Rural Student Experience of Spatial Inequality in Higher Education:
A Case Study in Kumi, Uganda
Master's Thesis in Educational Sciences
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ABSTRACT

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One of the prominent factors of intranational inequalities that are prevailed globally is the urban-rural disparity in living standards. This disparity leads to unequal access to educational opportunities and resources across geographical locations, creating spatial inequalities at various levels of education. Evidence suggests that the rural population in lower-income countries tends to be most vulnerable to inequalities in access to higher education (HE). Therefore, this study aimed to investigate spatial inequalities in HE in a developing, low-income country context through a qualitative case study of student experiences in a rural higher education institution (HEI) in Kumi District of Eastern Uganda.

The findings from a thematic analysis of seven semi-structured focus group interviews suggested heavy dependency on agriculture for financing HE, the importance of accessibility and cultural belongingness in choosing an HEI, and the lack of educational resources as shared experiences among the rural students. Furthermore, the findings revealed rural student conceptualisations of disparities in living standards, infrastructure, and employability between urban and rural HEIs in Uganda. The study also shed light on the obstacles faced by refugees seeking to access HE from Uganda's conflict-affected neighbouring countries, South Sudan and the Democratic Republic of the Congo. Despite the revealed challenges of ensuring access to quality HE in rural Uganda, HE in a rural region was seen as an essential source of community development and cultural preservation. The results of this study suggest implications for future studies on mediating effects of rurality in HE and recommendations for educational policy, specifically in the Least Developed Countries (LCDs) contexts concentrated in Sub-Saharan Africa (SSA).

Keywords: spatial justice, spatial inequality, urban-rural disparity, higher education, student experience, Uganda

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List of Abbreviations

Abbreviation	Definition
GDP	Gross Domestic Product
HE	Higher Education
HEI	Higher Education Institution
HEIs	Higher Education Institutions
HESFB	Higher Education Students' Financing Board
LDCs	Least Developed Countries
MLA	Monitoring of Learning Achievement
NCHE	Uganda National Council for Higher Education
SSA	Sub-Saharan Africa
SDG4	Sustainable Development Goal 4
UBOS	Uganda Bureau of Statistics
UN	The United Nations
UNCTAD	United Nations Conference on Trade and Development

1   INTRODUCTION

The aim of this study was to investigate spatial inequalities in higher education (HE) in a developing, low-income country context through a qualitative case study of student experiences in a rural higher education institution (HEI) in Eastern Uganda. A growing body of evidence suggests that global uneven development may be experiencing a geographical shift, creating a context where "there are more poor people in rich countries and more poor countries with rich people" (Horner et al. 2018, p.29; Trahar et al., 2020). In such a context, "global inequality is increasingly manifested within territorial proximity" (Horner et al. 2018, p.29), necessitating a deeper investigation of intranational inequality that may have been overlooked by the salience of international inequality. The urban-rural gap in living standards is one of the prominent factors of intranational inequalities that are prevailing globally (Lagakos, 2020; Young, 2013). The disparities between urban and rural living standards "measured by income, consumption, or various non-monetary aspects of life" are generally wider in developing countries (Lagakos, 2020, p. 174), and evidence suggests substantial differences in the educational attainment between locations and sexes in the developing world (Graetz et al., 2018; Roby et al., 2016).

The challenges of rural HE due to the "uneven distribution of social, economic and cultural resources that impact student access to higher education and their subsequent career choice" are not exclusive to lower-income countries (Trahar et al., 2020, p.933). However, the rural population in lower-income countries tends to be most vulnerable to inequalities in access to HE due to urban-rural disparities in terms of living standards (Trahar et al., 2020; UNESCO, 2006; World Bank, 2020). Regardless, most of the widely available literature on geographical inequalities in HE was researched and published in high-income countries such as North America, Australia, and the United Kingdom (Leibowitz, 2017). Therefore, this study aimed to contribute to the existing literature mediating effects of rurality in HE by exploring student experiences of rural HE

in one of the 46 least developed countries (LDCs) designated by the United Nations; Uganda (UNCTAD, 2022).

At least 33 out of the 46 countries designated as LDCs by the UN are in Africa, concentrated in the sub-Saharan region (UNCTAD, 2022). Although the urbanisation of sub-Saharan Africa (SSA) is accelerating (Saghir & Santoro, 2018), the rural population is expected to remain dominant, with a projected percentage of 58 percent by 2030 (UNESCO, 2006). 74 percent of Uganda's population lives in rural residences (World Bank, 2021) and only 5 percent of the total population enters tertiary education (World Bank, 2016). Of the 302 tertiary institutions registered by the National Council for Higher Education (NCHE) of Uganda (2023), 118 institutions are in the capital city Kampala located in the Central region of Uganda. These statistics suggest both substantial barriers to tertiary education at the national level and interregional disparities in opportunities for post-secondary education. Promoting spatial justice in HE requires recognizing and addressing the unique patterns and challenges of access to and the quality of HE that exist in various geographic areas and contexts. Acknowledging the scarcity of research in rural HEI contexts in sub-Saharan Africa, this study investigated student experiences in a rural HEI located in Eastern Uganda.

2 THEORETICAL FRAMEWORK

2.1 Spatial Justice

In this study, the concept of spatial justice, developed by a political geographer and urban planner Edward Soja (2010), was employed as a central theoretical framework to scrutinise spatial inequalities in higher education caused by "the omnipresence of geographically uneven development" (p. 71). Soja (2010) defines spatial justice as the concept of ensuring equal access to resources, opportunities, and services for all individuals and communities in urban environments, while also ensuring their right to participate fully in shaping the social, political, and economic aspects of the city. In his work, Soja (2010) emphasises the importance of understanding the spatial dimensions of inequality and advocates for the fair distribution of resources and opportunities across different geographical areas. Spatial justice recognizes that different geographical areas have varying levels of access to resources and aims to promote equality and equity in their distribution.

The theory of spatial justice takes a critical epistemological standpoint, which can also be referred to as "a critical spatial perspective" (Soja, 2010, p. 69). A critical spatial perspective raises "a critical awareness that we are spatial beings from birth, our primordial occupation of space" (Soja, 2010, p. 71). With this critical awareness of human spatiality, one approaches structural social inequalities with the underlying assumption that human geographies will always be associated with "spatial injustices and distributional inequalities," creating "some degree of relative advantage or disadvantage" between geographical locations (Soja, 2010, p. 72-73), which can be referred to as *spatial injustice* or *spatial inequality*.

The theory of spatial justice is built on the ontological premise that "no social process takes place uniformly over space" and the geographies humans create will always have some degree of unevenness, making "perfect equality across geographical space in any meaning attribute of human existence" simply unachievable (Soja, 2010, p. 72). Therefore, *spatial injustice* or *spatial inequality* can be defined as any instance of "unequal individual or collective advantage and

opportunity" perpetuating disparities between and within geographical regions and spaces (Soja, 2010, p. 73), such as unequal access to and quality of HE depending on geographical location.

While Edward Soja's concept of spatial justice was developed in an urban context in relation to the phenomenon of urbanisation in the U.S., its key principles and ideas can be employed to examine the relative disadvantages and general vulnerability of the rural population especially in regard to educational access (Nordberg, 2020). Considering that urbanisation is a persistent tendency that inevitably reduces rural population bases, particularly among young people (Nordberg, 2020), the role of HE cannot be overlooked when examining factors for the tendency for certain human activities to cluster in particular spaces and places (Soja, 2010, p. 72), which creates more and better opportunities and career prospects in urban centres. When employed in the context of higher education, spatial justice considers how opportunities and resources for post-secondary education are distributed across geographical space by evaluating the accessibility and quality of education provided by HEIs throughout different geographical regions.

2.2   Defining Urban and Rural

One of the globally prevailed spatial inequalities in education is urban-rural disparities in educational accessibility and attainment (Anlimachie & Avoada, 2020; Ansong et al., 2015; Lagakos, 2020; van Maarseveen, 2021; Xiang and Stillwell, 2023; Young, 2013). Defining the terms *urban* and *rural* is crucial to understanding the disparities that exist between the two entities. Urban and rural areas or populations are typically defined by residence in settlements above or below a certain size (Tacoli, 1998). In general, censuses and other statistical activities are carried out with an assumption that agriculture is the main economic activity for rural populations and industrial production and services for urban populations (Tacoli, 1998; UNESCO, 2006). However, the demographic and economic criteria determining what constitutes an urban or rural vary greatly between nations (Tacoli, 1998).

Furthermore, the boundaries of urban are increasingly blurred due to the spatial integration of agricultural and non-agricultural activities in extended metropolitan regions (Corbett, 2021; Firman, 1996; Ginsberg et al., 1991; Hugo, 1996; Simon et al., 2004), and due to the development and expansion of peri-urban areas that act as a "transition zone between city and countryside, between what is unambiguously 'urban' and supposedly typically 'rural'" (Simon et al., 2004, p. 236). Therefore, the concept of urban and rural have become a "slippery spatial notion" (Corbett, 2021, p.2), posing definitional challenges in works that posit a simple urban-rural binary. Although the distinction between *urban* and *rural* is used for descriptive purposes, there is no clear-cut dichotomy between the two (Simon et al., 2004; Tacoli, 1998). In other words, rural doesn't necessarily mean everything that is not urban and vice versa (Brown & Schafft, 2011).

In the absence of a sharp distinction between *urban* and *rural*, there still exists a *dichotomous relationship* between the two, which is in alignment with the relational concept of space (Seelig, 2021). The concept of relational space suggests that "a rural space is rural due to its relation to urban space, yet it is also rural in relation to its own past, present, and future space," which serves as an explanation of the evolvement of "rural space around urban centres that have become exurban or suburban relational spaces" (Seelig, 2021, p.859). In this study, urban and rural spaces were conceptualised as relational (Seelig, 2021) and interdependent (Massey, 1994) with an underlying assumption that there will always be some degree of relative advantage and disadvantage associated between locations that are labelled and contextually understood as "urban" or "rural" (Soja, 2010).

In most statistical systems, rural spaces are often characterised as *residual* space defined by the absence of people and their distance from urban centres (Seelig, 2021), or as "what is left over after urban areas have been defined" (Brown & Schafft, 2011, p. 18). Such a perspective may place rural strictly on the disadvantaged side, ignoring urban poverty and the complexity of inequalities that prevail within areas defined as urban and rural, as well as transition zones known as peri-urban areas. Therefore, it is necessary to understand complex interactions between different spatial entities and to view them as "spaces of

relations" instead of simple objects (Corbett, 2021, p.2). Furthermore, when investigating an area that is contextually labelled and understood as "rural," which is the case for this study, it is necessary to attend to "the intrinsic characteristics that contribute to a place's rurality" (Brown & Schafft, 2011, p. 8) and to consider "the diversity of communities defined as rural, which range from urban-adjacent suburbs to small, isolated islands and Indigenous communities" (Corbett, 2021, p. 2). Therefore, the characteristics that contribute to the rurality of this study context were thoroughly considered and explained (Sections 2.3 and 4.2.2).

2.3   Urban-Rural Disparity in Uganda

This study investigated student experiences of rural higher education and their conceptualisations of urban-rural disparities in higher education in Uganda. Therefore, it is important to define *urban* and *rural* and identify the urban-rural disparities within the context of Uganda. In the context of Uganda, the criteria for defining "urban" for statistical purposes have been altered over time (Mukwaya et al., 2012). Prior to 2002, settlements with a population of more than 1,000 people were defined as urban areas. In the 2002 census, a total of 110 urban areas were defined, ranging in population size from 1,600 in Nakeseke to 1,190,000 in Kampala (Mukwaya et al., 2012). The capital city Kampala was defined as the dominant urban centre, in which 80 percent of the nation's industrial and service sector firms were generating more than half of the country's Gross Domestic Product (GDP) (Giddings, 2009).

It is important to note that in the case of Uganda, population density is not a firm indicator of "urban," considering that high population densities are found in areas with excellent potential for agriculture, such as the slopes of Mount Elgon in the east near Mbale, the northern shores of Lake Victoria, and areas in the southwest and far northwest, which are regions with only a few and small urban centres (Mukwaya et al., 2012). High densities around areas that are considered ideal for agriculture can be explained by the fact that about 70 percent of all workers in Uganda are employed in agriculture (Mukwaya et al., 2012).

These 70 percent of total workers in Uganda are generating only 20 percent of the country's GDP, suggesting that those who work in agriculture and are predominantly located in rural areas have a lower standard of living than people who work in other economic sectors (Mukwaya et al., 2012). This leads to urban-rural disparities in household welfare in terms of consumption, food security, nutritional status, economic opportunities, and educational attainment (Mukwaya et al., 2012).

The concept of urbanisation emerged in Uganda under the British colonial rule beginning in the 1890s, which introduced a centralised administrative hierarchy that led to the establishment of urban centres around the city of Kampala (Twaddle, 1966). During the British colonial period, the construction of the Uganda Railway line accelerated the growth of urban centres concentrated in the Central region of Uganda, and "Specific planning attention was given to Kampala, as the largest and geographically most complex of the country's urban centres" (Mukwaya et al., 2010, p. 6). This legacy has persisted and has resulted in an unequal distribution of resources and services across geographical regions, perpetuating an urban-rural divide in terms of economic and infrastructural development. According to a report by the Uganda Bureau of Statistics (2020), the Ugandan government spends more on infrastructure development in urban areas compared to rural areas. Unequal infrastructural development has led to serious disparities in living standards between urban and rural regions of Uganda. For example, only 32.8% of rural households in Uganda have access to electricity, compared to 69.9% of urban households (World bank, 2020).

The proportion of people living below the poverty line is much higher in rural areas, the difference being extremely large in Uganda (UNESCO, 2006). As a result of rural areas' low national priority and disproportionately low political representation, rural residents typically lack access to necessary basic social services (UNESCO, 2006). Such disparity occurs even though the rural residents make up the majority of the population in Uganda and play a crucial role in defining both food security and environmental sustainability, given that agriculture is the main point of contact between humanity and the environment (UNESCO, 2006). Furthermore, the urban-rural gaps that are prevalent in

consumption and income are related to income disparities between agricultural and non-agricultural workers (Lagakos, 2020). This suggests that in Uganda, where 70 percent of the total population are agricultural workers, the majority of the population should be considered vulnerable to spatial inequalities that are prevailed by the disparities in urban and rural living standards, primarily due to the unequal sharing of resources and infrastructural development across different geographical regions.

