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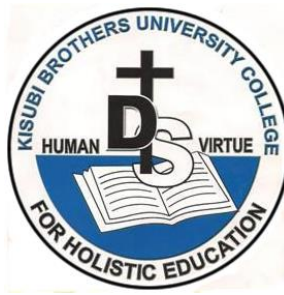
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Editorial

Welcome to this issue of East African Researcher. The first in the Journal's fourth volume, the issue presents a diverse range of articles—touching on the thematic areas of education, health and business.

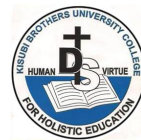
In education, Ddungu reports that university students' involvement in indiscipline differs significantly by gender. However, there is no significant difference in students' involvement in academic malpractices by gender. Bolu-Steve et al. investigated secondary school principals' perception of the problems and prospects of counselling programmes in Universal Basic Education in Ilorin metropolis. The study reports that there were no significant differences in the respondents' perception of the problems of counselling on the basis of gender. However, a significant difference was found on the basis of educational qualification and length of service. Thus, it is recommended that counsellors organise programmes for sensitizing school principals on the importance of counselling. Asingwire et al. delve into the impact of using music instruments on teaching in selected post primary institutions in Mbarara District of Uganda. They report that the availability of musical instruments in most of the selected institutions was inadequate; ironically, the few instruments available are not put to optimum use. Oluwo and Adesoji assessed gender inequality in terms of access to education, the job market and reasons why many women in South West Nigeria are economically disempowered. They found that educational attainment and family size significantly influence women's economic empowerment, so they underscore need for addressing the factors inhibiting women from accessing education. Namutebi's study delved into the factors responsible for research productivity in universities in Uganda, with specific reference to teamwork among academic staffs. She reports that there is a direct relationship between teamwork and research output. Finally, Kyaligonza discusses the growth, character, contributions, challenges and weaknesses of private universities in Uganda while Bolanle et al. delve into the nexus between the self-concept and behaviour patterns of students with hearing-impairment in integrated schools in South Western Nigeria.

Under health, Mohammed investigated access to information among primary healthcare (PHC) practitioners in rural areas of North Western Nigeria, concluding that access to reliable PHC information is crucial for progress towards universal healthcare albeit it was found to be constrained. Thus, she urges PHC management boards to establish effective and sustainable PHC information programmes that enhance access to a variety of PHC information resources. Hastrup et al. investigated the determinants of contraceptive practice among women of child bearing age, paying specific attention to cost, method and demand for children. Their study revealed that availability and cost of contraceptive methods; and demand for children are significant determinants of contraceptive use among the women. Adaramaja et al. investigated discrimination as a correlate of job security among HIV/AIDS patients attending the antiretroviral clinic at

State Hospital, Saki. They report that discrimination remained one of the major hindrances to job security for HIV positive employees after which they make recommendations towards improvement.

In business, Kiiza and Picho examined the relationship between decision making and staff commitment in the school of finance and banking in Kigali, Rwanda. On the other hand, Ahmad discusses the various entrepreneurial skills in Home Economics Education. This paper enumerates some of the areas in which Home Economics specialists can excel when it comes to entrepreneurship. Adeoti et al. examined the influence of vendor inventory management system on sale revenue of Nigerian National Petroleum Corporation's retail outlets as one of the chain distribution business in South-west Nigeria. Finally, Kibuuka et al. report the findings of a study that investigated the extent to which small-scale entrepreneurs in Kampala, Uganda, possess selected technical skills.

Editor.



External Environment and Gendered Student Indiscipline in Public Universities in Uganda

Livingstone Ddungu ¹

Abstract. Many educational institutions in Uganda are grappling with student indiscipline. This is particularly evident in public universities. However, research conducted so far to establish the cause of this indiscipline and how it can be addressed has identified mostly internal causes. Not much attention has been paid to establish whether the universities' external environment is contributing to this indiscipline. As well, research has not shown how students engage in indiscipline according to their gender. This paper attempts to fill these gaps. The paper is based on a comparative correlational field survey conducted in four public universities. Data was collected using a questionnaire and analysed using descriptive statistics, t-test, correlation and linear regression. Findings indicate that students' involvement in indiscipline differs significantly as a result of their gender. Male students engage in indiscipline that occurs in form of rioting and substance abuse more often than female students, but the reverse occurs when it comes to sexual immorality. There is no significant gender difference in students' involvement in academic malpractices. Students' exposure to their university's external environment contributes significantly and directly to their involvement in indiscipline. These findings suggest that minimising students' exposure to this environment significantly reduces their involvement in indiscipline.

Keywords: Student Affairs Management; Discipline; Higher education.

Introduction

University education was introduced in Uganda in 1940s and provided in the first four decades following a residential system, which was largely closed off from the

¹ East African School of Higher Education Studies and Development, Makerere University

Address Correspondence to:

Livingstone Ddungu, East African School of Higher Education Studies and Development,
Makerere University. P. O. Box 7062, Kampala, Uganda.

E-mail: lddungu@yahoo.com.

outside world (Sseremba, 2012; Nakanyike & Muwanga, 2003). Right from their admission up to their graduation, students of Makerere University, which was the only public university in Uganda, did not have much interaction with the surrounding community (Kamuhanda, 2006). They were so closed off that they even felt practically detached from the realities of their local environments back home after graduation (Nabayego, 2011). Hooliganism was unheard of. All that Makerere University students displayed was commendable discipline (Sseremba, 2012). They exuded a kind of demeanour that radiated a high sense of admiration in most of members of communities around Makerere University and back home (Otafire, 2014). Not only did these students' conduct and elitist approach to daily life situations make other community members accord them a lot of respect, it also led to glorification of Makerere University as the 'Harvard of Africa', thereby encouraging many parents to educate their children up to university level (Nuwagaba, 2014; Sseremba, 2012).

However, the situation started changing in last half of the 1970s, becoming increasingly different from the onset of the 1990s. Makerere University started getting opened up to the external world. Even other public universities that started coming on the scene from the late 1980s, including Mbarara University of Science and Technology, Kyambogo University, Gulu University, Busitema University and Muni University, began opening soon after their establishment. The opening up of Uganda's public universities was accelerated by the adoption of the dual-track admission policy that involved admitting both state and non-state sponsored residential and non-residential students (Ayee, 2014). This policy was a result of Uganda government's adoption of the neoliberal structural adjustment programmes that had been imposed by the International Monetary Fund and the World Bank. The government encouraged this policy after realising that owing to the competing demands it faced over public resources, it could not fund all high school leavers who were qualifying for university education (Ayee, 2014). Government recommended to all public universities to admit all the qualifying students by not restricting the numbers to the institutions' residential carrying capacity and expected subventions, but by giving an opportunity to all students who could afford to sponsor themselves (Magara, 2009).

All Uganda's public universities implemented the recommendation following the enterprise model rooted in the rationale of the free market system (Bisaso, 2010). Based on the ready and rising demand for higher education, the universities introduced market-driven programmes using day and evening courses of study (Muyinda, 2014; Carrol, 2007). Evening programmes encouraged even the working class to join these universities to upgrade (Bisaso, 2011; Altbach, 2006). The result was that the majority of the universities' self-sponsored students and a significant number of government-sponsored students were non-residents. This is actually the situation at all these universities even up to now. The students commute either from their family homes or from rented hostels and other housing units in the institutions' neighbourhood (Bunting & Cloete, 2012; Kasozi, 2002; Mayanja, 2001). This situation has totally opened up public universities to their external

environment. Today, out of 100087 students enrolled at these institutions (Uganda Bureau of Statistics, 2014), over 80% are non-residents. It is totally difficult to distinguish students from other members of the surrounding communities of these universities.

Other ways by which Uganda's public universities have been opened to their external environments involve their students forming associations based on their former schools (old students associations), home districts (district associations), religious affiliations (e.g. Makerere University Muslim Students' Association), and cultural backgrounds (e.g. Baganda Nkobazambogo, Basoga Nseete, and Teso Students' Development Association, to mention but a few) (Nabiruma, 2010; Byaruhanga, 2006). As adults, these universities' students also exercise their democratic right and freedom of association, thereby declaring their political orientations and establishing links with national political parties such as the National Resistance Movement, Forum for Democratic Change, Democratic Party, and others (Messerschmidt, 2015). The universities have also opened up to their external environments not only by using external and online distance educational programmes (Muyinda, 2014) but by also encouraging online communication through the use of social media such as facebook, WhatsApp, Twitter, You Tube, Email, Website, and others (Opati, 2013).

The opening up of Uganda's public universities has rendered their students squarely exposed to the influence of the institutions' external environments. The non-residential system has made the universities' boundaries with the surrounding communities porous, and in so doing, has rendered the institutions susceptible to the social influences of these communities. The formation of students' cultural, religious and other associations plus the links that the students form with the national political parties in a bid to exercise their right of association have exposed the universities to all kinds of external cultural, religious and political influences. The introduction of ICT and online distance programmes and the use of social media have exposed the universities to global forces. However, the nature of these forces and how the universities' exposure to them has influenced their student discipline remain to be understood.

As a matter of fact, research has shown that the discipline of Uganda's public universities has deteriorated so much that it has made Makerere University, one of these universities which was a once admirable institution, fondly referred to as the 'Harvard of Africa' (Kavuma, 2011; Wax, 2005) being referred to now as a hub of hooliganism (Namutebi, 2015; Nsabambi, 2015; Mpaata, 2008). This research indicates that Uganda's university students engage in violent strikes, vandalism, alcohol and drug abuse, academic malpractices, and other decadent acts, including sexual immorality, shouting vulgarity at passersby, and breaking into nearby shops and kiosks and making off with merchandise found therein (Namutebi, 2015; Otafiire, 2014; Mpaata, 2008). This research however, does not indicate how students engage in these acts of indiscipline according to their gender. It therefore, falls short of indicating which sex is more or less undisciplined than the other and in which forms of indiscipline the sex is worse than the other. This paper is hence

needed to clarify this situation so as provide a gender-specific platform for dealing with students' indiscipline.

Secondly, this research attributes the cause of all these forms of indiscipline to internal factors such as delivery of unsatisfactory academic and social welfare services (Sseremba, 2012; Nantagya, 2008) and unrealistic changes in the tuition policy (Mwesigwa, 2015; Magara, 2009; Mpaata, 2008). Other internal factors include lack of CCTV cameras to help identify ringleaders, lack of effective lecturer-student interaction due to high staff/student ratio, reluctance of university religious leaders, lecturers and police officers to participate in dealing with hooliganism, failure of the university councils to take management disciplinary advice about misbehaving students seriously (Nsibambi, 2015); and lack of formal mentoring programmes for students (Namutebi, 2015), amongst others. Since all these factors cited are identified empirically, it cannot be disputed that they really contribute to hooliganism that occurs at the university. However, the fact that all the factors are internal leaves a question begging an answer. This is the question of whether there is no any external influence playing a role in the degeneration of these universities' student discipline. In fact, an assumption has been made that the hooliganism exhibited at Uganda's institutions of higher education could be a result of the nature of the external environment to which the institutions' students are exposed (Daily Monitor, 2015).

Consequently, the purpose of this paper is to explore how students in public universities in Uganda engage in indiscipline according to their gender and whether the nature of these universities' external environments has any role it is playing the occurrence of this indiscipline. This purpose is realised by meeting specific objectives, which include establishing (a) the level at which students in Uganda's public universities engage in indiscipline according to their gender, (b) the nature of the external environment to which students in public universities in Uganda are exposed according to their gender (c) whether the level of indiscipline in which female and male students in public universities in Uganda engage relates to the nature of the external environment to which their institutions are exposed.

Theoretical and Literature Review

This paper is rooted in the open systems theory because it is the rationale of this theory that underpins how the external environment affects an organisation. According to Walonick (1993), this theory was developed from the general systems theory pioneered by a biologist known as Ludwig von Bertalanffy in 1928. The open systems theory posits that organizations operate not as self-contained isolated entities but in continuous and inevitable interaction with their surrounding or external environment (Pearce & Robinson, 2011; Scott, 2008; Sundarasaradula & Hasan, 2004). This theory views the external environment as everything that is outside of the organizational boundary (Dzimbiri, 2009). It defines this environment as all the influences that affect an organization from outside (Alkali,

2012). Sundarasaradula and Hasan (2004) refer to these influences as disturbances, explaining them as all external aspects that interact with the organization's internal factors to enhance or perturb it internally. They can therefore, be favourable or unfavourable (Senge, 2006).

The forms of external environment influences tend differ from one organization to another, depending on its type and the inputs it uses to pursue self-survival (Sundarasaradula & Hasan, 2004). The influences affect the organization through their interaction either with the inputs it draws from this environment or with the outputs it delivers to this environment (Mele, Pels & Polese, 2010). If the inputs are human beings, the influences can be in form of family backgrounds and community conditions characterizing them (Njoroge & Nyabuto, 2014), or they may be in form of the nature of interaction that these inputs establish or maintain with the outside social, economic, technological, political, information and communication, and other forces (Ahrweiler, 2011; Lunenburg, 2010; Norlin, 2009; Scott, 2008; Pearce & Robinson, 2007; Chesbrough, 2003). The influences can also be in form of the forces characterizing the market to which the organization delivers its outputs (Prahalad & Ramaswamy, 2004).

In social organizations such as educational institutions, the human inputs that form or keep interacting with the influences of the outside world or external environment include the teaching and non-teaching staff as well as the enrolled students (Munene, 2015; Lunenburg, 2010; Kondakci & van den Broeck, 2009; Norlin, 2009; Bulach, Lunenburg & Potter, 2008; Lunenburg & Ornstein, 2008; Roger, 2000). This paper is however, not investigating external environment influences on staff members. It is investigating external influences that affect students' discipline. Specific examples of the outside social influences that students keep interacting with include their home or family members' influences. According to Njoroge and Nyabuto (2014) and Boethel (2003), some students engage in indiscipline after being subjected to poor family backgrounds characterised by distorted, stressful, or inadequate homecare, family breakups, poor parenting, economic difficulties or being in company of immoral family members. Such students are likely to transfer the same behaviour to their schools. Njoroge and Nyabuto (2014) indicate further that some students get involved in indiscipline of an academic nature because of being subjected to this indiscipline by their former schools. In contrast, students who are exposed to well-nurtured and proper family conditions and to schools that do not encourage academic malpractices are unlikely to get involved in these forms of indiscipline. Similar observations are made by Jones and Jones (1995) and McGuinness (1994). These observations are however, not gender specific. They were also made not based on educational institutions outside Uganda.

Roger (2000) point out societal permissiveness punctuated by unregulated exposure to all information sources, including offline and global or online movies, television, radio and other types of social media as other external influences that cause students to engage in strikes, riots, vandalism, substance abuse, sexual

immorality and associated ills such as getting unwanted pregnancies and abortions, and other forms of indiscipline and lawlessness. Rogers (2000) indicates further that what this exposure has done to students is to encourage sexual immorality, pornographic behaviour, and violence, because students have the ability to replicate everything to which they are exposed. Reading novels and watching movies of bad boys or bad girls (gangsters or criminals), and being exposed to the practice of having multiple sexual partners, alcoholism, verbal and physical abuse, violence, and other real life situations that promote indiscipline cause students to replicate the same behaviour, thereby bullying fellow students, boycotting lessons, assaulting others, and engaging in indecent behaviour (Ministry of Education, 2001). Rahul (2013) observes that the cable and TV boom and global influence of western ideas and culture have further worsened the situation.

