Gender-Related Factors Influencing Female Students' Participation in Higher Education in Rwanda

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Abstract

Rwanda is widely seen as one of the most progressive countries in the world with regard to promoting gender equality and women's empowerment. In education for example, girls' access to primary and secondary education is among the highest in Africa. However, female students' participation remains limited in public universities and they constitute only around a third of the student population at the University of Rwanda. This article explores the factors that influence female students' participation in public higher education in the country. It draws from a study commissioned by the University of Rwanda on the causes of low female enrolment at the institution that was conducted between 2016 and 2017 . The study employed a mixed methods approach, and data was gathered by means of questionnaires, in-depth interviews and focus group discussions. The results revealed interlinked structural (such as university policies) and socio-cultural factors that contribute to the exclusion of female students from Rwanda's top university. Given the complexities involved, this calls for a multi-pronged approach to address the issue of female representation at the University.

Key words: Gender disparities, female students, higher education, Rwanda

Le Rwanda est largement considéré comme l'un des pays les plus progressistes au monde en ce qui concerne la promotion de l'égalité des sexes et l'autonomisation des femmes. Dans le domaine de l'éducation par exemple, l'accès des filles à l'enseignement primaire et secondaire est parmi les plus élevés d'Afrique. Cependant, la participation des étudiants féminins reste limitée dans les universités publiques et elles ne constituent

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qu'environ un tiers de la population étudiante de l'Université du Rwanda. Cet article explore les facteurs qui influencent la participation des étudiants féminins dans l'enseignement supérieur public du pays. Il s'appuie sur une étude commandée par l'Université du Rwanda sur les causes du faible taux d'inscription des femmes dans l'institution, qui a été menée entre 2016 et 2017 L'étude a utilisé une approche de méthodes mixtes, et les données ont été recueillies par des questionnaires, des entretiens approfondis et des discussions de groupe. Les résultats ont révélé des facteurs structurels (tels que les politiques universitaires) et socioculturels interdépendants qui contribuent à l'exclusion des étudiantes de la meilleure université du Rwanda. Compte tenu de la complexité de ces facteurs, il est nécessaire d'adopter une approche multidimensionnelle pour résoudre le problème de la représentation des femmes à l'université.

Mots clés: Disparités entre les sexes, étudiants féminins, enseignement supérieur, Rwanda.

1.   Introduction

Investing in girls' education and training has concrete social and economic benefits as it equips them for work and increases their lifetime earnings (United Nations Economic Commission for Africa [UNECA], 2019). In Africa, education not only provides girls with social, economic and health benefits but their families as well. However, African girls and women continue to be disadvantaged in education and training (ibid.) It is therefore not surprising that both the Millennium Development Goals (Goal 3) and the new UN Agenda 2030 for Sustainable Development include goals on inclusive, quality and equitable education as well as promotion of gender equality and women empowerment (Sustainable Development Goals 4 and 5). The African Union (AU) Agenda 2063 also calls for gender equality in all spheres of life, with an emphasis on women and girls' empowerment and protection against violence and discrimination. Investing in women and girls' education and training will ensure that these targets are achieved.

The Government of Rwanda has always recognised that "education is a fundamental human right and an essential tool to ensure that all Rwandan citizens – women and men, girls and boys – realize their full potential" (Ministry of Education in Rwanda [MINEDUC], 2003, p. 4).

Indeed, the country is widely viewed as one of the most progressive with regard to promoting gender equality and women's empowerment. For example, in 2016, girls' enrolment in primary and secondary schools surpassed that of boys. standing at 97.4% for the former and 96.3% for the latter at primary level, and 30% for girls against 26.4% for boys at secondary level (MINEDUC, 2016). However, recent figures point to a slight decrease of 1.8% in girls' enrolment while the number of boys decreased by 1% (MINEDUC, 2018). The decrease in the number of girls could be attributed to the high rate of dropout observed in primary 6 at 8.6% and primary 2 at 6.6% around the same period. The Ministry of Education acknowledged the change in girls' numbers as an unachieved target (MINEDUC, 2018).

Girls' enrolment at secondary level for the period 2016 to 2018 was higher than that of boys in both public and government-aided schools but not in private schools (MINEDUC, 2018). Furthermore, the Integrated Household Living Conditions Survey (Enquête Intégrale sur les Conditions de Vie des ménages [EICV])[2] of 2016/2017 shows that girls' Net Attendance Rate (NAR) in secondary school stood at 25% compared to boys at 21% (National Institute of Statistics Rwanda [NISR], 2018).