2.4   Urban-Rural Disparity in Education

Urban-rural disparities in education refer to the unequal access to educational opportunities and resources between urban and rural areas. These disparities can manifest in various ways, including differences in enrolment rates, availability of academic programs and institutions, quality of education, and employment opportunities after graduation. Such disparity in education is caused by several factors, including poverty, limited resources, inadequate infrastructure, and the lack of qualified teachers in rural areas (UNESCO, 2006). Regional disparities in education are not merely a concept, but a quantifiable factor that can be determined through learning assessments. For example, a World Bank report titled "Facing Forward: Schooling for Learning in Africa" highlighted on urban-rural regional disparities in education as a prevailing factor from the 2014 francophone regional learning assessment (PASEC) conducted in Togo, a country located in West Africa:

> *Rural versus urban.* Location (urban or rural) and regional disparities manifest in the early grades and compound over time. Particularly striking are the regional differences, where outcomes are more favorable for students in or close to the capital (Lomé) than for those living in more distant regions (Savanes). (Bashir et al., 2019, p. 40)

In addition, Monitoring of Learning Achievement (MLA) surveys undertaken in Sub-Saharan Africa (SSA) reports that urban-rural disparities in academic achievement have been consistently observed across all subject areas, including literacy, numeracy, and life skills (Majgaard & Mingat, 2012).

The urban-rural disparity in education is significant in SSA, where the lack of resources and infrastructure in rural areas often leads to insufficient provision of even the most basic education (Bashir et al., 2018; Roby et al., 2016; UNESCO, 2006). In many rural areas, especially in developing countries, schools are poorly equipped, understaffed, and lack basic facilities such as clean water and sanitation (Bashir et al., 2018; UNESCO, 2006; UNICEF & WHO, 2022). Additionally, there are often cultural and societal factors that discourage girls from attending school, especially in rural areas (Bashir et al., 2018; UNESCO, 2006), partly due to the higher frequency of child marriage compared to non-rural counterparts (USAID, 2015). This can further exacerbate the urban-rural disparity and gender inequality in education, as girls in rural areas are less likely to have access to education than their urban counterparts. Ensuring equitable access to quality education across geographical areas requires targeted interventions and investment in education infrastructure and resources that are tailored to the specific contexts, situations, and needs of urban, peri-urban, and rural areas. The urban-rural disparity in education is a complex issue that demands an approach that recognizes the unique challenges of providing quality education faced by each region, in order to ensure that every individual has equal opportunities to access quality education, irrespective of their location.

2.5   Rurality and Access to Higher Education

Access to higher education is a crucial factor in achieving social mobility and economic development (Haveman & Smeeding, 2006; Ozturk, 2008). However, rurality can be a significant barrier for individuals seeking to access HE. Rural areas often face challenges in providing access to HE and ensuring the quality of HE, due to limited resources, geographical isolation, and lack of infrastructure (Trahar et al., 2020). As a result, individuals from rural areas may face significant barriers in accessing HE and, in turn, experience reduced opportunities for social mobility and economic advancement. Rurality and access to HE have been explored in various studies and contexts, revealing distinct challenges that rural students face in accessing, continuing, and completing university studies (Byun

et al., 2012; Chankseliani et al., 2020; Goldman, 2019; Guiffrida, 2008; Maltzan, 2006; Mgqwashu et al., 2020; Oyarzún et al., 2020; Rosvall, 2020, Trahar et al., 2020; Turner, 2020). These challenges include centralised systems of university admissions that put rural school graduates at a disadvantage (Chankseliani et al., 2020), socioeconomic challenges in college enrolment and degree attainment in comparison to nonrural counterparts (Byun et al., 2012), the financial and social stress of moving to the nearest larger community or city for social mobility (Rosvall, 2020), and less family and communal influence to pursue post-secondary education compared to nonrural counterparts (Byun et al., 2020; Trahar et al., 2020). However, the findings on the mediating effects of rurality in HE cannot be generalised universally, as the concept of rurality is highly contextual and the conditions and situations of rural areas vary between countries (Tacoli, 1998).

Most widely available research mediating the effects of rurality in HE in the context of Africa has taken place in South Africa, covering various topics including how rurality is conceptualised in relation to HE (Timmis et al., 2021), how rural students negotiate the transitions from home to university and its influence on their trajectories through HE (Timmis et al., 2021), the challenges rural students face when encountering HE curricula imbued with colonialism (Timmis et al., 2021), how rural-based HEIs contribute to sustainable development in the rural communities (Nkomo & Sehoole, 2007), the digital divide between urban and rural distance education students (Lembani et al., 2019), and the scarcity of rurality and rural education as a research area among scholars in South African HEIs (Nkambule et al., 2011). While the findings from the existing research conducted in the South African context may be generalisable to rural HEIs in parts of SSA to some extent, the variety of contextual situations unique to each SSA nation and region necessitate further research conducted in more various contextual settings within SSA, where LCDs are concentrated.

2.6 Sustainable Development Goal 4 and Spatial Inequality in HE

Sustainable Development Goal 4 (SDG4) is a universal goal established by the UN, which aims to "ensure inclusive and *equitable quality education* and promote lifelong learning opportunities for all" (UNESCO, 2015, p. 20). Complementing the goal are targets revealing several challenges and issues regarding equity in education that need to be addressed such as the socioeconomic achievement gap, gender inequality, unequal access to educational resources and opportunities, uneven teacher distribution, and regional disparities (UNESCO, 2015). Target 4.3 specifically addresses access to post-secondary education, stating, "By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university" (UNESCO, 2015, p. 20). This target seeks to ensure not only accessibility to HE but also to guarantee high-quality HE to both men and women. However, the reality of this target in the given timeline is far from achievable in the context of SSA, where tertiary education enrolment remains at 10% of the SSA population, and 5% of the Ugandan population as of 2020 (World Bank, 2020). While SDG4 has significant implications for individuals and societies across the globe, it is crucial to recognize the current conditions with respect to spatial inequalities in edcuation that can hinder its achievement in significant ways.

Addressing spatial inequalities in education requires a focus on both access to education and the quality of education provided, as well as a holistic approach that addresses the root causes of social and economic disparities perpetuating systemic inequality. Spatial inequalities in education are particularly prevalent in low and middle-income countries, where marginalised populations often lack access to basic education and are more likely to experience poverty and other forms of social exclusion (UNESCO, 2006). *Promoting lifelong learning* from SDG4 suggests the importance of extending education beyond basic education; however, the majority of regions in SSA are struggling to even meet basic education targets (Graetz et al., 2018). SDG4 cannot be achieved without addressing spatial inequalities in education, and therefore, policymakers must

prioritise inclusive and equitable education systems that address the specific needs of marginalised communities across geographic regions and locations.

The experiences of those who are considered vulnerable to spatial inequalities in education, such as the rural population in SSA, are crucial to understanding the real challenges of achieving SDG4. Philip Roberts (2014), a rural education scholar, poses the important role of rural scholarship in decentralising knowledge that is predominantly produced in non-rural settings:

> The rural works as a metaphor for the local, as we are able to observe how dominant global cosmopolitan knowledge and understandings are produced, and the processes through which they marginalise other ways of understanding the world and deny situated knowledges. (p. 145)

The rural as "a metaphor for the local" is particularly applicable to the SSA context where the majority of the population is largely defined as rural residents (The World Bank, 2020) and projected to remain rural (USAID, 2015). Furthermore, Roberts (2014) posits that research in rural educational contexts is crucial not only to address the unique challenges faced by rural students and communities, but also to provide important data to policymakers, educators, and other stakeholders to inform policy decisions:

> In a globalised world, the rural allows us to see the impact of policies and ideologies that have become obscured by the familiarity of modern metropolitan life. Thus, our research speaks not only to the rural, but to the non-rural as well, in that it can shed light on what it takes for granted and what it has lost in the process of modernity. (p. 138)

While SDG4 is a universal goal, its realisation, implementation and achievability are subject to contextual factors and challenges. In particular, marginalised contexts such as rural regions in LDCs face significant barriers to achieving SDG4, due to inadequate infrastructure, limited resources, poverty, and social and cultural barriers to education. HE plays a critical role in the implementation and realisation of SDGs (Ferguson, 2019); therefore, ensuring access to high-quality HE requires a close examination of the current state of spatial inequalities in access to HE at international, intranational, regional, and local levels. Therefore, this study aimed to gain a critical perspective on the current state of spatial inequalities in access to HE by examining the real-life experiences of students who are pursuing HE in a rural setting in one of the LDCs, Uganda.

3 RESEARCH TASK AND QUESTIONS

This study aimed to contribute to the existing literature on rurality and higher education, with a focus on the concept of spatial justice and urban-rural disparities in higher education. Recognizing the scarcity of research investigating student experiences in a rural higher education setting in a developing country context, this study was guided by the following research questions, answered through a qualitative single case study in a rural higher education institution in the Kumi District of Eastern Uganda:

1. What are student experiences of higher education in rural Uganda?
2. How do students conceptualise urban-rural disparities in higher education in Uganda?

4 RESEARCH IMPLEMENTATION

4.1 Qualitative Case Study

This research undertook a qualitative case study approach, which is a research method that aims to investigate and understand a phenomenon in-depth in its real-life context, appropriate for *what* and *how* questions (Crowe et al., 2011; Yin, 2008, p.18). The main goal of a qualitative case study is to generate a rich, detailed description of the case being studied, and to develop insights and understanding of the underlying processes, mechanisms, and dynamics at play (Crowe et al., 2011; Yin, 2008). Case studies allow researchers to explore "a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information" (Creswell, 2013, p. 97). Single case studies and multiple case studies are research methods that differ in the number of cases examined, the level of analysis, and the generalisability of findings (Gustafsson, 2017). The choice between these methods depends on the purpose of the study, the research questions, and the available resources (Gustafsson, 2017).

4.1.1 Single Case Study Approach

A single case study method was chosen over multiple case studies in this study due to several reasons. The purpose of this study and the research questions were designed to understand the real-life experiences of students in a bounded context of a rural HEI and their conceptualisations of urban-rural disparities in higher education in Uganda, rather than to compare urban and rural HEIs or student experiences of HE across different geographical regions. This research focused on rurality and access to HE in a specific chosen context of Uganda, a country designated as one of the least developed countries (LDCs) by the UN (UNCTAD, 2022). The reason the multiple case study approach wasn't employed to investigate several rural HEIs within the context of Uganda was mainly due to resource, time, and situational constraints, which will be explained further in the Evaluation of the Study (Section 6.4).

Although single case studies have limited generalisability, using this method in the current study allowed for a close investigation of a culturally-specific and localised context, providing in-depth insights that produced a comprehensive description of the phenomenon of spatial inequalities in HE through the perspectives of rural students in Uganda. Furthermore, the research site was carefully selected to represent relevant dimensions (Siggelkow, 2007) pertaining to rural HEI settings in the context of SSA, such as the low-socioeconomic, agricultural family backgrounds of participants. Therefore, the findings may be generalisable to other rural HEI contexts in Uganda and SSA to some extent. This single case study was exploratory in nature because predetermined outcomes and propositions were not made about what students experience in rural HE and how they conceptualise urban-rural disparities in HE in Uganda (Yin, 2008).

4.1.2 Instrumental Case Study Approach

Intrinsic and instrumental case studies are two types of case studies used in qualitative research (Stake, 1995). The main difference between the two is their purpose and focus. An intrinsic case study is conducted to gain an understanding of the case itself, while an instrumental case study is conducted to gain insights into a broader issue or theory using the case as an instrument (Stake, 1995). While recognizing the limited generalisability of single case studies, this study was still more instrumental than intrinsic, because the purpose of this study was to gain insight into the broader issue of spatial inequalities in HE through a selected case of a rural HEI in Uganda. The reason that this case study was more instrumental than intrinsic can also be explained by the data collection method employed, which was semi-structured focus group interviews (Section 4.6.1). Considering that semi-structured interviews are designed with specific research questions in mind with previous knowledge on the chosen topic area (Kallio et al., 2016), the interview guide covers the main topics of the study (Taylor 2005). Therefore, the semi-structured interview guide used for this study was purposefully designed with the specific aim of gaining insight into the broader issue of regional disparities in HE (See Appendix D).

4.2   Research Context

4.2.1   Geographies of Higher Education in Uganda

An understanding of the current geographies of higher education in Uganda as a nation is necessary for the contextualisation of this study. Uganda has an estimated population of 45.8 million with 45 percent of the total population being under the age of 14 in 2021, which makes it one of the youngest nations in the world (World Bank, 2021). The rural population of Uganda is 74 percent (World Bank, 2021) and only 5 percent of the total population enters tertiary education (World Bank, 2016). A total of 302 tertiary institutions are registered by the National Council for Higher Education of Uganda (NCHE, 2023), including both public and private institutions. Of the 302 tertiary institutions, 118 institutions are in the capital city Kampala located in the Central region of Uganda. By regions, 165 institutions are located in the Central region, 54 in the Western region, 48 in the Eastern region, and 35 in the Northern region (National Council for Higher Education, 2023). The statistics suggest regional disproportionality in available post-secondary institutions with the centralisation of HEIs in districts that are near the metropolitan city of Kampala and simultaneously the Central region of Uganda.

4.2.2   Kumi District and Kumi University

A higher education institution in a district that is defined as largely rural in Uganda was selected as a case for this qualitative study. The research site chosen for this study was Kumi University, a private university located in Kumi District in Eastern Uganda. According to the 2014 National Population and Housing Census by Uganda Bureau of Statistics, 202,775 people out of the total Kumi district population of 239,268 live in rural residences (Uganda Bureau of Statistics, 2016). This means that about 85 percent of the total population of Kumi District lives in rural residences. The majority of the rural residents rely on subsistence farming for their livelihoods. The district is also characterised by limited infrastructure, including poor road networks and limited access to essential services such as healthcare and education. While there are some urban

centres within the district, such as the town of Kumi, the district is considered primarily rural in nature.

Kumi University is a religiously affiliated private university founded in 1999 by Korean missionaries with the support of a non-profit organisation Korea Food for the Hungry International (KFHI) with the following aim: "To provide quality, affordable, community-tailored, Christian-based higher education" (Kumi University, n.d.). The demographic composition of Kumi University is diverse in terms of nationality. The administrative leaders, the Vice Chancellor and Deputy Chancellor of Finance & Administration, are South Koreans. Several other South Korean professors and staff are holding positions at the university, including the Director of CIC (Center for International Cooperation), the Director of the Research Center, the Faculty Dean of Theology, and the University Chaplin. Most professors, lecturers, and students are Ugandans by nationality but belong to various ethnic groups, mostly Iteso (Ateso), as Kumi District belongs to the Teso sub-region. There are staff and students from Uganda's neighbouring countries including South Sudan, the Democratic Republic of the Congo, Burundi, and Rwanda.