According to Warren (2007) and Boethel (2003), the nature of the community in which students live determines how they behave at school. While communities inhabited by well-behaved members influence students living therein to behave well, those characterised by violence, prostitution, substance abuse, smoking, criminal gangs, cinema kiosks, and all manner of bad behaviour expose students living therein to the same behaviour, which they (the students) easily replicate while they are at school (Varela-Mato *et al.*, 2012; Cornell & Sheras, 2006; Skiba & Rausch, 2006; Skiba *et al.*, 2006; Raffaele-Mendez *et al.*, 2002; Bear *et al.*, 2000). While these studies explain how the behavioural conditions of a community in which students live influence students' discipline at school, they do not describe this influence in relation to Makerere University. In addition, the explanation is not gender specific. Even Tirodimos *et al.* (2009) and Von Bothmer and Fridlund (2005) who explain this influence according to gender did not do so in relation to public universities in Uganda. They however, show that male students tend to be more involved in indiscipline than female students.

Apart from the way the behavioural conditions of the families and communities that define the external environment affect the discipline that students display at universities, Byaruhanga (2006) points out that even the nature of the political activity played in this environment has a significant influence on this discipline. This activity shapes how students speak in public gatherings, it determines how they agitate for their rights from university administrations, protest against what they perceive as administrative violation of their entitlements, and they hold campaign for elective student leadership positions, and how the students relate with fellow students against whom they compete (Khalidi, 2015; Shaw, 2013; Lunenburg, 2010; Lunenburg & Ornstein, 2008; Byaruhanga, 2006). According to Le Feuvre and Metso (2005), the very nature of the politics played at national level reflects at universities as it exactly is. When national politics is peaceful and democratic, the politics university students engage in is also peaceful and democratic. When national politics is militarised, aggressive and violent, that is the type of politics students replicate at universities. These observations are summarised by Rahul (2013) that student indiscipline such as rioting, examination malpractices, and academic corruption, cannot be blamed on the students alone.

There is a great deal of political interference educational institutions. The students are misled and misused by various political parties to serve their selfish ends. The observations suggest that university students can engage in indiscipline of a political nature by just replicating it from the external political environment. Could this hold in Uganda's public university students?

Reifman (2011) indicates that the manner in which university students associate and fraternise in their social and cultural associations has a significant effect on how they behave. Reifman (2011) indicates further that students' fraternities and sororities are at times affected by their social links with external environment influences such as those of their patrons and cultural institutions that their members cherish; in the process, the influence is behaviourally diffused among their members. If the links expose students to the use of alcohol, the students eventually start drinking (Capone *et al.*, 2007; Borsari & Carey, 1999) and alcohol abuse (Bartholow, Sher & Krull, 2003). If the links expose students to substance abuse, the students eventually become substance abusers (Graham, Marks & Hansen, 1991). They expose students to cultural or racial discrimination, they make student discriminate against others not cherishing their cultural values (Milem *et al.*, 2005; Antonio, 2000; Hurtado *et al.*, 1998). The external influence can be in form of economic forces such as inflation that tends to decrease students' purchasing power, thereby causing the students to react by demonstrating against the monetary policies pursued by their governments (Lunenburg, 2010; Lunenburg & Ornstein, 2008).

Generally, literature indicates that the external influence can fuel the indiscipline in which students get involved when they are at their educational institutions. The literature is however, not covering the case of public universities in Uganda, thereby leaving it unclear as to whether this environment contributes to the indiscipline in which this institution's students. Literature also shows that indiscipline can differ between male and female students, especially at college and university level, but it still does not cover the public universities in Uganda.

Methodology

The study was designed as a comparative correlational field survey because its purpose was to compare the level at which university students engaged in indiscipline according to their gender and whether the level of indiscipline in which they engaged correlated with the external environment influences to which the university was exposed. The parent population consisted of all students in public universities in Uganda and its size was 100087 (Uganda Bureau of Statistics, 2014). Krejcie and Morgan's (1970) Sample Size Determination Table indicates that 384 respondents were the statistically representative sample of this population size. This sample was selected using simple random sampling to give each student in each of the four randomly selected universities an equal chance of participating in the study. Accordingly, any student who was found at the selected universities'

campuses, particularly in lecture theatres or at the library entrances and was willing to fill in the questionnaire was selected to participate in the survey. Care was taken to select an equal number of male and female students so as to avoid biases resulting from numbers. Data was collected from the selected respondents using a self-administered structured questionnaire whose content validity index and Cronbach Alpha coefficients were .907 and .899, respectively. Therefore, the questionnaire contained highly valid and reliable items. The collected data was analysed using the t-test for independent samples and the Pearson's correlation method.

Findings

The first objective of the paper was to compare the level at which students in public universities in Uganda engaged in indiscipline according to their gender. This level was established by asking the selected students to use Very often (5), Often (4), Sometimes (3), Rarely (2) and Very rarely (1) response scale to give their opinion on the extent to which the various indicators of student indiscipline occurred in their universities. Descriptive and t-test results obtained from the responses are shown in Table 1.

Table 1: Level of Ugandan public university students' involvement in indiscipline by gender

Indicators of student indiscipline	Mean description of involvement by gender			
	Male (n = 190)	Female (n = 190)	t	Sig.
Deliberate boycotting of lectures	4.79	4.50	1.023	.300
Missing coursework and testing exercises deliberately	4.39	4.30	1.077	.390
Involvement in examination malpractices	4.59	4.51	0.609	.790
Deliberate vandalizing of instructional materials	3.79	3.01	0.666	.760
Abusing drugs	4.29	3.04	3.709	.003
Abusing alcohol	4.69	3.33	2.302	.007
Deliberate involvement in sexual coercion	4.39	1.54	3.005	.009
Involvement in wilful immoral sexual intercourse	3.68	4.35	3.617	.004
Keeping multiple sexual partners	3.06	4.53	4.009	.000
Getting unwanted pregnancies/unplanned impregnation	3.03	4.49	4.776	.000
Carrying out abortion deliberately	4.09	4.60	4.709	.000
Involvement in violent riots	4.79	3.03	4.989	.000
Vandalizing of instructional infrastructure when students riot	4.37	3.01	3.637	.004
Deliberate burning of university property when students go on strike	3.38	2.05	3.955	.000
Shouting vulgarity at passersby whenever students riot	4.89	1.21	4.128	.000
Theft of merchandise from shops broken into when students riot	3.76	1.51	4.699	.000
Disrespecting university managers, lecturers, community members	4.59	2.50	3.409	.005
Involvement in pornography	4.42	3.56	3.399	.005
All the indicators	4.17	3.28	3.932	.000

From Table 1, the t-value ($t = 3.932$) corresponding to all the indicators was significant at the .01 level of significance ($\text{sig.} = .000 < .01$). This implies that there was a significant difference in the mean description of students' involvement in indiscipline. a glance at mean values corresponding to all the indicators reveals that while male students engaged in acts of indiscipline often (Mean = 4.17), female students got involved in these acts sometimes (Mean = 3.28). Therefore, the level at which male students got involved in indiscipline was significantly higher than the level at which their female counterparts got involved. In other words, male students engaged in indiscipline more frequently than their female counterparts.

Table 1 indicates that notwithstanding this significant difference, there were acts of indiscipline in which female students were significantly more involved than their male counterparts. These included involvement in wilful immoral sexual intercourse (Mean_{Male} = 3.68, Mean_{Female} = 4.35, $t = 3.617$, Sig. = .004 < .01), getting unwanted pregnancies/unplanned impregnation (Mean_{Male} = 3.03, Mean_{Female} = 4.49, $t = 4.677$, Sig. = .000 < .01), and keeping multiple sexual partners (Mean_{Male} = 3.06, Mean_{Female} = 4.53, $t = 4.009$, Sig. = .000 < .01). Similar statistics indicate that there were acts of indiscipline in which both forms of gender were involved without a significant difference. These included deliberate boycotting of lectures, missing coursework and testing exercises deliberately, and involvement in examination malpractices.

The second objective of the paper was to establish the nature of the external environment influences to which students in Uganda's public universities were exposed according to their gender. This objective was met by asking the selected students to describe this environment using Totally Agree (5), Agree (4), Not Sure (3), Disagree (2) and Strongly Disagree (1) response scale to describe this environment. Descriptive and t-test results obtained from the responses are shown in Table 2.

Table 2: Nature of external environment to which public university students in Uganda are exposed by gender

Indicators of nature of external environment	Mean description of the nature by gender			
	Male (n = 190)	Female (n = 190)	t	Sig.
My place of residence exposes students to uncensored online and offline movies, including those having scenes of violence.	4.63	4.53	0.992	.607
My place of residence makes it easy for students to have access to uncensored online and offline television and radio programmes.	4.90	4.86	0.736	.660
My place of residence exposes students to uncensored online and offline pornography even when they would have loved to avoid it.	4.56	4.55	0.669	.663
Students in my place of residence can get any information on violence and immorality because of having easy access to Internet.	4.68	4.71	0.667	.664
Students are free to read any novels of their choice.	4.90	4.83	0.776	.666
In my place of residence, people can keep multiple sexual partners.	4.50	4.57	0.068	.950
People in my place of residence can drink alcohol as they wish.	4.71	4.59	0.205	.903
In my place of residence, people can abuse drugs if they so wish.	4.49	4.33	0.703	.685
I know of students who live in homes of misbehaving people.	3.56	3.67	0.909	.609
I know of students who are poorly parented at home.	4.31	4.39	0.205	.903
I know of students whose families face economic difficulties.	3.51	3.55	0.353	.768
I know of students whose former schools engage in exam cheating	4.77	4.87	0.356	.769
People living in the neighbourhood of my habitat misbehave often.	4.33	4.38	0.285	.778
Students maintain outside links through their cultural associations.	3.56	3.65	0.378	.735
Students maintain outside links through old students' associations.	3.99	3.63	0.637	.635
Students are free to engage in activities of national political parties.	4.73	4.65	0.962	.607
All the indicators	4.22	4.23	0.775	.666

An analytical look at the levels of significance in Table 2 reveals that the t-values were all not significant. This implies that students' description of the nature of the external environment to which they were exposed did not differ as a result of their gender. Therefore, both female and male students were exposed to the same nature of the external environment. Indeed, the mean values corresponding to both the male students (Mean = 4.22) and female students (Mean = 4.23) were close to '4', implying that irrespective of their gender, students agreed to all the indicators of the nature of the external environment to which they were exposed. This agreeing implies that the students were exposed to all the aspects that characterised this environment in the same way. The analysis of the mean values corresponding to the specific indicators reveals that the students strongly agreed to even some of them (the indicators). This suggests that students were even more exposed to these indicators. For instance, both male and female students strongly agreed that their places of residence exposed them to uncensored online and offline information and movies, including those having scenes of violence, pornography and immorality (the means were close to '5'). This suggests that students had much exposure to these aspects of their universities' external environment.

The third objective of the paper was to establish whether the level of indiscipline in which female and male students in Ugandan public universities engaged related to the nature of the external environments to which their institutions were exposed. This objective was achieved using factor analysis and correlation analysis. Factor analysis was applied to identify the significant measures of student indiscipline and the external environment. Four significant measures of student indiscipline were identified by factor analysing the responses to the indicators shown in Table 1. These included academic malpractices, substance abuse, sexual immorality, and rioting. These measures were further analysed to build 'level of student indiscipline as a global component out of them. Factor analysis was further analysis to the responses to the indicators in Table 2. Four significant measures were generated and these were identified as family and school background, residential community permissiveness, association connections, and participation in national politics. These measures were also analysed further to generate 'exposure to external environment' as their global component. Thereafter, bivariate Pearson correlation analysis was conducted. Findings are shown in Table 3.

Table 3: Relationship between student indiscipline and exposure to external environments of public universities in Uganda

Variables	Level of student indiscipline	Academic malpractices	Substance abuse	Sexual immorality	Rioting	Family & school background	Residential community permissiveness	Association connections	Participation in national politics	Exposure to external environment
Level of student indiscipline	1									
Academic malpractices	.899**	1								
Substance abuse	.887**	.682**	1							
Sexual immorality	.859**	.530**	.553**	1						
Rioting	.908**	.315*	.580**	.502**	1					
Family & school background	.463**	.626**	.403**	.528**	.473**	1				
Residential community permissiveness	.533**	.015	.575**	.631**	.449**	.010	1			
Association connections	.308*	.017	.025	.439**	.319*	.098	.089	1		
Participation in national politics	.555**	.305*	.079	.069	.508**	.253*	.309*	.591**	1	
Exposure to external environment	.689**	.399**	.557**	.564**	.610**	.847**	.892**	.806**	.862**	1

** Correlation (r) is significant at the 0.01 level (2-tailed); * Correlation (r) is significant at the 0.05 level (2-tailed).

From Table 3, the correlation ($r = .689$, $\text{Sig.} < 0.01$) between level of student indiscipline and exposure to external environment was positive and significant at the 0.01 level of significance. This implies that the level of student indiscipline and exposure to the external environment varied in the same direction. Therefore, an increase in students' exposure to their universities' external environments translates into a rise in the level of the students' indiscipline. All other correlations in Table 3 are similarly interpreted. After establishing a significant relationship between the variable variables, further analysis was carried out to determine whether the relationship was predictive. This involved running linear regression analysis. Findings are summarised in Table 4.

Table 4: Prediction of level of student indiscipline by exposure to external environments of public universities in Uganda

Predicted Statistics on the Dependent variable								
	Std				R.	Adjusted		Std.
Predictor	Error	β	t	Sig.	R	R-Square	F	Error of the
								Sig. Estimate
(Constant)	.013		8.300	.000	.689	.475	22.33	.00
Exposure to external environment	.039	.68	6.960	.000				

The magnitudes of standard error and the error of estimate in Table 4 were very small, implying that the linear regression method was largely suitable to estimate model. The statistics indicate that students' exposure to Uganda public universities' external environments predicted the level of student indiscipline by a positive and significant 47.5% (Adjusted R-Square = .475, $F = 22.339$, $\text{Sig.} = .000 < .01$).

Discussion, Conclusions and Recommendations

The findings in Table 3 indicate that exposure of students in public universities in Uganda to these institutions' external environments had a strongly positive and significant relationship with the level at which the students engaged in indiscipline. As shown in Table 4, this relationship was predictive, implying that the more these students were exposed to their universities' external environments the more they got involved in acts of indiscipline. The findings are therefore consistent with the argument made by Rahul (2013) that student indiscipline should not be blamed on them alone but also to the external environments to which they are exposed. The findings also support the rationale of the open systems theory, which indicates that the external environment influences what takes place in every organisation (Alkali,

2012; Pearce & Robinson, 2011; Dzimbiri, 2009; Scott, 2008; Sundarasaradula & Hasan, 2004).

