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Education Attainment and Labour Force Participation in Uganda: Perspectives from Bunyoro Sub-Region

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Abstract: *This study examined the impact of education attainment on women's labour force participation in Bunyoro sub-region, Uganda. The study was guided by Theodre Schultz's Human Capital Theory, which emerged in the 1960s. The theory assumes that education enhances one's efficiency and productivity thereby increasing earnings in the labor market. The study adopted a descriptive correlation research design using a quantitative approach to determine the relationship between education attainment and women's participation in the labour force within the Bunyoro sub-region of Uganda. A sample of 365 residents participated in the study. Self Administered Questionnaires were used to collect data, which were analyzed using descriptive and inferential statistics. The study findings indicate that education attainment positively and significantly influences women's labour force participation in Bunyoro Sub – Region. However, it is not the only factor influencing women's labour market outcomes in the region.*

Keywords: Bunyoro Sub-region, Education-attainment, Labour Force Participation, Women Economic Empowerment

Background

The Universal Declaration of Human Rights reflects education as a key avenue for empowering women (UNFPA, 2017).Scholars such as Aslam, Bari and Kingdon, 2012; Kirahora et al., 2021, have also identified education as a major driver of women's economic. In the last two decades, the African continent has shown considerable achievement in education although with a lower gender parity mainly in primary education (World Bank, 2014). This study considered education attainment as the overall result of the educational career rather than individual educational transitions (Schneider, 2016; Kirahora et al., 2021). Specifically, the study constructed education attainment as interpersonal competence, cultural competence, and technical knowledge.

With the introduction of Universal Primary Education (UPE) 1997 in Uganda, primary education enrollment increased from 49.9% for girls in 2008 to 65% in 2015. Similarly, school completion increased from 37% for girls in 2008 to 72% in 2015 (Ministry of Education & Sports, 2016). In 2007, Uganda became one of the pioneers of Universal Secondary Education (USE) in Sub-Saharan Africa (Ministry of Education & Sports, 2013). Available statistics show a rise in the number of senior four candidates from 36% for girls and 54% for boys in 2007 to 47% for girls and 63% for boys in 2011 (Ministry of Education and Sports, 2016). According to the Global Gender Gap (2016), Uganda ranks 61 out of 144 countries in terms of addressing gender gap in education. In spite of this progress, there is limited share of women in wage employment in non-agricultural sectors (UNFPA, 2017). A report by the United Nations Population Fund (UNPF) revealed that Uganda's Labour Force Participation Rate (LFPR) was higher for males (60%) than females (46%). Likewise, the Employment to Population Ratio is higher for males (56%) than females (40%). Nationally, women in Uganda seem to be less economically empowered in relation to their male counterparts (UNFPA, 2017)

With regard to education performance, Bunyoro Sub - Region has registered considerable progress. Within the western region of Uganda for example, the Sub - Region had the least number of persons aged 15 years and above (13.4%) with no formal education in 2017. Further, with a score of 7.5%, Bunyoro Sub - Region ranked 7th among the other entire Sub - Regions with regard to post secondary and above education attainment in the same year. Similarly, only Bunyoro Sub - Region had achieved gender parity by 2017 at both secondary (24.1%) and primary (81.2%) school net enrollment (UBOS 2018). In Bunyoro Sub - Region, total enrollment into secondary school commendably increased by 36% between 2012 and 2017 (Uganda Education Statistical Abstract, 2012). These revelations indicate that Bunyoro Sub - Region is performing fairly well in relation to education attainment.

Statement of the problem

Despite the recorded improvement in education indices in Bunyoro Sub - Region, women's economic status in the region remains lower in comparison to their male counterparts. For example, for the working age (14-64), 297,000 male (56%) in relation to 237000 females (44.4%) in Bunyoro Sub - Region, were employed (UBOS, 2018). Much as the region had the lowest youth unemployment rates (11.9%) for persons of 18-30yrs in relation to the other Sub - Regions, proportional computations from the 2017 youth monograph report reveal that of a total of 1,687,870 (11.9%) unemployed youth in country, 113,011 (7%) females in relation to 87,864 (5%) males were from Bunyoro Sub - Region (UBOS, 2017). For the same age group, 22% of females owned agricultural land in relation to 35% of males (UBOS, 2017). This study therefore sought to examine the role of education in women's ability to participate in the labour force participation in Bunyoro Sub – Region.

