The Challenge of Inequality in University Education:

Is the District Quota Scheme Addressing Socio-Economic Disparities in Access to University Education in Uganda?

Godfrey Bagonza¹, Yuda Taddeo Kaahwa² & Nicholas Itaaga²

Correspondence: Dr. Godfrey Bagonza, Department of Foundations of Education, Faculty of Education, Kyambogo University, Uganda.

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Abstract

Access to university education is one of the fundamental educational questions in contemporary educational debates. This is because university education is seen as having an array of benefits to individuals, their households, and their nations. However, the challenge of inequality in terms of gender, income, location, and socio-economic status has constrained some individuals and households to access quality university education. In 2005 the government of Uganda introduced the District Quota Scheme to address the social inequalities in accessing university education. This study examined how the District Quota Scheme is addressing the rural-urban divide in access to university; how the District Quota Scheme has increased access to university education for children with parents who have low levels of education; and whether the District Quota Scheme is improving access to university education for children from low-income families. Following the social constructivist research paradigm and integrating both quantitative and qualitative research methods, the study found a change in access to university education by students from rural areas, students whose parents have lower levels of education, and those from low-income families as a result of introducing the District Quota Scheme. The study recommends that the government of Uganda and other stakeholders in the higher education sector should address the structural challenges to ensure that mainly the socially disadvantaged students take the biggest advantage of this scheme.

Keyword: district quota scheme, university education, equitable access

1. Introduction

Access to higher education is one of the fundamental educational questions in contemporary educational debates because higher education is seen as having an array of benefits to individuals, their households, and to our nations (Bowen, 2015; Baum, Ma & Payea, 2013; Huber & Kuncel 2015). Challenges of access to education in Uganda can be traced from the early stages when formal education was introduced in the country. Initial education introduced by the missionaries was accessible mainly by the children of the upper-class families such that the first high schools and colleges in Uganda were meant for the sons and daughters of chiefs and other influential people in society. These high schools and colleges were mainly located in the central region of the country thus qualifying students from other regions would find it difficult to access them, which made it difficult for such students from other regions to access university education though it was free. Social background and location more than the academic ability of students played a crucial role in the placement of students in secondary schools. Bright students from non-royal and non-influential backgrounds could not be admitted in schools meant for the sons and daughters of the royals even if they had the requisite academic credentials (Nakanyike & Nansozi, 2003; Aliker, 2018). The social and geographical inequity in secondary education was reflected at the university level in that though university education was free, it was students from the upper class that would access it.

Uganda's education system has gone through several transformations as a result of different education review commissions namely; the Castle Report of 1963; the Kajubi Report of 1989 and the subsequent Government White Paper on the education of 1992, liberalization and privatization of higher education, reallocation of education

¹ Department of Foundations of Education, Faculty of Education, Kyambogo University, Uganda

² Department of Foundations and Curriculum Studies, School of Education, College of Education and External Studies, Makerere University, Uganda

resources from higher education to primary education leading to the implementation of universal primary education (UPE) in 1997, and the implementation of universal secondary education (USE) in 2007. In these different education reviews, issues of equity and recommendations to address inequity along with gender, rural-urban, and social class were highlighted (Ssekamwa, 1997; Nakanyike & Nansozi, 2003; Muwagga, 2006). For example, the 1940 Thomas Education Committee recommended an increase in education for girls because there was inequity between boys' and girls' enrolment. In 1950, the colonial government in Uganda realized that schools were concentrated in the central region thus creating a rural-urban divide in education provision. As a result, big schools such as Ntare School, Lango College, and Teso College were started to bridge the rural-urban divide in education. The 1964 Education Act recommended that schools that discriminated against students because of their race should be nationalized to remove racial discrimination in the education system. This study, therefore, will examine how the District Quota Scheme is addressing the social-economic disparities in access to university education in Uganda according to gender, income, and social status