In fact, the findings in Table 4 indicate that the students' exposure to their universities' external environments accounted for almost 48% of the level of indiscipline displayed by these students at their universities' campuses. These findings are easily discernable if they are interpreted in a mathematic sense. That is, if students engaged in 100 acts of indiscipline, 48 of these acts were as a result of their exposure to their universities' external environments. This suggests that the management of public universities in Uganda can get rid of almost a half of the acts of student indiscipline by minimising students' exposure to the institutions' external environments. The correlations in Table 3 indicate that taking this remedy reduces all the forms of student indiscipline significantly, whether they are academic malpractices, substance abuse, sexual immorality or rioting. Comparative analysis of the magnitudes of these correlations reveals that the remedy causes the most significant reduction in students' rioting ($r = .610$, Sig. $< .01$) closely followed by reduction in students' involvement in sexual immorality ($r = .564$, Sig. $< .01$) and then in subsistence abuse ($r = .557$, Sig. $< .01$).

In terms of gender, minimising students' exposure to the external environment helps reduce mainly the students' vulnerability to sexual immorality. This is because they were mostly the ones who got involved in this form of indiscipline as a result of this exposure (Table 1). This minimisation helps reduce mainly male students' involvement in rioting and substance abuse (Table 1). What needs to be done in order to reduce students' exposure to the external environment is suggested by the findings in Table 3.

In the first instance, the correlations in this table indicate that residential community permissiveness related most significantly with substance abuse ($r = .575$, Sig. $< .01$) and sexuality immorality ($r = .631$, Sig. $< .01$). This suggests that reducing off-campus students' exposure to permissiveness in their communities translates in minimising their involvement in these two forms of indiscipline. This can be achieved by the university prescribing a code conduct and providing it to all managers of the off-campus students' hostels and requiring them to ensure that all the students resident in their hostels adhere to it. Secondly, the correlations indicate that students' family and school backgrounds related most significantly with academic malpractices ($r = .626$, Sig. $< .01$). This implies that dealing with academic malpractices requires looking into students' family and school backgrounds. This is moreover very necessary since the mean values that correspond to the different forms of academic malpractices indicate that irrespective of their gender, students got involved in these malpractices often or very often (Table 1). This suggests that the level at which both male and female students got engaged in academic indiscipline was high. Last but not least, findings in Table 3 indicate that students' participation in national political activities related most with rioting ($r = .508$, Sig. $< .01$). This suggests that minimising students' exposure to national political participation reduces their rioting in a significant manner.

If the management of public universities in Uganda is to deal with the level of student indiscipline in a manner that decreases it considerably, it should minimise students' exposure to the institution's external environment by:

- a) Reducing the level of permissiveness in non-resident students' residential communities. This can be achieved by prescribing a code conduct, providing it to the managers of students' hostels of residence and requiring them to enforce students' adherence to it when they are in their hostels of residence.
- b) Censoring all the online information and movies to which students can have access at their halls or hostels of residence. This can be achieved using programmers with online expertise needed to censure the information to which students can have access
- c) Vetting students' family and school backgrounds and ensuring that those whose backgrounds exposed to academic malpractices undergo a reformatory programme in their first semester at the university. The vetting can be carried out designing and using a questionnaire or inventory that can reveal this prior exposure.
- d) Reducing students' active participation in national political activity by minimising the direct influence of national political parties on internal student politics.

References

- Ahrweiler, P. (2011). *Innovation in complex social systems*. New York: Taylor & Francis.
- Alkali, M. (2012). Assessing the influence of external environmental factors on the performance of small business manufacturing enterprises in Bauchi state, Nigeria. *Institute of Interdisciplinary Business Research*, 4(7): 621-630.
- Altbach, G.P. (2006). *The private higher education revolution: An introduction*. Kampala: National Council for Higher Education.
- Antonio, A.L. (2000). Diversity and the influence of friendship groups in college. *Review of Higher Education*, 25(1): 63-89
- Ayee, J.R.A. (2014). *Academic leadership*. In Jallow, B.G. (Ed). *Leadership in postcolonial Africa*. London: Palgrave Macmillan
- Bartholow B.D., Sher, K.J, & Krull, J.L. (2003). Changes in heavy drinking over the third decade of life as a function of collegiate fraternity and sorority involvement: A prospective, multilevel analysis. *Health Psychology*, 22: 616-626
- Bear, G. C., Webster-Stratton, E., Furlong, M. J., & Rhee, S. (2000). Preventing school violence. In K. M. Minke & G. C. Bear (Eds.). *Preventing school problems—promoting school success: Strategies and programs that work* (pp. 1-69). Bethesda, MD: National Association of School Psychologists.
- Bisaso, R. (2010). Organizational responses to public sector reforms in higher education in Uganda: A case study of Makerere University. *Journal of Higher Education Policy and Management*, 32(4): 343-351.

- Bisaso, R. (2011). *Utilizing the learning organization for management capacity building at Makerere University*. University of Tampere: School of Management.
- Boethel, M. (2003). Diversity: School, family, & community connections. Annual Synthesis. [Online]. Retrieved on May 19, 2015 from <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=14&ved=0CDAQFjADOAo&url=http%3A%2F%2Fwww.sedl.org%2Fconnections%2Fresources%2Fdiversity-synthesis.pdf&ei=YSIbVabmKey67gaT-oL4Dw&usg=AFQjCNGCfxQHGYuo7W9XUd-yyNGF7ES2Fw&bvm=bv.93564037,d.ZGU>
- Borsari, B.E., & Carey, K.B. (1999). Understanding fraternity drinking: Five recurring themes in the literature, 1980-1998. *Journal of American College Health*, 48:30–37.
- Bulach, C., Lunenburg, F. C., & Potter, L. (2008). *Creating a culture for high-performing schools: A comprehensive approach to school reform*. Lanham, MD: Rowman & Littlefield.
- Bunting, I., & Cloete, N. (2012). *Cross-national performance indicators: A case study of eight African universities*. Wynberg: Centre for Higher Education Transformation
- Byaruhanga, F.K (2006). *Student power in Africa's higher education: A case of Makerere University. History, politics, economics and culture Series*. New York: Routledge.
- Capone, C., Wood, M.D., Borsari, B., & Laird, R.D. (2007). *Fraternity and sorority involvement, social influences, and alcohol use among college students*. [Online]. Retrieved on May 19, 2015 from <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2726649/>
- Carrol, B. (2007). Harnessing private monies to fuel university growth: A case study of Makerere University. *South African Review of Education*, 13(2): 77–92.
- Chesbrough, H.W. (2003). *Open innovation: The new imperative for creating and profiting from technology*. Boston: Harvard Business School Press.
- Cornell, D.G., & Sheras, P.L. (2006). *Guidelines for responding to student threats of violence*. Boston: Sopris West Educational Services.
- Daily Monitor (2015). *Hooliganisms are portrayals of violence in our society*. [Online]. Retrieved on May 17, 2015 from <https://www.facebook.com/DailyMonitor/posts/10152798983202197>
- Dzimhiri, L.B. (2009). *Organisation and management Theories: An African focus*. Gottingen: Cuvillier.
- Graham, J.W., Marks, G., & Hansen, W.B. (1991). Social influence processes affecting adolescent substance use. *Journal of Applied Psychology*, 76: 291–298
- Hurtado, S., Milem, J.F., Clayton-Pedersen, A.R., & Allen, W.R. (1998). Enhancing campus climates for racial/ethnic diversity: Educational policy and practice. *The Review of Higher Education* 21(3): 279-302.
- Jones, V. F. & Jones, L. S (1995). *Comprehensive classroom management: Creating positive learning environment for all students* (4th ed.) Boston: Allyn and Bacon.

- Kasozi, A.B.K. (2002). The role of the state in addressing challenges and opportunities posed by the rapid growth of universities in Uganda since 1988. *African Studies Review*, 45(2): 123–139.
- Kavuma, R.M. (2011). In *Africa's universities, quantity threatens quality*. [Online]. Retrieved on May 16, 2015 from <http://www.theguardian.com/global-development/poverty-matters/2011/sep/09/africa-university-funding-crisis>
- Khalidi, D. (2015). Pressures on universities to discipline and punish students and faculty for speech activities. [Online]. Retrieved on May 19, 2015 from http://israellobbyus.org/transcripts/3.2Dima_KhalidiT.htm
- Kondakci, Y., & van den Broeck, H. (2009). Institutional imperatives versus emergent dynamics: A case study on continuous change in higher education. *Higher Education*, 58(4): 439–464.
- Le Feuvre, N., & Metso, M. (2005). *The impact of the relationship between the state and the higher education and research sectors on interdisciplinarity in eight European countries*. [Online]. Retrieved on May 19, 2015 from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=37&ved=0CEcQFjAGOB4&url=http%3A%2F%2Fwww.york.ac.uk%2Fres%2Fresearchintegration%2FComparativeReports%2FComparative_Report_State_and_Higher_Education.pdf&ei=UxtbVaq-PIPR7Qa1p4GgAg&usg=AFQjCNFAFJZ_xuTafmB0vgWWQ3aKe8LCFA&bv=93564037d.ZGU
- Lunenburg, F. C., & Ornstein, A. O. (2008). *Educational administration: Concepts and practices* (5th ed.). Belmont, CA: Wadsworth/Cengage Learning.
- Lunenburg, F.C. (2010). Schools as open systems. *Schooling* 1(1): 1-5.
- Magara, E. (2009). Financing a public university: Strategic directions for Makerere University in Uganda. Council for the Development of Social Science Research in Africa. *Journal of Higher Education in Africa*, 7(3): 61–86.
- Mayanja, M.K. (2001). Makerere University and the private students' scheme. *International Higher Education*, 25: 11–13.
- McGuiness, J. (1994). *Teachers, pupils and behaviour: A managerial approach*. London: Cassell.
- Mele, C., Pels, J., & Polese, F. (2010). A brief review of systems theories and their managerial applications. *Service Science*, 2(1-2): 126-135.
- Messerschmidt, M. (2015). *Student leaders as drivers of democratic reform. Debate of the Candidates for the Position of Guild President, Makerere University*. [Online]. Retrieved on May 16, 2015 from <http://www.kas.de/uganda/en/events/63047/>
- Milem, J.F., & Chang, M.J., & Antonio, A.L. (2005). Making diversity work on campus: A research-based perspective.
- Ministry of Education. (2001). Report of the task force on student discipline and unrest in secondary schools. Nairobi: Jomo Kenyatta Foundation.
- Mpaata, K.A. (2008). *Aggressive behaviour in education institutions: theoretical perspectives and implications for school and university managers in Uganda*. [Online]. Retrieved on April 3, 2015 from

- <http://ahero.uwc.ac.za/index.php?module=cshe&action=downloadfile&fileid=36807145012175749519581>
- Munene, I.I. (2015). *Multicampus university systems: Africa and the Kenyan experience*. New York: Routledge.
- Muyinda, P.B. (2014). Open and distance learning in dual mode universities: A treasure unexploited. *International Perspectives of Distance Learning in Higher Education*. [Online]. Retrieved on May 16, 2015 from <http://www.intechopen.com/books/international-perspectives-of-distancelearning-in-higher-education/open-and-distance-learning-in-dual-mode-universities-a-treasure-unexploited>
- Mwesigwa, F.S. (2015). *University students should use dialogue, not violent strikes*. [Online]. Retrieved on April 3, 2015 from <http://www.monitor.co.ug/OpEd/Commentary/University-students-dialogue-violent-strikes/-/689364/2670090/-/vbm9j/-/index.html>
- Nabiruma, D. (2010). Are cultural associations relevant in universities? *The Observer*, 29 August.
- Nakanyike, M., & Muwanga, N.K. (2003). *Makerere University in transition 1993-2000: Opportunities & challenges*. [Online]. Retrieved on May 16, 2015 from https://books.google.co.ug/books?id=mXwJGvV0hYcC&pg=PA14&lpg=PA14&dq=Government+abolished+the+Makerere+University+Students%E2%80%99+Guild+in+1978.&source=bl&ots=q96au1DUEJ&sig=dz19txjCn-2HjIKUPfNjcSIHOYU&hl=en&sa=X&ei=1khXVbK8FsjH7AbWhoHoDw&redir_esc=y#v=onepage&q=Government%20abolished%20the%20Makerere%20University%20Students%E2%80%99+Guild%20in%201978.&f=false
- Namagembe, G. (2014). *Makerere University timelines*. [Online]. Retrieved on May 16, 2015 from <https://getrudenamagembe2010.wordpress.com/>
- Namutebi, E. (2015). *Student mentoring and indiscipline in public and private secular and religious-based universities in Uganda*. Upcoming paper.
- Nantagya, G. (2008). *Contribution of privately sponsored programmes on the socio-academic welfare at Makerere University*. Kampala: Makerere University (Unpublished M. Ed dissertation).
- Njoroge, P.M., & Nyabuto, A.N. (2014). Discipline as a factor in academic performance in Kenya. *Journal of Educational and Social Research*, 4(1): 289-307
- Norlin, J.M. (2009). *Human behaviour and the social environment: Social systems theory*. Upper Saddle River, NJ: Allyn & Bacon.
- Nsibambi, A. (2015). *Addressing hooliganism at Makerere*. Sunday Monitor, 17th May. [Online]. Retrieved on May 17, 2015 from <http://www.monitor.co.ug/Magazines/PeoplePower/Addressing-hooliganism-Makerere/-/689844/2704182/-/xpn21oz/-/index.html>
- Nuwagaba, V. (2014). Whose role is it to redeem Makerere University? *Issue 702*. [Online]. Retrieved on May 16, 2015 from <http://pambazuka.org/en/category/letters/93359>
- Opati, O.D. (2013). *The use of ICT in teaching and learning at Makerere University: The case of College of Education and External Studies*. University of Oslo. [Online].

- Retrieved on May 16, 2015 from https://www.google.com/url?sa=t&ret=j&q=&esrc=s&source=web&cd=12&ved=0CB8QFjABOAO&url=https%3A%2F%2Fwww.duo.uio.no%2Fbitstream%2Fhandle%2F10852%2F36807%2FICT%40MUK-Onop.pdf%3Fsequence%3D1&ei=UnBYVauNjIKbNpOngTA&usg=AFQjCNGcOhdjI_QyDs4jkQWuyGMcPIIA&bvm=bv.93564037,d.eXY
- Otafiire, H. (2014). *Has Makerere University gone to the dogs or dogs have come to Makerere*. [Online]. Retrieved on May 16, 2015 from <http://www.campustimesug.com/has-makerere-university-gone-to-the-dogs-or-dogs-have-come-to-makerere/>
- Pearce, A. J., II & Robinson, B.R. (2007). *Strategic management: Formulation, implementation and control* (10th ed). Boston: Irwin McGraw-Hill.
- Pearce, A.J., II & Robinson, B.R. (2011). *Strategic management: Formulation, implementation and control* (12th ed). Boston: Irwin McGraw-Hill
- Prahalad, C.K., & Ramaswamy, V. (2004). *The Future of competition: Co-creating unique value with customers*. Boston: Harvard Business School Press.
- Raffaele-Mendez, L.M., Knoff, H.M., & Ferron, J.F. (2002). School demographic variables and out-of-school suspension rates: A quantitative and qualitative analysis of a large, ethnically diverse school district. *Psychology in the Schools*, 39: 259–277.
- Rahul, K. (2013). *Indiscipline among the students*. [Online]. Retrieved on May 17, 2015 from <http://doblecine.com/indiscipline-among-the-students/>
- Reifman, A. (2011). *How fraternities and sororities impact students (Or do they?): Drinking, academics, and social behaviour under the microscope*. [Online]. Retrieved on May 19, 2015 from <https://www.psychologytoday.com/blog/the-campus/201109/how-fraternities-and-sororities-impact-students-or-do-they>
- Roger, B. (2000). *A whole school approach: Behavioural management*. London: Paul Chapman Publishing Ltd.
- Scott, R. W. (2008). *Organizations and organizing: Rational, natural, and open systems perspectives*. Upper Saddle River, NJ: Prentice Hall.
- Senge, P. (2006). *The fifth discipline: The art and practice of the learning organization* (re. ed.). New York, NY: Currency/Doubleday.
- Shaw, C. (2013). *How should universities respond to student protests? – 10 views*. [Online]. Retrieved on May 19, 2015 from
- Skiba, R.J., & Rausch, M.K. (2006). Zero tolerance, suspension, and expulsion: Questions of equity and effectiveness. In C. M. Evertson & C. S. Weinstein (Eds.). *Handbook of classroom management: Research, practice, and contemporary issues* (pp. 1063–1089). Mahwah, NJ: Erlbaum.
- Skiba, R.J., Ritter, S., Simmons, A., Peterson, R., & Miller, C. (2006). The safe and responsive schools project: A school reform model for implementing best practices in violence prevention. In S. R. Jimerson & M. J. Furlong (Eds.), *Handbook of school violence and school safety: From research to practice* (pp. 631–650). New York: Routledge.