Despite these advances, female students' access to and participation in higher education remains limited, especially in public universities where they consistently represent only about a third of the student population. For example, at the University of Rwanda (UR), the only public and biggest university in the country, the proportion of female students fluctuated between 32 and 34% between 2012 and 2017 (UR, 2018a). According to the NISR (2018), the proportion of females aged 16 and older attending various public tertiary institutions in rural and urban areas stood at 1.1-1.5% from 2013 to 2016, compared to 1.7-2.0% for males (NISR, 2018). The situation is reversed in private higher learning institutions (HLIs) where female student representation is higher than that of males.

A number of barriers may hinder female students from accessing higher education and these differ in different contexts. According to Mirza (2015), the reasons for exclusion from higher education are difficult to unpack as they are underscored by the complex dynamics of class, gender and race. Experiences are complex and relational and are located at the intersection of structure, culture and agency (Mirza, 2018). However, scholars have also observed that organisational or institutional,

socio-cultural and individual factors contribute to underrepresentation of females in HLIs in terms of both staff and students (Huggins and Randel, 2007; Osumba, 2011). Another key factor is whether the HLI is public or private. In the 2017/2018 academic year, female students in Rwandan private tertiary HLIs outnumbered their male counterparts (51.1% female, 48.9% male). However, in public institutions, the reverse was true, with female students at 31.5% compared to males at 68.5%. The two preceding academic years showed a similar trend (MINEDUC, 2018).

Huggins and Randel (2007) highlight that Rwandan education and development policies prioritise science and technology and that this may act to further exclude female students unless additional strategies are activated to promote women's participation in these fields. Munthali (2017) notes that the persistent gender gap in higher education threatens to sustain African women's marginalisation in the global knowledge economy, especially given the fact that technological advancements have resulted in a shift in emphasis to science, technology, engineering and mathematics (STEM) subjects. These fields are crucial for sustainable development and women's participation should thus be encouraged (Munthali, 2017). Statistics show that Rwanda has made some progress in this regard, with an increased number of girls taking traditionally male-dominated subjects such as the sciences at secondary school level (MINEDUC, 2016).

In exploring the complex factors influencing female students' participation in public higher education in Rwanda, this article draws from a broader study commissioned by UR and funded by the UR-Swedish International Development Agency (SIDA) Programme. The study, which aimed to understand the causes of low female enrolment at UR, was conducted from 2016 to 2017. It employed a mixed methods approach, with both qualitative and quantitative methods.

Gender and Education Related Theories

This study draws on social theories on gender equality in education (Unterhalter, 2005; Subrahmanian, 2005; Walker, 2006; Dunne, 2007; Aikman and Unterhalter, 2007). The literature on gender and education highlights the differences between girls and boys, and women and men, in terms of access, performance, completion, subject choice and the outcomes of education (Dunne, 2007; FAWE, 2010; Rubagiza, 2012). Although no

single explanation fully accounts for these differences, most scholars refer to theories of social construction of gender identity or what it means to be a woman or man in a given society (Stromquist, 1995; Subrahmanian, 2005; Dunne and Leach, 2005). This process socialises people into the roles, attributes, attitudes and behaviours expected of boys and girls and later, men and women. As one of the agencies of socialisation, schools and other educational institutions play a powerful role in constructing masculine and feminine identities (Dunne and Leach, 2005). In general, girls and boys tend to construct their identities in relation to dominant discourses of what it means to be masculine or feminine in their social contexts (Ssali, Ahikire and Madanda, 2007).

Current construction of gender in many African societies, including Rwanda, can be located within the institution of patriarchy that defines power relations within society, granting superior status to males vis-à-vis females. Patriarchy therefore implies systemic male dominance in the economic, social, cultural and political spheres. It is an ideology that validates male values, behaviour, and privilege. Norms on what women and men do, and how their activities and roles are valued, determine their opportunities (Subrahmanian, 2005; Walker, 2006). This explains the 'son preference syndrome' that exists in a number of African countries, where boys are favoured in accessing education (Ssali et al., 2007).

Women and men face different constraints to what they do and those confronted by women serve to restrict their freedom to access opportunities (Subrahmanian, 2005; Walker, 2006; Unterhalter, 2007). For instance, women's reproductive roles are time-consuming and home-based; hence, girls' work is often not compatible with schooling. In most households, girls and women spend time on household chores instead of their studies (Abagi, Rubagiza and Kabano, 2002; Dunne, 2007; ActionAid, 2013). Even when they manage to negotiate their burden to participate in education, gender inequalities are institutionalised in educational institutions' norms, structures and processes to present barriers to equitable outcomes (Subrahmanian, 2005; Dunne, 2007). Moreover, women and girls internalise social norms and beliefs that devalue them, which leads to negative self-perception and doubt of their own abilities. For example, women do not take up opportunities on offer, or make choices that are not in their best interests (Nussbaum, 2000). It is, however, important to note that gender intersects with other inequalities and that there are differences based on socio-economic status, ethnicity, disability, rural/urban and others among girls and women. Such differences enhance the vulnerability of affected girls and even boys and exacerbate their exclusion from education.