Kumi University currently has the following four faculties offering Certificate, Diploma, Bachelor of Arts, and Bachelor of Science degrees: 1) Faculty of Social Science and Management Studies; 2) Faculty of Education and Languages; 3) Faculty of Science and Technology; 4) Faculty of Theology. Kumi University was approved by the Ugandan Government in 2004 and acquired an official operational licence from the National Council for Higher Education (Kumi University, n.d.), also known as NCHE, which is a regulatory body appointed by the Ugandan Government with the responsibility of licensing HEIs, accrediting new and old programmes and implementing quality assurance in the Ugandan HE sector (Kasozi, 2016). Kumi university is currently in the advanced stages of achieving an official charter from NCHE. Acquisition of an official charter from NCHE will allow Kumi University to offer Masters and Doctor of Philosophy degrees.

4.3   Research Participants

Given that the scope of this study was restricted to a selected rural HEI context in Kumi, Uganda, the full-time status of students at Kumi University was established as the criterion for participant selection. As this was the only criterion for participant selection, this qualitative case study did not employ "random sampling of participants in the statistical sense" (Galletta, 2013, p. 33). A convenience sampling method was employed in the selection of participants. Convenience sampling is a non-probability sampling method in which the participants are selected based on their accessibility and willingness to participate in the study, rather than being randomly selected from a larger population (Braun & Clarke, 2019). A total of 38 students volunteered to participate in this study, with varying levels of education, majors, nationalities, and genders. Of the 38 participants, 22 were male students and 16 were female students. Most participants were Ugandan nationals from the Teso tribe, as Kumi District is located in the Teso sub-region of Uganda. Some participants were international students from Uganda's neighbouring countries South Sudan and the Democratic Republic of the Congo. The participants were informed through the research notification and privacy notice that their nationalities would be disclosed for general background information purposes, but their identities would not be revealed through the quotes used in the report (See Appendix A and B).

4.4   Researcher's Positionality

Since this research employed a case study approach within a specific geographical and cultural context, an explanation of the researcher's positionality in relation to the research context is necessary. I am a female East Asian by ethnicity and South Korean by nationality. I moved to East Africa at the age of ten and completed middle school and secondary school in two different East African countries: Malawi and Kenya. Being educated in private, American curriculum international schools in the East African context, I consider myself privileged in terms of access to quality education. Hence, I recognize that I lack

personal experience in receiving an education at local schools in Malawi and Kenya that are often situated in difficult learning environments. Despite my privileged background in terms of education, I consistently witnessed large disparities in access to and quality of education throughout my experiences of receiving pre-tertiary education in SSA countries. Through my experiences of receiving and delivering education in diverse social contexts, including developed and developing countries, private and public schools, and national and international institutions, I learned that inequality in education is a global phenomenon. From my personal experiences and observations, educational inequalities in low-income countries in SSA appeared to pose greater challenges compared to high-income countries. Therefore, through my master's thesis, I aspired to explore issues of inequality in education in the East African context where I spent most of my adolescence, witnessing great challenges to educational attainment at all levels.

Despite my prior experiences of living in East African country contexts, I was conscious of my foreign identity in the research context where I conducted the study. As a researcher, I took on the "focused participant observer" role, in which I maintained "an explicit research status and a clear agenda of what data to gather in the scene" (Tracy, 2013, p. 111-112). As the field research was constrained to a period of 12 weeks, the data collection plan was designed to adhere to a specific timeline. Consequently, in this study, the researcher's positionality as the focused participant observer was appropriate.

Due to my privileged background in access to primary and secondary education in developing countries and higher education in developed countries, I chose to be critical of my own observations of the learning environment and quality of education being offered at the university. As an outsider, it was also important to establish trust with research participants by helping them understand my perspective and potential biases as a researcher to facilitate a more open and productive dialogue in the focus group interviews. Therefore, throughout 12 weeks of field research, I actively participated in various school activities and meetings, and I observed various courses offered by the university where I had many opportunities to interact with the university students and staff.

Sharing my own experiences of growing up in Malawi and Kenya helped the prospective research participants to take interest in my background, leading to conversations relating to the research agenda. My experience of growing up in East African contexts assisted in the trust-building process with the participants, which was an essential part of the qualitative research process (Tracy, 2013).

4.5   Ethical Considerations

4.5.1   Disclosure of Research Site

Anonymisation, which "refers specifically to removing or obscuring the names of participants or research sites, and not including information that might lead participants or research sites to be identified" (Tilley & Woodthorpe, 2011, p. 198), is a common practice used in qualitative research. However, in this study, location and the name of the research site were disclosed. Disclosure of location and name of research site takes serious ethical considerations, due to privacy concerns. Therefore, approval was obtained by the university administration to disclose the district and the name of the university in the report of this study. In addition, research participants were informed in the research notification, privacy notice, and consent form that the research site will be disclosed in the study report (See Appendix A, B, and C).

Seelig (2021), a researcher in critical rural scholarship, suggests "the tension inherent in place anonymization in critical rural scholarship" (p. 863) raises methodological challenges for researchers to weigh out the "dynamics of power inherent in the act of naming" (Guenther, 2009, p. 412). While the erasure of research sites for confidentiality is a common practice in qualitative rural scholarship, it ironically promotes neoliberalism, which "prioritizes standardization as a baseline for efficient measurement and comparison, which serve as a mechanism of commodification and as a precondition of disinvestment" (Seelig, 2021, p. 865). Such a process is detrimental for rural spaces, as it "destroys the lived spaces ... in an effort to homogenise and fragment those spaces in order

to create economic efficiency" (Cervone, 2017, p. 3). In addition, place anonymisation allows de-contextualisation for theoretical generalisability, which "erases the distinctiveness and diversity of rural places" (Seelig, 2021, p. 864). The problem of place anonymisation in qualitative rural scholarship is expressed in the following quote by Seelig (2021):

> Rural is both a location and all of its relevant characteristics and histories, and the label given to the people who live there. In this way, people are associated with, and shape, the places in which they exist, while reciprocally, the places, and how they are named, shape them. From a critical rural standpoint, place anonymization eliminates key attributes that inform the study's findings, whatever they are, because of this relationship between people and places as well as the social processes that define place, and the power dynamics that lie within. (ibid., p. 864-865)

As explained in the previous section "Defining Urban and Rural" (Section 2.2), the concept of rurality, or what defines "rural" is highly contextual. Taking a single case study approach, this study investigated a single rural context in relation to the distinct historical and cultural characteristics it contains, especially in respect to the dominant tribe represented in the region and its geographical circumstances that affect the backgrounds of the majority of the study participants. Therefore, the findings of this study cannot be generalised to every place that is considered rural, even within the SSA context, considering the vast diversity of tribes, cultures, and situations that exist in SSA.

The decision to disclose the research site in this study was deliberately and cautiously made to counter the process of neoliberalism that downplays the voices of the rural (Seelig, 2021) and the rural place anonymisation which "leads to the erasure of sociologically significant information" (Jerolmack & Murphy, 2017, p. 3) and the ignorance of rural diversity. Although the location and the name of the research site were disclosed in this study, the personal data of the research participants were kept strictly confidential, which will be explained in the following sections on participant consent and data management (Sections 4.5.2 and 4.5.3).

4.5.2   Participant Consent

Ethical consideration is an integral part of scientific research, consisting of informed consent, risk of harm, anonymity, confidentiality, and conflict of interest (Tracy, 2013). Research consent was obtained from Kumi University to collect research data through field observation and focus group interviews for the period of 12 weeks after the submission of a detailed research proposal to the Vice Chancellor of the university. The purpose of the research was clearly communicated to university students through both oral presentations and written research notification (See Appendix A). The students were given a week to express their interest to participate in the study. Students who expressed interest in participating in the study were provided with written privacy notice (See Appendix B) and consent form (See Appendix C). The voluntary nature of the research participation was stressed throughout the research process, and participants were clearly informed that they can stop participating in the study at any time, without giving a reason. The reason for the grouping of focus groups according to nationality was also verbally communicated to the participants during the participant recruitment process as well as at the beginning of every focus group interview in the introduction statement (See Appendix D).

4.5.3   Data Management

Due to the nature of focus groups which involves group discussions, ensuring total confidentiality of data can be challenging. Therefore, research participants were instructed to refrain from using any names during the focus group discussions and to respect the confidentiality of other focus group participants by keeping all information shared during the study to themselves (See Appendix D). The focus group interviews were audio-recorded with participant consent so that transcriptions of the interviews would be accurately produced based on the audio recordings. The purpose of the audio recording was to ensure the accuracy of capturing what was said in the interviews; however, to prevent the participants from being identified from the recordings, the participants were informed that the audio recordings will be deleted upon the completion of the

interview transcriptions. The participants were also informed that personal data and responses from the focus group interviews will be handled confidentially in accordance with the privacy notice provided. In addition, the rights of the data subjects were clearly outlined in the privacy notice for participant information (See Appendix B). The participants were informed through the research notification, the privacy notice, and the consent form that the nationalities of the participants will be disclosed to provide general background information of research participants, but individuals will not be identifiable from the quotes used in the report (See Appendix A, B, and C).

4.6 Data Collection

4.6.1 Semi-structured Focus Group Interviews

The chosen data collection method for this study was semi-structured focus group interviews. Focus group interview is a form of qualitative data collection method that generally consists of 3 to 12 participants, characterised by group interactions in various forms including group discussions and interactive activities (Morgan, 1997; Tracy, 2013). In this study, the use of focus groups was appropriate, as this method has been shown to disclose a range of participant viewpoints and emotions regarding specific issues or topics, and can also reveal disparities in perspectives among different groups of individuals (Rabiee, 2004).

With a total number of 38 participants, 7 focus group interviews were conducted with 4 to 6 participants in each group. 5 of the focus groups consisted of students with Ugandan nationality and 2 of the focus groups consisted of international students from Uganda's neighbouring countries South Sudan and the Democratic Republic of the Congo. The rationale for dividing participants into national and international student groups was to acknowledge their differing experiences in higher education. All of the international student participants identified themselves as refugees from war-torn neighbouring countries South Sudan and the Democratic Republic of Congo. Focus groups composed solely of international students were designed to allow participants to openly share their experiences of accessing HE in a foreign country due to

political unrest in their home countries, as well as their experiences of pre-tertiary education in refugee settlements.

Semi-structured interview was chosen in this study to gain a deep understanding of the participants' lived experiences, opinions, and attitudes on spatial inequalities in HE, incorporating "both open-ended and more theoretically driven questions, eliciting data grounded in the experience of the participant as well as data guided by existing constructs in the particular discipline within which one is conducting research" (Galletta, 2013, p.45). Semi-structured interviews are particularly useful for exploring complex or sensitive issues, where the researcher wants to gather detailed information from participants but also wants to ensure that the interview remains focused and structured (Galletta, 2013; Kallio et al., 2016). Therefore, in this study, the semi-structured interview guide was purposefully designed to gain insight into the particular issue of urban-rural spatial inequality in HE education through the exploration of student experiences of rural HE students and their conceptualisations of urban-rural disparity in HE in Uganda (See Appendix D).

4.6.2   Research Field Notes

During the 12-week field research, hand-written field notes were collected to record observations that offered a contextual understanding of the research site (See Appendix E). The field notes did not contribute directly to the findings of this study; however, they guided the process of research, especially the process of creating the semi-structured interview guide. The field notes were taken in various situations, including school events or activities, notable interactions between the researcher and the university staff and students, living experiences such as market visits and infrastructure observations in Kumi District, and accounts of visits to other educational institutions and organisations in differing geographical locations in Uganda.

4.7 Data Analysis

4.7.1 Thematic Analysis

Thematic analysis was the chosen method to extract findings from the semi-structured focus group interviews conducted. Thematic analysis considers how the reported data answers specific research questions and can invite a novel conceptual or theoretical viewpoint (Lochmiller, 2021). Since thematic analysis can be geared in a way that it "reports experiences, meanings and the reality of participants" (Braun and Clarke, 2006, p. 81), it was an appropriate data analysis method for this study, with a focus on rural student experiences in a real-life HEI context. In this study, thematic analysis was utilised as a "constructionist method, which examines the ways in which events, realities, meanings, experiences and so on are the effects of a range of discourses operating within society" (Braun & Clarke, 2006, p. 81).

The thematic analysis in this study involved a cyclical process of iterative data coding and analysis to identify and develop themes and sub-themes by revisiting the data and refining the coding and thematic development over several cycles of analysis (Braun & Clarke, 2006). The data analysis process consisted of the following steps: 1) Transcribing the audio-recorded interviews; 2) Reviewing the transcriptions; 3) Familiarisation with the data set; 4) Initial coding; 5) Searching and developing themes; 6) Reviewing themes and sub-themes; 7) Refining themes.

ATLAS.ti (version 23.0.1), a qualitative data analysis software, was used for the initial coding and development of themes and sub-themes. Identification of initial patterns led to the first cycle of coding, also known as initial coding (Braun & Clarke, 2006). The aim of the first cycle of coding was to find significant and pertinent chunks of text or phrases that responded to the research questions to be further investigated in later coding cycles (Lochmiller, 2021). The next step was the creation of descriptive codes which described the experiences and viewpoints of the focus group participants. The search for themes occurred based on the evaluations of the descriptive codes. The final step of the analysis was the interpretive phase in which the themes and sub-themes were created and

described based on the categories identified through the analysis of the descriptive codes. The themes and sub-themes were then reviewed and evaluated to ensure that they accurately represent the data and that they are relevant to the research questions. In this process of evaluation, themes and sub-themes were refined and modified to better capture the patterns and meanings of the data. The following questions formulated by Lochmiller (2021) were considered throughout the thematic data analysis process in this study:

1) How do the categories support the development of the theme?
2) To what extent is the theme supported by the perspectives of multiple participants?
3) What areas of agreement, disagreement, similarity, or difference does the theme include?
4) Which quotations or examples offer the most compelling support for the theme?
5) How should I substantiate the theme using quotations and/or primary data sources? (ibid., p. 2036).

4.7.2 Description of the Thematic Analysis Process

52 initial codes were identified in the initial coding process (See Appendix F), which conclusively generated 4 themes that responded to the first research question and 3 themes that responded to the second research question. For each theme, sub-themes were identified and described to capture more nuanced and complex aspects of each theme. The themes and sub-themes were reviewed multiple times throughout the analysis process to ensure they accurately reflect the data and are internally consistent.

The process of generating themes and sub-themes required refining or combining themes and sub-themes as necessary to create a cohesive and meaningful set of categories. There was an additional finding that did not answer the research questions directly, but suggested interesting points relating to the role of HE in rural community development. This additional finding was also analysed and reported in this study (Section 6.3) to complement the importance of HE in human capital, regional, and economic development, as outlined in this study.

5 RESULTS

5.1 Student Experiences of Higher Education in Rural Uganda

The results of the thematic analysis of the semi-structured focus group interviews regarding the first research question can be seen in Table 1. The table outlines the themes and sub-themes of student experiences of higher education in rural Uganda.

