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Gender Differences in Enrollment and Graduation Rates in Private and Public Higher Learning Institution in Rwanda

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Abstract

This study provides a situation analysis of enrolment and graduation rates between female and male students in public and private higher learning institutions in Rwanda. The study tracked graduation rates of female and male students for nine years (2004-2013) from 6 colleges of the University of Rwanda and 7 private Universities. For triangulation purposes, the study utilized a mixed method approach. Findings reveal that the number of male graduates from public Universities more than doubles that of females in the same University category (68.9% male to 31.1% female.

However, female graduates from private universities outnumbered that of males but with a small margin (53.8% female to 46.25 male). Findings also reveal that in terms of disciplines, the percentages of male graduates outnumbered that of females with high margins in STEM disciplines while females outnumbered males in non-STEM disciplines.

This study also found out that access to University education was influenced by many factors that affected male and female students differently. Such factors included: early parenthood, loss of parents/guardians, level of performance in College entrance

exams, family responsibilities, and availability of gender-based counseling services at colleges or lack thereof. Other factors included gender stereotype, combining work and studies and financial constraints.

Key words: Gender, access, enrollment, higher education, graduation rates.

1. Introduction

Investment in human capital is an important path to development, more so in third world countries. Further, low levels of human capital are widely considered to be a major impediment to economic growth and eradication of poverty in many Sub-Saharan African countries (Glick and Sahn, 2000). Similarly, higher education has been considered as a bridge towards human resource development and social transformation (Milan and Holford, 2014). Needless to say that the knowledge and skills obtained in Higher Education enable people to be able to manage and transform national economies, improve the social lives of citizens (Singh, 2001; Akoojee and Nkomo, 2007).

A number of studies also recognize the importance of increasing access to schooling for girls because it is believed that improvements in women's education helps to eliminate gender inequalities in employment opportunities and earnings (Strauss and Thomas, 1995). However, people's aspirations and ability to undertake further levels of education are sometimes limited by gender and social economic status. This reality has indeed been an obstacle for equitable and sustainable development.

Gender differences in enrollment and graduation from Higher Learning Institutions (HLIs) remain problematic for all stakeholders who seek gender-balanced student populations free

from any form of exclusion (Thompson, 2007). Between 1963 and the early 1994, access to higher education in Rwanda was characterized by regional and gender disparities in enrollment and graduation, mainly based on ethnicity and patriarchal tendencies.

However, after 1994 genocide, Rwanda recognized the potential of human resource for developing its economy and introduced initiatives to enhance access to HE, especially for marginalized students who were previously excluded. From 2000, two groups of HE underrepresented categories of students attracted policy attention, namely poor students and women. Global gender equity campaigns have been an important vehicle for encouraging the increased enrollment of women ~~as students~~ into higher education.

Given the strong commitment by Rwanda to promote gender equality, the post 1994 education policy changed and education became a right of every Rwandan. The Rwandan government enacted gender-inclusive policies geared towards attaining gender equality in access to every level of education (primary, secondary and tertiary).

The country has attained gender parity at the level of parliament and is atop all nations by having the highest proportion (64 %) of women legislators and similar high levels of female representation at all levels of governance (Curran, Evans, Piron, & Driscoll, 2006).

However, outcomes continue to fall short of the objectives which were targeted. Girls still continue to trail behind boys regarding school enrolment, retention, and completion especially in public Higher Learning Institutions (HLIs). In other words, despite

Rwanda's policy to involve women in the country's development agenda, there is yet to be equality in access to university education between females and males; there remains substantially low numbers of female students in public Universities. For example, from a tracer study that was conducted by Rwanda's High Education Council in all HLIs (HEC, 2015), 65.5% of the respondents were male while only 34.5 % were female. Although these findings are not segregated by public versus private HLIs, a cursory look at the statistics would point to low number of female enrollment in public HLIs.

The imbalance of ratio between male and female students enrolled at the universities is becoming a serious phenomenon, yet, there has been a minimal effort to critically analyze the causes for such imbalances and recommend research based strategies to narrow such gaps. The high demand for University education after the genocide period led to the increase in the number of Universities from one public University college in 1963 to seven public Universities in 2012. As such, the option for the government to encourage the establishment and accreditation of private Universities in Rwanda makes sense.

Private institutions remain an option for the majority of girls as they perform relatively lower than their male counterparts in upper secondary national examination and in comparison, have few chances for access to public higher institutions because of government resource constraints, although the costs are very expensive as compared to the public schools (MINEDUC, 2015).