2. Literature Review

The British Colonial government established Makerere University in 1922, first as a technical school, then in 1947, it became a university college offering external degrees for the University of London. Makerere University was named the University of East Africa until 1977 when the East African community collapsed. From its inception up to the early 1990s Makerere University as the only university in Uganda, was elitist admitting only a few students from well-to-do families who could afford to access good secondary education (Mamdani, 2007; Mugagga, 2006). However, in the early 1990s under the influence of the World Bank's Structural Adjustment Programs, University Education in Uganda was liberalized. This led to the emergence of Private Universities and privately sponsored students being admitted to Public Universities to study alongside government-sponsored students (Mamdani, 2007). Since 1992 Uganda's university sector has been expanding, currently, there are 51 accredited universities in Uganda which include Public Universities and over 42 Private Universities (NCHE, 2018). Available statistics indicate that university enrolment in Uganda has grown from 137,190 students in the year 2006 to 179,067 in 2016 (NCHE, 2018; MoES, 2018). Despite the expansion of the Higher Education sector, the issue of equity at all levels of education especially at Higher Education is still a challenge.

Since the inception of Makerere University up to the 1990s, students admitted to the University (which was by then the only Public University) received a full scholarship which covered tuition fees, full board, health, transport, and a personal needs allowance (Aliker, 2018; Mamdani, 2007). This scholarship was awarded based on merit rather than need and therefore it was extraordinary luck and privilege to be admitted to Makerere University (Mamdani, 2007). The scholarships were given in light of the view that it was the government's responsibility to train manpower that would take on the leadership of the country after independence. Starting with the 1990/91 academic year many reforms including cost-sharing were introduced at Makerere University. All allowances to students including textbooks, stationery, travel, and personal allowance were abolished (Mamdani, 2007). The government scholarship only catered for tuition, accommodation, and meals. The government provided different admission tracks to cater to students who were disadvantaged by gender, disability, and social-economic status. During the 2005/2006 Academic Year, the government introduced the District Quota Scheme which allocated 25% of the scholarships to be awarded based on the District Quota Scheme to address the socio-economic disparities in access to university education.

Currently, the government of Uganda offers 4000 scholarships annually to be competed for by students in different categories including national merit, District Quota Scheme, disabled students' scheme, and outstanding sports personalities' scheme. National merit considers performance in the Uganda Advanced Certificate of Education Examination (UACE) (NCHE, 2018; MoES, 2018). The best students get scholarships and each student is given one of the six courses he/she has applied for. According to the government student's admission records, the national merit takes 73% of the 4000 scholarships each year. Under the District Quota Scheme, each district is allocated a quota of the scholarships to be competed for by students who have completed UACE that year; have a home, and have studied in that district. The District Quota System accounts for 25% of the total scholarships each year. One percent (40) of the scholarships each year are reserved for students with special needs and another one percent (40) is allocated to outstanding sports personalities.

With the District Quota Scheme, the government allocates scholarship quotas per district to be competed for by students who have a home and have studied and sat Uganda Advanced Certificate of Education in that district. Students apply for those scholarships and selection is done by the Ministry of Education and Sports; then the selected students' names are sent to their respective home districts for verification. Those who are given these scholarships study at public universities of Makerere University, Mbarara University of Science and Technology, Busitema University,

Gulu University, Kyambogo University, and Muni University. The District Quota System aims to help well-performing students who could not access university education due to stiff competition on national merit and to help districts that fail to have students admitted on government sponsorship on national merit.

Equity in society is a cornerstone of social harmony, stability, fairness in social mobility, and progress. The institution of education is supposed to provide the equalizing effect to students who are disadvantaged by ascription through social mobility. This should be through policies and practices which ensure equity of opportunity, process, and outcome (Ghosh, 2001; Le Grand, 2002; Monk, 1990). Equity in awarding government scholarships to students joining university removes the discrimination suffered by sections of students due to ascription thereby reducing the effects of the social inequity existent in society.