Global Commitment to Gender Equality in Education

The role played by education in the empowerment of girls and women, and their societies has been emphasised for decades. Girls' access to education is an essential means of achieving important objectives, such as reducing poverty, decreasing the fertility rate, and improving child health, nutrition and schooling as well as achieving sustainable human development (UNESCO, 2012; African Development Bank [AfDB], 2015; Sperling et al., 2016). Promoting gender equity and the empowerment of women is therefore "the smart as well as the right thing to do" (Abbott et al., 2010).

In recent years, global attention has focused on the promotion of girls' education and gender equality in education, especially in lower-income countries where gender disparities in education have been more prominent. These efforts have mainly been driven by the Education for All (EFA), Millennium Development Goals (MDGs), and the recent Sustainable Development Goals' (SDGs) agendas and they have yielded commendable achievements, especially in increasing girls' and boys' access to basic education. International and regional human rights treaties such as the Convention on the Elimination of all Forms of Discrimination Against Women (1979) and the Protocol to the African Charter on Human and Peoples' Rights on the Rights of Women in Africa, better known as the Maputo Protocol (2003) have also played a crucial role in promoting women's rights in all spheres, including the right to education.

According to the Global Monitoring Report (2018), the targets for gender parity in education have been reached at all levels of education except at tertiary level, if one takes the world as a whole (UNESCO, 2018). This means that progress is varied across different regions and countries. The report observed that sub-Saharan Africa is the only region where women do not enrol and graduate from tertiary education at the same rate as men (UNESCO, 2018). According to the McKinsey Global Institute (MGI) (2019), Africa as a whole has a female-male ratio of 0.76 in education. This is the lowest Gender Parity Score in the world,

considering that the global score is 0.92, which is relatively close to gender parity (MGI, 2019).

The lack of equal education and training opportunities has major consequences for African women. It plays a significant role in perpetuating inequality in employment and earnings (AfDB, 2015). Women receive lower wages than men, and the gap is much wider at lower levels of education. On average, the male-female earnings ratio is 2.8 among individuals with no education but close to parity among those with tertiary education (AfDB, 2015).

Enrolment Trends by Gender in Tertiary Education

According to Bunyi (2003), at independence, access to tertiary education in African countries was mainly for the purpose of providing much-needed human resources to lead development efforts. The fact that tertiary institutions were expected to educate and train men to replace departing male colonial civil servants can be considered one of the reasons for gender imbalances within this sector (Bunyi, 2003; Leach, 2008). As in other parts of Africa, Rwandan girls were only later sent to school and their education centred on being taught how to become better housewives for newly "educated men" (MIGEPROF, 2010; Leach, 2008). While access to higher education remains problematic in many countries, women have been the principal beneficiaries of the rapid expansion of this sector across the world in the past four decades.

Female enrolment at tertiary level has grown almost twice as fast as that of men (UNESCO, 2012). Nonetheless, disparities persist in favour of men in most sub-Saharan African countries. While female students are in the majority in countries like Mauritius, Lesotho, Tunisia and South Africa, they are concentrated in the arts and social sciences disciplines (Teferra and Altbach, 2004; Vincent-Lancrin; 2008, FAWE, 2010), with very low participation in STEM disciplines. This appears to be a global phenomenon, although the level of disparity differs across countries (Bunyi, 2003, FAWE, 2010; UNESCO, 2012; Tusiime et al., 2017). Worldwide, female students are underrepresented in computer science and engineering (Tusiime et al., 2017; Cheryan, Master and Meltzoff, 2018). This is likely to perpetuate underrepresentation in the future since girls and women lack role models. As noted by UNESCO (2012), women and men's preferences for specific fields of study in higher education are shaped by their individual histories and everyday realities as well as their material conditions.

Studies on gender and education, particularly in Africa, point to a number of factors that perpetuate gender differences in higher education, including social and cultural norms that lead to gender differences in access, performance and completion of primary and secondary education; parents' economic situation and the value they place on educating girls and boys; a lack of scholarships and incentives for female students and other socially disadvantaged groups; gender insensitive higher education policies; poor student learning and living conditions such as a limited number of classrooms and hostels, and the location of educational institutions; and a lack of quality, relevant education that discourages young people from advancing to higher education (Bunyi, 2003; Dunne and Leach, 2005; UNESCO, 2010; Tusiime et al., 2017).