It is against this background that this study was undertaken to provide a detailed account of gender differences in undergraduate

enrolment and graduation with specific emphasis on gender and graduation rates public and private Universities. While significant research about female students' enrolment and graduation rates has been carried out in primary and secondary schools, very few studies have examined issues pertaining to gender differences with regards at graduation rates in faculties within public and private HLIs. This study therefore was guided by the following objectives;

- To identify gender differences in terms of enrollment and completion rates between female and male students within public and private HLIs in Rwanda.
- To investigate factors contributing to the imbalance of gender in private and public HLIs
- To identify differences in the choice of academic courses between male and female students in public and private HLIs and provide recommendations on how this gender gap in terms of enrollment and graduation rates can be reduced in higher education in Rwanda.

2. Literature Review

This study was guided by social theories of gender inequalities. This framework for analyzing global trends in gender inequality is based on the fact that there are consistent economic, social and political disparities between men and women across societies and no single explanation seems to have been able to account for this fully (Yamato and Bray, 2002).

Hence, arguments in favor of gender, approach to girls' schooling gained momentum. However, experiences, programs and policy responses to the complex gender issues are yet to be explored and consolidated, more so in countries of Sub-Saharan Africa,

including Rwanda (European Commission, 2009). These authors also indicate that the gender gap in key education indicators still persists in most of developing countries despite the high investment priority that girls' education has received. There has been agreement on the existence of universal male domination or patriarchy for centuries, although the extent and form varies widely (Makama, 2013).

Patriarchy exists at family-social levels, and in ideological political systems. Patriarchy is considered as a set of social relations which has a material base and in which there are hierarchical relations between men and solidarity among them which enable them in turn to dominate women (Essien and Ukpong, 2013). Concomitantly, the patriarchal structure and gender inequality limit even the willingness of people and agencies in those societies to help women.

Theories of girls' educational experiences have pointed to both possibilities and challenges pertaining to gender equality in education, and gender analysis needs to be broadened and widened by taking into account the social and experiential dimension of girls. Shayan (2015) indicates five main challenges for females when it comes to access to education. These include poverty, poor school environments, and negative attitude toward women in society, insecurity and social exclusion.

Studies conducted in Universities, especially in the West and also in Africa, have shown that there is a male numerical and cultural dominance in Universities that results in the Universities and academic life being 'highly gendered organizationally, structurally and practically (Raburu, 2015). The authors above identifies three

features that characterize the gendered structure of Universities as the exclusion of women from University education for a long time; men continuing to dominate the top positions in most disciplines and management positions and the high status Universities being more male-dominated.

The social theories perspective is used in this analysis to interrogate the implications that the growth of private Universities has on gender equity in higher education in Rwanda. The current perspective also takes the analysis further to find out the areas or courses these women are gaining access to compare to men.

The literature on gender and access to High Learning Institutions has proliferated in the last two decades (Leonard, 2001; Deem & Ozga, 2000; Blackmore & Sachs 2001; Mayzumi, 2008).

Despite the considerable increment in enrolment ratios in schools, gender gap remains relatively high in some parts of the world and it is more prevalent in higher education especially in developing countries (Mayzumi, 2008). The past two or three decades have been characterized by the rapid increase in female educational enrolment and attainment in HLIs (Scheck & Mustafa, 2010) but the gaps are still wide.

It is the reason why the global organizations such as UNESCO and UNICEF have not ceased to remind the governments to ensure that they are providing equal chances to education and employment between girls and boys. (Lynch & Feeley, 2009).

Therefore, much is expected from educational policy making and enforcement to alleviate gender related hindrance to education

(Stromquist, 2013). However, the gender parity target has not been achieved in many countries including Rwanda (UNESCO, 2008), where it is known that poor and rural women are excluded from HLIs (Morley et al., 2010).

Gender imbalance in HLIs is a common phenomenon across the world and the African continent in particular. Most, gender imbalances are a result of cultural, social, economic, psychological, historical and political factors.

Akyeampong (2004) argues that female access to education is hindered by certain cultural beliefs and practices such as the expectation that girls will help with household chores and family businesses, as well as early marriages.

Stephens (2000) and Pryor & Ampiah (2003) concur that sometimes, there is the fear that a girl's marriage prospects will diminish if she obtains a higher education equal to men or more than men. Even when they are enrolled, girls experience schooling differently from boys, with some teachers showing greater expectations for boys and thus giving them more attention and intellectual challenge than girls (Dunne and Leach, 2005).