- Ssentamu-Ddumba, J. (2013). *Strengthening public universities to generate knowledge and promote research uptake for national and regional development: Revised concept note for the Makerere-Sida bilateral research programme, 2015-2020*. Kampala: Makerere University.
- Sseremba, H. (2012). The rise and fall of Makerere University. *The Campus Journal*. [Online]. Retrieved on May 16, 2015 from <http://campusjournal.ug/index.php/special-report/investigation/457-the-rise-and-fall-of-makerere-university>
- Sundarasaradula, D. & Hasan, H.M. (2004). A unified open systems model for explaining organizational change. In S. Gregor & D. Hart (Eds.), *Information Systems Foundations: Constructing and Criticising* (pp.125-142). Canberra, ACT, Australia: Australian National University Press.
- Tirodimos, I., Georgiouva, I., Savvala, T.N., Karanika, E., & Noukari, D. (2009). Healthy lifestyle habits among Greek university students: Differences by gender and faculty of study 3. *East Mediterranean Health Journal*, 15:722–728.
- Uganda Bureau of Statistics. (2014). *Statistical abstract*. [Online]. Retrieved May 23, 2015 from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCEQFjAA&url=http%3A%2F%2Fwww.ubos.org%2Fonlinefiles%2Fuploads%2Fubos%2Fstatistical_abstracts%2FStatistical_Abstract_2014.pdf&ei=jhVgVeWVMIj7AaFwoGQCQ&usg=AFQjCNEaHYsx5JPKggiEmjIkJkC56GSj3w&bvm=bv.93990622,d.ZGU
- Varela-Mato, V., Cancela, J.M., Ayan, C., Martín, V., & Molina, A. (2012). Lifestyle and health among Spanish university students: Differences by gender and academic discipline. *International Journal of Environment, Residence & Public Health*, 9(8): 2728–2741.
- Von Bothmer, M.I., & Fridlund, B. (2005). Gender differences in health habits and in motivation for a healthy lifestyle among Swedish University students. *Journal of Nursing and Health Science*, 7:107–118.
- Walonick, D.S. (1993). General systems theory. [Online]. Retrieved on May 16, 2015 from <http://www.statpac.org/walonick/systems-theory.htm>
- Warren, A.F. (2007). *The relationship between reported incidents of student discipline and student achievement across four eastern states*. Virginia Polytechnic Institute and State University. PhD Dissertation. [Online]. Retrieved on May 19, 2015 from <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CB4QFjAA&url=http%3A%2F%2Fscholar.lib.vt.edu%2Ftheses%2Favailable%2Fetd-04252007-144250%2Funrestricted%2FDissertationFinal1.pdf&ei=ZQhbVYmiONGu7AbHgIGwBw&usg=AFQjCNFMf9SrV4KAh5yyyXPiENrvWXBNOA&bvm=bv.93564037,d.ZGU>
- Wax, E. (2005). *Underfunded and overrun, 'Harvard of Africa' struggles to teach*. [Online]. Retrieved on May 17, 2015 from <http://www.washingtonpost.com/wp-dyn/content/article/2005/10/28/AR2005102801989.html>.



Prospects and Problems of Counselling Programmes in Universal Basic Education in Ilorin, Nigeria

Foluke Nike Bolu-Steve ¹, Itodo S. A. ¹, Adegoke A. A. ¹, Ogungbade, O. K. ¹

Abstract. This study investigated secondary school principals' perception of the problems and prospects of counselling programmes in Universal Basic Education (UBE) in Ilorin metropolis. A total of 200 respondents participated in the study. The major instrument used in collecting data was titled "Problems and Prospects of counselling in UBE Questionnaire" (PPCUBEQ). Data were analysed using percentages, means, frequency counts, ANOVA and t-test statistical tools. The null hypotheses were tested at 0.05 alpha level. The study shows that there were no significant differences in the respondent's perception of the problems of counselling in UBE on the basis of gender. However, a significant difference was found on the basis of educational qualification and length of service experience. Respondents did not differ in their perception of the prospects of on the basis of gender, educational qualification and length of years in service. It is, therefore, recommended that counsellors should organise enlightenment programmes for principals on the importance of counselling.

Keywords: Counselling; Universal Basic Education; Nigeria

Introduction

Counselling is an 'applied psychology' which involves the relationship of trust between the counsellor and the client. Counselling entails a more personalized relationship between a professionally trained counsellor and an individual seeking for help. Counselling is a learning oriented process which stresses on rational planning, problem resolution, decision making and prevention of problems. Duntoye, (2002) defined counselling as a special kind of interaction between the counsellor and the client. Oladele (2000) regards counselling as a personal help

¹ Department of Counsellor Education, University of Ilorin

Address Correspondence to:

Bolu-Steve Foluke Nike, Department of Counsellor Education, University of Ilorin, P.M.B. 1515, University of Ilorin, Ilorin, Nigeria E-mail: bolusteve2002@yahoo.com.

carried out mainly by means of inter-personal communication where the counsellor helps the counselee in achieving adaptive attitudes, insight into their problems.

UBE

The UBE programme is a nine (9) year basic educational programme, and this is aimed at eradicating illiteracy, ignorance, poverty as well as stimulates and accelerates national development, political consciousness and national integration. The programme was established on 30th September 1999 and by 26th May 2004, the UBE bill was passed into law. The implantation process of the programme has been on since 1999, but the progress was hampered by lack of an enabling law to execute certain aspects of the programme. The UBE programme is the Nigeria's strategy for the achievement of Education for All (EFA) and the education related millennium development goal (Adebimpe, 2001). The UBE Commission (UBEC) was formally established on 7th October, 2004. The policy stated that at the end of 9 years of continuous education, every child should have acquired appropriate relevant skills and values which will make the students employable in order to contribute to National Development (Ehindero, 2000). UBE (UBE) is a reformed programme in Nigeria's basic education delivery (from primary all through to junior secondary school) and is to reinforce the implementation of the National Policy on Education (NPE) in order to provide greater assess and ensure quality throughout the Federation as it is free and compulsory (Adomeh, Arhedo & Omoike, 2007). Importantly, Nigeria is adopting UBE as a process of fulfilling the aim of education for all (EFA) as endorsed at the world conference on education held in the year 1990 (Ekpunobi, 2006). In order to achieve this laudable goal, a 9-year continuous, free and compulsory basic education was proposed for immediate implementation.

Following the declaration by the Federal Government of Nigeria for the introduction of 9-year free and compulsory basic education structure, which covers the primary and to junior secondary school, strategies have been put in place by the Nigerian Educational Research and Development Council (NERDC) to re-structure and re-align the school curricula for the 9-year basic education (UBE Act, 2004).

Purpose of UBE

Yoloye (2004) observed that, the concept of Basic Education is not a completely new term to the Nigerian educational system and that within the last few decades; it has assumed a global significance. The expanded vision of UBE programme as contained in the implementation guideline are as follows:

1. Developing the entire citizenry to become conscious of the benefits of education.
2. Provision of free UBE for every Nigerian child of school going age.

3. Reducing drastically the incidence of drop out from the formal school system.
4. Ensuring the acquisition of appropriate levels of literacy, numeracy, manipulative communicative and life skills as well as the ethical, moral and civic values needed for laying a solid foundation for the lifelong living.

Problems facing Counselling in UBE

Bukoye (2004) explained that counselling is one of the disciplines that have not been given adequate recognition despite its importance in the UBE programme. This has been the obstacle hindering the establishment of counselling programme at various secondary school level. Lack of indigenous philosophical testing materials, constitutes another impediment to effective implementation of counselling programme in schools. This situation has allowed practicing counsellors to rely on philosophical tests developed from foreign countries. Most of these tests are not suitable for Nigerian Culture context especially as it relates to UBE programmes. Inadequate funding of counselling programme is one of the major problems encountered by counsellors. Despite the need for counsellors in the UBE programme, Kolo (1992) observed that funds are not adequately provided by the government for school counsellor to run guidance programme. Most times the school principals are reluctant in funding counselling programmes in schools. Lack of fund, therefore, constitutes the greatest impediment to the implementation of counselling programme in the schools.

Perception of counsellor's roles by the principals and other administrators is another source of problem in the implementation of school counselling programme in Nigeria. Lack of clarity about the roles of a counsellor in the UBE scheme as stated in the National Policy of Education is a challenge to the counsellor. In fact, the common feature is that counsellors are considered as rivals for promotion to higher offices. This situation exists because of the fact that there is no clear line of demarcation between the counsellors' office and that of the vice principal (Yahaya, 2004).

Lack of adequate physical facilities for counselling programme is one of the serious problem currently hindering the service of counsellors in the UBE programme. To sum up this, Olori et al (2005) stressed that though the UBE programme is good, experiences over the years showed that only non-politicization of the scheme could pave the way for UBE's effective implementation. Thus, if counsellors must be effective in the UBE programme a massive injection of uninterrupted funds will have to be ensured (Olori, Ibuku, Oyedeji, & Tahir, 2005 & Obong 2006).

Prospects of Counselling in UBE

The National Policy on Education stated that "in view of the apparent ignorance of many young people about career prospects and because of the personality maladjustment among students, career officer and counsellors will be appointed in

post primary institution. "Since qualified personnel in this category are scarce, government will continue to make provision for training of interested teachers in guidance and counselling" (NPE, 1977, p.30). Adeoye (2004) explained that counselling is broad in scope and it consists of educational, vocational and personal-social programmes which are in line with the aims and objectives of the UBE. The common counselling services in schools are Orientation Service, Information service, Placement service, Appraisal service, Personal/social service, Follow-up service, Educational service and vocational/career Counselling service. However, the above services in counselling are grouped into three broad components which are discussed below:

Educational Counselling. Adeoye (2004) explained that educational counselling helps in guiding young people to pursue the right type of education necessary, while at the same time ensuring that the right balance is kept in order to meet the human resource needs of the nation. Students also need valid and usable information that relate to all types of present and future educational opportunities. They also need information on requirements of entrance in to higher institution of learning.

Vocational Guidance/Counselling. Vocational guidance is the assistance offered to an individual in making decision about career choice in order to have satisfactory vocational adjustment. Hence, this was one of the reasons while the service of counselling profession was included in the National Policy on Education. However, educational counselling is needed to achieve vocational guidance. This is because educational counselling is not enough to enable an individual plan, take the right decision and adjust equitably to his environment. A combination of educational and occupational information provides career information. After the end of nine years of the UBE Programme, the counsellor is needed to help the student choose the right pre-vocational or pre-technical class based on their subject combination (Bukoye, 2004).

Personal-Social Guidance/Counselling: Irrespective of student's educational attainment, they often need information pertaining to how they can achieve personal understanding in the course of their development. Personal social counselling is the assistance given to an individual or a student by the professional counsellor in matters that border on interpersonal problem. The modern day society is characterized by number of changes where mothers work from dawn to dusk as such information on sex education, physical and mental health development, personal appearance, social behaviour etc. are not readily provided for students at home. The counsellor in the UBE program can provide enlightenment in this area (Duntoye, Akande & Abdulkadir, 2007).

Statement of the Problem

The understanding of the aims and objectives of UBE (UBE) is the first step towards the successful implementation of the programme in Nigeria and yet the UBE programme has not been able to fully achieve their goals. In spite of all the

reforms in the educational sector a lot of school age children are still dropping out of school for many socio-cultural and economic problems (Ekpunobi, 2006). Counselling is a useful tool in enhancing the goals and implementation of UBE programme in Nigeria. This is because it can help to resolve crises within the system and at the same time helps learners to deal with problems that tend to pose barriers to their ability in achieving their academic goals.

It is a statement of fact that effective organization of UBE programme in Nigeria will be a reality when professional counsellors are employed in secondary schools (Olayinka & Omoegun 2001). In most schools professionally trained counsellor are made subject teachers rather than being counsellors. Sometimes principals prefer to employ the services of career masters which provide information and skeletal form of counselling programme. Such services rendered by these personnel who are not professionally trained are inadequate especially in the UBE scheme, because they have limited experience. Most school principals are yet to comply with the aim of National Policy on Education (1998) as it relates to the functionality of counsellors in the UBE programme (Bukoye, 2004). Educationists have stressed the importance of counsellors in the UBE scheme. As such, Durosaro (2004) revealed the need for the introduction of guidance and counselling programme right from primary school education up to the University level if the UBE program must be achieved.

Earlier studies on UBE programme include; Obanya (2000) who worked on UBE as a people Oriented Programme, Yoloye (2004) dealt with the relevance of UBE in primary schools while Igwe (2004) looked at the challenges and prospects of UBE programme in the management of primary and secondary education in Nigeria. As such, the researchers carried out a study on the prospects and problems of counselling programme in the UBE as express by principals of secondary schools in Ilorin metropolis. The purpose of this study is to examine the perceptions of principals on the problems and prospects of counselling in UBE programme.

Research Questions

The following research questions were addressed in this study:

1. What is the prospects of counselling programme in the UBE?
2. What is the problem facing the counselling programme in the UBE?
3. Is there any significant difference in perceptions of secondary school principals on the prospects of counselling in the UBE on the basis of age?
4. Is there any difference in perceptions of secondary school principals on the prospects of counselling in the UBE on the basis of educational qualification?
5. Is there any difference in perceptions of secondary school principals on the prospects of counselling in the UBE on the basis of length of years in service?
6. Is there any difference in perceptions of secondary school principals on the problems of counselling in the UBE on the basis of age?

7. Is there any difference in perceptions of secondary school principals on the problems of counselling in the UBE on the basis of educational qualification?
8. Is there any difference in perceptions of secondary school principals on the problems of counselling in the UBE on the basis of length of years in service?

Research Hypotheses

The following hypotheses were tested in this study:

1. There is no significant difference in perceptions of secondary school principals on the prospects of counselling in the UBE on the basis of age.
2. There is no significant difference in perceptions of secondary school principals on the prospects of counselling in the UBE on the basis of educational qualification.
3. There is no significant difference in perceptions of secondary school principals on the prospects of counselling in the UBE on the basis of years in service.
4. There is no significant difference in perceptions of secondary school principals on the problems of counselling in the UBE on the basis of age.
5. There is no significant difference in perceptions of secondary school principals on the problems of counselling in the UBE on the basis of educational qualification.
6. There is no significant difference in perceptions of secondary school principals on the problems of counselling in the UBE on the basis of length of years in service.