Table 1 Student Experiences of Higher Education in Rural Uganda

Themes	Sub-themes	Number of mentions from the focus group interviews
Financing higher education	Agriculture as a main source of income to finance HE	19
	Importance of scholarships	28
	Unavailability of student loans	5
	Tuition and other costs of learning in HE seen as a challenge	8
Accessibility and belongingness	Proximity of HEI to home perceived as an important factor	19
	The importance of cultural acceptance and tribal identity in HE studies	14
	Fear of being discriminated against in urban HEIs	13
Educational resources	Lack of educational resources in rural HE	14
	Sharing of educational resources among the rural students	12
Experiences of international students	Challenges of students with refugee status in Uganda	18

5.1.1   Financing higher education

Agriculture as a main source of income. Financing HE was discussed extensively by respondents, including sources of income to finance HE, the importance of scholarships, and the unavailability of student loans. Most of the respondents referred to agriculture as their family's main source of income to pay university tuition, frequently describing their parents as "peasants" which was synonymous with "farmers": "Since my parents are farmers, they are peasants. All of us are dependent on agriculture. So, after harvesting, they sell the agricultural produce, then the money is given to me for tuition" (Student 5, Focus Group 1). The dependence on agriculture in rural settings was also associated with low-socioeconomic background: "The majority of us are from a poor setting, that means from a rural setting, farming and raising a few animals, which means you always lack money" (Student 38, Focus Group 7). The respondents also expressed concern for weather and climate conditions affecting harvest, which directly affects their abilities to finance HE:

> *It's a struggling moment whereby you see currently, the weather is not favouring. Like, I can talk about Eastern Uganda at large, the weather is not so favourable. Whereby the sun has hit so much in this season. And you find that there is a lot of poor harvest. Even the animals don't do well, meaning most parents are not able to afford to send their children back to university.* (Student 19, Focus Group 4)

Importance of scholarships. While the respondents expressed difficulties in affording university tuition through a small income generated by agriculture which depends on annual harvests, weather, and climate conditions, they mentioned the importance of scholarships which assisted in financing HE significantly. Since Kumi University is funded by a Korean NGO, scholarship opportunities are generated by donors from abroad. Therefore, the university is currently able to offer 35 percent scholarships to all admitted students, as well as full scholarships to students who are orphans and hold refugee status. According to the respondents, scholarship opportunities at the university were a major inducement for them to continue HE studies:

> *With the scholarship policy at the university, I agree with it. Because the university understands the reality that we come from rural areas whereby raising tuition is quite difficult. So the university has helped some of us, like for me, to cut off the tuition by giving me 35 percent scholarship so that I can only pay 65 percent of the tuition. At*

least it has favoured each and everyone. The university at least encourages those living in rural areas to receive education. (Student 5, Focus Group 1)

Another participant emphasised the importance of scholarships in lowering financial barriers to higher education for rural students:

One of the factors that influenced me to come to Kumi University and pursue higher education is the financial factor. I've been offered a scholarship, and that's why I joined here. Otherwise, if there was no scholarship, I could have not started university at all due to financial reasons. (Student 13, Focus Group 3)

Unavailability of student loans. The topic of student loans was brought up by a few respondents, who viewed accessing the loan unfeasible:

It's impossible to get a student loan, at least in Uganda. There are very few who get this loan because it is a challenge. It's really hard for you to access this loan because here and there, you see there's a lot of corruption, and if you don't have the technical know-how, you just don't get it. So most students are denied the chance to get a loan and to climb higher. (Student 19, Focus Group 4)

Respondents suggested that only a few students are able to access student loans due to various challenges. From their point of view, corruption appeared to be one of the biggest obstacles to accessing student loans, which implied that individuals with the right connections are more likely to receive a student loan. The respondents argued that the process of obtaining a student loan requires technical know-how or insider knowledge, which can make it difficult for students who are not familiar with the process to navigate the system. This can create barriers for many rural students who lack the necessary connections or technical knowledge to access the loan, mainly due to their geographical situations and limitations.

Another respondent explained one of the criteria for being qualified for a student loan, which was the official charter from the National Council for Higher Education (NCHE):

If I know correctly, you can only apply for a student loan, only if the university you go to is chartered by NCHE. But Kumi University is in the process of getting chartered. So, I think, we don't even have the chance. We don't qualify. (Student 20, Focus Group 4)

The respondent suggested that students attending Kumi University are not eligible for a student loan because the university is in the process of getting chartered by NCHE. Chartering is a process by which a university is officially

recognized and authorised by the government to offer higher education degrees and programs. Kumi University is currently in the advanced stages of acquiring the civil charter from the government of Uganda, meaning that once this process is complete, the university can offer higher degrees including Master's and PhD (Kumi University, n.d.). The quote highlights the importance of university charters and the impact they have on students' access to financial resources for higher education. It also underscores the challenges faced by students attending universities that are not yet chartered and the need for increased government support for a wider spectrum of universities in different regions of Uganda. As most universities chartered by NCHE (2023) are located in urban areas, it poses significant challenges for the chartering process of rural universities struggling to meet the required standards due to limited infrastructure and access to resources primarily available in urban centres. It was evident from the field observation that administrators and staff find the chartering process stressful as they strive to meet equal standards and requirements as those in urban areas. Therefore, it may be necessary to modify requirements or provide strategized assistance that acknowledges the unique challenges faced by rural HEIs during the chartering process.

Tuition and other costs of learning in HE seen as a challenge. Alongside the challenges of financing tuition fees in a rural setting, the respondents stressed the importance of considering hidden costs of higher education:

The biggest challenge in higher education is tuition because in rural areas, most people cannot afford tuition of higher [education] institutions for learning. Like, they find it extremely costly. Not just the tuition but also considering there are other costs like photocopying the handouts for class, the accommodation, food, and other things for living, you know. (Student 1, Focus Group 1)

Another respondent expressed that due to financial constraints in rural settings, many students struggle to pay their tuition fees on time, even if they work hard to raise funds:

The challenges we have with rural universities, one is that, the challenge of finances. Whereby, even though you try so hard to raise the finances, you often fail to pay on time. That means you will not be able to continue your university studies and you just go back to farming, trying to raise more money before you can get back. (Student 25, Focus Group 5)

From this quote, it can be inferred that rural students may be forced to drop out of higher education and return to farming or other forms of work to raise the funds needed to continue their education, which can further delay their educational goals and career prospects.

5.1.2   Accessibility and belongingness

Proximity to home. Proximity to one's home district or village was found to be a significant factor influencing rural students' choice of a higher education institution: "When looking for university, I first looked at the distance. Being a resident of this district of Kumi, I found it so easy to approach" (Student 12, Focus Group 2); "I wouldn't choose going to other universities out of my home. Because Kumi University is at home, it is very accessible" (Student 7, Focus Group 2). The primary factors influencing the preference for attending an HEI located near one's home district were the cost of transportation and the ability to access home in case of emergencies:

> *Like in case of anything wrong happens to you and you need help from home. And mostly the help that you need immediately, it's like when you're very far, say like the university is very far from home, the transport cost for the parents to reach to you is not affordable, and that's a disadvantage.* (Student 29, Focus Group 6)

Another respondent raised the importance of being able to access basic needs from home such as food and water:

> *Most of us cannot afford moving up to Kampala. Like, you can go there, but maybe sometimes you get into problems there. And your people are far and there is no way they can reach you. So, at least for some of us who are near to our home, like in case of some problems, like you lack food, water, you can easily go back home and get what you need.* (Student 3, Focus Group 1)

The participant responses indicated that for rural students who may not have sufficient funds to purchase basic necessities or travel long distances, the availability of HEIs in their home district is a crucial factor that influences their choice of pursuing a higher education degree. It can be inferred from the responses that being close to home is essential for rural students' survival as it provides them with easier access to basic amenities, such as food and water, which they may not be able to afford if they need to travel long distances.

Tribal and cultural belongingness. The students' choice of a rural HEI was influenced by their sense of belonging to the local tribe and culture: "As an Iteso, there is a university, why like, why should I travel and go study far away? When there is a university around?" (Student 1, Focus Group 1). Tribal identity was also associated with communal language spoken in the region, which was perceived as an advantage:

The university is near our home so my parents could easily look after me. So I can have parental care. And even the situation or lifestyle. I'm with my people where we can use the same language, where you can understand each other. Life comes very easy when you're with your own people and you're not stressed. (Student 36, Focus Group 7)

Essentially, the quote highlights the importance of having a supportive community and a sense of cultural belongingness throughout HE studies, potentially contributing to student well-being. Kumi University is located in Kumi District, which is a Teso-sub region in Uganda. Iteso is the term referring to people who speak Teso (Ateso), which is an Eastern Sudanic (Nilotic) language belonging to the Nilo-Saharan language family (Encyclopedia Britannica, n.d.). Evidently, the majority of the student population at Kumi University identified as belonging to the Teso tribe. Uganda is defined as a heterogeneous nation that consists of 65 indigenous communities recognized by the Ugandan Constitution (1995) and the Constitution (Amendment) Act (2005). Considering the relatively small size of the nation (Tulibaleka et al., 2021), Uganda is one of the most ethnically fragmented nations in Africa (Fearson, 2003). Despite its ethnic and cultural diversity, "urban development and planning have not embraced multiculturalism" (Tuliabaleka et al., 2021, p.75), and minority tribes have been ignored and experienced discrimination (Baker, 2001). The apparent difficulties of ethnic and cultural integration (Tuliabaleka et al., 2021) between different regions of Uganda were evident from the participant responses, as they expressed fear of being discriminated against, if they were to pursue HE in urban regions of Uganda:

One point about an advantage of studying in a rural school. There is no segregation. Because you understand, if you go to those that are in urban areas, there is a lot of segregation and there are different classes of people. There are those ones who are rich, some are poor. But in the rural areas, all of us, we are in the same place. So we're

treated equally. Because we understand we live similarly and all of us come from the same area. (Student 4, Focus Group 1)

The quote demonstrates a rural tudent's perception of the advantage of studying in a rural HEI, which is the absence of social stratification. Several respondents argued that there tends to be more segregation and social stratification in urban areas, with people from different socioeconomic classes often living in different neighbourhoods and attending different schools. This can lead to a sense of inequality and division among students, with a feeling that they are not as valued or respected as others. However, the respondents believed that in rural areas, this type of social segregation is less pronounced. They explained that because everyone in the rural area comes from similar backgrounds and shares similar experiences, there is less of a sense of social hierarchy or division compared to urban areas where there's more diversity in socioeconomic and cultural backgrounds. This led to the respondents believing that students who are attending rural schools are more likely to be treated equally and with respect, regardless of their socioeconomic status and other backgrounds.

The findings indicated the importance of a sense of community, belonging, and shared experience in creating an environment of equality and respect in higher educational settings for all students, regardless of their backgrounds. The respondents believed that by attending a rural school where everyone comes from similar backgrounds and shares similar experiences, they are more likely to be treated equally. Simultaneously, such belief may dissuade rural students from seeking higher education in urban HEIs, where they would most likely receive higher-quality education and gain better chances of social mobility, based on the disparities in infrastructure and resources between urban and rural HEIs.

5.1.3 Educational environment and resources

Shortage of educational resources. Shortage of educational resources was a shared experience among the respondents, especially in terms of digital learning materials. A respondent expressed concern about the lack of access to learning materials, such as computers and books, at a rural university:

Yeah, we have computers at the uni, but I can say compared to the student population, the population has gone too much than the computers. So we need much more of the learning materials like computers and even books. We need the books to enhance learning. We have the books in the library but you find that sometimes, you can't find what you're looking for. (Student 19, Focus Group 4)

The respondent's comment on the lack of educational resources in a rural HEI emphasised the need for universities to prioritise the provision of sufficient learning materials, including computers and books, to facilitate effective learning and academic success for students. However, this can be a challenge for rural universities that face significant infrastructural and financial limitations compared to their urban counterparts.

Several respondents expressed challenges faced by rural students in accessing educational services, commenting on the differences in availability of services between urban and rural areas. For instance, if a student needs a computer, he or she has to order it from the capital city Kampala, which is a costly and time-consuming process. In contrast, students in urban areas can easily obtain the materials or resources they need for learning, therefore "it limits those who study in a rural university" (Student 21, Focus Group 4). Limited access to online resources such as research portals was another factor identified as a disadvantage of studying at a rural HEI:

The research portals like the online research portals, they are very expensive so our university don't have access to them. But maybe in bigger universities in the cities like Makerere and Gulu, the public ones [universities], and they have more money, they probably have availability. Also the Internet works better there in the cities. (Student 18, Focus Group 4)

The participant responses suggested that there is a disparity in the provision and availability of educational services between rural and urban areas, which may negatively affect the academic success and opportunities of rural students.

Culture of sharing educational resources. The rural students' shared experience of limited access to educational resources prompted a discussion about the culture of sharing educational resources among themselves:

Sometimes when I don't have money to afford a hard copy, if my friend has afforded it and if she's not reading it, then I borrow it. We have a spirit of sharing. Togetherness, yeah. So if someone doesn't have something, we share. (Student 3, Focus Group 1)

Another respondent acknowledged that the lack of educational resources resulting from financial challenges or inadequate provision by the university is "a common, understandable situation" and expressed empathy towards peers who may be experiencing such a condition stating "we don't like to see a friend have limited resources that you can help that person. It is a condition that others have all experienced also" (Student 12, Focus Group 2). By acknowledging the challenges that other students faced in rural HEI, the respondents demonstrated a high level of awareness and sensitivity towards the experiences of their peers. This kind of empathy and understanding seemed to be essential for creating a supportive and inclusive learning environment where students can thrive despite the shortage of educational resources which cause strain in learning.

5.1.4 Experiences of international students

Challenges of students with refugee status in Uganda. Experiences of international students were distinctive from that of national students, as they revealed unique challenges of financing higher education in a foreign country as refugees:

> *Most of the international students, as we've said, come from refugee camps. They have limited sources of getting income as compared to the nationals who are established already in their country. They have more sources of income, so they are in a better position to support their children who are in school.* (Student 13, Focus Group 3)

The international students suggested economic disparities between students with refugee status and Ugandan students who are more established in their country. They also explained the difficulties of attaining basic education in the refugee settlements:

> *Okay, the life in the refugee settlement, I don't know if someone choose to be a refugee. I don't know if there's someone who love to be refugee. It's a hard life. When you're born in a settlement, you grow up in the settlement, you get married in the settlement, and your life is there, restricted. You find there a lot of challenges. As far [as] issues of education is concerned, of course, regarding the high population in the settlement, it is not of good quality. So going to university is a dream. Because your foundation was laid in a poor background, in a settlement, it affects your entire life.* (Student 25, Focus Group 5)

The responses of international students with refugee backgrounds highlighted an additional aspect of spatial inequality in education that should be considered.