The District Quota System was introduced in public universities in Uganda in 2005 to improve equity across socio-economic status, location, disability, and by implication gender. A review of admission records of public universities reveals an elaborate admission criterion on District Quota System but there is no elaborate policy document to guide on how equity will be achieved through these students' admission tracks. Literature reveals that though these admission tracks may have a visible impact on access, the impact on equity of the process is not clear and it has not been analyzed. Universities may continue implementing these admission tracks even when they are not achieving the intended goals. This may negatively affect the categories targeted by these admission tracks and in turn negatively affect the achievement of sustainable development goals. The study examined how the District Quota Scheme has addressed Socio-Economic Disparities in access to University Education in Uganda in terms of gender, location or place of origin, and socioeconomic status. The study was guided by the following objectives:

- 1. To establish whether the District Quota Scheme is addressing the rural-urban divide in access to university education in Uganda.
- 2. To find out whether the District Quota Scheme has increased access to university education for children with parents who have low levels of education.
- 3. To evaluate whether the District Quota Scheme is improving access to university education for children from low-income families in Uganda.

3. Research Design and Methodology

Following the social constructivist paradigm which suggests that individuals construct their meaning about reality and social concepts as they interact with the world (Creswell 2009), the study adopted the mixed methods research approach in data collection and data analysis. The mixed methods research approach was preferred because it is an emergent methodology of research that advances the systematic integration of both qualitative and quantitative data within a single investigation (Wisdom & Creswell 2013). The study adopted the cross-sectional research design during which data were collected using both interviews and a questionnaire survey with the key stakeholders in university education to get information about the sampled elements of the population as a whole (Zheng 2015). The cross-sectional research design was selected for this study as data were gathered from a pool of participants with varied characteristics and demographics such as age, gender, income, education, geographical locations, and ethnicity which are important predictors in measuring equity in access to university education (Tristan 2016).

4. Population and Sampling

The target population for this study was 1,792 students on the District Quota Scheme in four public universities in Uganda which included Makerere University, Mbarara University of Science and Technology, Gulu University, and Busitema University. The population also comprised Registrars in charge of admissions from the four universities, officials from the department of higher education at the Ministry of Education and Sports, and officials from the gender mainstreaming department at Makerere University. This population was considered relevant for this study because it constituted the main beneficiaries and other decision-makers on the students' loan scheme for higher education.

Relying on the simple random sampling strategy, a sample of 317 government-sponsored students on the district quota scheme was selected. The simple random sampling strategy was appropriate for students on the District Quota Scheme because it increases the internal and external consistency of data collected (Anita *et all, 2013*; Baridalyne, 2012). On the other hand, using the purposive sampling method, 4 registrars in charge of admission from 4 universities, 2 members of staff from the gender mainstreaming department at Makerere University, and 2 members of staff from the Department of Higher Education in the Ministry of Education and Sports were also selected for interviews for this study to provide information which would complement responses from students. According to the Krejcie and Morgan Table of Sample size determination, for a population of 1800 subjects a sample size of 317 is adequate for this study (Adam 2020, Amin 2005). The population and sample size distribution are shown in Table 1.

Table 1. Population and Sample Size Distribution

Target Category	Population Size	Sample Size	Sampling Strategy
Students on the District Quota Scheme	1,792	317	Simple Random
Registrars in charge of Admission	4	4	Purposive Sampling
Staff from Gender Mainstreaming Department	2	2	Purposive Sampling
Staff from the Department of Higher Education	2	2	Purposive Sampling

Source: Primary Data

This study used a questionnaire with both closed and open-ended question items to collect data from students who are benefiting from the District Quota Scheme in the public universities in Uganda. On the other hand, interviews were done with registrars in charge of admission from 4 universities, members of staff from the gender mainstreaming department at Makerere University, and members of staff from the Department of Higher Education in the Ministry of Education and Sports. Triangulation of methods of data collection was used to increase the credibility and validity of research findings.

5. Findings of the Study

Descriptive Statistics

The most important background variables for this study included the gender of the respondents, year of study, Discipline of Study, and the Social Economic Background of their Families. These variables are important in this study because one would wish to know whether benefitting from the District Quota Scheme was fairly distributed across gender, year of study, the discipline of study, and family background. Table 1 presents the descriptive statistics of this study on a sample of 317 students.