Furthermore, poverty is also cited as the main barrier for women to participation in studies (Morley et al., 2010). Early marriage and pregnancy, lack of agency in determining whether or when to marry, combined with lack of information and poor quality basic education to impede girls' educational opportunities.

Arguably, other barriers include lack of parental social and material capital, lack of schools, especially in rural areas, and limited opportunities to develop the capacity to aspire (Appadurai,

2004) e.g. lack of role models. Socio-cultural practices and gendered power relations also played a significant part in determining who should gain access to education and what they should study. On the other hand, there has been global critical attention to the under-representation of women in science, technology, engineering and mathematics (STEM) disciplines. Globally, men predominate in subjects related to Engineering, Manufacturing and Construction, Mathematics and Computer Science (OECD, 2007).

When women of all socio-economic backgrounds do enter HLI's they are often concentrated in subjects associated with low-wage sectors of the economy (World Bank, 2002a). In many countries, two-thirds to three-quarters of graduates in the fields of Health, Welfare and Education are women. In many low-income countries, the increased entry of women into STEM disciplines is seen as a major indicator of gender equality, with initiatives sometimes funded by the international donor community.

In Rwanda, there is a shrinking divergence in subjects studied by boys and girls. Although boys outnumbered girls in sciences five years ago, the number of girls in sciences started to increase from 2012. The same trend is observed in humanities, languages and teacher education. Women continue to lag behind men in subjects such as science, mathematics and technology education (ESSP 2013- 2018).

Education stereotyping continues, with women and girls tending to study programs related to so-called 'women's occupations such as nursing, secretarial jobs and social work. Programs in

engineering, physics and the so-called 'hard sciences' continue to be dominated by males (MINEDUC, 2015).

3. Methodology

This study adopted the concurrent mixed method research design by which qualitative and quantitative data approaches were used in parallel. The quantitative approach involved the computation of statistics about enrollment and completion rates by gender within the 6 Colleges that constitute the University of Rwanda as well as 4 selected private Higher Learning Institutions for convenience reasons. Their selection was based on their dates of existence and accessibility.

The qualitative approach focused on exploring the social cultural and economic factors that account for differential enrollment of female and male students in public and private HLIs. This approach was used to gather information from key informants, composed of registrars from selected institutions and representatives of their students.

A sample of 110 was considered, i.e. 10 registrars from each of 10 higher institutions of learning (6 colleges of University of Rwanda and 4 private Universities) and 10 student representatives (five females and five males) from each of the selected higher Learning Institutions. For ecological validity, two were chosen from rural and two from urban.

Policy documents about gender and education was analyzed to examine the policies concerning gender education in higher institutions of learning. Records from 2004 to 2013 pertaining to enrolment and completion rates in the sampled Universities were

collected and analyzed to ascertain the differences between females and males. In this study, individual semi structured interviews were conducted with academic registrars from the sampled institutions. The interviews mainly focused on their perceptions regarding social cultural and economic factors that account for gender disparities in enrolment and completion rates.

Focus group interviews were also conducted because they provide more information from different groups of people in a shorter period of time than individual interviews could. In this study, focus group discussions were conducted with 10 student representatives (both male and female) from each of the sampled higher learning institutions with the aim of getting in-depth information about the social cultural and economic factors that contribute to gender imbalance in terms of enrolment and completion rates.

For ethical considerations, participants were informed about the purpose of the study and anonymity and confidentiality were ensured in order to protect the participants' privacy. Quantitative data was analyzed using descriptive statistics involving percentages and frequencies and presented in a form of tables. Thematic organization and content analysis was applied on qualitative data from interviews and focus groups.

4. Results and Discussion of Findings

Data were organized and presented thematically in sections and sub-sections based on the research questions.

Table 1. Proportion of male and female enrolment in both public and private learning institutions

Category of Higher Learning Institutions			Gender	% in each category of HIs
<i>Private institutions</i>	<i>Higher Learning</i>		<i>M</i>	46.2%
			<i>F</i>	53.8%
<i>Public institutions</i>	<i>Higher Learning</i>		<i>M</i>	68.9%
			<i>F</i>	31.1%

From the preceding table, this study revealed that from the population of 78050 students who graduated from both private and public Universities taken together, males (58.3%) outnumbered their counterpart females (41.7%). Further, the study revealed that the proportion of female graduates (31.1%) was significantly smaller than that of males (68.9%) in Public Universities. In contrast, women increasingly represented the majority of graduates in private Universities (53.8% for female and 46.2% for males).