Theoretical framework

This study was hinged on Theodre Schultz's 1961 Human Capital Theory that was further elaborated by Gary Becker (1930–2014). The theory assumes that education enhances productivity, raises bargaining power and, increases earning in the labor market. A similar view is held by Tan (2014) and Kirahora et al., (2021), who indicate a close relationship between the level of education, and wages since education attainment enriches the skills of laborers and enables them to efficiently use modern technology. Education is considered the principal mechanism for developing human knowledge hence, an investment that not only impacts knowledge and skills to individuals, but also values, ideas, attitudes and aspirations which contributes to the nation's development (Uganda Bureau of Statistics, 2017; Kirahora et al., 2021). This view is shared by Khanykin, (2020), who argued that education and wages are directly related. According to Khanykin, education enriches the skill of a laborer and enables him/ her to efficiently use modern technology. This narrative collaborates with education attainment constructed in terms of: interpersonal competences, technical knowledge and cultural competence. Khanykin (2020) further, states that education has the ability to tap into one's innate ability before or during employment. In essence, the Human Capital Theory assumes that an educated population is a productive force facilitated by competences as outcomes of the education system. Thus, the theory is largely used to address the question of returns to investment in education and training

Review of related literature

Labour force participation rate represents a country's available work force measured by the percentage of working age population (15years and more), that is either employed or actively looking for employment (Boateng *et al*., 2013; Pérez et al.,2021). While women represent around 49percent of the global population, their participation in the labour force is very low (World Bank Gender Statistics, 2016). Even with a significant increase in women's labour force participation in the last century, the global labour force participation for women was by 27 percent lower than men's in 2018 (Sivakumar & Sharma, 2019). This is echoed by the UN Women Report (2018) that, women in most countries earn less than men, with an estimated gender wage gap of 23 per cent). This is supported by the fact that, women in OECD countries had a lower average female labour force participation rate (50.9 percent) than men (70 percent) in 2014 (World Bank, 2016).

In Africa, there is also a clear difference in wage variation among genders. For example, occupations such as teaching and general office work, which are mostly dominated by females shows the lowest differentials in wages, compared to male dominated professions, like engineering (ILO, 2016). In Uganda, despite the presence of an Equal Opportunities Commission Act , less women in the working age bracket (75 percent) compared to men (82 percent) were working in 2017 (UNHS, 2016/17). In line with this, women's unemployment rate (14.4 percent) was more than double that of men (6.2 percent). This review seems to imply that globally, women face higher unemployment occurrences than men. Work -related segregation happens in most countries and women's participation in the labour market seems to be restricted to unskilled low paying jobs. This could partly explain why women continue to earn less than men.

Evidence on the positive relationship between women's education and labour force participation abounds (Aslam, De, Kingdon & Kumar, 2010; Aslam, Bari & Kingdon, 2012). Education attainment is a key determinant of labour market out comes in most countries (Yakubu; 2010; Cazes & Verick, 2013) and is often associated with future employment (Greenstone, *et al*., 2012). For example, more schooling among older men in the Unites States led to increased labour force participation in the recent past (Blau & Goodstein, 2010). Additionally, 95percent of students in America relate education attainment with job acquisition (The Gallup-Purdue Index Report (2014). While Astin *et al*., (2011) reveals the majority of university students expect their academic institutions to prepare them for employment. Nonetheless, almost half of college graduates are unemployed (Selingo, 2016). In his study, Bbaale (2008) showed that female education, especially at the secondary and post-secondary levels, reduces fertility and increases the likelihood of being engaged in the labour market. In Turkey, female level of education strongly influenced female labour force participation (Tansel, 2002). These views are in line with Nasir and Nazli (2000), that an additional year of education increases returns for wage earners by 7 percent. Similarly, rapid growth in female labour force participation rate within the Asian Tigers (Hong Kong, Singapore, South Korea, and Taiwan) is attributed to higher female education levels in relation to other developing economies (ILO, 2008).

Although several studies indicate that education is associated with better prospects for participation in the labour market, other studies have shown that more education does not always increase the probability of getting a job (Selingo, 2016). For example, there was a low employment rate record among those who received the cash transfers (government funding) two years after their school completion, in Malawi (Baird, Mclntosh, & Ozler, 2016). Further, in India, the most uneducated women may have a higher labour force participation rate (in subsistence activities and informal employment); while women with a high school education are often afford to stay out of the labor force. Further, education benefits are not always economic orientated. For example, Lagemann and

Lewis (2012) argue that education should majorly equip young adults with generic skills and civic values rather than economic benefits.

While education is a significant determinant of labour force participation; other factors may inform women's participation in the labour market (Selingo, 2016). Cultural norms, beliefs and attitudes have continued to shape female labour supply (Fernandez, 2013). Gendered differences in laws affect women's participation in the labour market. For example, more than 2.7 billion women are legitimately denied access to same choice of employment chances as men the world over (World Bank, 2018). Also, of the 189 economies assessed in 2018, 104 still had laws prohibiting women from working in specific jobs; 59 had no laws on sexual harassment in the workplace, while in 18 economies, husbands could legally stop their wives from working (World Bank, 2018). Labour force participation is further affected by social security systems and pension plans (Blau & Goodstein, 2010).