Higher Education Trends in Rwanda from a Gender Perspective

As noted previously, in the past 20 years, Rwanda has made tremendous advances in education, with access to primary and secondary education for girls being among the highest in Africa. However, a shift tends to occur as girls and boys climb the educational ladder. In the 2017/2018 academic year, male students made up 54.8% of overall enrolment in higher education. In the public higher education sector, male students constituted 66% of enrolment, while females constituted 52.2% of the student population in private higher education. The gender difference in female and male enrolment in public and private HLIs in Rwanda is often attributed to the different status accorded to these institutions (Randell and Fish, 2011; Tusiime et al., 2017). Public institutions like UR are considered to be more prestigious since they attract the best performing students who qualify for government scholarships (Tusiime et al., 2017). Government scholarships also disproportionately favour institutions offering STEM subjects. Furthermore, tuition fees at public HLIs are almost double those at private universities (MINEDUC, 2018). It should also be noted that private HLIs have the largest share of student enrolment. For instance, in the 2017/2018 academic year, they enrolled 61.8% of all students in higher education (MINEDUC, 2018).

2.   Methodology

The broader study employed a mixed methods approach with both qualitative and quantitative data collection techniques applied. These included questionnaires, in-depth interviews and focus group discussions (FGDs). The study population comprised students from UR's six Colleges spread across various campuses, and those from seven private universities, six senior students from four secondary schools, and 20 female students who gained admission to UR but never registered. Purposively selected administrative and academic staff in each of the learning institutions, policy makers and stakeholders focusing on education, gender equality and women's empowerment in Rwanda also participated in the study. The qualitative samples were either purposively or randomly selected. In total, 1 513 participants completed questionnaires, and 32 FGDs and 49 individual interviews were conducted.

In order to manage the large study population, the sampling strategy involved two approaches. The quantitative approach "primarily used quantifiable, numeric data and the use of statistics" guided by the Raosoft sample size calculator (Raosoft, 2004). The qualitative approach "primarily involved the use of non-numeric data, expressed and analyzed in words" (McLafferty, Slate and Onwuegbuzie, 2010). Data collection sites included Kigali City, and the Northern, Western, Eastern and Southern provinces of Rwanda.

Fifty-three percent of the student participants were males. Forty-six percent were from UR, of whom 58% were male, while students from private universities made up 25% of the student sample and 56% were female. The students from senior secondary schools represented 29% of the student sample and 52% were male. In addition, individual interviews were conducted with 20 female students that were admitted to UR but never enrolled. A further 29 (15 women and 14 men) individual interviews were conducted with officials from ministries, and the universities and schools that were part of the study.

The study fulfilled the research ethical requirements of UR. Permission to conduct the study was obtained from the relevant authorities at the institutions that participated and informed consent was obtained from all participants. The researchers ensured that the participants were not exposed to any harm by approaching them with respect, asking non-harmful questions, and securing a safe environment for data collection.

Confidentiality was maintained throughout the study and the information provided was not linked to any participant's name.

The findings presented below are structured around three themes, namely, trends in admission and registration of male and female students at UR, the factors influencing student enrolment, and the challenges faced, particularly by female students within the University.

Trends in Student Admission and Registration at the University of Rwanda
Statistics from the MINEDUC show that female student enrolment at public tertiary institutions from 2011 to 2015 ranged between 34 and 31% (MINEDUC, 2016). The UR's records reflect similar trends in three consecutive academic years: 2013/14 (37.2%), 2014/15 (33.0%) and 2015/16 (32.4%) (University of Rwanda, 2016a).

Besides confirming underrepresentation of female students at the University, the study dispelled a common perception held by most participants and the general public that female students are more likely to study perceived 'feminine' courses like Social Sciences and Business Studies. As a female student from the College of Agriculture and Veterinary Medicine (CAVM) put it:

> Female students like to study things that are not complicated… especially since we know that sciences are difficult … I think the Business programme is their first choice, and Nursing is the second. Because these are easy subjects that do not require much effort, such as going to field, putting on boots, sports pants, no… girls do not like such things. By studying business, they are always in nice offices, in banks, in high class offices. (Female student, CAVM)

Yet statistics on student enrolment by college for the academic years 2013/14, 2014/15 and 2015/16 did not show larger female enrolment in the Business and Social Science Colleges. Only the College of Business and Economics (CBE) had a slightly high number of female students, at 39.8%, 41.8% and 39% over the three years. Indeed, the percentage of female students in the College of Arts and Social Sciences (CASS) was the lowest in all UR colleges during that period at 25.9%, 25.0% and 27.5% respectively. For the first two years, this was lower than female representation in the College of Science and Technology (CST) at 28.8% and 26.1%.