This underrepresentation of females in public Universities and their overrepresentation in private ones is due to the fact that males generally perform better than females at upper secondary level. Therefore, because access to public higher education is based on higher performance, male student tend to outnumber their females counterparts in public HLIs and thus, the, private HLIs remain an option for the majority of girls (MINEDUC, 2015).

However, there were other factors that came into play when making choices between private and public HLIs. For example, one of the female student participants commented that“-Females in private institutions are many compared to males and it is probably

because most are working and conditions in private Universities are more favorable to doing part time work than in public”.

Another student from one private institution added that

Well, I am not sure but I think females are many compared to males. For example, in the faculty of Economics and Business studies which is my faculty, females are more than males. I think the reason for this is that in schools today, girls are more than boys but when they sit for senior six national exams, many of them fail to get government sponsorship even if they have the opportunity of being admitted at slightly lower grades than boys. So, they resort to private institutions where they can be enrolled at lower grades. I think this is the main reason why in our Institution there are many females than males.

Another respondent explained that this discrepancy may partly be attributed to the conditions of study and emphasized “For us, we think Private Universities have more female students than males because the conditions of study are favorable to them and they have a variety of courses for part-time students”.

It should be noted that because public HLIs are subsidized by the government, there is limited choice to change specialization should a student opt to. The story is different in private HLIs where a student is generally allowed to change his or her specialization (major) if she or he decides to do so.

All this variation accounts for students’ choice of which HLIs to enroll. In addition, the students’ choices for choosing which category of HLIs to enroll were embedded in a complex web of public perceptions about public and private education as illustrated in the table below.

Table 2: Respondents' Perception of Public and Private HLI's on a number neutral statements (Expressed in percentages)

	Private	Public
<i>Offers flexibility to study and work</i>	89.5%	55.8%
<i>I can afford to pay Tuition fees</i>	75.0%	56.8%
<i>I have the opportunity to choose the course I want</i>	90.3%	46.8%
<i>Conferred degrees are Highly recognized on the labor market</i>	68.0%	82.8%
<i>Possibility of employment is high</i>	66.8%	69.3%
<i>Offers opportunity for creativity and innovation</i>	69.3%	80.0%
<i>Provide adequate skills and competencies</i>	72.5%	84.0%
<i>Admission criteria is flexible</i>	82.3%	66.3%
<i>Lecturers are highly qualified</i>	70.5%	80.8%
<i>Possibilities of completion are high</i>	74.5%	75.0%
<i>There exists rigorous assessment criteria</i>	67.0%	80.3%
<i>Study conditions are favorable for females</i>	76.5%	68.5%
<i>Study conditions are favorable for males</i>	73.5%	70.3%
<i>Possibility of being admitted at lower pass marks</i>	80.0%	42.3%
<i>Possibility of being enrolled at higher pass marks</i>	59.5%	78.3%
<i>Has high public reputation</i>	67.5%	87.3%

In comparison, 90.3% of the students as compared to 46.8% expressed that private HLI's provide opportunity for students to choose the courses (specializations) of their choice. 89.5% expressed that private HLIs offered flexibility to study and work compared to 55.8% who expressed the same for public HLI's. These factors seem to captivate many students especially females to enroll in private Universities compared to public ones. These

findings were re- affirmed by students' interviewees as noted from the following excerpt:

University of Rwanda students pay about 633,000 Frw per year and are obliged to pay in two installments yet for us we pay 450,000 Frw and the mode of payment is flexible in the sense that you can pay in three installments. So many girls and some boys decide to come to this institution where fees are relatively low compared. And nowadays getting employment has nothing to do with where you studied from. I know there is a belief that private Universities produce people with limited skills, this is not true, when you go to banks for example, and you find people who studied here doing equally well as those from public Universities.

However, Table 2 shows that 87.3% of the student respondents expressed that public HLI's have high public reputation as compared to 67.5% who said the same for private HLI's. Further, the percentage of students who expressed their agreement on the neutral statements as the applied to private and public HLI's were the following: provision of adequate skills and competencies (84% for public institutions and 72.5% for private institutions), and conferred degrees which are believed to be highly recognized on the labor market (82.8% for public institutions and 68% for private institutions, high possibility of employment (69.3% for public institutions and 66.8% for private institutions as well as higher qualification of lecturers (80.8% for public institutions and 70.5% for private institutions.