In countries that are affected by war and political unrest, education often grinds to a halt, creating significant barriers to higher education for refugees. Such a disturbance in educational progress has a long-lasting effect on the learning prospects of refugees, as described by another respondent:

As international students, we normally face interpretation problems in our studies. Okay, we find we have different accents, different ways of understanding, different foundations in education. In fact the level of understanding differs. So, you find that maybe in an institution back in your own country, they teach according to the pace of their education, which may be slower than Uganda. And when there is war going on and your family is dying and you have to flee, education is not a priority. But the biggest percentage of education, it is the foundation you gather from the start. Us going to poor primary schools, poor secondary schools or not going at all, and even we are lucky enough to still do university here, because the background, because the foundation was really not nice, it will still affect you. Because if you have not learned well at lower levels, you'll struggle in higher institutions. So it becomes very hard for you to keep up with other students. (Student 23, Focus Group 5)

Refugees have no choice but to leave their homes and settle in unfamiliar and often difficult environments in hosting countries, where educational and economic opportunities may be limited to foreigners with refugee status. The international students' responses emphasised the impact that the lack of a strong economic and educational foundation can have on their entire lives, including their educational paths and career opportunities. The responses also suggested that the effects of spatial inequality in education can be long-lasting and far-reaching, limiting the potential of those affected. The findings from the experiences of the international students highlighted the importance of addressing the root causes of spatial inequality, such as political unrest and economic disadvantage, to create a more equitable and accessible education system for all, despite geographical locations and situations.

5.2 Rural HE Students' Conceptualisation of Urban-Rural Disparities in Uganda

The results of the thematic analysis of the semi-structured focus group interviews regarding the second research question can be seen in Table 2. The table outlines the themes and sub-themes of rural higher education students' conceptualisation of urban-rural disparities in Uganda.

Table 2 Rural HE Students' Conceptualisation of Urban-Rural Disparities in Uganda

Themes	Sub-themes	Number of mentions from the focus group interviews
Gap in living standards and educational quality	Differences in cost of tuition and living between urban and rural areas	31
	Disparities in quality of HE education and services between urban and rural areas	6
Gap in infrastructure	Low exposure to technology in rural areas	13
	Disparities in electricity and water supply between urban and rural areas	9
	Poor transportation system in rural areas	12
	Modernised buildings and learning facilities in urban HEIs	8
	More government support for HE and development in urban areas	7
Gap in employability	Degrees from urban HEIs preferred over degrees from rural HEIs	8
	More job and networking opportunities in urban areas	6

5.2.1 Gap in living standards and educational quality

Differences in cost of tuition and living between urban and rural areas. While financing higher education was generally seen as a great challenge by respondents, they perceived tuition and living costs at rural HEIs to be affordable compared to urban HEIs: "The advantage of studying at a university that is located in a rural area is the tuition, that it's somehow affordable. And the other services like food. The food is sold at reduced, subsidised prices" (Student 4, Focus Group 1); "Kumi University is affordable. And when my parents looked at other universities, they had to pay much tuition. So comparing the universities, it was the university that at least was affordable" (Student 35, Focus Group 7). In contrast, the tuition and the living cost in urban areas was seen unaffordable:

> *The cost of living in urban places as compared to Kumi University is high. To me, they will charge you high, everything will be high. The tuition will be high, functional fee will be high, everything will be high. And also the standards of living. So basically, the standards of living at Kumi University, even the rent here, around the community here, can be like only thirty thousand in a semester. Then you go to Kampala, my friend at Makerere University who is doing bachelors degree, so he was paying something like eight hundred thousand.* (Student 18, Focus Group 4)

Another respondent commented on the gap in living standards between urban and rural HEIs, stating, "accommodation itself in Makerere University is probably worth the tuition in Kumi University, accommodation alone" (Student 33, Focus Group 7). Although some respondents expressed strong desire to study in urban centres for accessibility to better educational services, they dismissed their desires with the explanation that the cost of living in urban areas is simply unaffordable for them. Choosing an urban HEI over a rural HEI was also seen as an inconsiderate and ignorant behaviour toward the financial situation of family members:

> *You know like as being a youth after high school, you really have that excitement that you want some exposal to urban center. Like you really want to see the standard, and ignorantly, you really opt for urban university not really knowing how it will affect your parents because they're the ones to pay for everything. For you, you just want to be there but not consider the situation of your parents. So I would really say ignorantly you choose the urban university.* (Student 21, Focus Group 4)

Disparities in quality of HE education and services between urban and rural areas. Respondents expressed concern over the disparities in quality of higher education and services between urban and rural areas, specifically in terms of the provision of qualified lecturers:

> *Let me say, some services being offered in those big universities, like you could be having access to maybe better lectures. We believe the lecturers in some of those bigger urban universities are somehow better because those universities are also very sound in the country. They are known, they're famous.* (Student 13, Focus Group 3)

The shortage of lecturers in rural HEIs was seen as a contributing factor to the gap in quality of higher education provided between urban and rural areas: "In rural universities, the lecturers are not enough compared to the number of students" (Student 10, Focus group 2); "Most lecturers, they fear to be in rural areas. Maybe because they assume that there's no good facility, they're not exposed to good teaching environment, or they don't get paid more than urban universities, so there is inadequate staff in rural universities" (Student 32, Focus Group 6). As expressed by the respondents, the gap in living standards between urban and rural areas is essentially what contributes to the unequal distribution of teachers across geographical regions. The disparity in living standards between urban and rural areas can make it difficult to attract and retain highly skilled professionals, including teachers, in rural areas. Urban areas often offer better job opportunities, higher salaries, and better living conditions, which can make it challenging for rural areas to compete in terms of attracting and retaining skilled professionals (Bashir et al., 2018).

5.2.2   Gap in infrastructure

Low exposure to technology in rural areas. The digital divide between urban and rural areas was among the most extensively discussed issues by the respondents:

> *Now, you find it hard when you go to the computer lab. Some of us don't know how to operate these computers. When you want to search for something for coursework, you don't have enough knowledge. So you find yourself limited to such work. But then in urban areas, these people have much more experience with Internet issues. So, even a child who's 10 years old can be better than me who grew up in an urban setting. Because they're interacting with these things since childhood. But now some of us, we see a computer at the age of 18 years. You come to university and finally see computer*

for the first time, but you don't know how to turn it on, you don't know how to research, you don't know how to do it. Talk of smartphones. Many of us cannot afford it and don't know how it works. (Student 38, Focus Group 7)

Respondents expressed frustration with the lack of knowledge and experience when it comes to using digital tools such as computers and smartphones, particularly in the context of academic work. They believed that people who grew up in urban areas have more experience and knowledge of using technology because they have been exposed to it from a younger age. Students in urban HEIs may have greater access to digital resources, including high-speed internet, computer labs, and online databases, allowing them to engage in online learning and research more easily. In contrast, students in rural HEIs often have limited access to such resources due to inadequate digital infrastructure, including slow internet speeds and outdated equipment. This can result in reduced academic performance and limited opportunities for professional development for students in rural HEIs, especially in the era of rapidly evolving digitalisation of education.

Disparities in electricity and water supply between urban and rural areas. One of the identified causes for the digital divide between urban and rural universities was the problem of power shortages in rural areas, which occurs frequently due to the underdevelopment of infrastructure:

Okay, you can see that in rural areas, you have a problem of power. And even the teachers don't have skills in computer. So a student, he or she gets difficulty to have that ability or skill to have computer. In rural areas, it is very difficult to find or have a laptop. The reason why? There's no power to charge it and even how to handle it, because it can easily get down, spoiled because of poor care. And in rural areas, even to have a smartphone is very difficult. In rural areas, we don't have equal facilities compared to urban areas. (Student 36, Focus Group 36)

Another respondent commented on the unequal supply of electricity between urban and rural HEIs, which creates disparities in educational outcomes between students based on geographical locations :

In terms of the distribution of resources, we understand that those universities in the rural areas like our university, we realise that sometimes power is not constant in the living supply. Power can go off anytime and when comparing it to some universities in the urban areas, there is constant supply of power. This means that the urban students learn more than us. (Student 13, Focus Group 3)

Insufficient supply of water in rural areas was also raised as an infrastructural challenge:

> *For instance, universities, they cannot provide water for those students who are staying outside [of campus]. Here, some of the sources of water, they are far from the students, the students who stay around here. So the sources of getting water is very far. So, they have the challenge of getting water.* (Student 2, Focus Group 1)

The findings suggested that the shortage of electricity and water supplies are perceived as contributing factors limiting the learning processes of rural higher education students. Respondents shared the difficulty of accessing electronic devices for academic work or having adequate lighting to study at night due to power shortages. The lack of water in rural areas, which was another shared experience by the respondents, creates hygiene and sanitation problems, leading to potential health problems that can impact student attendance and focus in school. These factors can collectively hinder the educational opportunities and outcomes for rural students.

Poor transportation system in rural areas. Poor transportation system in rural areas was seen as a challenge of pursuing studies in a rural HEI:

> *One of the major challenges of studying at a rural university that I see is the issue of transport. At times we face difficulties with transport like travelling home and travelling back to school. Because sometimes there are not many vehicles compared to those universities in the urban areas where transportation is easy and even cheap.* (Student 13, Focus Group 3)

The participant responses indicated that in rural areas, fewer options for transportation make it difficult for rural students to travel to and from their homes or other destinations. This was found to be especially problematic for students who needed to make multiple trips during the week, such as those who needed to help their family with farming. Additionally, respondents agreed that the cost of transportation can be higher in rural areas, where there is less competition among transportation providers.

Modernised buildings and learning facilities in urban HEIs. The respondents perceived university buildings and facilities in urban HEIs to be more advanced and modern compared to the ones in rural areas: "When you look at just the appearance of rural universities and the ones in the city, the ones in the city are somehow advanced or modernised compared to us" (Student 10,

Focus Group 2). While the buildings of Kumi University are undoubtedly modern in comparison to the surrounding villages that consist mostly of mud hut residences, they may appear outdated and small when compared to larger university buildings and facilities located in urban centres. Some respondents shared that sometimes, students study under mango trees, which was seen as both an advantage and a disadvantage of studying at a rural HEI: "We see that in rural areas, we have many many mango trees, and sometimes we have lectures under the trees, which is a good learning environment. But in urban centres, you're most likely stuck in the small lecture room" (Student 2, Focus Group 1); "Universities in rural areas, their learning environments, sometimes learn under mango trees. But in urban areas, they don't learn under mango trees like us. That's not equal learning environment" (Student 4, Focus Group 1).

More government support for HE and development in urban areas. A few respondents viewed differing levels of government support between urban and rural HEIs as a contributing factor to spatial inequality in HE in Uganda: "The government facilitates more universities in the city area compared to ones in rural areas" (Student 10, Focus Group 2). The following quote implies that the unequal distribution of resources between urban and rural areas is partially due to differences in infrastructure development, which affects the ability of the government to provide equitable services to all areas:

> *There is poor infrastructure development when it comes to rural areas. Now, it makes it hard and challenging for the government to distribute some of the things to some village schools in the rural area. For example, if there are some desks that the government has donated, some textbooks for example to a rural school. But because of the transport factor, it is hard for those things to reach the schools. But in urban areas, the infrastructure is well-developed. Distributing such services doesn't take a lot. So it makes the urban areas to have better services as compared to rural areas.* (Student 38, Focus Group 38)

Another respondent suggested that urban HEIs have an advantage in accessing government support because of their proximity to government officials:

> *Maybe some of the challenges we find, issues like, maybe the government support is very difficult for rural institution to access, basically...For example, in urban universities you find that where they're close to the government officials they could visit once in a while because now for rural institutions it is very hard for a government official to access it at his or her own time. So it becomes hard for those universities*

maybe to get chartered or to receive any support from the government. It might receive it but it may take time. Because reason being, it's not frequently known. (Student 25, Focus Group 5)

From this quote, it can be inferred that rural HEIs may struggle to receive government support because government officials find it difficult to visit the institutions due to distance and other logistical issues. This can create delays in the process of receiving support and accreditation for rural HEIs, which may impact their ability to attract students and maintain their operations. It can be also inferred from the quote that the lack of visibility of rural HEIs may contribute to their difficulties in accessing government support that may be more accessible in urban HEIs.

5.2.3   Gap in employability

Degrees from urban HEIs preferred over degrees from rural HEIs. Respondents commented on the competitiveness of university degrees from urban HEIs over degrees from rural HIEs, which affects the career prospects of graduates depending on the geographical location of the university:

> *As much as job opportunities are concerned in the national market, students from rural universities, most especially in countries like Uganda, they are less valued. You will find that after students graduate from a rural university, they will find it very hard to compete in the national market. And there's a possibility that they will be less valued than people who come from universities that are popularized, so it creates economic imbalance based on where you graduated.* (Student 12, Focus Group 2)

This quote suggests that there is a perceived bias towards graduates from urban universities over those from rural universities in Uganda. This bias can lead to fewer job opportunities and lower value being placed on the qualifications of graduates from rural universities, creating an economic imbalance based on where they received their education. The quote also implies that this bias could result in graduates from rural universities finding it more difficult to compete in the national job market compared to graduates from popularised universities in urban areas.

More job and networking opportunities in urban areas. While employability is an important outcome of a higher education degree,

respondents pinpointed poor accessibility of jobs and fewer opportunities to enter the desired job market with a degree from a rural HEI:

> *In rural areas, there is poor accessibility of jobs. You find that there is inequality there. Whereby, a person like me, who study in a rural university like this one, and maybe a colleague who studied in Makerere and Gulu, those known universities, then we apply for the same job. You'll find that they'll consider his, being the other university is well-known in terms of practical aspects. You'll find that they'll first consider the other one and I'll be left out or ignored. So you find that there's poor accessibility of jobs also.* (Student 20, Focus Group 4)

In this quote, the respondent indicates spatial inequalities in job opportunities and accessibility. Several respondents argued that the preference of employers is often based on the perception that bigger HEIs in urban centres are better equipped to provide practical skills, which further contributes to the inequality in job opportunities. Poor accessibility of jobs in rural areas impacts rural students' career prospects in negative ways, which contributes to the cycle of poverty in rural areas, given that limited job opportunities often result in lower wages and fewer career advancement opportunities, making it difficult for individuals to break out of poverty.