Ceci and Williams (2015) and Cheryan, Master, and Meltzoff (2018) argue that the fact that men are associated with science, engineering, and brilliance has a negative impact on women's choice of study programme where they would fear science related fields. This would suggest that female students choose courses in the arts and humanities. Indeed, studies by Teferra and Altbach (2004), Vincent-Lancrin (2008), and FAWE (2010) indicate that in African countries like South Africa, Mauritius, Lesotho and Tunisia where female students make up a larger proportion of higher education enrolment, most are enrolled in arts and social sciences disciplines. This does not appear to be the case at UR, where there is low representation of female students in arts and social sciences, which are referred to as *ibisosi* (very easy, like eating sauce) by students. This calls for an examination of other factors to explain low female representation at UR in general and in programmes that supposedly attract female students.

Determinants of Student Enrolment at the University of Rwanda
The study identified a number of interrelated factors that influence student enrolment at UR and how these may contribute to the exclusion of female students from Rwanda's biggest and only public university. These are categorised into:

a) *Structural determinants* – which include existing policies, procedures, and institutional requirements associated with enrolment, the field of study, study schedule, campus location and accessibility, accommodation, fees and mode of payment, the teaching/learning environment, and other related factors.

b) *Socio-cultural determinants* – refer to family influence, socio-economic conditions, and broader societal and cultural constructions of women and girls.

These factors influence students' formative decision-making as they navigate the transition from secondary school to UR.

This study identified five steps in enrolling at UR.

i) *Eligibility*
In the first place a student needs to have sat and passed the National Advanced Level Secondary Leaving (S6) examination with at least two principal passes. Female students' performance in national exams has

been found to be lower than male students in all disciplines (REB, 2017). For example, in 2015, 91.8% of males who sat for the S6 national exams passed compared to 86.1% of girls. Lower marks might thus result in female students' low enrolment at UR. However, over the three years 2013, 2014 and 2015, 48.7%, 48%, and 49.5% of female students obtained two principal passes (MINEDUC, 2016), respectively. Thus, in terms of eligibility based only on passing the national exams, it is not clear why female representation only stands at a third of the student population at UR.

ii) *Application*
An eligible student can choose to apply to study at UR. Admission depends on their performance in the examinations and the availability of places in the courses applied for. In the academic years 2014, 2015, and 2016, females made up 26%, 25%, and 38% of applicants, respectively (UR, 2017). While this small number of applications could be due to poor performance, it does not fully explain why a much lower percentage of female students applied than those who were eligible based on performance in the final national examinations.

During the FGDs, participants' explanations for this situation included females not being sufficiently confident to apply. Limited access to information among female students was also cited, as was the online application process. When the six senior secondary students were asked how they came to know about UR, a higher percentage of boys mentioned former UR students (100% vs 93% girls), the media (97.5% boys, vs 92.9% girls) and the Internet (91% vs 89%) as their main sources of information. In contrast, more girls said that learned about it from school teachers (97.1% girls, vs 88.9% boys).

Regarding access to and the use of information technology, participants argued that female students have to fulfil many family obligations and thus have less time to familiarise themselves with information technology or the use of internet cafés. It should be noted that most Rwandans do not have Internet access at home, which is why internet cafes are popular with young people, particularly young men. This could explain the differences in female and male students' responses in terms of receiving timely information, processing the required documents, and meeting UR application deadlines.

The Beijing +25 Rwanda Country Report (Republic of Rwanda, 2019) notes that the "ICT literacy rate among women is still low at 7% compared to 11% of men in the same age category". The concept of the gender digital divide highlights the differences between men and women and boys' and girls' access to and use of ICT (Cooper, 2006, Nesaratnam et al., 2018). Previous studies on the use of ICT in schools and out-of-school in Rwanda (Rubagiza et al., 2011, Rubagiza, 2012) also noted a gender digital divide as well as one between rural and urban settings.

The participants noted that female students' decision to apply to UR depends on a number of conditions, including the teaching/learning environment and the extent to which this is flexible and accommodates their needs, the family's socio-economic status (whether they can afford the fees or value girls' education), and the profession or job they aspire to. As the excerpts below indicate, cultural constraints were highlighted as a strong factor:

> *Today, when a girl is 25 and still single, she loses her hope of getting married one day. So, influenced by that idea, girls prefer to get married and go to university later because they believe that if they finish their studies at university with no husband, it would be a wasted life. So, they prefer to marry men who will afford to send them to university and provide them with whatever they will need.* (Boy student, S6, KDA)

A member of senior management at a university corroborated this:

> *In the Rwandan society some people think that a highly educated girl is unlikely to be a good wife. Some girls might not want to pursue their tertiary education to avoid such frustration and missing out on family life.* (Member, senior management, UNiK)

Private universities are more flexible with regard to aspects such as the application process (online applications are not compulsory), the teaching and learning structure (more possibility of evening and weekend programmes), and choice of preferred campus (more students in private universities study in the area where they live and work, which enables female students to fulfil their family responsibilities). Thus female students are less likely to apply to UR. According to the literature, social and cultural norms perpetuate gender differences in higher education and contribute to differences in access, performance and completion of primary and secondary education (Bunyi, 2003; Dunne and Leach, 2005; Tusiime et al., 2017). This means that, to some extent, eligible female students are lost along the journey of education.