From the perceptual questionnaire, it was also revealed that Public Universities are said to have rigorous assessment criteria (80.3% for public institutions and 67.0% for private institutions) and enroll students at higher pass marks (78.3% for public institutions and 59.5% for private institutions). Ideally, these factors should attract students to enroll in public Universities but it appears that

they instead limit many students and therefore decide to resort to private ones.

It is pertinent to mention that regardless of the differential perceptions students have of public and private Universities, there are some commonalities such as study conditions which are favorable to females and males, highly qualified lecturers and possibilities of completion and employment. In one example, one participant noted:

In private HLI's "boroshyubuzima" (there is less rigor in private HLI's), for example in the University I go to has study conditions that are flexible compared to University of Rwanda. In private HLI's, a student cannot be discontinued because of poor performance instead they allow you to repeat and lecturers help students by giving them notes". (A third year student Dep't of Economics and Business Studies from a private HLI's.

Table 3. Proportion of male and female by field of study (n=78050).

Field of study	% of graduates segregated by gender	
	<i>Male</i>	<i>Female</i>
<i>Agriculture, veterinary medicine</i>	72.0%	28.0%
<i>Medicine</i>	69.1%	30.9%
<i>Health science</i>	51.6%	48.4%
<i>Computer science and IT</i>	72.8%	27.2%
<i>Engineering</i>	79.7%	20.3%
<i>Applied and pure sciences</i>	78.0%	22.0%
<i>Arts and social sciences</i>	53.2%	46.8%
<i>Education</i>	61.0%	39.0%
<i>Business and economics</i>	52.6%	47.4%

As depicted in table 3, it is evident that with the exception of services (45.4% for men and 54.6% for women), in all the domains

offered in the Universities reviewed from 2004-2013, males outnumbered females. However, there was no significant gender difference in disciplines such as arts and social sciences (53.2% for men and 46.8% for women), business and economics (52.6% for men and 47.4%) and health sciences (51.6% for men and 48.4%),.

The findings indicated in the preceding table reveal that science disciplines are dominated by men. For example, in Engineering, women graduates constituted 20.3% against 79.7% for men, agriculture and veterinary medicine graduates constituted 28.0% women graduates against 72.0% men graduates. In Medicine, there were 30.9% females against 69.1% males, computer sciences and ICT (27.2% against 72.8% for men and in applied and pure sciences (22.0% for female against 78.0% for male) .

These gender-based imbalances concur with Adeyemi and Akpotu's (2004) earlier call and recommendation that models for developing female-friendly science-based programs should be for women welcomed. Such findings are also in line with Marley's (2010) conclusion that in the mathematics and computer science sector, men were in a substantial majority, while women dominated in the environmental and social sciences .

The same study noted that higher secondary education still had strong gender imbalance in that sense that the choices made by men and women might presumably be regarded as a reflection of the traditional expectations associated with various occupations in a gender-oriented labor market.

Although Girls' participation in different subjects ranges between 20.3% and 47% in higher education. Mostly, the courses offered in private Universities in Rwanda reflect commercial consideration and require less investment in terms of infrastructure and equipment.

Table 4. Comparisons of Female graduate' fields of study in public HLIs vis-a-vis private HLIs

<i>Domain</i>	<i>Category</i>	<i>%</i>
<i>Services</i>	<i>Private</i>	100.0%
	<i>Public</i>	0.0%
<i>Agriculture, veterinary medicine</i>	<i>Private</i>	0.0%
	<i>Public</i>	100.0%
<i>Medicine</i>	<i>Private</i>	0.0%
	<i>Public</i>	100.0%
<i>Health science</i>	<i>Private</i>	0.0%
	<i>Public</i>	100.0%
<i>Computer science and ICT</i>	<i>Private</i>	55.9%
	<i>Public</i>	44.1%
<i>Engineering</i>	<i>Private</i>	0.0%
	<i>Public</i>	100.0%
<i>Applied and pure sciences</i>	<i>Private</i>	1.3%
	<i>Public</i>	98.7%
<i>Arts and social sciences</i>	<i>Private</i>	60.8%
	<i>Public</i>	39.2%
<i>Education</i>	<i>Private</i>	40.9%
	<i>Public</i>	59.1%
<i>Business and economics</i>	<i>Private</i>	60.1%
	<i>Public</i>	39.9%

Table 4 illustrates differences in graduation rates between public and privates higher institutions of learning by field of study from 2004 to 2013. Most of the graduates were in public Universities particularly in the fields, such as Agriculture, Veterinary Medicine and Sciences, Medicine, Engineering, Health Sciences are exclusively offered in public higher learning institutions. Subjects,

such as, Applied and Pure Sciences (98.7% for public and 1.3%), arts and social sciences (60.8% for public and 39.2

for private institutions and Education (59.1 for public and 40.9% for private) are predominantly offered in public institutions. On the other hand, private Universities led only in domains such as Business and Economics (60.1%), Arts and Social Sciences (60.8%), Computer Science and ICT (55.9%) as well as Services (100%). The services discipline included careers like Tourism and Hotel services.