6   DISCUSSION

6.1   Discussion of Student Experiences of Rural HE in Uganda

6.1.1   Challenges of cost-sharing in HE for rural students

The findings of this study suggested that tuition is a major barrier to HE for students in a rural setting in Uganda, whose families depend on agriculture for a living, which generally generates a small income. Therefore, financial aid in the form of scholarships and student loans is essential to alleviate the financial burden of funding HE, which has intensified due to the implementation of the cost-sharing scheme in HE. Cost-sharing is a term referring to "a shift of at least some of the higher education cost burden from governments, or taxpayers, to parents and students" (Johnstone & Marcucci, 2010, p. 2). The phenomenon of cost-sharing in financing HE was examined worldwide through the International

Comparative Higher Education Finance and Accessibility (ICHEFA) project run by D. Bruce Johnstone and Pamela Marcucci (2010). This project took a special interest in East Africa, including Uganda, which had actively begun implementing the *dual-track tuition fee* concept in early 2000s (2010). The dual track tuition fee system exists in most of East Africa, which "limits admission to the free (or very low tuition fee) openings to only the number of students that the state can afford to support, while allowing a second track of matriculates, generally scorching below an admissions examination cutoff score, admission if they pay a tuition fee (and sometimes a very high one)" (Johnstone & Marcucci, 2010, p.106).

In 1992, Makerere University in Kampala, Uganda used the dual-track tuition fee scheme for the first time with astounding financial success (Johnstone & Marcucci, 2010, p. 106), after suffering from closure from 25th of December 1990 to 11th May 1991, due to student unrest caused by the government's attempt to withdraw 'Boom,' which was government-provided student allowance to afford living expenses along with free university tuition (Kajubi, 1992). The incapability of the government to fully fund HEIs through public funds (Kajubi, 1992) led to the introduction and implementation of the dual-track tuition fee system, which led to the generalisation of cost-sharing in HE. Furthermore, since the state neither can afford the surging number of people desiring HE nor the capability to provide HE across all regions of Uganda, the private sector plays an important role in the provision of HE (Kasozi, 2003). Private HEIs, such as Kumi University, rely on student tuition to operate because they are not funded by the state. Since the majority of public higher education institutions (HEIs) in Uganda are located in urban areas, financial aid is crucial for students attending private HEIs situated in rural regions. These students often have limited access to financial resources, employment opportunities, and are heavily affected by poverty.

6.1.2   Unequal access to student loans

The results of this study revealed that student loans are perceived as an unviable source of financing HE by rural students. The Education Policy Review Commission (EPRC) appointed by the Ugandan government submitted a report

in 1989 with the following recommendation on the introduction of a student loan system to alleviate the difficulties of financing HE: "For students who cannot raise the necessary finances, the government should establish a system of student loans to be repaid only when the student completes his/her studies and finds gainful employment" (Kajubi, 1992, p. 440). However, "such loan schemes in developing countries has so far been disappointing with non-repayment being as high as 80% in Kenya," for example (Bakkabulindi, 2006, p. 54).

Student loans for tertiary education are provided by the Higher Education Students' Financing Board (HESFB), which is "a statutory body established by The Higher Education Students' Financing Act, No. 2 of 2014 with a mandate to provide Loans and Scholarships to Ugandan students seeking to pursue Higher Education" (HESFB, 2023). The following are the criteria for eligibility for the first-year student loan by HESFB (2023):

1) Be a Ugandan Citizen.
2) Be Admitted to a Private Chartered University or Public University or a listed Other Tertiary Institution in Uganda. Accreditation is by the National Council for Higher Education (NCHE).
3) Applicant must be pursuing any of HESFB's approved STEM Programmes or Programmes approved under affirmative Action.
4) Demonstrate a financial need.
5) Be joining in the First Year of study.
6) MUST not be a beneficiary of any other Scholarship or Funding Opportunity

According to the "List of Successful Students' Loan Scheme Applicants for the AY 2022-2023" published by HESFB, a total of 3,089 student loan applications were received in the year 2022 and only 2,417 (78%) were qualified for the loan (Nuwagira, 2022). Among those who qualified for the student loan, 1,854 (77%) were male and 563 (23%) were female (Nuwagira, 2022). Using the budgetary allocation of UGX 2.6 Billion, the Board awarded financial support to only 625 applicants out of the 2,417 who were qualified for the loan scheme, of which 418 (67%) were male while 207 (33%) were female (Nuwagira, 2022). Considering that total student enrolment in tertiary education was 275,252 in 2019 (NCHE, 2019), the provision of student loans poses significant accessibility challenges in the context of Uganda. In addition, as the interview participants expressed in their

responses, smaller private HEIs in rural regions of Uganda that are in the process of obtaining a charter from NCHE do not even meet the eligibility criteria for the student loan, despite the significant challenges they face in financing HE through small income generated from agricultural produce. Even this income is unstable due to its dependency on weather and climate conditions. The unequal accessibility to student loans puts rural students at a disadvantage, because fewer rural universities are public, receive government funding, and are chartered by NCHE compared to their nonrural counterparts. Such disparities in funding opportunities for HE between urban and rural regions based on the availability of publicly funded HEIs and eligibility of student loans create spatial inequalities in access to HE, hindering the achievement of SDG4, especially in regards to making HE affordable and achievable for every individual.

6.1.3   The importance of accessibility and belongingness in HE

The students considered the proximity of the HEI to their home district as a crucial determining factor, as it directly impacted their access to basic needs such as food and water. For many rural students who come from low-income families, the cost of transportation and basic necessities can be a significant barrier to accessing and continuing HE. In other words, the proximity to home was viewed as vital for students' well-being and survival. These findings highlighted the need to increase access to HEIs in rural areas by developing infrastructure and enhancing the capacity of rural HEIs.

The findings from this study also raised an important issue of social integration and inclusion in HE across geographical space. Uganda is a diverse nation that comprises 65 indigenous communities officially recognized by the Ugandan Constitution (1995) and the Constitution (Amendment) Act (2005). Unfortunately, despite the country's rich ethnic and cultural diversity, urban development and planning have failed to embrace multiculturalism (Tuliabaleka et al., 2021, p.75), leading to neglect and discrimination of minority tribes (Baker, 2001). This has resulted in challenges regarding ethnic and cultural integration (Tuliabaleka et al., 2021) that are evident from participant responses, with many expressing fears of discrimination in urban regions of Uganda as someone who's

coming from a non-urban region or from a different tribe. The findings indicated the importance of inclusion and diversity in achieving SDG4, as access to quality education must be provided to all individuals, regardless of their ethnic or cultural background or geographical location. This requires the government and HEIs to prioritise multiculturalism and social integration in their development and planning, ensuring that all individuals have equal opportunities to access education without fear of discrimination.

6.1.4   Limited access to educational resources for rural HE students

Based on the focus group interviews, it was evident that rural students who pursue higher education commonly faced difficulties in accessing educational resources, especially digital resources. This is primarily due to their remote geographic location, which limited their access to resources that are more easily accessible and available in urban areas. The participant responses on sharing of educational resources highlighted the importance of a sense of community among students, particularly in a challenging learning environment. They also suggested the need for a more empathetic and supportive educational environment, where students can collaborate and work towards creating a more equitable and accessible learning experience to combat the shortage of educational materials. The notion of sharing resources and supporting each other can help to alleviate the burden of limited resources, and foster a culture of collaboration and mutual assistance. However, it's important to note that the culture of sharing as a means to combat the lack of educational resources should not be normalised. Educational equity means that resources should be distributed equally so that all students, regardless of their background, circumstances, and location, should have access to the same quality of educational resources and materials (UNESCO, 2015). This includes access to textbooks, technology, facilities, and other learning materials.

The fact that rural HE students have become accustomed to sharing educational resources due to the lack of availability suggests serious implications for the provision and accessibility to educational materials in rural regions, especially to technology. Achieving educational equity requires a focus on

identifying and addressing the barriers that prevent some students from accessing the same resources as others, and providing additional support and resources to those who need it. Therefore, more attention should be given to rural HEIs where accessibility to a variety of educational resources and materials are limited primarily due to its geographical location and poor infrastructure.

6.1.5   Challenges of students with refugee backgrounds

"When there is war going on and your family is dying and you have to flee, education is not a priority" (Student 24, Focus Group 5).

The findings from two of the seven focus groups consisting of international students from South Sudan and the Democratic Republic of the Congo revealed significant challenges in access to higher education for refugees. Uganda hosts the largest refugee population in Africa and the third largest in the world, hosting a total refugee population of 1.5 million, of which 57 percent are from South Sudan and 32 percent from the Democratic Republic of the Congo (UNHCR, 2023). Based on 2021 estimates, the worldwide enrolment rate of refugees in higher education was only three percent, which is significantly lower compared to the global average enrolment rate among non-refugees, which exceeds 40 percent (UNESCO, 2022).

Refugee students encountered numerous challenges when attempting to access their host country's higher education system, including "legal restrictions, prohibitive tuition fees and living costs, constraining language requirements, difficulties in getting their prior credentials recognized, as well as additional barriers facing female students, among others" (UNESCO, 2022). Some of these difficulties were revealed in the focus group interviews by the international respondents, who expressed that poor educational foundations laid in their war-torn countries and refugee settlements had a persistent impact on their higher education studies and are expected to affect their future educational and career opportunities.

UNESCO (2022) posits that investing in higher education for refugees not only benefits the refugees themselves but also strengthens the national education systems in which they are enrolled, to the advantage of host communities,

institutions, and students. An inclusive higher education system that accommodates refugees can create a more enriching academic environment for all students, promote enhanced social cohesion, and improve academic infrastructure and resources (UNESCO, 2022). Furthermore, increased participation of refugee students in higher education is critical for achieving SDG4, which aims to improve education for all, expand the enjoyment of rights, and improve development outcomes (UNESCO, 2022).

6.2 Discussion of Rural Students' Conceptualisation of Urban-Rural Disparities in HE

6.2.1 Gaps in living standards and the quality of HE

The findings of this study revealed rural students' awareness of a significant gap in living standards between urban and rural regions, which contributed to their choice of a rural HEI over an urban HEI. Tuition and living costs in urban HEIs were perceived as simply unaffordable, which prevented the participants from even considering pursuing a higher education degree in bigger universities in urban centres. The findings of this study also confirmed the shortage of lecturers in a rural HEI, which the students saw as a major contributing factor to the gap in the quality of HEIs between rural and urban regions. Evidently, the shortage of teachers in rural areas is a persistent problem that has been documented in numerous studies in various contexts. According to a report by the World Bank composed by Bashir et al. (2018), low pay and poor working conditions are the primary reasons why many qualified lecturers do not want to teach in rural areas. This leads to a shortage of faculty staff, with universities in rural areas struggling to fill teaching positions. Furthermore, the shortage of lecturers in rural HEIs can be the result of a brain drain, where highly skilled professionals leave rural areas for better job opportunities in urban areas or abroad. Such a trend in teacher mobility leaves rural universities with even fewer qualified lecturers, perpetuating the cycle of staff shortages. In turn, students in rural and remote areas may not have access to quality education due to a shortage of qualified teachers, leading to lower levels of literacy and numeracy, higher dropout rates,

and reduced economic opportunities. Spatial inequalities in teacher distribution contribute directly to the disparities in the quality of education provided in different geographical locations, hindering the achievement of SDG4.

6.2.2 Gaps in infrastructure

Infrastructural underdevelopment in rural areas poses significant challenges for rural HEIs to provide the same quality of education that is provided by their non-rural counterparts. The digital gap between urban and rural areas was among the most discussed issues by the study participants. The rural students were well-aware of the importance of acquiring digital skills in the job market, yet saw a serious lack of technological skill development in rural areas. Most students at Kumi University did not own personal digital devices such as computers, laptops, or smartphones. According to respondents, most rural students' first encounter with a computer occurred at a higher education institution, which is alarming.

The digital divide affects not only access to resources but also the delivery of education. Online and hybrid learning have become increasingly common in higher education, especially in response to the COVID-19 pandemic. However, students in rural areas may not have the necessary technology or internet access to participate in online classes, which further exacerbates spatial inequalities in higher education. Evidently, Kumi University completely stopped its operation during the COVID-19 pandemic because it did not have the capacity to comply with "The Emergency ODeL Guidelines," a policy document published by NCHE laying out conditions that all HEIs in Uganda had to meet in order to deliver classes remotely during the national lockdown (NCHE, 2020). The ODeL guidelines did not consider the regional differences in COVID infection levels, infrastructure and ICT capacity, institutional capacity, staff capacity, and financial resources across HEIs in different regions. This created a high barrier for smaller institutions in rural areas with poor infrastructure to continue providing education for their students during the pandemic.

The digital divide between urban and rural areas is partly due to the disparities in geographic uneven development in terms of infrastructure, which results in a gap in the provision of basic needs such as electricity and water. The

unequal supply of electricity and water between urban and rural regions is unique to low-income country contexts. For instance, supply of electricity and water would not be a distinguished feature in studies that investigate urban-rural disparities in higher education in high-income countries, considering that only 41.4 percent of population in low-income countries have access to electricity and 100 percent of population in high-income countries have access to electricity (World Bank, 2020). It can be inferred from the results of this study that in the context of LDCs, access to basic needs like electricity and water has a definite influence on higher education studies, particularly when it comes to acquiring technological skills and accessing digital resources that are crucial for academic advancement.

6.2.3   Gaps in employability between urban and rural HEIs

While career prospects are an important outcome of higher education, spatial inequalities in accessibility of jobs and networking opportunities put students attending HEIs in remote, marginalised regions at a disadvantage. The findings of this study revealed that rural students' perception of their HEI degrees and its competitiveness in the job market are rather negative. Most renowned HEIs in Uganda are concentrated in the capital city Kampala, offering better accessibility of jobs and opportunities for students attending urban HEIs. It can be inferred from the participants' input that there's a general bias towards higher education degrees attained from rural HEIs because of their low visibility due to their locations that are distant from the metropolitan regions, where most economic activities that generate the majority of the nation's GDP are concentrated.

Gaps in employability between urban and rural HEIs show the existing systemic inequalities that come from the branding of HEIs as elite or subpar based on their location. This not only affects the career prospects of rural students but also perpetuates a cycle of underdevelopment in these regions. Addressing these spatial inequalities in higher education requires a multi-faceted approach, including investment in infrastructure, policies to promote the decentralisation of HEIs, and initiatives to bridge the learning and career prospect gap between urban and rural HE students. It is crucial to ensure that all students have equal

access to quality education and opportunities to thrive in the job market, regardless of their geographic location. This will not only benefit individual students but also contribute to the overall economic and social development of the country.