iii) Admission

Some students are accepted for the courses they chose, while others are assigned to related programmes depending on their marks in the national exams and the availability of places. According to UR statistics, there were no major differences in male and female student admission during 2014, 2015, and 2016. Linking admissions and applications, 66%, 72%, and 62% of females were successful, and 66%, 70%, and 65% of males succeeded, respectively. The only issue related to students' preferred course. Due to the limited number of places in some fields of study, coupled with the government's policy of promoting and supporting STEM programmes, they do not necessarily gain admission in their chosen field. A participant explained:

> *I had applied for Pharmacy or Medicine and Dentistry, but they offered me Clinical Psychology at Huye campus. I didn't want it and I went to KHI in Kigali to ask them to give me another faculty. They told me that it was impossible unless I started studying, then they would review my case after one year. They said that many people were asking for the same. I did not believe that after one year they would still offer me the course I wanted. That is why I then decided to look elsewhere and by chance I got to study my preferred choice.* (SNR 12, female student who was admitted but never registered at UR)

Imposition of study programmes with little room for flexibility, coupled with the government's preference for STEM over social sciences and humanities is also likely to cause gender imbalances in some programmes of study at UR. Due to cultural stereotypes of female capacities, roles and professions (see the above notion of *ibisosi*), girls are more likely than boys to withdraw when offered a science/STEM programme. Indeed, gender disparity in STEM subjects appears to be a global phenomenon, particularly in engineering and computer science (Cheryan et al., 2018). Underrepresentation of women and girls in 'hard science' subjects, causes further disparities since girls and women continue to lack role models (Murphy et al., 2007).

iv) Scholarships

Worldwide, funding is a very important component of student entry to higher education. The fees charged by UR are higher than those of local private universities. Once students have been admitted to their field of study, they can apply for a government scholarship through the Rwanda Education Board (REB)/SFAR[3]. Eligibility is subject to the student's performance in the national examinations, the course (whether in science or arts/humanities), and the *Ubudehe* (the family's socio-economic status) category[4]. As noted above, the focus on performance in the national examinations is likely to reduce the number of females receiving this scholarship. Through the REB, the government is the largest sponsor of UR's students. It sponsored 70.3% of all students at the institution in 2013/2014, 91% in 2014/2015, and 85% in 2015/2016. However, more students apply for scholarships than receive them. Non-governmental organisations and private funders also offer scholarships. Statistics produced by UR show that, in absolute and relative terms, fewer female than male students were sponsored. Female students received 32.8% of scholarships during 2013/14, 33.0% during 2014/15, and 32.4% during 2015/16 (UR, 2018). Moreover, the percentage of sponsored female students versus those who apply remains lower than that of male students. In this regard, REB scholarships were awarded to 34.2% of female students in 2014, 58.5% in 2015, and 34.1% in 2016 against 41.5%, 65.8%, and 48.0% for male students, respectively (Rwanda Education Board, 2017).

As most participants in this study noted, tertiary education is very expensive, and most parents cannot afford it. In terms of gender disparities, a participant noted that:

> *There are many factors to consider in allocating scholarships, such as performance and area of study and because many girls opt not to study sciences, a girl may have performed well in other subjects but not in the priority area to be funded (e.g. science related[5]); as a result she will not be given a scholarship.* (Key Informant - UR)

It is likely that a student who fails to secure REB sponsorship or another source of funding, would opt to attend a cheaper private university. The annual cost per student for STEM programmes at UR is two million Rwandan Francs (RWF) (UR, 2018b), while it is between 667 000 RWF and 800 000 RWF at Institut d'Enseignement Supérieur de Ruhengeri

and 860 000 RWF at Kibogora Polytechnic (KP, 2020; INES, 2020) and private universities in the Northern and Western Provinces, respectively. Likewise, the cost of non-STEM programmes was 800 000 RWF at UR, between 465 000 RWF and 587 000 RWF at INES, and 420 000 RWF at KP. The significant difference in costs between UR and private universities is an important driver for students to choose private HLIs.

v) Registration

Another observed gender difference at UR is at the stage of registration. This is considered as the final step in student enrolment. Once a student has applied, has been admitted to a certain field of study/faculty and is able to pay for his/her tuition (whether by means of a government scholarship or otherwise), he/she can be a registered student at UR. A comparison between female and male students admitted and registered over the period 2014 to 2016 reveals differences. In 2014, of the female students admitted, 1 942 (47%) were registered compared to 4 453 male students (47%). In 2015, of the female students admitted, 3 389 (63%) were registered, while 5 375 (67%) males were registered. In 2016, only 2 232 (33%) admitted female students were registered, compared to 4 242 (42%) male students. Thus, the final step of registration in the process of enrolment shows gender disparities in favour of male students. This is not due to the registration process itself, which is the same for all students, but to the intersecting factors discussed earlier that contribute to female students' exclusion.