Overall, it can be inferred that public Universities had more graduates in Science domains than private and the vice versa with regard to Arts and Social Sciences. This finding is in line with studies conducted in Kenya (Onsongo, 2011), in Nigeria (Iruonagbe et al., 2015) that concurred that courses offered in private Universities are in subjects areas which require lower levels of investment in infrastructural facilities.

The findings also support studies that conclude that private institutions are principally interested in market-driven courses and concentrate on courses that do not necessitate huge investments in equipment and research facilities (Suspitin, 2003; Bernasconi, 2003).

Table 5. General Completion rates by gender

Year	Gender	%
2004	<i>M</i>	65.4%
	<i>F</i>	34.6%
2005	<i>M</i>	62.3%
	<i>F</i>	37.7%
2006	<i>M</i>	61.1%
	<i>F</i>	38.9%
2007	<i>M</i>	54.2%
	<i>F</i>	45.8%
2008	<i>M</i>	63.1%
	<i>F</i>	36.9%
2009	<i>M</i>	51.4%
	<i>F</i>	48.6%
2010	<i>M</i>	57.5%
	<i>F</i>	42.5%
2011	<i>M</i>	54.6%
	<i>F</i>	45.6%
2012	<i>M</i>	62.5%
	<i>F</i>	37.5%
2013	<i>M</i>	61.1%
	<i>F</i>	38.9%

Table 5 above shows completion rate of males and females from 2004 to 2013. The males continued to dominate in completion from 2004 to 2013 with the completion rate for females being less than 40%. The dominance was prominent for a period of nine years with an exception of 2009 that 48.8 % for females against 51.4 % for males, 2010 with 42.5 for females and 57.5 % for males and 2011 with 45.4% for females against 54.6 for males. Some of the factors affecting this underrepresentation are depicted in table 6.

Table 6. Factors affecting completion rates of female and male students in Universities

<i>Obstacles to college success as they affect male and women</i>	<i>% of graduates segregated by gender</i>	
	<i>Male</i>	<i>Female</i>
<i>Gender stereotype on success at university</i>	26.8%	47.0%
<i>Lack of gender specific counseling service/facilities</i>	13.4%	49.4%
<i>Poor performance in A – level national exams</i>	55.6%	17.1%
<i>Poor academic performance</i>	17.6%	70.9%
<i>Combining work and studies</i>	40.7%	50.6%
<i>Early fatherhood/ motherhood</i>	17.1%	75.3%
<i>Family responsibilities</i>	60.5%	31.7%
<i>Financial constraints</i>	60.8%	62.2%

Researchers identified a list of factors that were likely to influence university graduation rates in general. Student participants were provided a questionnaire comprising these factors and asked to who, between female and male students were likely to be affected by these factors.

The percentages in table 6 indicate the degree to which participants believed the respective factors affected male or female students' possibility of graduation. It emerged that girls are more affected than boys in their academic pursuit. Specifically, early parenthood(75.3%for girls and 17.1% for boys), loss of parents/guardians(70% for girls and 53.1% for

boys) poor performance in University admission exams(55.9% for girls and 17.1% for boys), family responsibilities (60.5% for girls and 31% for boys) as well lack of specific gender counseling services (49.4% for girls and 13.4%for boys), gender stereotype(47.0% for girls and 26.8% for boys), Related to these findings, other factors affected male and female students differently.

These included factors like combining work and studies (50.6% for girls and 40.7%) and financial constraints (62.2% for girls and 60.8% for boys). during the interviews, participants expressed views that supported the preceding statistical trends. For example, one of the participants notes:

Females who are employed and studying and married face a big challenge. For me I combine studies with work and I have got young children at home, so you can imagine the challenge I have. To be honest, I hardly participate in group assignment. For continues assignment tests (CATS) and final exams I try my best but it is not easy. I leave work at 5 pm and go to school. Classes begin at 5:30 pm and end at 9:30 pm but for me most of the time I leave at 8: 45 because I have to go and see my children. Even if we have a maid, I cannot trust her so much but for men they do not mind because they know the wife is there to take care of children. Also, when female students get pregnant, it affects their studies so much but men are not affected at all. A woman may suspend her studies or perform poorly due to all these situations.