6.3 Additional Finding on the Role of HE in Rural Development

Despite the revealed challenges of ensuring access to quality higher education in rural Uganda, HE in a rural region was seen as an essential source of community development and cultural preservation:

> *But basically also, most universities in rural areas, as time goes on, they can develop the region. They become cities. So for example, Kumi University was found in a village. But as Kumi University came, you see that around Nyero, we're seeing something developing. So you come here after twenty years, you see a beautiful city, from Kumi Municipality to Kumi City. Twenty years from now. So where universities are, you see that there must be a development. Why? Influence of the university. But at the same time, the beautiful Kumi, the Teso culture stays, it doesn't change.* (Student 18, Focus Group 4)

In this quote, the respondent mentions the impact universities can have on the development of rural areas. When a university is established in a rural area, it can serve as a catalyst for regional growth and development. As the university attracts students, faculty, and staff, it creates a demand for services and infrastructure, such as transportation, housing, and businesses. This, in turn, can lead to the establishment of new businesses, the expansion of existing ones, and the creation of jobs, improving the career prospects of rural HEI graduates. Several respondents acknowledged the importance of preserving tribal and cultural heritage even as rural areas develop. They suggested that rural HEIs have a responsibility to promote and preserve local culture and traditions, while also contributing to economic and social development. By balancing these priorities, universities can help create sustainable and inclusive growth that benefits both the local community and the broader region.

6.4   Evaluation of the Study

6.4.1   Implications for educational policy and future research

This study has important implications for educational policy and future research. At the international level, spatial inequalities and regional disparities in higher education should be examined in various contexts including high-income, middle-income, and low-income countries because they are crucial factors that affect the achievement of SDG4. At the country-specific level, the National Council for Higher Education (NCHE) in Uganda should take into account the challenges faced by rural HEIs in offering quality higher education and complying with the same standards as larger universities in urban regions where resources are concentrated. The current higher education policy in Uganda does not provide a guideline for addressing spatial inequalities in higher education despite its dominant rural population that is largely affected by the large urban-rural disparities in living standards. Strategised support based on specific needs and challenges of rural HEIs is needed to address the spatial inequalities in higher education in Uganda that are outlined in this study.

6.4.2   Researching Multilingually

It's important to be aware of the potential challenges of researching multilingually and to take steps to address these challenges to ensure the validity and reliability of their research findings. The definition of researching multilingually is provided as follows:

> how researchers conceptualise, understand, and make choices about generating, analysing, interpreting and reporting data when more than one language is involved – and the complex negotiated relationships between research and researched as they engaged with one another in multilingual sites. (Holmes, Fay, Andrews & Attia, 2013a, p. 297)

Although the research process in this study was done completely in English, all of the study participants were at least bilingual in their tribal languages and the English language. There were strains in understanding the accents of the study participants during the interview and the interview transcription processes. Transparency regarding the researcher's language proficiency and limitations

when communicating with study participants was emphasised during the interview, which helped build trust and avoid misunderstandings. For instance, in cases where the statements made by the study participants were unclear, they were requested to repeat or rephrase their statements to ensure that the intended message was clearly understood.

Likewise, accuracy and transparency were prioritised during the interview transcription process. If a word or phrase was not understandable, the transcription convention of [inaudible] was used to indicate that the audio was unclear. In some parts, it was possible to make an educated guess about what was said based on the topic being discussed or the words used before or after the unclear part. The context of the surrounding words and phrases were used to deduce what was said. However, this was done with great caution, and making assumptions or filling in the gaps with words or phrases that may not be accurate were avoided throughout the transcription process.

6.4.3   Limitations of the study

This study employed a single case study approach to explore a specific rural context in terms of its unique historical and cultural features, particularly with respect to the dominant tribe represented in the region and the geographical conditions that influence the backgrounds of most study participants. Considering that this study is culturally specific and localised, generalising the findings of this study to other rural HEI contexts should be done with caution, even within the Sub-Saharan African context, given the wide range of tribes and cultures as well as the situations HEIs in rural regions present in SSA. However, the context of this study was carefully selected to represent a range of relevant dimensions such as the low-socioeconomic, agricultural backgrounds of participants, which may be generalisable to other rural contexts in Uganda and SSA to some extent.

Furthermore, the findings of this study relied primarily on the rural students' experiences, understanding, and knowledge about urban-rural disparities in higher education in Uganda. Therefore, the results should be interpreted within the context of these perspectives, being aware of potential bias

or misleading information in participant responses (Goodwin, 2017). Although some of the claims by the participants were consistent with information gathered from existing data and statistics, every claim made by the interview participant was not verified in this study. Nonetheless, the participant responses provide valuable insights into the specific challenges faced by rural students in an HEI context in Uganda and can inform policies and interventions aimed at reducing urban-rural disparities in HE by listening to the voices of the rural students, who are considered vulnerable to spatial inequalities in HE. Further research is needed to explore the issues of spatial inequality in HE from multiple perspectives and to develop more comprehensive solutions that address the complex and interrelated factors that contribute to urban-rural disparities in HE.

6.5 Conclusion

This study aimed to understand student experiences of rural higher education and their conceptualisations of urban-rural disparities in higher education in Uganda. It can be inferred from the results of this study that urban-rural disparities in higher education are tangible experiences for rural students, who were well-aware of the contributing factors to spatial inequalities in higher education. The rural students from low-income, agricultural families faced great barriers to accessing higher education due to financial challenges, as their small family income was directly dependent on the climate and weather conditions affecting annual harvest, which made it an unstable source of income for them to finance their higher education studies. In addition to the financial instability and constraints of financing higher education in a rural setting, tribal and cultural differences between different regions of Uganda seemed to dissuade interregional mobility of rural students, who expressed fear that they will face discrimination and segregation in urban higher education institutions based on their socioeconomic status and tribal backgrounds. Moreover, the students' shared experience of shortage of educational resources and their accustomed behaviour of sharing educational materials in response to the shortage indicated

a serious lack of accessible educational resources in rural areas, mainly due to infrastructural and financial challenges.

The findings of this study also demonstrated rural students' understanding of the disparities in urban-rural higher education institutions and their contributing factors, including gaps in living standards, infrastructure, and employability. Student perceptions of urban-rural gaps in living standards, regional development, and opportunities suggested that spatial inequality in higher education is systemic, meaning that the disparities in access to quality higher education between urban and rural areas are deeply ingrained in the larger societal and economic structures. This perceived systemic nature of spatial inequality in higher education highlights the need for comprehensive policies and interventions that address the root causes of these disparities, including investment in infrastructure, the development of rural economies, and the provision of equitable educational opportunities for marginalised communities. Without such efforts, the gap in higher education access and outcomes between urban and rural areas is likely to persist, perpetuating inequality and hindering the overall progress of the nation and society. According to a World Bank report titled "The Changing Nature of Work," "the poor in emerging economies are concentrated in rural areas in the agriculture sector" and therefore, "Raising their productivity is crucial to gaining human capital" (World Bank, 2019, p. 92). Considering the crucial role higher education plays in human capital development (Son, 2010), investing in increasing access to higher education in rural areas as well as improving the quality of higher education in rural higher education institutions will be in turn beneficial for economic growth, poverty reduction, and societal development in the context of sub-Saharan Africa where the majority of the population are rural residents.

Unique challenges that refugees face in accessing higher education were revealed by study participants from South Sudan and the Democratic Republic of the Congo. The findings from these participants highlighted an additional important aspect of spatial inequality to be considered: conflicted-affected regions where education has come to a halt. One does not choose to be born in a location where political unrest limits accessibility to education and lifelong

learning. Refugees often reside in settlements with limited educational resources, and their access to basic and higher education may be further constrained by language barriers, discrimination, and a lack of financial resources. Strategised support to ensure smooth transitions of refugee students to the hosting country's education system and curriculum is crucial to reduce spatial inequalities in education.

Without addressing spatial inequalities in education, Sustainable Development Goal 4 and its targets are simply unachievable, as a significant proportion of the global population will be left behind, perpetuating the cycle of systemic poverty and inequality. There are significant spatial inequalities in education around the world, especially in the least developed countries (LDCs), with populations in rural areas, conflict-affected regions, and marginalised communities facing significant barriers to accessing quality higher education. To achieve the goal of providing "inclusive and equitable quality education for all" (UNESCO, 2015, p.20), it is necessary to adhere to the specific challenges in the provision of inclusive and equitable quality education in different geographical, cultural, and social contexts and to take a multifaceted approach to achieving spatial justice in education.

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APPENDICES

Appendix A   Research Notification

UNIVERSITY OF JYVÄSKYLÄ

FACULTY OF PSYCHOLOGY AND
EDUCATION

Date 1 November, 2022

RESEARCH NOTIFICATION

1.   **Student Experience of Rural Higher Education: A Case Study in Kumi, Uganda and invitation to participate in research**

I ask you to participate in *Student Experience of Rural Higher Education: A Case Study in Kumi, Uganda*, which aims to explore how student experience higher education in a rural context, and how they conceptualize the urban-rural gap in post-secondary education in Uganda.

You are invited to the study because you are a student at the university which is the research site of this case study. If you agree to participate in this study, you will participate in a focus group interview consisting of 4 to 8 students. The interview will be held in English.

This research notification describes the study and related participation. The privacy notice attachment provides information on the processing of your personal data.

The study will involve about 50 participants in total, both males and females from various fields of study at the university.

This is a single study, and you will not be contacted again later.

2.   **Voluntariness**

Participation in this study is voluntary. You can refuse to participate in the study, stop participating or cancel your previously given consent, without stating any reason for this and at any time during the study. This will have no negative consequences to you.

If you stop participating in the study or if you cancel your consent, the personal data, samples and other information collected on you up to that point will be used as part of the research material as far as it is necessary in order to ensure relevant research outcomes.

You are not obliged to answer any question during the focus group interview, but you may answer at your own free will. Your responses will be anonymized in the interview transcription stage.

3.   **Progress of the study**

As part of this study, you will be placed in a group of 4 to 8 students. The researcher will ask you several questions while facilitating the discussion. With your consent, the focus group interview will be audio-recorded for the purpose of transcription and accuracy. The transcription will be anonymized, and your responses will remain confidential, meaning that you won't be identified from your responses. No names will be included in the final report. Quotes will be used from the interviews in the write-up of the study, but the researcher will ensure that no one can be identified from these quotes.

Please note that there are no right or wrong answers to focus group questions. The researcher wants to hear varying viewpoints and would like for everyone to contribute their thoughts. Out of respect, please refrain from interrupting others. However, please feel free to be honest even when your responses counter those of other group members.

4.   **Possible benefits from the study**

Participating in this study may not benefit you directly, but your participation in this study will contribute to the understanding of how students experience equity issues in higher education in rural Uganda.

5.   **Possible risks, harm, and inconvenience caused by the study**

The study is not expected to cause any risks, harm, or inconvenience of any kind. However, if you feel uncomfortable, you can leave the focus group interview at any time, without giving a reason.

6.   **Study-related costs and compensations to the subject as well as research funding**

No monetary reward will be paid for participation in the study.
Simple snacks and drinks will be prepared for the focus group interview session.

7.   **Informing about research results and research outcomes**

The study will contribute to the researcher's completion of her master's thesis. The researcher is not compensated financially for the completion of this study.

Your personal data and responses from the focus group interview will be handled confidentially in accordance with the privacy notice provided to you and no names will be included in the final report. Please be advised that although the researcher will take every precaution to maintain the confidentiality of the data, the nature of focus groups prevents the researcher from guaranteeing confidentiality. Participants will be asked not to use any names during the focus group discussion. Should you choose to participate, you will be asked to respect the privacy of other focus group members by not disclosing any content discussed during the study. The researcher will analyze the data, but your responses will remain confidential, and no names will be included in the reporting of results.

Please be advised that the nationalities of the participants will be disclosed to provide general background information of research participants, but the participants will not be identifiable from the quotes used in the report. Please also be advised that the name of the research site (Kumi University) will be disclosed in the report.

Audio recordings of the focus groups will be kept on a password-protected computer of the researcher Sion Yang. Audio recordings will be accessible to the researcher only, and not kept beyond the use of the study. The audio recording will be destroyed after the transcription is complete. All documents and recordings will be anonymously labelled with a code number for each participant, with a conversion file held in a password-protected computer of the researcher Sion Yang. The anonymized transcription will be kept on the password-protected computer of the researcher Sion Yang.

After the study has finished, the results will be written up as part of the master's research thesis of Sion Yang and submitted to the University of Jyväskylä for examination. The results will also be submitted for publication in the database of the University of Jyväskylä. If you would like to receive a soft copy of the findings, please let the researcher know by using the contact information provided.

8.   **Insurance coverage for research subjects**

The University of Jyväskylä has insurance for its staff and activities. The insurances of the University of Jyväskylä are not valid if a research subject's home municipality is not in Finland. Since the research site is Uganda, there will be no insurance coverage for research subjects.

9.   **Contact person for further information**

Sion Yang, syangvv@student.jyu.fi, a candidate for the master's degree in Educational Sciences at the University of Jyväskylä.

Appendix B **Privacy Notice for Study Participants**

FACULTY OF PSYCHOLOGY AND EDUCATION

UNIVERSITY OF JYVÄSKYLÄ

Date 1 November, 2022

PRIVACY NOTICE

You are participating in a scientific research *Student Experience of Rural Higher Education: A Case Study in Kumi, Uganda.* This privacy notice informs you about the processing of your personal data as part of the research. You have a legal right to receive this information in accordance with the European Union and Finnish legislation.

1. Data Controller(s)

Responsible leader of the research: Sion Yang, a candidate for a master's degree in Educational Sciences at the University of Jyväskylä [syangvv@student.jyu.fi]

Supervisor of the research: Heidi Layne, Senior Lecturer, Sustainable and Global Education at the University of (Faculty of Education and Psychology) [heidi.j.layne@jyu.fi]

2. Processor(s) of personal data

Processor of personal data refers to somebody processing personal data on behalf of the Data Controller and according to the Data Controller's instructions. In this research, the Data Controller, Sion Yang, is also the processor of personal data.

3. Other disclosure of personal data during research

Your personal data will be handled confidentially and without disclosing them to any outsiders.

4. Personal data to be processed in [*Student Experience of Equity Issues in Higher Education: A Case Study in Rural Uganda*]

Your personal data will be processed for the research purpose described in the information letter.

In this research, we will collect the following personal data on you: name, nationality, interview audio records, and interview transcripts. Data collection is based on the research plan.

Please be advised that the nationalities of the participants will be disclosed to provide general background information of research participants, but the participants will not be identifiable from the quotes used in the report. Please also be advised that the name of the research site (Kumi University) will be disclosed in the report.

Data subjects have received a hard copy of this information.

All data subjects are adults, over the age of 18.

5. The lawful basis for processing personal data in scientific research

☒Data subject's consent (GDPR, Article 6.1a, special personal data categories 9.2a)

Additional grounds

☒Processing of personal data for journalistic, academic, artistic, or textual purposes (Data Protection Act, section 27)

6. Protection for personal data

Processing of personal data in this research is based on an appropriate research plan and the study has a designated person in charge. The personal data collected and saved for this research will include only such data that is necessary for the research purpose.

Preventing identification
☒The data set is anonymized at the compilation stage (all identification data are fully removed so that there will be no return to the identifiable data and no new data can be connected to the data set).