The enrolment process outlined above reveals progressive selection of fewer students (both male and female) to reap the *crème de la crème*. While the whole process appears objective and neutral, it may be considered unfair or gender-blind since it does not take into account the many socio-cultural constraints limiting females from achieving the same level of competitiveness as males or restricting their freedom to choose.

3.   Findings and Discussion

It was important to understand the challenges encountered by students and how these may impact female students' enrolment and study at UR. A number of issues were identified as challenges encountered by both female and male students at universities more broadly. In order of importance, these were (1) a campus located far from the student's home (50%), (2) a non-conducive learning environment (49%), (3) lack of access

to accommodation (46%), (4), the University's teaching and learning facilities (45%), and (5) the field of study not matching the student's preference (44%). Further discussion during the FGD with students revealed the gendered nature of some of these challenges.

It was observed that limited accommodation mainly affects female students. While UR has invested in student hostels, and priority is given to female students, they cannot all be accommodated. Failure to secure university accommodation means that, like their male counterparts, female students seek private accommodation in neighbouring areas. The participants indicated that this is usually more expensive, and that cheaper accommodation is usually located in poor, insecure locations, or far from the university. A male student had this to say:

I can say that when you are discussing with girls you find that sometimes there are reasons which could make them leave this place (University). We usually study until 11:00 pm. In this location, near this campus, there is violence and gang related crimes. They can take your computer or your phone... the long distance to the girls' hostels becomes an obstacle for them. That's why they decide to shift in order to avoid the violence and to find a more secure campus near their families. (Male student, CAVM)

This is in line with the literature (Bunyi, 2003; Dunne and Leach, 2005; UNESCO, 2010) that shows that the nature and availability of residential facilities at universities play a key role in female students' choice of university in Africa. Moreover, gender-based violence and other forms of abuse impinge on female students' well-being (Unterhalter, 2003, Dunne and Leach, 2005, ActionAid, 2013). These factors may negatively impact retention of female students and successful completion of their studies.

Furthermore, some participants were of the view that campus life at UR was characterised by a lack of discipline and immorality which was seen as more detrimental to female students. It was also noted that most Rwandan families are more protective of their daughters than their sons, and thus would not want them to study far from home. A female student who was admitted to UR said that she opted for a private university not far from home:

My father was not comfortable with the fact that I would stay at campus. He said the discipline was not good, which I found to be true from talking to colleagues. (SNR 17)

An aspirant university student who was about to complete her secondary education observed that:

There is a challenge for first-year students who apply to UR when they are allocated to campuses away from home. For example, a student from Eastern Province going to a campus located in the Western Province, and you know how difficult it is for girls to adapt to such new situations... which is not the same for boys who can sleep anywhere, but it is difficult for a girl. (Female student, LDK)

It was also noted that female students were considered as less capable of withstanding hardships such as delays in the release of bursary allowances. Although this affects both female and male students, the latter are likely to improvise by doing odd jobs. It was observed that even when they have a government scholarship, female students have more financial needs than male students, and might be tempted to engage in sex work.

While concerns about female students' safety and vulnerability to violence may be valid, they are often located in social norms and discriminatory practices that continue to position girls or young women as only fit to become wives and mothers (Rose and Tembon, 1999; Dejaeghere and Lee, 2011). As Unterhalter (2010), observes, giving substance to gender equality also means tackling violence against girls and women, which is a key cause of non-participation in school and the fulfilment of educational aspirations. Therefore, as Rubagiza (2012) contends, instead of protecting girls by keeping them at home or regarding safety and violence as a problem for girls, more attention should be paid to creating an environment where everyone feels safe.

Other challenges identified were the lack of flexibility as UR only offers day programmes. A number of participants pointed out that application and admittance requirements at UR are difficult, especially for students with family obligations. It is common in Rwanda for young women to join university after they are married or they marry while completing their undergraduate programme. The lack of flexible study arrangements makes it difficult to balance family roles and academic obligations and is also difficult for students with work commitments. This was seen as a push factor, especially for female students, to consider enrolment in private universities rather than UR.