5. Conclusion

This paper examined the concepts of gender and University education. It also explored and discussed the level of participation in University education by gender in public and private institutions. In addition, the paper discussed the factors affecting

enrollment and completion rates of female and male students in Universities. Such factors were early motherhood, loss of parents/guardians, poor performance in college admission exams (A level exams), family responsibilities and lack of specific gender counseling services and gender stereotype.

The study noted the underrepresentation of females in public Universities mainly due to the fact that male students generally perform better than females at upper secondary level which is the main factor that determines admission to Public Universities. Thus, private Universities becomes a better option for the majority of girls (MINEDUC, 2015).

It is also drawn from the study that in the mathematics and computer science disciplines, males were a substantial majority, while females dominated in the environmental and social sciences. The same study noted that tertiary education still has strong gender gap in the sense that the choices made by men and women might presumably be regarded as a reflection of the traditional expectations associated with various occupations in a gender-oriented labor market. Underrepresentation of females in science-related subjects might also be due to the courses offered in private institutions in Rwanda. The current study showed that courses offered in private Universities are in discipline areas which require lower levels of investment in infrastructural facilities. The private institutions also are principally interested in market-driven courses and concentrate on courses that do not necessitate huge investments in equipment and research facilities.

There is need for fundamental changes to ensure gender parity in University education in both private and public Universities is bridged. To increase the number of female enrollment in higher

education, there is need for articulation and deliberate implementation of affirmative action policies. This will enable female candidates who have obtained slightly less than minimum required marks to enter public universities.

In addition to this, universities can consider offering remedial courses or pre-university programs to female students to enhance their entry requirements. It will also be prudent for universities to encourage female academics to seek for management positions so as to act as role models to female students.

Finally the researchers advocate for outreach programs that will serve to sensitize and change peoples' attitudes and beliefs towards women empowerment through higher education

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References

- Adeyemi, K. & Akpotu, N. 2004. Gender Analysis of Student Enrollment in Nigerian Universities, *The International Journal of Higher Education and Educational Planning* (48) 3: 361–378.
- Akoojee, S. and Nkomo, M.2007. Access and quality in South African higher education: the twin challenges of transformation, *South African Journal of Higher Education*, 12(3), 385-399.

- Appadurai, A. 2004. *The Capacity to Aspire: Culture and the Terms of Recognition*. In Rao, V. and Walton, M. (Eds.). *Culture and Public Action*. Stanford: Stanford University Press.
- Akyeampong, A. K. 2004. Aid for self-help effort? A sustainable alternative route to basic education in Northern Ghana. *Journal of International Co-operation in Education*, 7(1), 41-52.
- Barbour, R. 2007. *Doing Focus Groups*. London: Sage.
- Bernasconi, A. 2003. Private higher education with an academic focus: Chile' new exceptionalism, *International Higher Education, Summer*.
- Blackmore, J. and Sachs, J. 2001. Women leaders in the restructured and internationalized University, in: A. Brooks and A. Mckinnon (Eds) *Gender and the Restructured University*. Buckingham, Open University Press.
- Cohen, L., Manion, L., and Morrison K. 2000. *Research Methods in Education (5th Edition)*. London: Routledge Falmer.
- Creswell, J.W. 2008. Qualitative and mixed methods research. *Journal of Mixed Methods research*, 1 (4), 309-332.
- Creswell, J. and Plano, C. V. 2007. *Designing and Conducting Mixed Methods Research*. Thousand Oaks, CA: Sage.
- Deem, R. and Ozga, J. 2000. Transforming post-compulsory education? Femocrats at work in the academy. *Women's Studies International Forum*, 23(2), 153-166.
- Dunne, M. and Leach, F. 2005. *Gendered School Experiences: The Impact on Retention and Achievement in Botswana and Ghana*. London: DFID.
- European Commission. 2009. Gender Outcomes in Educational Outcomes: Study on the Measures taken and Current in European.
- Essien, AM.and Ukpong, D. P. 2013. Patriarchy and gender inequality: The persistence of religious and cultural prejudice in contemporary Akwa Ibom State, Nigeria. *International Journal of Social Science and Humanity*, 2(4), 286-290
- Evan, A., Piron, L.H., Curran, Z. and Driscoll, R. 2006. *Independent Evaluation of Rwanda's Poverty Reduction*