The personal data processed in this research will be protected by means of:
 ☒ user ID   ☒password

For this study, a separate data protection impact assessment has been made
☒ No, because the research manager in charge has checked that the impact assessment is not compulsory.

The researchers have completed data protection and information security trainings
☒Yes

Agreements with research assistants and/or processors of personal data /Joint Data Controllers
☒ Yes

7. PROCESSING OF PERSONAL DATA AFTER *THE RESEARCH HAS ENDED*

☒ The research register will be deleted after the research has ended, approximately by May 2023.

8. Rights of the data subject

Cancellation of consent (GDPR, Article 7)
You have the right to cancel your consent if the processing of personal data is based on consent. Such a cancellation has no impact on the lawfulness of consent-based processing conducted before the cancellation of consent.

Right to access your personal data (GDPR, Article 15)
You have the right to get to know whether and which personal data of yours are processed. If you wish, you can also request a copy of your personal data to be processed.

Right to rectification (GDPR, Article 16)
If there are any inaccuracies or errors in your personal data to be processed, you are entitled to request that these be rectified or supplemented.

Right to erasure (GDPR, Article 17)
You have the right to demand in some cases that your personal data be erased. However, the right of erasure is not applicable if the erasure would prevent or greatly hinder reaching the goal of processing in a scientific research.

Right to restriction of processing (GDPR, Article 18)
You have the right to restrict the processing of your personal data in some cases, like when you challenge the correctness of your personal data.

Right to data portability (GDPR, Article 20)
You have the right to receive your submitted personal data in an organised, generally used and machine-readable format, and also the right to transfer the data to another Data Controller if possible and processing takes place automatically.

Deviating from the rights
In some individual cases, it is possible to deviate from the described rights on the grounds stipulated in the GDPR and the Data Protection Act insofar as the rights would prevent or greatly hinder reaching the goals of scientific or historical research or statistical purposes. The need for deviating from the rights is always assessed case-specifically. It is also possible to deviate from the rights if the data subject cannot, or cannot any longer, be identified.

Profiling and automatised decision-making
In this research, your personal data will not be used for any automatic decision-making. In this research, the purpose of the processing of personal data is not to assess your personal qualities, i.e. profiling, but personal data and qualities are considered from the perspective of broader scientific research.

Implementing the data subject rights
If you have any questions about your data subject rights, you can contact Sion Yang, the researcher. All requests concerning the implementation of data subject rights are submitted to Sion Yang via email: syangvv@student.jyu.

Reporting an actual or suspected information security breach to JYU
https://www.jyu.fi/fi/yliopisto/tietosuojailmoitus/ilmoita-tietoturvaloukkauksesta

You have to lodge a complaint with a supervisory authority especially with a locally relevant one in terms of your permanent place of residence or work if you regard that the processing of personal data violates the EU General Data Protection Regulation (EU) 2016/679. In Finland, the supervisory authority is the Data Protection Ombudsman.

Updated contact information of the Office of Data Protection Ombudsman:
https://tietosuoja.fi/etusivu

Appendix C   Consent Form for Study Participants

JYVÄSKYLÄN YLIOPISTO

CONSENT TO PARTICIPATE IN THE RESEARCH PROJECT

Student Experience of Rural Higher Education: A Case Study in Kumi, Uganda

I understand that participation in the study is voluntary and that I can stop participating at any time, without giving a reason. There will be no negative consequences for me if I withdraw. The data collected about me up to the point of withdrawal may still be used in the study.
Yes ☐

I have been adequately informed about the study and the processing of my personal data. I have received the information sheet about the study, as well as the privacy notice. I have also had the opportunity to ask the researcher further questions.
Yes ☐

I consent to my responses in the focus group interview being recorded for further analysis with the understanding that the data set will be anonymized at the compilation stage (all identification data are fully removed so that there will be no return to the identifiable data and no new data can be connected to the data set) and that the audio recordings will be destroyed after the transcription is complete.
Yes ☐

I acknowledge that my personal data will be handled confidentially by the Data Controller and the processor of personal data, and it will not be disclosed to any outsiders. I was informed that the nationalities of participants will be disclosed in the study report for the provision of general background information of the research participants, but individuals will not be identifiable from the quotes used in the report. I was also informed that the name of the research site (Kumi University) will be disclosed in the study report.
Yes ☐

I understand that no rewards will be paid for participation in the study.
Yes ☐

I confirm that I will not participate in face-to-face data collection if I have flu symptoms, fever, am recovering from illness, or am feeling otherwise unwell.
Yes ☐

I understand the information that I have received and agree to participate in this study.
Yes ☐

By signing this form I accept that
- data will be collected from me as described in information sheet,
- my data can be used in accordance with the procedures outlined in the privacy notice

I give my consent to the sections specified above by ticking the "yes" boxes.

Confirmation
☐ By ticking this box, I acknowledge that I am at least 18 years old and that I voluntarily agree to participate in this study.

Participant's Printed Name (in block letters)

Participant's Signature   Date

Researcher's Signature   Date

Contact details:
Sion Yang / syangvv@student.jyu.fi

Appendix D   Semi-Structured Focus Group Interview Guide

Introduction statement:

Thank you for joining the focus group interview session today. The purpose of this interview is to gather qualitative data for a master's thesis titled "Student Experience of Rural Higher Education: A Case Study in Kumi, Uganda." The interview is expected to take about 45 minutes to an hour. The details about this research process are described in the research notification provided to you in advance. You have also been provided a privacy notice which informs you about the processing of your personal data as part of the research. You are here because you have signed a consent form to participate in this research project. The interview will be audio-recorded, as described in the research notification, privacy notice, and consent form. If you have any questions regarding the research notification, the privacy notice, and the consent form, now is the time for you to ask the questions.

I would like to remind you that participation in this study is voluntary. You can refuse to participate in the study, stop participating or cancel your previously given consent, without stating any reason for this and at any time during the study. This will have no negative consequences to you. If you stop participating in the study or if you cancel your consent, the personal data, samples and other information collected on you up to that point will be used as part of the research material as far as it is necessary in order to ensure relevant research outcomes.

You are not obliged to answer any question during the focus group interview, but you may answer at your own free will. The focus groups were formed according to nationality, because the experiences of national students and international students may differ in the study context. Your responses will be anonymized in the interview transcription stage. Please refrain from using any names during the focus group discussions and please respect the confidentiality of other focus group participants by keeping any information shared during this interview to yourselves. Lastly, please keep the content of the focus group interviews confidential to ensure that the responses of participants in other focus groups will not be influenced by previous knowledge of the interview content.

Interview questions:

1. What factors influenced your decision to apply to and attend Kumi University?
2. How do you afford your tuition fees and living expenses throughout the academic year?
3. What do you understand about the scholarship policy at the university and do you agree or disagree with it?
4. Is this university tuition affordable? How about in comparison to other universities?
5. In your opinion, are different cultural backgrounds represented and supported equally at the university?

6. Have you observed or experienced any gender inequalities in access to higher education or during your university studies?
7. What educational resources and materials are provided by the university?
8. Are educational resources enough? If not, what resources are lacking?
9. How would you describe the learning environment at Kumi University?
10. Have you observed any differences between the learning environment at Kumi University and other universities, especially in urban centres?
11. What are the advantages and disadvantages of studying at a university in Kumi District?
12. If you had the choice of attending a university in an urban centre, would you have chosen to do so? Why or why not?
13. What do you see as the main challenges of entering and continuing higher education in Uganda, especially in rural regions like Kumi?

Appendix E   Hand-written Field Notes Samples

Top left note:

<OCT 6> Field Notes - Observation Day 1   10-12:30 a.m.   BA w/ Education BAED
Course observed: Educational Philosophy   BS w/ Education BSC.ED
          2nd Year Bachelors education
Educational Material Used: Early History of Educational Philosophy
Group discussions - groups of 6
- Each group studies one educational philosophy
  in detail (Essentialism, Behaviorism, Perenialism, Pragmatism,
- Select a group leader   Existentialism, Reconstructivism)
- Each group presents findings from the discussion
- Forms a different group with one member
  from the previous group
- Students seemed to have grasped general understanding
  of the different philosophies of education but
  most explanations were straight from the text provided
- Students would read texts and ask "what does it mean?"
- In discussion of existentialism, the question of
  student autonomy & catering to various learning
  needs arose. A student expressed a discontent
  in the Ugandan education system, saying that
  everyone is taught the same way with the
  purpose of preparing students for exams.
- I asked, "What do you think is more important:
  Trying to meet diverse learning needs and
  de-emphasizing standardized test scores (which means
  the average test scores may be low), or making
  sure students do well on the exams through
  rigorous test preparation but ignoring diverse
  learning needs?" A student answered that it's
  more important to prepare students for exams
  because the exam results are what decides
  the future. This answer reflects the dominance
  or the overbearing presence of "teaching to the
  test" culture in the Ugandan education system.
- [redacted] invited me to share basic facts about
  the Finnish education system. Students asked
  me the following questions:
  1) What are ways of becoming a teacher in Finland?
  2) What is the structure of Finnish education?
  3) How does the government support the

(left margin) Their reading skills were more advanced than what I had expected. Also, some students demonstrated the ability to analyze texts at a deeper level, showing critical thinking skills.

Top right note:

<OCT 17> Field Notes - Observation Day #8
Sociology of Education - [redacted]
Class scheduled at 9 am → Begins at 9:25am
Student presentations on various topics in sociology of education
- Nature and scope of Sociology of Education
- Basic sociological concepts in sociology of education
- Sociological functions in education
- Education and culture
- Social mobility and Education
- Home environment and Education
- School Developing Problems in Developing Countries
- Classroom Interaction and student cultures
- School social climate and learning
- Schools as social Organizations
- Current trends in sociology of education
Education is defined by the students as:
- Process of acquiring knowledge, habits, and skills through interactions
- Process of transferring values and habits either informally or formally from generation to generation
- Is both the act of teaching knowledge to others and receiving knowledge from others
- Continuous accumulation of knowledge, skills, and values
- All experienced individuals undergo from the day of birth to death → signifies lifelong learning?
- Process of bringing desirable change to the behavior of an individual → behaviorism?
After writing down all the definitions of "education" on
the board, the students and professors look at each
given definition carefully.
Professor: "You don't teach knowledge, you give knowledge."

My definition = Most powerful tool for a nation's
                economic development
Prof. asks, how about students' social and
emotional development? → Seemed
        to misunderstand

Middle left note:

The Structure of Ugandan Education
Pre-primary - 3 yrs
Primary School - 7 yrs → Primary Leaving Examination (PLE)
Lower secondary - 4 yrs → Uganda Certificate of Education (UCE)

Technical Institutes 3 yrs (certificate)

Upper secondary → Uganda Advanced (Advanced level) Certificate of Education
2 yrs   (UACE)

- Primary Teachers College (certificate)
  2 yrs @ National teachers college
- Uganda College of Commerce (diploma)
  2/3 yrs
- National Teachers College (diploma)
  2 yrs
- Uganda Technical College (diploma)
  2 yrs
- University (diploma/degree)
  3/3 yrs

Middle right note:

<OCT 14> Field Notes - Observation Day #6
Course observed: Development Studies Y1S2
the course on the timetable is marked as 8am-10 am. When
I went in the classroom 5 min before 8, only two students
were there. Other students and the professor didn't show
up until 20 min post 8. I asked [redacted] one of the
students who came early, if it was common for classes
to start later than scheduled [redacted] said it was common
for classes to begin late - it starts "whenever people show up."
However, he said that the class still ends at 10 sharp.
Although time perceptions is different in the Ugandan
culture, I question the validity of shortened class periods.
The credits require certain instructional hours, but the
actual hours of learning is probably significantly less
than what is required?

[redacted] also shared that instructional materials are provided
as soft copies. Students are responsible for making a
hard copy → 100 pages costs around 20,000 shillings.
Most students cannot afford to print out the materials.
Asio, a student said that about three quarters of the
students do not have hard copies for this reason.
However, students have the 'culture of sharing'!
Whenever a hard copy is required due to the absence of
smart phones, students with the hard copy share theirs
                                              willingly

Bottom left note:

I asked for data regarding dropout rates, but the
data was unavailable. The school doesn't have a
systemic tracking record of students who discontinue
their studies at Kumi University. They have to submit
a letter indicating their discontinuation, but these
letters are hand-written and not all of them
submit the letters. Some students simply disappear.

If a student is not able to pay the tuition fee
in full before exam period, they automatically
"fail" the exam and have to ask for an
extension of their studies. → Repeat the
semester and take the exam.
  * What if they paid partially but
    are not able to pay the tuition
    in full before exam time?

Appendix F   Initial Codes

ATLAS.ti Report

Master's Thesis

Codes grouped by Code groups(selection)

Filter:
Filter codes in group "Initial Codes"
Report created by Sion Yang on 18. Mar 2023

◇ Initial Codes

52 Codes:
- ○ Affordable cost of tuition and living in rural HE compared to urban HE
- ○ Agriculture as source of income in rural areas
- ○ Better educational resources and lecturers in urban universities
- ○ Challenge of refugee students
- ○ Charter issue
- ○ COVID-19 Experience
- ○ Degrees from urban universities preferred over degrees from rural universities
- ○ Desire to study in an urban area
- ○ Distance
- ○ Diversity of student body
- ○ e-learning perceived negatively by rural students
- ○ Effect of climate and drought on rural students
- ○ Family background of rural students
- ○ Fear of being discriminated in urban regions
- ○ Fishing as a source of income for raising tuition
- ○ Fluctuating scholarship policy
- ○ Foreign degrees valued over degrees in Uganda
- ○ Governmental support focused on urban universities
- ○ Higher cost of living in urban areas
- ○ Higher population in urban areas
- ○ Higher tuition fees in urban areas
- ○ Infrastructure challenges in rural areas
- ○ Job form
- ○ Job opportunities
- ○ Lack of alternatives way of learning
- ○ Lack of educational resources
- ○ Language barriers in regions far from home
- ○ Low exposure to technology in rural areas
- ○ Lower cost of food in rural areas
- ○ Making bricks as source of making income for tuition
- ○ NCHE fee
- ○ Not enough lecturers in rural areas
- ○ Parental support to pay tuition

○ Poor health facilities in rural areas
○ Poor transportation in rural areas
○ Quality of lecturers
○ Religious factor
○ Relying on relatives for tuition
○ Rural environment perceived as a positive learning environment
○ Rural students describing their parents as "peasants"
○ Rural university perceived as less segregated in terms of socioeconomic
    status
○ Rural university as a source of regional development
○ Scholarship at Kumi University
○ School activities and clubs
○ Security perceived as being better in rural areas
○ Sharing of educational materials among students
○ Shortage of electricity
○ Shortage of water
○ Student loans
○ Tribal identity affects choice of university region
○ Tuition and other costs of learning seen as a challenge
○ University being placed in a village