Methodology

The research design adopted for this study was the descriptive survey method. The design allows the researcher to collect data and describe it in a systematic manner (Adana, 1996). The target population of the study consisted of all principals in Ilorin metropolis. A total number of 200 respondents were selected. Simple random sampling was used in selecting five government schools from each of the four local Governments in Ilorin which includes Ilorin East, Ilorin South, Ilorin West and Asa. Each of these schools has both junior and secondary school sections, the principals and the vice principals were purposively selected from each of these school. Ten respondents were chosen from each school (5 from junior and 5 from senior sections) and this makes a total of 50 respondents in each LGA.

Data was collected using a questionnaire entitled "Perception of prospects and problems of counselling in UBE Questionnaire" (PPPCUBEQ). The items questionnaire were derived from review of related literature. The instrument had three sections, A, B and C. Section A contained demographic data while section B consisted of items on the Problems of counselling programme in the UBE.

Section C dealt with Prospects of counselling in the UBE. The 4 point Likert type rating scale response format was adopted for use on section B as thus: Strongly Agree-(SA)-4 points, Agree- (A)-3 points, Disagree-(D) -2 points and Strongly Disagree-(SD) -1 point .The questionnaire contained 20 items. The questionnaire was given to four experts who affirmed that it covered the intended contents and, therefore, valid for use. The reliability of the instrument used for the study was established using test-retest method within an interval of four weeks. The instrument was administered to 20 students in a private secondary school, these students did not form part of the final respondents used for the study. The Pearson Product Moment Correlation Coefficient was used to compute the correlation co-efficient of the instrument. A reliability co-efficient of 0.74 was obtained. The data were analysed using both descriptive and inferential statistics. Frequency count and simple percentage were used for the descriptive statistics while mean scores and ranking were used to answer the main research question.

Results

This section presents the result of the analysis of data obtained for the study. The data collected were analysed using both descriptive and inferential statistics.

Table 1: Distribution of Respondents by Personal Data

	Variable	Frequency	%
Gender	Male	135	67.5
	Female	65	32.5
	<i>Total</i>	<i>200</i>	<i>100</i>
Educational Qualification	OND/NCE	5.0	2.5
	HND/ B.Ed.	135	67.5
	M.Ed.	60	30.0
	<i>Total</i>	<i>200</i>	<i>100</i>
Length of years in service	Below 10 years	107	53.5
	11-21 years	45	22.5
	22- 31 years	36	18.0
	Above 32 years	12	6.0
	<i>Total</i>	<i>200</i>	<i>100</i>

Table 1 shows that 135 (67.5%) of the total respondents are males while 65(32.5%) are females. 5 (2.5%) of the respondents are OND/NCE holders, 135 (67.5%) are HND/B.Ed. holders while 60 (30%) have M.Ed. certificate. Also, respondents that have below 10 years' experience are 107 (53.5%) while 45 (22.5%) of the respondents have between 11-21 years' of experience.

Prospects of the Counselling Programme in UBE

The findings on the prospects of the counselling programme in UBE are shown in Table 2.

Table2: Principals' Perceptions of the Prospects of the Counselling programme in UBE

In my view, the counselling programme in UBE can help:	Mean	Rank
Students to achieve their educational goals	3.25	1 st
Students to make the right choice of career	2.97	2 nd
Build the students personality	2.86	3 rd
Facilitate self-understanding	2.84	4 th
Identify different occupational areas available after school	2.82	5 th
Promote educational goals	2.70	6 th
Improve the school curriculum	2.61	7 th
Harness human resources for UBE programme	2.51	8 th
Expand the UBE programmes	2.49	9 th
Build a sense of commitment to the unity of the nation	2.43	10 th

Problems Facing the Counselling Programme in UBE

The findings on the problems facing the counselling programme in UBE are shown in Table 2.

Table 3: Principals' Perceptions of the Problems Facing the Counselling programme in UBE

In my view, the problems facing the counselling programme in UBE are:	Mean	Rank
Inconsistency of government policies	3.59	1 st
Inadequate funding by the government	2.96	2 nd
Inadequate facilities to provide effective counselling services	2.86	3 rd
Lack of trained counsellors to handle the counselling duties	2.74	4 th
Inadequate information on the importance of counselling in secondary schools	2.68	5 th
Principals' negative attitude towards counselling profession	2.61	6 th
Lack of enough psychological tests in schools	2.55	7 th
Cultural barriers in form of belief system	2.51	8 th
Negative attitude of counselling practitioners themselves	2.40	9 th
Inadequate remuneration of counsellors in secondary schools.	2.17	10 th

Table 2 revealed that item 2 ranked 1st with a mean score of 3.25 and which states that "in my view as a principal, counselling can help students achieve their educational goals" while items 6 was ranked 2nd with a mean score of 2.96. Table 3 also shows that item 4 ranked 1st with a mean score of 3.25 and it states that "as a

principal the problem of counselling programme in UBE is inconsistency of government policies” while item 5 was ranked 2nd with a mean of 2.97.

Six null hypotheses were generated and tested in this study. The researcher used t-test and Analysis of Variance (ANOVA) to analyse the hypotheses. The results of the analysis are presented in the tables below.

Hypothesis 1: There is no significant difference in the perception of secondary school principals on the prospects of counselling in UBE on the basis of gender.

Table 4: Mean and t-test comparison of respondents on the basis of gender

Gender	N	Mean	SD	Df	Cal. t-variance	Critical t-value
Male	135	27.37	2.758	198	0.65	1.96
Female	65	27.65	2.836			

Table 4 reveals that the calculated t-value of 0.65 is less than the critical t-value of 1.96. Therefore, the hypothesis is accepted.

Hypothesis 2: There is no significant difference in the perceptions of secondary school principals on the prospects of counselling in UBE on the basis of educational qualification

Table 5: ANOVA in perception of prospects of counselling in UBE Board by educational qualification

	Sum of squares	Df	Mean square	Cal. f-ratio	Crit. t-value
Between groups	3.547	2	1.773	.228	3.00
Within group	1534.133	197	7.787		
Total	1537.680	199			

Table 5 shows that the calculated f-ratio of .228 is less than the critical f-ratio of 3.00. Therefore, hypothesis 4 is also accepted.

Hypothesis 3: There is no significant difference in the perceptions of secondary school principals on the prospects of counselling in UBE on the basis of length of years of service

Table 6: ANOVA in perception on prospects of counselling in UBE on the basis of length of years in service

	Sum of squares	Df	Mean square	Cal. f-ratio	Cri. t-value
Between groups	21.868	3	7.289	.943	3.00
Within group	1515.812	196	7.734		
Total	1537.680	199			

Table 6 shows that the calculated f-ratio of .943 is less than the critical f-ratio of 3.00. Therefore, hypothesis 6 is accepted.

Hypothesis 4: There is significant difference in the perceptions of secondary school principals on the problems of counselling in the UBE on the basis of gender.

Table 7: Mean and t-test comparison of respondents on the basis of gender

Gender	N	Mean	SD	Df	Cal. t-value	Cri. t-value
Male	135	27.18	2.12	198	1.12	1.96
Female	65	26.82	2.17			

Table 7 shows that the calculated t-value of 1.12 is less than the critical t-value of 1.96. Therefore, the hypothesis which states that there is no significant difference in the perceptions of secondary schools principal on the problems of counselling in the UBE on the basis of gender was accepted.

Hypothesis 5: There is significant difference in perceptions of secondary school principals on the problems of counselling in the UBE on the basis of educational qualification.

Table 8: ANOVA in perception of the problems facing counselling in the UBE Board on the basis of educational qualification

	Sum of squares	Df	Mean square	Cal. f-ratio	Cri. t-value
Between groups	202.297	2	101.148	28.1*	3.00
Within group	708.983	197	3.598		
Total	911.280	199			

p<0.05

Table 8 indicates that the calculated f-ratio of 28.1 is greater than the critical f-ratio of 3.00. Therefore, hypothesis 2 which states that there is no significant difference in perceptions of secondary schools principal on the problems of counselling in UBE on the basis of educational qualification is rejected.

Hypothesis 6: There is no significant difference in perceptions of secondary school principals on the problems of counselling in the UBE on the basis of length of years in service.

Table 9: ANOVA in perception of the problems facing counselling in UBE on the basis of length of service

	Sum of squares	Df	Mean square	Cal. f-ratio	Cri. t-value
Between groups	127.897	3	42.632	10.67*	3.00
Within groups	183.383	196	3.996		
Total	911.280	199			

p<0.05

The result on table 9 reveals the calculated f-ratio of 10.67 is greater than the critical f-ratio of 3.00. Therefore, hypothesis 3 which states that there is no significant difference in perception of secondary school principals on the problems of counselling in UBE on the basis of length of years in service is rejected.

Discussion, Conclusions and Recommendations

The study revealed that counselling in UBE programme can help students achieve their educational goals. This corroborates the view of Idowu (2004) that counselling programme consists of services which aim at helping students in achieving their educational goals and at the same time develop their potentials. Also, majority of the respondents believed that the major problem of counselling in the UBE programme is the inconsistency of government policies. Kolo (1992) observed that because of the lackadaisical attitude of the federal and state governments to counselling programme, funds are not adequately provided to the school counsellors to run guidance programme. Most of these policies keeps changing over time.

On the prospects of counselling profession in the UBE, male and female principals did not differ in their opinion. Idowu (2004) opined that the principals believed that the objectives of National Policy on Education and the UBE could be brought about more easily through the services of counsellors. Educational qualification of the respondents notwithstanding, they all agreed that counselling profession is important in the UBE programme. This is in agreement with Adana (1984) who stated that the counselling program consist of services that aimed at helping the students from the beginning to the end of school system to cope with, function well, and get the best out of the educational system. No significant difference was found in the perception of the principal on the prospects of counselling in the UBE on the basis of length of years in service. To buttress this Olayinka (1999) emphasized the use of counselling in the national reconstruction and transformation.

Despite the differences in their gender, respondents did not differ in their perception on the problems of counselling in the UBE programme. Makinde (1981) observed that irrespective of gender, Nigerians see counselling as an invasion of individual privacy and as such these kind of people tend to frustrate rather than support counselling programme in schools. This makes the functionality of counsellors difficult in the UBE agenda.

Respondents differ in their opinion on problems of counselling in the UBE program on the basis of their educational qualifications. The level of education plays a crucial role in the way people perceived things. UBE program has clearly spelt out the use of counselling in the programme. With the level of education of principals, some are yet to see the importance of the profession in the UBE scheme of things. This may be attributed to conservatism or resistance to changes

and innovation in education (Yahaya, 2004). The principals' length of service years affects their perception. This could be as result of the experience of the principals over time. However, Adeoye (2004) explained that their length of service years notwithstanding the onus rest on the principals to take up the challenge of ensuring that government policy in respect of counselling programme is executed. Kolo (1992) explained that due to lack of information over the years, many organizations that require the services of counsellors in Nigeria do not appreciate the services and this constitute problems for counselling practitioners.

It was concluded that:

1. No significant difference was found in the perceptions of secondary schools principals on the prospects of counselling in the UBE on the basis of gender
2. No significant difference was found in the perceptions of secondary schools principal on the prospects of counselling in the UBE on the basis of educational qualification
3. No significant difference was found in the perceptions of secondary schools principal on the prospects of counselling in the UBE on the basis of gender
4. No significant difference was found in the perceptions of secondary schools principal s on the problems of counselling in the UBE on the basis of gender
5. A significant difference was found in the perceptions of secondary schools principal on the problems of counselling in the UBE on the basis of educational qualification
6. A significant difference was found in the perceptions of secondary schools principal on the problems of counselling in the UBE on the basis of length of years of service

An implication of these findings is that, with the frequent changes in educational polices, professional counsellors need to update themselves so as to be relevant to the UBE programme. The principals and counsellor are encouraged to work hand in hand with each other so as to enhance the successful implementation of counselling programme in UBE. The services of professional counsellors are needed if the aim of the UBE programme are to be achieved. This creates a bright future for counselling practices in the schools.

The counsellors should organize enlightenment programmes for principals on the importance of counselling in the UBE programme. Professional counsellors should be employed by the government. This is because a trained School counsellor is skilful in establishing warm relationship and creating a good learning environment for the students. The government should also provide adequate funds for the implementation of counselling programmes in schools. This will aid effective take off of the counselling programmes in schools.

References

Adana, B.S. (1996). *Statistical methods for students*. Ilorin: Unilorin Press.

- Adana, B.S. (2004). The school guidance programme. In A.I. Idowu (Ed) *Guidance and Counselling in Education*. Ilorin: INDEMAC Publication.
- Adebimpe, O.A. (2001). The place of library in the accomplishment of Universal Basic Education Programme: *Journal of Education Development*. Pp. 82-85.
- Adeoye E.A. (2004). Relationship between the counsellor and other school guidance personnel. In A.I. Idowu (Ed.) *Guidance and Counselling in Education*, Ilorin: INDEMAC Publishers.
- Adomeh, I.O.C., Arhedo, A. and Omoike, D. (2007) *Contemporary issues in history of education* in O.O. Aluede & D. Omoike (Eds.): trends in history of education in Nigeria (pp. 221-139) Agbor: Krisbec Publications 121-139
- Bukoye, R.O. (2004) *Introduction to guidance and counselling services in schools Ilorin*. God May provide Printing and Publishing Enterprises.
- Duntoye, J.A. Akande F.F. and Abdulkadir O.R. (2007). *The Basics of Guidance and Counselling Ilorin*. Integrity Publications.
- Durosaro, I. A. (2004). *Elementary school counselling*. In A.I. Idowu (Ed) *Guidance and Counselling in Education*, Ilorin: INDEMAC Publication.
- Ehinderio, S. (2000). *The Universal Basic Education and the Primary School Curriculum*. In *Planning and Implementation of UBE in Nigerian Education*. Adepoju T.L. Education Industrial Nigeria Ltd. Ibadan.
- Ekpunobi, A.N. (2006, August 13-19): *Universal Basic Education Commission*. Paper presented at the 47th Annual Conference of Science Teachers Association of Nigeria held in Calabar.
- Idowu, A.I. (2004). *Guidance and Counselling: An overview*. In A.I. Idowu (Ed.) *Guidance and Counselling in Education*, Ilorin: INDEMAC Publishers.
- Igwe, S.O. (2004). The UBE Programme in Nigeria: *Challenges and Prospects in Management of Primary and Secondary Education in Nigeria* (Eds.) Fagbamiye E.O., Babalola J. Fabunmi O. and Ayeni NAEPA Publication.
- Kolo, F.D. (1992) *Guidance and counselling perspectives*. Zaria: Stevano Printing Press.
- Makinde .O. (1993). *Fundamental of guidance and counselling*. London: Macmillan Publishing Ltd.
- National Policy on Education (1977). Lagos: Federal Government of Nigeria.
- Obanya, PAI (2000) Education and the Nigerian Society revised: *The UBE as a people Oriented Programme*: Prof. J.A. Majasan First Anniversary Memorial Lecture. Conference centre U.I. 17th March.
- Obong I.J. O. (2006, August 13-19): *The Role of Teachers in the Implementation of UBE in Nigeria*: paper presented at the 47th Annual Conference of STAN in Calabar.
- Oladele J.O. (2000) *Guidance and counselling a fundamental Approach*. 3rd Edition, Focus on the 6-3-3-4 of Education System Lagos John-Lad Publishers Ltd pp. 276-272.
- Olayinka M .S. (1999). *Counselling for national reconstruction and transformation*. A keynote address delivered at the Annual National Conference of the counselling Association of Nigeria on 23rd Aug 1999 at the University of Lagos
- Olayinka M.S. and Omoegun M.O. (2001) *Principle of Practice of Guidance and Counselling*. Lagos Bab-Sheriff Ltd.