- Strategy 2002-2005, Overseas Development Institute and Institute of Development Studies, UK.*
- Glick, P. and Sahn, D. E. 2000. Schooling of girls and boys in a West African Country: the effects of parental education, income and household structure. *Economics of Education Review*, 19(2), 63-87.
- HEC. 2015. A tracer study of graduates from higher education institutions and employers' satisfaction of graduates' competences. Kigali, Rwanda.
- Iruonagbe, C.T., Imhonopi, D. and Egharevba, M.E. 2015. Higher education in Nigeria and the emergence of private Universities. *International Journal of Education and Research*, 3(2), 49-64.
- Leonard, D. 2001. *A Woman's Guide to Doctoral Studies*, Buckingham, Open University Press.
- Lynch, K. and Feeley, M. 2009. *Gender and Education (and Employment), Gendered Imperatives and their Implications for Women and Men: Lessons from Research for Policy Makers*, European commission.
- Makama, G.A. 2013. Patriarchy and gender inequality in Nigeria: The way forward. *European Scientific Journal*. (9) 7: 1857 – 1881.
- Mayuzumi, K. 2008 'In-between' Asia and the West: Asian women faculty in the transnational context. *Race Ethnicity and Education*, 11(2), 167-182.
- Mellegard, I. and Pettersen, K.D. 2012. Curriculum practice: English teachers' understanding and realization of the new national curriculum, LK06. In Hasselgreen, A., Drew, I. and Sørheim, B. (eds). *The Young Learner: Research-Based Insights into Teaching and Learning* (207-218). Bergen: Fagbokforlage
- Milan, M. and Holford, J. 2014. *Adult Education Policy and the European Union. Theoretical and Methodological Perspectives*. Rotterdam: Sense Publishers
- MINEDUC 2013. Education Sector Strategic Plan 2013 - 2018. Rwanda. Kigali.

- OECD (2007), Education at a Glance 2007: OECD Indicators, *OECD Publishing*, Paris. DOI: <http://dx.doi.org/10.1787/eag-2007-en>
- MINEDUC. 2015. *Education for All Review 2015*. Kigali, MINEDUC
- Morley, L., Leach, F., Lussier, K., Lihamba, A., Mwaipopo, R., Forde, L. D. and Egbenya, G. 2010. Widening participation in higher education in Ghana and Tanzania: developing an equity scorecard. Falmer: University of Sussex
- Onsongo, J. K. 2011. Promoting Gender Equity in Selected public Universities in Kenya. Addis Ababa, Ethiopia, Organisation for Social Science Research in Eastern and Southern Africa (OSSREA)
- Pryor, J. and Ampiah, J. G. 2003. *Understandings of Education in an African Village: The Impact of Information and Communication Technologies*. London: DFID
- Raburu P. A. 2015. Motivation of women academics and balancing family and career. *Journal of Educational and Social Research*, 5(1), 359-370
- Schech, S. and Mustafa, M. 2010. The Politics of gender mainstreaming poverty reduction: An Indonesian case study. *Social Politics*, 17(1), 111–135.
- Shayan, Z. 2015. Gender inequality in education in Afghanistan: Access and barrierS. *Open Journal of Philosophy*, 5(3), 277-284
- Singh, M. 2001. *Re-inserting the Public Good into Higher Education*. Kagisano – CHE Higher Education Discussion Series.
- Stephens, D. 2000. Girls and basic education in Ghana: a cultural enquiry. *International Journal of Educational Development*, 20(3), 29–47.
- Strauss, J. and Thomas, D. 1995. Human Resources: Empirical Modeling of Household and Family Decisions. In: Behrman, J.R., Srinivasan T.N. (Eds.), *Handbook of Development Economics*, Amsterdam: Pub. Co
- Stromquist, N. P. 2013, *Adult Education of Women for Social Transformation: Reviving the Promise, Continuing the*

- Struggle. *New Directions for Adult and Continuing Education*, 138:29–38. doi: 10.1002/ace.20051
- Suspitsin, D. 2003 Russian private higher education: alliances with state-run organizations. *International Higher Education*, fall
- Thompson, R. 2006. The effect of topic of discussion on gendered language in computer mediated communication discussion. *Journal of Language and Social Psychology*, 25 167-178
- UNESCO. 2008. Education for All Global Monitoring Report.
- World Bank. 2002. World Development Report 2002: Building Institutions for Markets. New York: Oxford University
- Yamato, Y. and Bray, M. 2002. Education and socio-political change: the continued growth and evolution of the international schools sector in Hong Kong. *Asia Pacific Education Review*, 3(1), 24-36.