Table 2. Background Variables for the Study

Variable	Attribute	Frequency	%
Gender	Male	187	59
	Female	130	41
Years of Study	2 nd Year	161	51
	3 rd Year	156	49
Discipline of Study	Arts and Humanities	153	48
	Sciences	164	52

n=317, Source: Primary Data

The distribution by gender is 59% males and 41% females which indicates that more males accessed the District Quota Scholarships compared to females during that year. However, this is not enough to conclude that more females have better access to higher education compared to females because this study relied on data for one year. For the year of study 2nd Year, students constituted 51% while 3rd Year students constituted 49% in the sample meaning that there was not much change in the numbers admitted on the quota scheme for the two years. The study concentrated on the 2nd Year students and the 3rd Year students because these had stayed slightly longer in the university compared to the 1st year students and they have good experiences of how the District Quota Scheme is affecting the social-economic disparities in access to university education in Uganda. The distribution by the discipline of study is 48% were in the Arts and Humanities disciplines while 52% in the Sciences discipline which shows that there is much segregation between arts and science disciplines while selecting who to benefit from the scheme.

Research Question 1: Is the District Quota Scheme addressing the rural-urban divide in accessing university education?

To answer this question, statistics from the Ministry of Education and Sports in Uganda were used to get data on the total number of students admitted on the government scholarships before the introduction of the District Quota

Scheme (2000 - 2005). The focus was on the urban districts of Kampala, Wakiso, Mukono, and Mpigi, and the remaining percentage was considered to be the rural population. This data set was compared with the admission of students in the same Districts after the introduction of the District Quota Scheme (2012 - 2013). Findings on Admissions before the introduction of the District Quota Scheme are presented in Table 3.

Table 3. Percentage of Admissions on Government Sponsorships for Urban Districts Compared to Rural before the Districts Quota Scheme

Urban Totals					Urban %	Rural %	
Year	Kampala	Wakiso	Mukono	Mpigi	Total admissions	%Urban	%Rural
2000/2001	359	463	238	293	3098	44	56
2001/2002	584	384	208	471	3789	43	57
2002/2003	482	374	108	78	2549	41	59
2003/2004	568	327	215	78	2770	43	57
2004/2005	365	254	128	75	2512	33	67

Source: Student Admission Records

Findings in Table 3 indicate a small difference in the percentage of students admitted from rural areas and those admitted from the urban areas on the government sponsorship scheme before the introduction of the District Quota Scheme. For the Academic Year 2000/2001 44% of the scholarships went to urban students while 56% went to rural students, 2001/2002 43% went to urban students while 57% went to rural students, 2002/2003 41% went to urban students while 59% were from the rural setup, 2003/2004 43% were urban students while 57 were rural, and 2004/2005 33% went to urban students while 67% were rural students. These findings indicate an improvement in scholarships going to rural students over the years but also based on the percentages urban students are also still advantaged. Findings in Table 4 are aimed to show whether there is any improvement inequity of access between the rural and urban areas after the introduction of the District Quota Scheme.

Table 4. Percentage of Admission of Students on Merit combined with those on the District Quota Scheme

Urban Totals				Urban %	Rural %		
Year	Kampala	Wakiso	Mukono	Mpigi	Total admitted	%Urban	%Rural
2012/2013	331	285	238	293	3098	37	63
2013/2014	361	342	208	471	3789	36	64
2014/2015	314	323	108	78	2549	32	68
2015/2016	283	383	215	78	2770	35	65
2016/2017	260	352	128	75	2512	32	68

Source: Student Admission Records

Findings in Table 4 indicate an improvement in the number of students admitted to the university from rural areas after the introduction of the District Quota Scheme in Uganda. In the academic year 2012/, 2013 37% of admissions on both schemes were from urban areas while 63% were from the rural Districts, in 2013/2014 36% were from urban Districts while 64% were from rural areas, 2014/2015 32% were from the urban areas while 68% were from the rural areas, 2015/2016, and in 2016/2017 32% were from urban areas while 58% were from the rural areas. These findings indicate that introduction of the District Quota Scheme is improving access from the rural sector students.