- Olori, T. Ibuku, W. Oyedeji, L. and Tahir, G. (2005): *Lack of Resources Threaten*. UNESCO local Report (2005): *Education for All* (EFA) Global Week, Magazine.
- Universal Basic Education (UBE) Act (2004): *The Compulsory, free, universal Basic Education Act and other relate matters*. Abuja: UBE
- Yahaya L. A. (2004). *Professionalization of counselling in Nigeria*. The school guidance programme. In A.I. Idowu (Ed) *Guidance and Counselling in Education*, Ilorin: INDEMAC Publication.
- Yoloye, A.E. (2004). *The Relevance of Universal Basic Education in the Development of Primary Education System in Nigeria*. In *Planning and Implementation of Universal Basic Education in Nigeria*. (Ed) Adepaju, T.L. Education Industries Nigeria Ltd. Ibadan.



Case for using Music in Teaching and Learning Process in Post Primary Institutions with Specific Reference to the Case of Selected Schools in Mbarara District of Uganda

Asingwire Richard ¹, Ochan Joseph ², Tindi Seje Nuru ¹

Abstract. This study was conducted to find out the impact of using music instruments on teaching in selected post primary institutions in Nyakayojo sub county, Mbarara–Uganda. The findings were that the availability of musical instruments in most of the selected post primary institutions was inadequate. Ironically, even in instances a few music instruments were available, they were not put to optimum use. It was also found that many teachers did not know how to use the instruments. It was boring, if not hectic, on the side of students and, a burden on the side of teachers when trying to make students understand rather than cram the content. Most of the teachers thought that music was for music teachers only. The study recommended that every teacher tries to use musical instruments when teaching.

Keywords: Music; Curriculum innovation; Teaching & learning.

Introduction

According to Ssekamwa (1995), Musical instruments are those teaching aids that help a teacher to clearly demonstrate to the learners about what is being taught. In Uganda, music did not start with the colonial rule but it was there in African traditional culture. This form of education was later referred to as informal education by colonialists and Christian missionaries. This informal education aimed at giving instructions to the young ones on how to sing, live better in society and being good citizens in future. It involved instructions from the elders

¹ Kampala International University

² University of Juba, South Sudan

Address Correspondence to:

Ochan Joseph, Department of Education, College of Education, University of Juba, South Sudan.
E-mail: opikejoseph@yahoo.com. Tel: +211954602637.

to the young ones. This could be at night around the fire place and while at work, like when weaving baskets, hunting and digging. Musical instruments used by then were horns, flutes, tube fiddles, gongs, bells and pipes.

With the coming of the European missionaries in 1977 and 79 respectively, informal education was abandoned and was replaced with formal education brought by Europeans. In this form of education, children of the same age group were collected under roof and given musical instruction by teachers. It should be noted that, Europeans discouraged Africans to continue with their form of education, which was now looked at as devilish and barbaric and therefore to be abandoned.

Musical instruments facilitate learning (Ssekamwa 1995). As there is a correlation between musical aids and easy learning that stimulates the mind of the one who is learning to understand better. Therefore, musical instruments are very important in learning process. These musical instruments include; piano, tube fiddles, xylophones, and properties like spears, chairs, shields, manuscript board and television sets. The teacher can select and use any of these according to the topic in the learning process. However, in post primary institutions in the area of study showed that music instruments were not adequate. This means that teachers were teaching without including music. Therefore learning was not done effectively. Thus, the research came in to find out whether music instruments have any impact on learning.

Review of Related Literature

Musical Instruments used in Learning

According to Aggarwal (1995), there are many categories of musical instruments found in educational institutions, which are used in teaching in schools. These are;

Hardware and software materials. Hardware materials are the tangible objects like computers while software are intangible programmes in the operation system which contain music or musical instruments.

Projected materials and non-projected materials. Projected materials include projectors, films and slides. Non-projected materials on the other hand include chalkboards, maps, diagrams and books that contain music or musical instruments.

Audio, visual and audio-visual materials. Audio materials include radio, piano, tube fiddles and telephones. Visual materials include maps, charts, posters and pictures. Audio-visual materials also include television (Thompson, 1995)

Three-dimensional media include all shapes like models and specimens.

Media. These include computers, video recorders, radios, cassettes and filmstrips.

This is a comprehensive view of music instruments on which this study was based. However in the field study, these were or not available in the selected institutions.

Impact of Musical Instruments on Teaching

Ministry of education and sports (1989) evaluated the use of music instruments that when fully utilized in teaching, they enhance music teaching and academic performance. The ministry went on and gave the following advantages;

1. Delivery of music instruments can be more standardized by using media.
2. Instructions can be more motivating and learning can be more interactive.
3. The time required for the instructions can be reduced.
4. The quality of learning can be improved when desired. In other words flexibility is possible.

Even, Thompson (1995) states that, “the use of music in teaching supplements or complement the teachers’ task”. He further states that, they provide first-hand information, which is necessary for concept formation. Students can touch, smell and even test if necessary. This gives them a wider understanding of things being learnt. According to Warburton O (1992), teachers who use the indirect method/style of teaching/ learner centered were more effective than those that use the direct style teaching/teacher centered method.

In the course of handling the teaching, a number of music instruments have to be employed and unless this is done, teaching becomes more theoretical. As John (1999) correctly observed that music instruments are far more effective than words alone during the teaching – learning process. He concluded that, learners tend to remember 10% of what they hear, 50% of what they hear and see, then 90% of what they hear, see and do.

According to Aggwal, J.C. (1995), music instruments are supplementary services used by the teacher to clarify, establish, co-relate and co-ordinate accurate concepts, interpretations and appreciations in teaching any subject. They include the music text books, music instruments like piano, tube fiddles, xylophones and, costumes such as raffia skirts, beads, head gears, skins, properties like spears, chairs, shield, manuscript board and television sets. The teacher can select and use any of these according to the topic in teaching. Using these instruments help in improving the learning process.

Methods and Techniques

The mixed explanatory method (quantitative and qualitative) was employed where the data were collected utilizing semi-structured questionnaires, interview schedule and observations in the use of music instruments during the learning process from 104 respondents composed of 4 administrators, 20 teachers and 80 learners from five selected post primary institutions in Nyakayojo sub county, Mbarara - Uganda. Themes were constructed after coding and quantitative data were analysed using frequency counts, explanations and descriptions in presenting the findings.

Findings and Interpretations

Demographic Characteristics

Learners: Most of the learners were still young (below 18 years) and were interested in music. All students in secondary institutions entered after successfully completing primary level and those in Primary Teacher College (Kibingo TTC) entered the college after passing Ordinary level very well. Majority (70%) knew music instruments though they didn't know how to use/ play them. Most of the respondents answered disagree with 96.4% to the question of learning using music instruments. This was a very big percent compared to 3.6% of the respondents who agreed. Almost all learners (99.2%) enjoyed lessons where music instruments were used compared to just a few (0.8%) who didn't care and answered "not sure".

Teachers: 60% were above thirty years, 40% were below thirty years. Most of the teachers were diploma holders (99%) compared to 1% who was a Bachelor's holder. All selected teachers were (100%) knew musical instruments and knew how to play most of them. This was so because they were music teach teachers. Many teachers (84.3%) agreed that they were not using musical instruments when teaching compared to minority (15.7%) who confessed to have used them on some few occasions even.

Administrators: 87% of the administrators were above 50 years. Only 23% were in their fifties or late forties. All the administrators (100%) were Masters' holders in education. A big percentage (80%) agreed on with the question being available in schools compared to 20% who disagreed that the available are not enough.

Challenges in Using Musical Instructional Materials in Learning

Most of the learners agreed (mean = 3.26) that they understood the lessons in class when music was used. The understanding when musical instruments were used was at high degree (mean = 3.96)

Eighty seven percent of the teachers disagreed that the students used music during learning process but strongly agreed that the students understood when using musical instruments also.

Fifty percent of the administrators strongly agreed that the teachers used music during the learning process and agreed 3.33 that the students understood the lessons when using musical instruments.

Suggestions for Improved use of Musical Instruments in Teaching

Based on the responses from the students, teachers and administrators, the ways to address the challenges are; teachers to used music and musical instruments when teaching. Train all teachers on how to use music and musical instruments when teaching. Administrators and the government to provide musical instruments to all institutions of learning.

Observations were made though many institutions didn't have music on the time table. Most of the schools didn't have enough musical instruments. Many teachers were teaching without musical instruments. Some were trying to use music instruments for the first time. Students became wild when musical instruments were brought in during the learning process and they (instruments) became centre of attraction. Lessons with musical instruments were cheerful and interesting while on the other hand, lessons without any musical instrument were boring.

During the interviews, students were being true in revealing not to have been using music instruments during their learning process. They needed to play them and to perform or to be entertained but they were limited to such. Teachers agreed that they were using musical instruments but not all what they want to use were available apart from drums. Administrators covered themselves that music instruments were enough and available yet one wonders why they needed the government to buy for them musical instruments. They also covered teachers that they were using musical instruments.

Conclusion and Recommendations

Musical instruments are not enough in post primary institutions. The use of musical instruments schools is very low. Teachers don't know how to use musical instruments when teaching. Learning process is more theoretical. The Ugandan government, through educational officers and administrators are reluctant on using musical instruments during the learning situation. Learners are facing a lot of challenges in learning.

The teaching of nowadays is quite different from that of long time ago (modern Vs traditional respectively) where the former is learner centred while the latter is teacher centred. Learners must practice what they learn and there should be ice breakers during the learning process. Learners should be participate at maximal level and be active not talk and chalk (writing notes) only. Using of musical instruments should not only be in class. Let learners be allowed to use them even in their free periods. Seminars, workshops, practice and presentations should be programmed for both teachers and students. Musical instruments, both soft and hard wares, should be made available for both teachers and learners but not to be locked in stores. Let the government plans, supply and supervise well her education system. Teachers should be trained on how to use musical instruments.

References

- John, P. (1999), *In Sound and Silence Classroom Projects Creative Music*, London; Cambridge University Press
- Thompson, H. (1995), *Child psychology growth trends in psychology adjustment*, London; Sussex University Press

- Ministry of Education, (1998), Education policy commission review report, *Kampala, Longman*
- Ssekamwa S C, (1995). The history and foundations of formal education, *Kampala, Fountain Publishers*
- Warburton O, (1992), Basic Music knowledge, *London, Oxford University press.*



Educational Attainment and Family Size as Predictors of Women's Economic Empowerment in South West Nigeria

Arinola Agness Aguda Oluwo ¹, Adesoji A. Oni ¹

Abstract. This exploratory study assessed gender inequality in terms of access to education, the job market and reasons why high population of women lack economic empowerment in South West Nigeria. The descriptive survey multistage sampling technique with the use of questionnaires. A sample of 1200 female respondents was selected from five study locations - Epe, Ikere, Ijebu-Ode, Ogbomosho and Osogbo. One research instrument was used to collect quantitative data for the study. Predictors of Economic Empowerment Questionnaire (PREQ) was designed by the researcher. In order to achieve the objectives of the study, two research questions and two hypotheses were formulated to guide the study. The data generated were analysed using ANOVA at 0.05 level of significance and Post Hoc Pair-wise Comparison was done. Both hypotheses were rejected. This shows that educational attainment and family size have significant influence on women's economic empowerment. It was concluded that efforts should be made to reduce the factors that inhibit women's ability to achieve parity with their male counterparts in education. The findings further drew attention to the need for interventions aimed at promoting women's access to employment thus improving their earning capacity that has the potential of contributing to improved standard of living for the whole family.

Keywords: Economic empowerment; Gender & Development; Family size

Introduction

In every society, education sector stands as a medium through which positive transformation could be achieved. It also enhances the potential of both men and women for contributing to the social, economic and political aspects of national

¹ University of Lagos

Address Correspondence to:

Adesoji A. Oni, Department of Educational Foundations, University of Lagos, Akoka-Yaba, Lagos, Nigeria. E-mail: aoluoni@yahoo.com.

development. Educating girls therefore, is a prerequisite for eradicating poverty. Women as mothers in marital relations are seen as central to the survival of the family and invariably the society and the involvement of women in the world of work enhanced the economic and social status of the entire family members (Robert-Okah, 2011).

It is important to clarify the concept of education which Durkheim (1973) described as a systematic socialization of an individual in belief, collective opinions and feelings of nationality from one generation to the next. He noted that the main function of education is the transmission of society's norms and values to the younger generation. Isichei and Olufowobi (2005) acknowledged that education is the skilful process of bringing out the innate potentialities or developing human endowments for proper functioning within the society. They believed that education implies that a person's outlook is transformed by what the person knows. Similarly, Moore (2004) stressed that the relationship that exists between education and empowerment is an important concern of sociologists of education for all time. As education is seen as an instrument for human development and transformation of societies, it is also expected to lead to empowerment by influencing the life chances and economic outcomes for women just as it impacts on men. Empowerment on the other hand, involves enabling individuals to gain control over resources to their benefit (Agarwal 2013). Acquiring education also makes it possible for individuals to gain access to knowledge and skills that enhance their abilities to influence their personal lives and the community in which they live.

Efforts by government agencies and non-governmental organizations in terms of policies and programmes (such as the National Economic Empowerment Development Strategy - NEEDS) to improve the situation of women in the past have led to some form of enlightenment on the need to involve more women and create more awareness on improving the status of women. These policies continue to make considerable progress towards attaining parity in education but large gender disparities in educational attainment seem to exist and are of concern to sociologists of education, researchers and policy makers. However, beyond this, there has been little emphasis on the control of resources by women as a way to accelerate their status in the society and to reduce poverty.

Functionalist Perspective (Instrumental versus Expressive Roles)

Early functionalists like Radcliff-Brown (1935) and Malinowski (1954) and modern ones like Talcott Parsons (1949) and Robert K. Merton (1968) cited in Oni (2005) both see society as being held together by norms, values and a common morality. In other words, cohesion is created by shared societal values and society is static or at best in a state of moving equilibrium (Ritzer, 1993). According to Functionalists, it is functional for society to assign different roles to men and women. This division of labour according to Thio (2003) was originally based on the physical differences between sexes. For thousands of years when hunting-

gathering societies predominated, men were more likely to roam far from settlements to hunt for animals because men were larger and physically stronger, while women were more likely to stay near home to gather plant food, cook and care for the children because only women could bear children and nurse babies.

Universal Basic Education

The Universal Basic Education (UBE) scheme was launched in 1999 to provide intellectual and non-intellectual competencies to all Nigerians for learning or trade. The basic components are compulsory nine years of schooling (primary and junior secondary), nomadic education, and out-of-school literacy and non-formal education for children, youths and adults. Though these objectives sound quite laudable like those of other programmes, the problems of inadequate infrastructure, inadequate relevant manpower and inadequate funding which characterize the Nigerian economy may make it difficult to realize. The UBE act 2004 which provides a 9-year compulsory free universal basic education for all children of primary and junior secondary school age in Nigeria also seeks to reinforce the national primary education goals and sets targets for attaining universal primary education within global Education for All – (EFA) context by 2015.