Several studies have reported that even in countries that have attained parity in the labor force participation rate, job opportunities are still in the favor of men (Klasens, 2018). A report by World Bank (2011) showed that in most developing countries, women, earn less, participate in less productive jobs and, constitute a great share of unpaid family work. Similarly, another study indicated that within developing countries, more women than men are involved in the less paying informal sector including agriculture (ILO, 2018). This is also true for migrant women. Many migrant women engage in low-skilled poor paying jobs a, work under harsh conditions, have limited labour and social protections, yet vulnerable to physical and sexual violence (ILO, 2015: UN Women Report, 2016). From the review, gender based differences seem to affect dynamics of female worker participation in the labour market. It is also shown that other than education, women participation in the labour market is influenced by several factors.

Methodology

The study adopted a descriptive correlation research design in order to portray an accurate profile of persons, events, and situations (Mulegi, 2023) and to describe relationships between the study variables (Kirahora et al, 2021). A quantitative approach was adopted for data collection. A sample size of 365 respondents participated in the study. The majority of respondents were bachelor degree holders while none had a PhD. See Fig. 1 below.
In addition, the study considered women of 18years and above, living or working in Bunyoro at the time of the study degree holders. In line with Mulegi (2012) and Borgen (2015), data were analyzed using descriptive and inferential statistics.

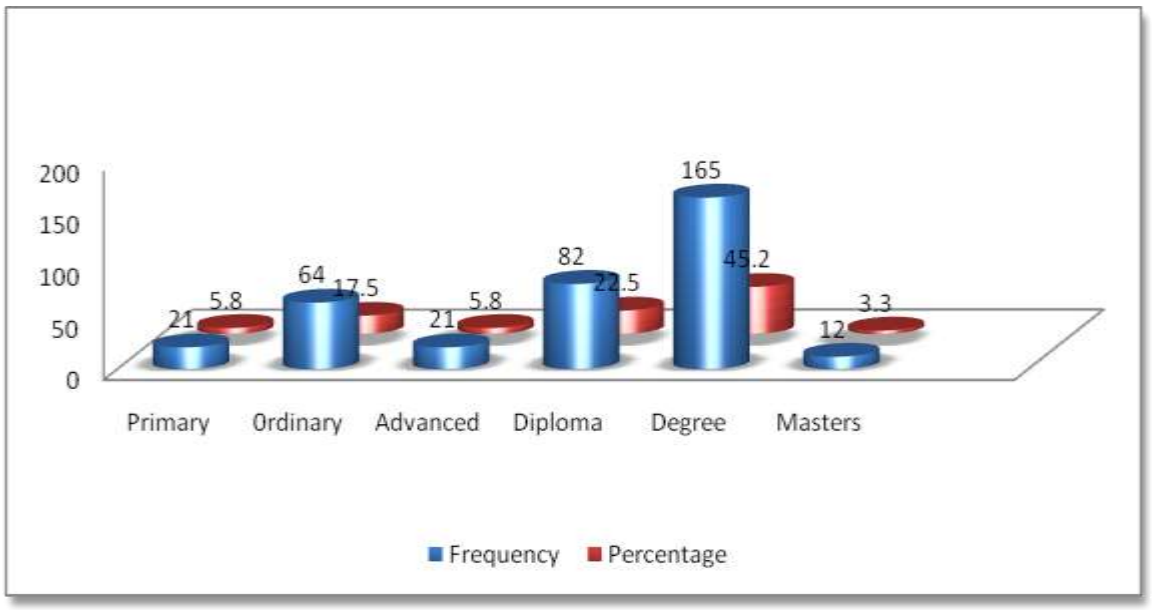

Fig.1. Representation of Respondents by Education Level, Field Data (2021)

Source: Field Research (2021)

Figure 1 indicates that, 21 (5.8%) of the respondents had primary level education, 64 (17.5%) had ordinary level education, 21 (5.8%) had an advanced level, 82 (22.5%) had a diploma, 165(45.2%) had a bachelors degree and, 12 (3.3%) had a master's degree. This shows that all respondents were able to comprehend the questionnaire and thoughtfully provide responses to each question item in the questionnaire.

Presentation of findings

Table 1 indicates results of means and standard deviations for responses obtained from questionnaires. Table 2 on the other hand shows regression analysis of education attainment and women's participation in the labour force.