Despite this notable access for university education by students from rural areas, officials from the Department of Higher Education in the Ministry of Education and Sports raised some challenges which the scheme is abused. One of the officials who was interviewed noted thus:

"...the system of allocating the district quota scholarships is not transparent, and it has many loopholes that well-off families have exploited to out-compete the intended beneficiaries such that it has not increased accessibility to the level it is being perceived. There are beneficiaries of the District Quota Scheme who come from high socioeconomic status families, a study in good schools in urban centers but register for

examinations in rural districts to compete favorably for the District Quota Scheme. At the same time, there are affluent families in rural districts that send their children to high-status schools in urban centers, but those students register for examinations in the rural school. Such students meet the criteria for the District Quota Scheme, yet they are not disadvantaged in the merit system but are just enjoying location advantages being in areas targeted by the scheme. Furthermore, there are some cases of corruption where some parents bribe District officials to approve students who do not meet the criteria for the quota system'. (Official from the Department of Higher Education, January 2021).

Despite the few challenges noted above, findings on the question of who is benefiting from the scheme according to the rural-urban divide indicate that there is an improvement in the number of students admitted to the university from rural areas after the introduction of the District Quota Scheme in Uganda.

Research Question 2: Is the District Quarter System Helping Children whose Parents have Lower Levels of Education to access University Education?

It is generally believed that children whose parents have higher levels of education have higher chances of access to university education compared to their counterparts whose parents have lower levels of education. This study also sought to find out whether the District Quota Scheme has improved access to university education children whose parents have lower levels of education. To answer this question data were collected from 317 students who were benefiting from the District Quota Scheme to establish how they were distributed according to the education acquisition levels of their parents. The findings are presented in Table 5 and Figure 1.

Table 5. Response on Level of Education of Parents

Education level	No	%	
No Formal Education	14	04	
Primary	96	30	
Secondary	79	25	
Post-Secondary Certificate	57	18	
Diploma	44	14	
University Degree	44	13	

n=317, Source: Primary Data

Findings in Table 5. suggest an improvement in access to university education for children whose parents have primary and secondary levels of education. In the sample selected for this study, 04% of the students indicated that their parents had no formal education. 30% and 25% indicated that their parents had primary and secondary education respectively, 18% showed that their parents had a post-secondary certificate, 14% showed that their parents had Diploma qualifications and 13% showed that their parents had a University Degree.

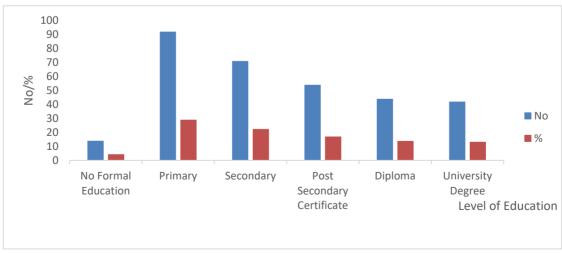


Figure 1.

Findings from this sample suggest that the District Quota Scheme is favoring students whose parents have lower levels of education. However, the number of parents with diplomas and Degree is also relatively high meaning that probably not all individuals in the population with higher education qualifications can afford fees for their children in the university so some of them go for the District Quota Scheme. These findings are also presented graphically in Figure 2:

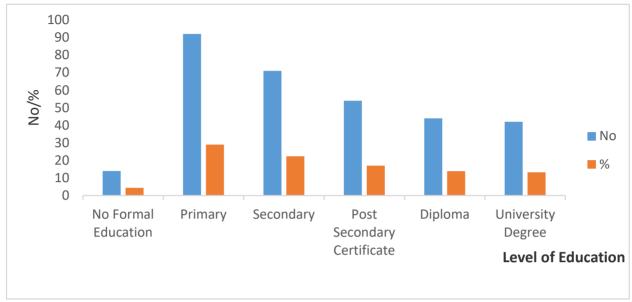


Figure 2. Responses on Level of Education of Parents

Figure 2 indicates the trend of access to university education by students from families with different levels of education who have benefited from the District Quota Scheme. In the sample, few students indicated that their parents had no formal education while those with Primary and Secondary Education are more than the Post-Secondary education levels. These findings are also affirmed by the revelation that as much as the District Quota Scheme has improved access to university education, some of the beneficiaries would still afford to access university education without government scholarship even if their parents had lower education. These findings are affirmed by some students who when asked to explain how they could have joined university without District Quota Scheme. One stated as follows:

I have studied in private schools where my father was paying more money than what private students doing my course are paying, so there is no way my father would have failed to pay my tuition fees at university. As much as he did not study up to the university level, my father wants his children to acquire university education (Extracted from one of the students' questionnaires)

Findings from this sample suggest that the District Quota Scheme is favoring students whose parents have lower levels of education.

Research Question 3: Is the District Quota Scheme benefiting Children from Low-Income Families in access to university education.

It is widely recognized that, on average, children from poorer family backgrounds have worse chances of access to university education compared to their counterparts from higher-income family backgrounds (Blanden & Gregg, 2004). In this paper, we examined whether the District Quota Scheme has improved access to university education for children from low-income families. The study relied on a sample of 317 students from public universities who are benefiting from the District Quota Scheme. Students were asked to select the income category where they thought their households belong. Income levels were categorized as families earning below UGX 100,000(US\$30), those earning UGX 100,000(US\$30) to UGX 500,000(US\$140), those earning UGX 500,000(US\$140) to 1,000,000(US\$280), those earning UGX 1,000,000(US\$280) to 2,000,000(US\$560), and those earning above 2,000,000(US\$560). The findings are presented in Table 6.

Table 6. Response on Family Income of Students

Income Levels	No	%
Below US\$ 30	38	12
US\$ 30 to US\$ 140	133	42
US\$ 140 to US\$ 280	63	20
US\$ 280 to US\$ 560	44	14
US\$ 560 and above	38	12

n=317, Source: Primary Data

Findings in Table 6 reveal that the District Quota Scheme could have improved access to university education for lower-income groups earning between US\$ 30 and US\$ 280. However, those from families with incomes below US\$30 are few only 12% in this sample yet they are the most deserving for affirmative action. On the other hand, children from families with incomes which are above US\$ 280 are increasingly benefitting from the District Quota Scheme yet their families can afford to pay for university education on the private entry scheme. These findings are further presented in figure 3 showing the trend of change in access to university education in Uganda as a result of the introduction of the District Quota Scheme.

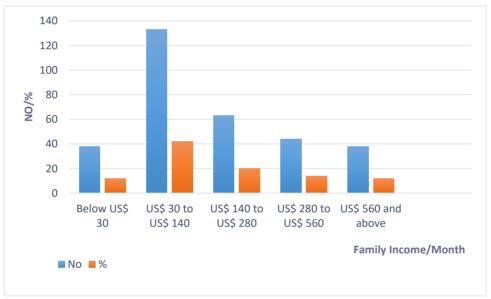


Figure 3. Response on Family Income of Students

Findings in Figure 3 suggest that the number of students who come from the low-income group (US\$30 to US\$140) accessing university education is increasing because of the introduction of the District Quota Scheme. However, some of the students who were reached also revealed that they hoped to access university education without government sponsorship. One of the students who responded to our questionnaire observed:

".....my parents were determined to sell everything that they have to secure my education if I was not successful with the District Quota Funding. I desired to pass examinations to be able to win the government scholarship on merit but I went through a school that did not provide me with the environment to perform to my expectations. (Extracted from one of the students' questionnaires).

Findings on this objective reveal that the District Quota Scheme has improved access to university education for lower-income groups earning between US\$ 30 and US\$ 280.