Gender Parity in Education

Gender parity in education is central to education in order to develop every member of the society to contribute meaningfully to the development of the nation. Gender parity in education is so important that it has received tremendous attention in recent years as stated in the second and third millennium development goals (MDGs). Goal 2: Achieve Universal Primary Education and especially goal 3: Promote gender equality and empower women. The goal 3 target: eliminate gender disparity in primary and secondary education, preferably by 2005, and to all levels of education not later than 2015. In Nigeria, progress has been made at the primary school level to achieve gender parity but at the higher education sector, this appears not to be the case. Particularly, there has been a growing concern about the imbalance between males and females in science classes (Udeani, 2003,). Nigeria has succeeded in moving close to achieving gender parity at the primary level of education and it has led to increase in number of girls enrolled in secondary schools but has not reflected in higher education. More male than female still attend higher institutions with implications for career progression. There are indications that married women graduates were less likely to be in paid employment than women as a whole because of family responsibilities. Some of the reasons for differences in educational attainment between the sexes are suggested by studies of the attitudes and expectations of girls towards work, marriage and the future in general. Majority of girls still look forward to marriage and are less ambitious and tended not to see success in terms of work or careers

but in being married and successful as a mother and wife. Girls still lag substantially behind boys in terms of secondary school enrolment but in Nigeria, according to ministry of education, parity in primary education has improved to 76% in 2009. The table below illustrates the situation at the primary school level.

Table 1: National Summary of Primary School Enrolment 1999-2005

Year	Total Males (%)	Total Females (%)
1999	10,058,434 (56.26)	7,818,894 (43.74)
2000	10,738,029 (51.00)	8,413,413 (43.00)
2001	10,583,411 (55.00)	8,457,812 (45.00)
2002	11,015,011 (55.00)	8,791,071 (45.00)
2003	14,366,513 (56.00)	11,338,280 (44.00)
2004	11,828,494 (55.00)	9,926,359 (45.00)
2005	12,189,073 (56.00)	9,926,359 (44.00)
Total	80,778,965 (56%)	64,346,848 (44%)

Source: Federal Ministry of Education; Statistics of Education in Nigeria: 1999-2005

From the table 1 above, it can be seen that between 1999 and 2005, the total female primary schools' population was 44 per cent as against 56 per cent for males. The above data indicates a clear gender gap even at this initial level of the educational ladder. Statistics indicate that there is usually increasing constriction for girls, participation as they move up in the educational system. At the University level, there was a proportion of 494,822 (64 per cent) males as against 285, 1779 (36 per cent) females within the same time frame. Gender disparity at the tertiary level of education is a testimony to the internalization of the socialization expectations of the female role in the society. Certain cultural and traditional constraints, practices, attitudes and expectations have been documented as contributing to the educational gap between men and women (Erinoso, 1994). Consequently, certain factors appear to impede women's access to education which invariably contributes to their lack of economic empowerment; one of such factors is perceived attitudes towards women economic empowerment. A negative attitude towards empowerment will include the belief 'that a woman's place is in the home or kitchen' (Ayobade, 2012). In societies where patriarchal ideology is entrenched, individuals are likely to hold different and diverse opinions which can influence issues of women empowerment, pursuing full-time career, earning income and more importantly controlling their resources and assets. Abe (1997) observed that some of these opinions seem to be influenced by cultural norms and traditional views of the people and these shape their attitude towards women empowerment. However, the way women view empowerment in terms of having control over their resources may play a role in whether they achieve economic empowerment or not.

Family sizes pose many challenges to women who in most cases are solely responsible for household chores and childcare. This could mean being full time house makers and not being able to pursue any career thus leading to dependence on spouse for resources resulting in lack of economic empowerment. As women grow older, they may find that years had been spent nurturing the family and were unable to build careers and acquire assets in their names to provide security for them in old age. This could lead to poverty in old age if for any reason they are divorced or lose inheritance right after the demise of husband. Recent studies show that women are twice as likely as men to be poor in old age. Thirteen percent (13%) of women who are 75 years and older are poor compared to six percent (6%) of men in the same age group. (Retrieved from www.centerforAmericanProgress.org).

Ogundipe (2002) pointed out that when women lack economic empowerment, it leads to powerlessness, subordination, exclusion from decision-making process and financial dependence. This usually results in their vulnerability to domestic violence, emotional abuse and the violation of their fundamental human rights. It could also translate to negative self-concept such as low self-esteem, unassertive behaviours, under representation and participation in politics and in the formal sector of the economy, thus aggravating women's powerlessness in some situations (Robert-Okah, 2011). It is evident that a high population of women still lack education that is required for empowerment; hence remain dependent and poor. Women occupy subordinate positions in the society, majority are unskilled, thereby constituting a high percentage of unemployable people who live in poverty.

Problem

Empowerment through education of women has emerged as an important developmental issue of global dimensions in the past decades (United Nations Report 1995, Ezeigbo 1996, United Nations Educational & Science Organization 2005). Education, known to be an important factor in achieving economic empowerment, had been unavailable to so many women and girls because of cultural and economic factors for a very long time. This has resulted in low enrolment especially at the secondary and tertiary levels of education, thus leading to low educational attainment among women. Obviously, as a social issue it becomes imperative to consider breaking this cycle of poverty for women and girls. Although, past governments in Nigeria made several efforts to improve the status of women, in terms of their policies and empowerment programmes, these have not yielded the desired expectations.

Purpose of the Study

The purpose of this study was to explore the extent to which access to education and family influence economic empowerment for women in South West Nigeria. . Specifically, the following objectives were set to achieve this aim;

1. Examine whether educational attainment has any influence on economic empowerment of women;
2. Explore the extent to which family size influences women's economic empowerment

Research Questions

The study was designed to address the following questions

1. Will educational attainment have any influence on economic empowerment for women?
2. To what extent will family size influence economic empowerment of women?

Research Hypotheses

1. Educational attainment will not have any significant influence on economic empowerment of women.
2. Family size will not have any significant influence on economic empowerment of women.

Methodology

The study covered women who reside in the South West Nigeria. The six states that make up the region are Ekiti, Lagos, Ogun, Ondo, Oyo and Osun. The study adopted a descriptive survey design involving the distribution of copies of the questionnaires for collecting quantitative data without manipulating any variable.

The target population for the study comprised all women aged from less than 24 years to 55 years and above, literates and illiterates alike who reside in the South West Nigeria. The respondents within the age range were chosen in order to capture the reproductive years, their educational qualifications and work life period.

The study adopted a multi-stage sampling technique. The first stage was the selection of the states using simple random sampling technique. The 6 states in the region were written on separate pieces of paper, wrapped, put in a box and selection was done through the hat and draw method. The following 5 states - Ekiti, Lagos, Ogun, Osun and Oyo were selected while the sixth state Ondo was used for the pilot study. The second stage of the sampling procedure involved random selection of one Local Government Area from each of the 5 States. All the Local Government Areas in each of the states were written down on pieces of paper wrapped and put in five separate boxes and one was randomly selected from each box. Thus, Ikere LGA in Ekiti State, Epe LGA in Lagos State, Ijebu-Ode from Ogun State, Osogbo from Osun State and Ogbomoso South LGA from Oyo state were selected.

The third stage involved the selection of wards within the selected Local Government Area while the streets were selected through cluster sampling

technique, from the streets; houses were selected through systematic sampling method. The rooms in the houses, which were mostly single rooms, were then randomly selected. For the interview schedule, both the literate and the illiterate respondents were selected through purposive sampling method. Of the one thousand, two hundred and twenty - nine (1229) copies of the questionnaires given out in the five states, about 1200 were fully completed from the respondents in all the study locations. This gave a good return rate of the questionnaires.

Table 2: Distribution of Respondents by States in South West

States	N	n	%	No of Returned Questionnaires	%
Ondo	594	239	19.45	232 (7)	19.33
Ogun	642	246	20.02	242 (4)	20.17
Oyo	691	254	20.67	247 (7)	20.58
Osun	553	232	18.87	227 (5)	18.92
Lagos	725	258	20.99	252 (6)	21.00
Total	3205	1229	100	1200	100

Table 2 shows the total number of respondents were 1200 from five States in South West Nigeria. Out of 1200 participants, 232 completed and returned the questionnaire from Ondo State, 242 completed and returned the questionnaire from Ogun State, 254 completed and returned the questionnaire from Oyo State, 232 completed and returned the questionnaire from Osun State while 258 completed and returned the questionnaires from Lagos State. However, the figures in bracket were the unreturned questionnaires.

This was a 25-item researcher-designed questionnaire, used to elicit information on the impact of economic empowerment for women in the home. The instrument was in two parts; the first section focused on personal data, information was sought on respondents' marital status, and educational qualifications, occupations, and level, age, and family size. The second part required respondents to indicate the extent to which they agree or disagree with items along levels of strongly agree, agree, disagree, strongly disagree. Using Cronbach Alpha method, the PREQ has a reliability co-efficient value of 0.71 when tested during the pilot study, as a result of its high co-efficient; the instrument was found to be suitable and reliable for the study. The scoring of the instrument ranged from 4 to 1 for positively worded statements and in reverse order for negatively worded statements.

A total of 35 participants were used in the pilot study. The research instruments were administered to the participants. At the end, the responses were collated and data were generated. The data were then subjected to Cronbach Alpha test of internal consistency and the reliability coefficient was 0.75,

The mean, standard deviation and other statistical procedures employed in the analysis of the data include Analysis of Variance (ANOVA) and Pearson's Product Moment Correlation. Both hypotheses were tested at 0.05 level of significance. The results obtained are presented below.

Findings

Hypothesis One: Educational attainment will not have any significant influence on the economic empowerment of women.

This hypothesis was tested using mean, standard deviation and Analysis of Variance. The results are presented in Tables 3, 4, and 5.

Table 3: Educational Attainment and Economic Empowerment

Participants Level of Education	N	Scores on Economic Empowerment	
		Mean	Std. Deviation
No Formal Education	206	52.90	7.40
Primary Education	286	59.20	7.60
Secondary Education	385	67.06	10.47
Tertiary Education	323	69.58	8.24
Total	1200	62.18	8.42

The descriptive statistics revealed generally that the educational attainment of respondents towards economic empowerment was high irrespective of their educational qualifications. However, the respondents that had tertiary education had more drive towards their economic empowerment than those who had secondary. This may be as a result of the fact that more opportunities seem to be available to them as graduates compared to those who had only secondary education. Those that had primary education had a mean score of 59.20 and standard deviation 7.60 while those that had no formal education were the least with a mean score of 52.90 and standard deviation of 7.40 their chances for economic empowerment appeared to be very limited. To determine whether significant influence exists between educational attainment and economic empowerment, Analysis of Variance statistics (ANOVA) was done.

Table 4: ANOVA in Influence of Education on Economic Empowerment

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	45271.83	3	15090.61	196.86	.00
Intercept	4405909.86	1	4405909.85	57480.88	.00
Level of Education	45271.83	3	15090.61	196.86	.00
Error	91679.48	1196	76.65		
Total	136951.31	1199			

Table 4 shows that there is significant influence of educational attainment on economic empowerment of women ($F= 196.86$, $P<0.05$) given 3 and 1196 degrees of freedom at 0.05 level of significance. Therefore, hypothesis one was rejected. This shows that women's educational attainment impacted significantly on their ability to achieve economic empowerment. Since there was significant influence of educational attainment on economic empowerment, further Post-Hoc analysis of data was done to determine which educational attainment level or category had higher significant influence on economic empowerment of women. The result of the analysis is presented in Table 5.

Table 5: Inter-Educational Comparison of the Mean influence Between Groups in Terms of Economic Empowerment

	No Formal Education	Primary education	Secondary education	Tertiary education
No formal education	-	-6.3	-14.16	-16.68
Primary education	14.16	-	7.86	-10.38
Secondary education	16.68	7.86	-	-2.52
Tertiary education		10.38	-2.52	-

Evidence from Table 5 shows that significant difference exists between respondents with no formal education and those with Primary Education (-6.29), Secondary Education (-14.16) and the Tertiary Education (-16.68) ($p<0.05$). Also significant differences were found between respondents who have primary education and those with no formal education, secondary education and tertiary education with mean difference of 14.16, -7.86 and -10.38 ($p < 0.05$). Furthermore, significant differences were found between respondents with secondary education and those with no formal education, primary education and tertiary with mean difference of 16.68, 7.86 and 2.52 ($p<0.05$). A significant difference also exists between respondents with tertiary education and those with primary education and secondary education with mean difference of 10.38 and 2.52 ($p< 0.05$). This further showed that respondents who had tertiary education had significant economic empowerment compared to those with lower educational attainment.

Hypothesis Two: Family size will not have any significant influence on economic empowerment of women.

The hypothesis was tested using a one- way Analysis of Variance (ANOVA) statistics. The results of the analysis are presented in Tables 6 and 7.

Table 6: Family Size and Economic Empowerment

Family Size	N	Scores on Economic Empowerment	
		Mean	Std. Deviation
1-2 Children	167	68.72	8.38
3-4 children	607	67.04	10.28
5 children and above	426	56.24	7.91
Total	1200	64	8.85

Evidence from Table 6 shows that out of 1200 respondents, 167 who had 1-2 children had the mean score of 68.72 for economic empowerment for women. 607 who had 3-4 children had the mean score and standard deviation of 67.04 and 10.28 respectively on economic empowerment of women, while 426 respondents who had 5 children and above had the mean score of economic empowerment of 56.24 with 7.91 standard deviation. A critical observation of the data above shows generally that irrespective family size of respondents their economic empowerment. However, the respondents that had 1-2 children had more drive towards women economic empowerment than those that had 5 children and above with a high mean score indicating that they have less constraint to achieve economic empowerment. To ascertain whether or not family size has significant influence on economic empowerment, test of between subjects effects was carried out and the result of the analysis is presented in Table 7.

Table 7: Influence of Family Size on Economic Empowerment of Women

Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	34612.36 ^a	2	17306.18	202.42	.00
Intercept	3692470.53	1	3692470.53	43191.84	.00
Family Size	34612.36	2	17306.18	202.42	.00
Error	102338.95	1197	85.49		
Corrected Total	136951.31	1199			

a. Significant at 0.05; df = 2 and 1197 ;F-cal=202.42; F-critical=2.61.

Evidence from Table 7 showed that the null hypothesis was rejected; this means that there is significant influence of family size on economic empowerment of women. (F-cal. 202.42, $P < 0.05$) given 2 and 1197 degrees of freedom at 0.05 level of significance. Therefore, hypothesis 4 was rejected. This shows that there is a significant difference between family size and women economic empowerment. Since there was significant difference between family size and economic empowerment, Further Post Hoc analysis of data was done to determine which family size category differs from the other in economic empowerment. The result is presented in Table 8.