Table 1: Descriptive statistics on Labor force Participation

N=365	Mean ($\bar{x}$)	Std. Deviation(s)
More educated women have higher access to labour markets than the less educated.	4.13	.772
Women's education attainment equips them with knowledge & skill for better employment	4.07	.901
Education attainment increases one's bargaining power in the labour market.	4.24	.768
Low education attainment limit women's ability to travel long distances for work	3.77	.978
One's access to labour markets is determined by education attainment alone	3.72	.978

Source: Survey Data (2021)

Table 1 indicates that education affects women's involvement in the labour market within the Bunyoro Sub-Region. The data indicate that education attainment increases one's bargaining power in the labour market, equips women them with knowledge and skills for better employment, and increases access to the labour market.

Table 2: Correlation analysis for education attainment and labour force participation

Variables correlated	r-value	Sig-value	Interpretation	Decision on Ho
Interpersonal competence Vs Labour force participation	.329**	.000	Significant Correlation	Rejected
Cultural competence Vs Labour force participation	.256**	.000	Significant Correlation	Rejected
Technical Knowledge Vs Labour force participation	.350**	.000	Significant Correlation	Rejected
Overall Education attainment Vs Labour force participation	.396**	.000	Significant Correlation	Rejected

Table 2 indicates that education attainment was operationalized technical knowledge, interpersonal competence and cultural competence. Results show that interpersonal competence, cultural competence and technical knowledge are positively and significantly related with labour force participation (sig.0.00, p-values < 0.05). By implication, a change in interpersonal competence, cultural competence, and technical knowledge will cause a similar change in women's participation in the labour entrepreneurship. Aggregately, results confirm that education has a significant positive relationship with women labour force participation (sig.0.00, p-values < 0.05).

Table 3: Regression Analysis of education attainment with labour force participation

Variables Regressed	Adjusted R^2	F	Sig	Interpretation	Decision on Ho
Education Attainment Vs Labour force participation	.159	23.511	.000[a]	Significant effect	Rejected
Standardized Coefficients	**Beta**	**T**	**Sig.**		
(Constant)	1.623	5.966	.000	Significant effect	Rejected
Interpersonal competence	.196	3.575	.000	Significant effect	Rejected
Cultural competence	.084	1.519	.130	Insignificant effect	Accepted
Technical Knowledge	.230	4.025	.000	Significant effect	Rejected

Results in Table 3 indicate that at statistic Adjusted $R^2 = 0.159$, education attainment in Bunyoro Sub - Region predicted 15.9 % of labour force participation. By implication, women's labour force participation in Bunyoro Sub - Region is informed by other factors other than education attainment.

Results in Table 4.10 further show multiple regression results on the effects of individual education attainment constructs o n labour force participation in Bunyoro Sub - Region. Multiple regression applied the allied equation ($Y= \beta 0+ \beta_1X_1+\beta_2X_2+\beta_3X_3+\varepsilon$), which statistically explains the extent to which each construct of education attainment predicts a change in labour force participation. The equation was expanded as: $Y = 1.623 + 0.196X_1 + 0.084X_2 + 0.230X_3$.

The regression equation established that holding all the three constructs of education attainment at zero, the level of labour force participation was 1.623. It also indicates that holding all the constructs of education attainment (independent variables) at zero, a unit increase in interpersonal competence led to 0.196 increase in labour force participation, while a unit increase in cultural competence led to 0.084 increase in labour force participation. Likewise, a unit increase in technical knowledge led to a 0.230 increase in labour force participation.

Results of standardized coefficients of Beta statistics also indicate that, of all constructs of education attainment, technical knowledge(0.230) had the highest prediction power on labour force participation, followed by interpersonal competence(0.196), and finally by cultural competence (0.084).

Furthermore, interpersonal competence and technical knowledge had a significant effect on labour force participation (Sig, 0.00 < 0.05) while cultural competence had no significant effect on labour force participation (Sig, 0.130). Aggregately though, education attainment had a significant effect on labour force participation (Sig, 0.00 < 0.05).

Conclusions

The study sought to examine the role of education attainment in women's labour force participation in Bunyoro Sub-Region of Uganda. Findings indicated a positive and significant effect of education attainment on women's labour force participation. It was however revealed that women's ability to participate in the labour force was also influenced by other factors other than education attainment. Further, technical knowledge has a high predicative power over labour force participation. The study findings conform to the canons of the human capital theory that, education enhances efficiency and skill of productivity, thereby increasing an individual's earnings in the labour market.

Recommendations

The study recommends that the affirmative action programme that gives female students 1.5 points at entry to public universities should be extended to private institutions of higher learning. At lower levels, for example, right after senior four, girls should be given an extra point so as to boost their grades especially for science subjects. This will boost female selection for more competitive courses at the advanced level of learning. The education syllabus should be revised to make ICT learning mandatory for all pupils and students. Teachers at all levels should be trained on ICT tools and how to incorporate them into teaching. Government should regulate mobile network providers such that prices for data and similar services are affordable for all. This will enhance competitiveness and productivity for women to engage more profitably in the labour market.

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