6. Discussion of Findings

Discussion of Findings for Objective 1

Findings on the first objective revealed that there is an improvement in the number of students admitted to the university from rural areas after the introduction of the District Quota Scheme. However, interviews also indicated that students from urban settings seem to continue benefiting more than their rural counterparts. These findings concur with Forsyth & Furlong (2000) who asserts that there are affluent families within the low socio-economic

status neighbourhoods who take the education opportunities meant for the low socio-economic class in those neighbourhoods. These students do not cheat the system but enjoy location advantages by taking opportunities meant for their neighbourhoods though they do not possess the characteristics that attracted those opportunities to those places. The findings further concur with Yang, (2010), who observed that the preferential policies of examination waivers, boosting of grades of students aimed at compensating the unfairness in the college entrance national examinations are often abused and end up benefitting students from politicians and connected civil servants who allocate those opportunities to their children. Therefore, affirmative action in terms of introducing preferential schemes for disadvantaged students can improve access to university education if the challenges of corruption and dishonesty among the stakeholders are addressed.

Discussion of Findings for Objective 2

Findings on the second objective revealed that the District Quota Scheme has enabled students whose parents have low levels of education to access university education. This is since this study found out that the performance of highly educated parents' children was found to be better than that of the less educated parents. As Harris and Goodall (2008) revealed in their studies that highly educated parents concentrate on the text-enriched environment at home. Besides that, they have the experience of student life extensively so that they are aware of the problems and their appropriate solutions. Their guiding and motivational approach towards their children contribute positively to their academic achievement. Children of intermediate and above showed 90% results as compared to 56% of less-educated parents' children. These findings also agree with (Chevalier, Harmon, Sullivan, & Walker, 2005) who suggest that only parents' educational level is not responsible for students' educational performances but home investment and socio-economic status of the family are also important factors influencing students' school achievement. Given the fact that children from families where parents have higher levels of education are advantaged to attend university education, the District Quota Scheme can provide an opportunity for their counterparts whose parents have lower levels of education. Therefore, all stakeholders interested in increasing access to university education should push for affirmative action like the District Quota Scheme to enable children from low socio-economic sectors to access university education.

Discussion of Findings for Objective 3

Like other studies have suggested, findings in this study reveal that people in the low-income group value education as a tool to liberate them from poverty and therefore are willing to sacrifice everything they can to give their children university education. This finding also agrees with (Ezewu, 1998) who asserts that parents struggle to take their children to school and to maintain them in school for them to be better off than their parents. At the same time, parents from low socioeconomic status families look to education as the only tool to liberate them from poverty. The findings of this study also agree with other studies which suggest that while the number of students from low-income families has increased over time, low-income families are still massively underrepresented because the increase in the number of students from high-income families has been much higher than that from low-income families. For example, Holmes and Mayhew (2016) conclude that higher education is incapable of reducing social inequality where social deprivation is entrenched in the early years of schooling and that individuals afflicted then will remain disadvantaged throughout their education life. This view is shared by Crawford, Gregg, Macmillan, Vignoles, and Wyness (2016) who assert that differences in achievement by students from different socio-economic groups emerge during the first years of schooling and widen with the progression in the education system. Therefore, stakeholders in the education sector need to provide incentives for access to education at all levels of education if education is to be used as an effective tool for addressing social inequality.

7. Conclusions

This study concludes that the District Quota Scheme is increasing access to university education for children from Rural Districts of Uganda compared to the time before the Scheme was introduced. It was also revealed that there is an improvement in access to university education for children whose parents have lower levels of education because of the introduction of the District Quota Scheme. Finally, the District Quota Scheme has improved the opportunity of children from low-income backgrounds to access university education in Uganda.

8. Recommendations

The study recommends that the government of Uganda and other stakeholders in the higher education sector should address the structural challenges to ensure that mainly the socially disadvantaged students take the biggest advantage of the District Quota Scheme. The study further recommends that government and other stakeholders in the education

sector in Uganda should explore other affirmative options which can improve access to quality university education by children from low socio-economic backgrounds.