A female student from a private university noted that:

Everyone is welcome in most private universities; whether you work or have kids, or you have suspended your studies and want to come back; you register without any problem. But these options are not there in public universities. The reason why the number of female students increases in private HLIs is because everyone who wants to study is well received, but in public (UR) they first consider the marks one got in the national exams. (Female Student, INES)

The constraints experienced by female students in terms of balancing family and studies confirm the findings of other studies (Subrahmanian, 2005; Walker, 2006; Unterhalter, 2007) that show that women's reproductive roles tend to be incompatible with schooling since they are time-consuming and home-based. Women and girls have great domestic demands that do not avail them much time to focus on their studies (Abagi et al., 2002; Dunne, 2007).

This sub-section highlighted common challenges faced by UR students, whether male or female. However, delving further revealed the gendered nature of such challenges. These and other related factors continue to limit female students' access to, retention and completion of their studies at UR.

4.   Conclusion and Recommendations

This article examined the factors that influence female students' participation at UR. The larger study from which it drew was commissioned by Rwanda's only public University where females comprise only a third of the student population. Moreover, female underrepresentation cuts across all the colleges including Arts and Social Sciences, Education, and Business and Economics; fields that tend to attract more female students in other university settings. The article revealed the multiple hurdles that students have to overcome to enrol and study at UR. More specifically, it highlighted a number of interlinked factors that may lead to female students' exclusion.

These underlying factors were categorised into, firstly, *structural determinants* such as policies, procedures and institutional requirements. While these are not intentionally biased against female students (since they apply to all students), their intersectionality with socio-cultural

factors tends to disadvantage female students more. The other category is *socio-cultural determinants* that constrain female students from lower educational levels and impact their entry to higher education. They include family background, socio-economic conditions, and broader societal and cultural norms and stereotypes. The unequal status accorded to girls and boys, women and men in Rwandan society (although implicit) implies that girls' education is less valued than that of boys (Abagi et al., 2002; Were and Opondo, 2007).

Thus, although the policy environment in Rwanda promotes gender equality, and the Ministry of Education and the University therefore assume that young women and men with the best grades in national exams will gain entry to UR, other push and pull factors constrain female students' choices. Nussbaum (2000) highlights that individual preferences and choices are often shaped by society, public policy and other life circumstances. In other words, people adjust their desires and aspirations to the way of life they know. This may explain why, for instance, when faced with the reality of the lack of safe accommodation on campus or a non-flexible study schedule, some female students may choose to join a private university (that is more accommodating in this regard) rather than UR. The fact that girls are expected to take on the bulk of domestic chores from an early age (Abagi et al., 2002; Dunne, 2007) often undermines their performance at school, and may lead to them dropping out. It restricts their freedom to pursue higher education, and constrains what they choose to study and when, and even job opportunities later in life.

In light of the complex nature of the challenges female students confront, a multi-pronged approach is required to find solutions. Some concerns, especially structural factors, could be addressed by the University, whereas tackling the social and cultural factors require a concerted effort from the broader Rwandan society.

For its part, UR should start by implementing its Gender Policy of 2016. The policy sets out clear strategies to mainstream gender into UR policies and procedures on student admission, academic regulations (e.g., a flexible study schedule to accommodate part-time students at undergraduate level), curricular, the teaching and learning environment, and staff recruitment, and to address sexual harassment. It also calls for the establishment of a Gender Mainstreaming Directorate at UR

headquarters to coordinate these activities. This would go a long way in improving the situation at the University.

More generally, the analysis highlights the importance of viewing gender equality in the context of the wider social environment, and not only in terms of the education system. There is a need for policymakers and other stakeholders in education to move from an exclusive focus on achieving gender parity in schools and tertiary education by targeting female students for inclusion in existing programmes. Rather, more attention should be paid to the school and university processes and the community environment, including socio-cultural attitudes and practices that disadvantage girls and other vulnerable children, in order to create an enabling teaching and learning environment for all students. Furthermore, attention needs to be paid to areas such as the workplace where women face discrimination, which could affect their educational aspirations.

(Endnotes)

1 The study was initiated by the Vice-Chancellor for Academic Affairs and Research, conducted by the UR Centre for Gender Studies and funded through the UR-SIDA Programme.

2 The Enquête Intégrale sur les Conditions de Vie des ménages (French acronym EICV) or Integrated Household Living Conditions Survey (English acronym IHLCS) is conducted every five years. It provides information on changes in the population's well-being such as poverty, inequality, employment, living conditions, education, health and housing conditions, and household consumption, among others.

3 The Student Finance Agency Rwanda (SFAR) was a department of the Rwanda Education Board (REB), which was responsible for funding higher education students. The Higher Education Council (HEC) is currently responsible for managing student funding.

4 *Ubudehe* categories are socio-economic classifications of families. It is on this basis that government social support was offered to the neediest of families in the health, education, and other sectors. Students who passed national exams but fell into the categories most in need were granted government scholarships to attend university.

5 Eighty-five percent of REB scholarships to attend the UR are allocated to STEM subjects.

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