References

- Adam A. M. (2020). Sample Size Determination in Survey Research. *Journal of Scientific Research and Reports*, 26(5), 90-97. https://doi.org/10.9734/jsrr/2020/v26i530263
- Aliker, M. (2018). The Bell is Ringing. Kampala: Fountain Publishers.
- Amin, M, E. (2005). Social science research: Conception, methodology, and analysis. Kampala: Makerere University Printery.
- Anita, A., Anupam, P., Pikee, S., & Aruna, N. (2013). Sampling: Why and How of it? *Indian journal of medical specialties*, 4(2), 330-333. https://doi.org/10.7713/ijms.2013.0032
- Baridalyne, N. (2012). Sampling, Sample Size Estimation, and Randomization. *Indian J Med Spec*, *3*, 195-7. https://doi.org/10.7713/ijms.2012.0056
- Baum, S., Ma, J., & Payea, K. (2013). Education pays 2013: The benefits of higher education for individuals and society. New York, NY: The College Board.
- Bowen, W. G. (2015). Higher education in the digital age. Princeton, NJ: Princeton University Press. https://doi.org/10.1515/9781400866137
- Chevalier, A., Harmon, C., Sullivan, V. O., & Walker, I. (2005, February). The Impact of Parental Income and Education on the Schooling of Their Children. *IZA Discussion Paper No. 1496*, 1-8.
- Creswell, W. J. (2009). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. (3rd ed.). London: SAGE Publications, Inc.
- Ezewu, E. (1998). Sociology of Education. Singapore: Longman.
- Forsyth, A., & Furlong, A. (2000). *Socioeconomic disadvantage and access to higher education* (1st ed.). Bristol UK: The Policy Press.
- Ghosh, B. N. (2001). From market failure to government failure: a handbook of public sector economics. Leeds: Wisdom House.
- Harris, A., & Goodall, J. (2008). Do Parents Know They Matter? Engaging all Parents in Learning. London center for leadership in learning institute of education, UK. *Educational Research, Routledge 3*, 277-289, https://doi.org/10.1080/00131880802309424
- Holmes, C., & Mayhew, K. (2016). The economics of higher education. *Oxford Review of Economic Policy*, 32(4), 475-496. https://doi.org/10.1093/oxrep/grw031
- Huber, C. R., & Kuncel, N. R. (2015). Does college teach critical thinking? A meta-analysis. *Review of Educational Research*, *XX*(X), 1-38.
- Le Grand, J. (2002). Equity and choice: an essay in economics and applied philosophy. London: Routledge.
- Mamdani, M. (2007). Scholars in the marketplace: the dilemmas of neo-liberal reform at Makerere University, 1989-2005. Kampala: Fountain Publishers.
- MoES. (2018). Education and Sports Sector Fact Sheet 2002-2016. Kampala: Ministry of Education and Sports.
- Monk, D. H. (1990). Educational finance: an economic approach. New York; London: McGraw-Hill.
- Muwagga, M. A. (2006). *The Philosophical Implications of the Liberalization of University Education in Uganda*. Doctoral Thesis. Makerere University Kampala.
- Nakanyike, B. M., & Nansozi, K. M. (2003). *Makerere University in Transition 1993–2000: Partnership for Higher Education in Africa*. Kampala: Fountain Publishers.
- NCHE. (2018). The state of higher education and training in Uganda 2015/2016. Kamp. https://doi.org/10.1016/j.ijsolstr.2011.01.028
- Ssekamwa, J. C. (1997). History and Development of Education in Uganda. Kampala: Fountain Publishers.
- Tristan, M. (2016). Three dimensions of equity of access to higher education. *Compare: A Journal of Comparative and International Education*, 46(4), 645-665. https://doi.org/10.1080/03057925.2015.1043237

- Wisdom, J., & Creswell, J. W. (2013, February). *Mixed methods: Integrating quantitative and qualitative data collection and analysis while studying patient-centered medical home models* (AHRQ Publication No. 13-0028-EF). Rockville, MD: Agency for Healthcare Research and Quality
- Yang, D. (2010). An Empirical Study of Higher Education. *Chinese Education & Society*, 43(6), 59-85. https://doi.org/10.2753/CED1061-1932430603
- Zheng, M. (2015). Conceptualization of cross-sectional mixed methods studies in health science: A methodological review. *International Journal of Quantitative and Qualitative Research Methods*, *3*(2), 66-87.

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