Table 8: Mean Difference in Women's Economic Empowerment due to Family Size

(J) Family Size	(I) Family Size Scores on Economic Empowerment		
	1-2 Children	3-4 Children	5 Children and above
1-2 children	-	-10.80	-12.48
3-4 children	10.80	-	-1.68
5 and above	12.48	1.68	-

Table 8, for respondents who had 1-2 children, significant differences were found between those who had 3-4 children and 5 children and above with mean difference of -10.80 and -12.48 respectively ($p < 0.05$). This implied that the respondents with 5 children and above had a higher economic empowerment drive than those who had 1-2 children and 3-4 children. For those who had 3-4 children, significant difference was also found to exist between respondents who had 1-2 children, and 5 children and above with mean differences of 10.80 and -1.68 respectively ($p < 0.05$). This implied that respondents with 5 children and above had a higher economic empowerment than those who had 1-2 children. Table 8 further showed that significant difference exists between respondents with 5 children and above and those with 1-2 children and 3-4 children with mean differences of 12.48 and 1.68 respectively ($p < 0.05$). This implied that respondents with 3-4 children had a higher economic empowerment drive than those who had 1-2 children. The table above also shows that women that had 5 children and above had more economic drive than those that had less children.

Discussion, Conclusions and Recommendations

The findings indicated that a significant influence of educational attainment on economic empowerment of women does exist. This might due to the fact that education is one of the most important means of empowering any individual. In this case, it has been found to be a potent variable in equipping women with necessary skills to achieve economic empowerment. Education provides knowledge, skills and is a viable tool for transformation and developmental process of the nation. The findings might also be hinged on the assumption that functional education, in the provision of basic life skills empowers individual women to become self-sufficient. Apparently, the higher the educational attainment a woman acquires the wider the window of opportunities open for the attainment of economic empowerment. It increases women's chances of a wide range of job opportunities. The finding was in line with that of Mgbemere (2001) who found positive impact of education through the acquisition of vocational skills on improved economic empowerment of poor women in Lagos state. In her study, it was found out that adult education and vocational skills help improve the standard of living of poor women.

The findings on hypothesis four showed that large family size had significant impact on women's capability to pursue and build sustainable careers. The reason for this finding could be that some women with few children may have less responsibilities at home than women with many children. Other reasons could be that women with many children may be facing more family challenges which might affect the drive for economic empowerment. From the interview sessions, women cited having large family members to care for as one of the major constraints to building enduring careers. In support of this finding, Martin (1995), while Robert-Okah (2011) reported that the result of their study showed that family size played a vital role of rural women for their empowerment and it influenced all other variables. This is especially so when the children were very few, because they tend to have less challenges compared to women with large families. Sultana and Hasan (2010) supported the above findings. They found out that the fewer the children a woman had the higher her drive for economic empowerment as a result of spare time at her disposal.

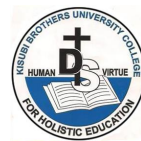
On the basis of the findings from the study, the following recommendations are made:

1. Government as well as educational agencies, Non-Governmental Organizations (NGOs) and the media should intensify efforts to ensure that the education of women and girls especially higher education and science education, receive full support and encouragement to enable the nation record great success in women's education.
2. Agencies Government through the Media publications should provide more enlightenment campaigns on family planning to encourage men and women to raise the number of children (family size) they can manage effectively. This will help women show more interest towards economic empowerment, as they will have more time for leisure and business.

References

- Abe, I. I. (1997). Gender and self-concept among selected Nigeria and American primary school children. *Journal of Studies in Education* 7, 1, 128-137.
- Agarwal, B. (2013). Gender and command over property: a critical gap in economic analysis and policy in South Asia. *World Development*, 22, 1455-1478.
- Ayobade, A. (2012). Gender differences and the influence of socio-cultural factors in accessing formal funds by small-scale entrepreneurs in Lagos state, Nigeria. An unpublished Ph.D. thesis submitted to the Department of Sociology, University of Lagos, Akoka, Lagos.
- Durkheim, E. (1973). *The rules of sociological methods*. New York: Free Press.
- Erinoso, S. (1994). *Girls and science education in Nigeria*. Report of a study prepared for the Rockefeller foundation. Monograph Series: Anglo International.
- Ezeigbo, T.A. (1996). *Gender issues in Nigeria: feminine perspective*. Lagos: Vista Books Limited.
- Federal Ministry of Education (2007). *Statistics of education in Nigeria 1999 –2005*. Abuja.

- Federal Ministry of Education. (2009). *Roadmap for the Nigerian education sector*. Abuja.
- Hall, C.M. (1992). *Women and empowerment: strategies for increasing autonomy*. Washington: Hemisphere Publishing Co.
- Hudson, W.W. (1982). *Index of self-esteem (ISE)*. The clinical measurement package: A field Manual. Chicago: Dorsey Press.
- Isichei, F. M. & Olufowobi, O. O. (2005). *An introduction to philosophical foundations of education*. Lagos: Virtuoso Ventures.
- Martin, J. & Roberts, C. (1995). *Women and employment; a lifetime perspective*, London: HMSO.
- Merton, R. K. (1968). *Social theory and social structure*. New York: The Free Press.
- Mgbemere, N. M. (2001). *Study of women's empowerment potentials in adult education programmes in Lagos state*. Unpublished Ph.D. Thesis, University of Lagos.
- Moore, R. (2004). *Education and society. Issues and explanations in the sociology of education*. Cambridge: Polity Press.
- Ogundipe A. (2002). Power in gender discourse. In C. E. Ukhun, (Ed.). *Critical gender discourse in Africa (31-44)*. Ibadan: Hope Publications Limited.
- Oni, A. A. (2005). Theories of sociology and their relevance to educational system. *Guru Nanak Journal of Sociology. India: Guru Nanak Development University*. 26(1), 1-15.
- Oni, A. A. (2008). The sociological foundations of reforms in education. *Nigerian Journal of Sociology of Education* 11, 2.78-81.
- Parsons T. (1949). *The structure of social action*. New York: McGraw-Hill.
- Ritzer, G. (1993). *Contemporary sociological theories*. New York: McGraw-Hill.
- Robert-Okah, I. (2011). Gender Equity and women empowerment in Nigeria: a paradigm for national development. *Journal of International Gender Studies*. 6, 167-179.
- Sultana S. & Hasan, S.A. (2010). Impact of Micro-Credit on Economic Empowerment of Rural Women. *Scientific Journal of Krishi Foundation* 8(2): 43-49
- The UNESCO Courier (2005). *Women's long march to power; no progress without a secular society*. New York: UN
- Thio, A. (2003). *Sociology*. Pearson Education INC USA 252-256.
- Udeani, U. (2003). *Increasing female participation in science and science careers in the 21st century: problems and suggestions, interventions from Nigeria*. Proceedings of the pan African women in science and engineering. A vision for the 21st century November 29 –December 4th 1999, Kenya: Nairobi.
- UN Report (2005). *The millennium development goals report*. New York: United Nations.
- World Economic Forum (2007). *The global gender gap report*, Geneva, Switzerland: World Economic Forum.



Teamwork and Research Output in Universities in Uganda

Edith Namutebi ¹

Abstract. African universities are lagging behind other universities as far as research output is concerned. The available literature, however, attributes this comparatively slow progress to insufficient research funding and infrastructure. Not much attention has been paid to the level of teamwork among the universities' researchers and it explains this phenomenon. Therefore, the purpose of this paper is to clarify this situation based on the analysis of questionnaire data collected from a comparative correlational field survey that involved 236 lecturers and 379 postgraduate students conveniently selected from 18 randomly selected universities in Uganda. The data is analysed using descriptive, t-test, factor analysis, correlation and linear regression methods. Findings indicate that the level of teamwork is negligible among Ugandan university lecturers and postgraduate students involved in research; and it does not significantly differ across the public and private universities. The level of research output is also low and does not significantly different across the two types of universities. There is a strongly positive and significantly predictive relationship between the level of teamwork and the level of the universities' research output. This relationship suggests that improving teamwork among the lecturers and students conducting research translates in significant increase in the level of the universities' research output. The paper is hence ended by making recommendations urging the universities' management to adopt a research policy that encourages teamwork among the lecturers and students involved in research.

Keywords: Teamwork; Performance management; Higher education.

Introduction

Despite having an appreciable number of highly cerebral academics and scholars, African universities are still grappling with the challenge of conducting and publishing research to a level, which matches that of their counterparts in other

¹ Mutesa I Royal University

Address Correspondence to:

Edith Namutebi, Mutesa I Royal University, P. O. Box 14002 Mengo, Kampala, Uganda. E-mail: edithnamutebi29@gmail.com.

continents (Cloete & Maassen, 2015; Maassen, 2015; Harle, 2013; Lee, 2013; Hessels & van Lente, 2008; Brint, 2005). Harle (2010) provides insightful illustrations of this challenge by indicating that in the past decade, the total annual research output from African universities stood at 27,000 published papers per year, but these papers were equivalent to those published by only universities in Netherlands. Harle (2010) adds that during this decade, African universities' share of global research (measured in terms of published articles) even declined steadily from 31% in 1996 to only 0.7%. These statistics are substantiated in the work of Urama, Swilling and Acheampong (2013) and Adams, King and Hook (2010). The statistics do not include unpublished research as well as research published in printed and recognizable local journals (Harle, 2010), but they suggest that as far as the production of internationally publishable research is concerned, African universities are lagging behind other universities.

Universities in Uganda are not an exception. The available literature indicates that these universities have not contributed significantly to the global research output (Musige & Maassen, 2015; Okori, 2011; Hydén, 2006). The universities have not made a significant contribution even at the African level, especially when they are compared to the universities in South Africa and Kenya (Harle, 2010). This literature however, attributes such insignificant contribution to inadequate research funding. Other explanatory factors identified by other authors include insufficient research infrastructure, poor stewardship of research resources, and failure of the top university management to translate their inspiring speeches about the need to invest in research into budgetary reality (Musige & Maassen, 2015; Lee, 2013; Kellerman, Klipstein-Grobusch, Weiner, Wayling & Fonn, 2012; Kariuki, 2009; Hessels & van Lente, 2008; Kayongo, 2007). These are not the only factors.

Harle (2013, p.1) indicates that, "While insufficient public investment pushes some universities into serious difficulties, and while a lack of research grants makes it difficult for researchers to undertake new work, the obstacles to research output are more than financial; the ways in which research is managed at institutional level is also critical." Cloete, Maassen and Bailey (2015) add that African universities' insignificant contribution to global research output is not only as a result of lack of capacity and resources. It is also as a result of a complex set of factors. However, the main factor that Cloete *et al.* (2015) point out involves a fundamental lack of a strong output-oriented research culture. In general, a scrutiny of the literature on the factors that explain African universities' insignificant contribution to global research output reveals that it does not pay much attention to teamwork. Where the literature covers teamwork, attention is put on teams that academics form to compete for and conduct externally sponsored research projects (Ddumba-Ssentamu, 2013). It also covers teamwork needed by lecturers to ensure that students are prepared to graduate in time (Nassuna, 2013). Teamwork as a factor explaining the insignificant contribution of African universities to the international research output or not covered. It is therefore necessary to cover this area.

The need to investigate teamwork is based on other sources of literature that have since 1956 shown that it is one of the factors that enhances the conducting of research and publication of research output (Turégano, 2015; Johnson *et al.*, 2012; Ruvinsky, 2011; Bush & Hattery, 1956). According to Hoegl and Gemuenden (2001), the success of any research undertaking is accelerated when teamwork is involved. Indeed, following the gestalt principle that the whole is greater than the sum of its parts (Farrands, 2012), teamwork facilitates sharing of research activities in a collaborative and cohesive manner, which creates synergistic contribution to the research output eventually realized (Yeager & Nafukho, 2012). Frimpong and Agyemang (2010) articulate it better, stating that teamwork makes complex research and innovation undertakings easier by facilitating their partitioning into relatively simpler activities that can be jointly executed by team members according to their different but complimentary research skills and knowledge. In so doing, teamwork creates synergy and efficiency both of which translate into taking much less time to produce research output that is qualitatively and quantitatively much more than the research output that would have been produced by the team members as individuals (Leviss, 2014; Culotta, 1993). Therefore, when a university does not contribute much to the global research output, questioning and investigating the level of teamwork among its researchers becomes inevitable.

Besides falling short of explaining the level of teamwork among researchers in Ugandan universities and how this level relates to the universities' research output, the available research also measures the research output in relative terms and at international level. Whereas these measures are relevant in terms of comparing and ranking universities internationally, they fall short of indicating the exact level of research output produced at the university level. Yet a university's research output can be significant in absolute terms even when it is insignificant in relative terms (Mamdani, 2011). For instance, many universities in Europe and America produce a significant amount of research output at the individual level, but this output becomes insignificant when it is compared to that produced by Cambridge and Oxford universities in Europe and Harvard, Stanford and Yale in America (Ratcliffe, 2015; Paton, 2014; Ontario Confederation of University Faculty Associations, 2013; Musick, 2011). Therefore, the available literature poses the need to establish the level of research output produced at the university level and by the very universities' researchers and academics. Consequently, the purpose of this paper is to establish the perceived level of research output produced by Ugandan universities, the level of teamwork that exists among the universities' researchers and the relationship between these variables. This purpose is achieved by meeting three specific objectives, which include establishing the (a) perceived level of research output produced by Ugandan private and public universities; (b) the level of teamwork among researchers in these universities; and (c) the relationship between the level of research output and level of teamwork among researchers in universities in Uganda.

Theoretical and Literature Review

Different theories have been developed to explain the role of teamwork in boosting human performance, efficiency, effectiveness and output (Caya *et al.*, 2013; Tasa *et al.*, 2009; Gündüz, 2008; Cooke & Gorman, 2007; Kandula, 2006; Sycara & Sukthankar, 2006; Paris *et al.*, 2000). This paper is however, underpinned by the rationale of Belbin's team roles theory. This theory was developed following a combined role- and personality-oriented approach based on the idea that what is needed is not well balanced individuals, but individuals who balance well with each other (Belbin, 1993). The balancing that this theory stresses is not in terms of individuals as human beings; it is in terms of roles they play in a complementary manner that reinforces work or task performance, thereby leading to greater output (Belbin, 2007). The roles specified by this role are nine, including plant, specialist, monitor/evaluator, implementer, sharper, completer/finisher, team-worker, coordinator, and resource investigator (Belbin, 1993, 2004, 2007). Belbin (1993) explains that the plant is a role needs a person who is creative, imaginative, unorthodox, and can solve difficult problems. The specialist role needs a single-minded, self-starting, dedicated person who is capable of providing knowledge and skills in rare areas. The monitor/evaluator role requires a person who is sober, strategic, discerning, sees all options, and judges accurately. The implementer role requires a person who is disciplined, reliable, conservative and efficient at turning ideas into practical actions.

Belbin (2004) goes on to explain that the sharper is a role that requires a challenging, dynamic person who has the drive and courage to overcome obstacles, and who also thrives on pressure. The completer/finisher is a role that requires a person who is painstaking, conscientious, anxious; who searches out errors and omissions, and delivers on time. The team-worker is a role played by a person who co-operative, mild, perceptive and diplomatic, and who is also able to listen, build team cohesiveness by averting friction. The coordinator role requires a person who is mature, confident, and good at chairing, clarifying goals, promoting decision-making, and at delegating. The resource investigator is role that requires a person who is extroverted, enthusiastic, communicative, and who is also able to explore opportunities and to develop contacts. Belbin (2007) maintains that team is effective and efficient when it is formed by ensuring that members can play all the nine roles effectively. He adds that the roles should not be confused with the number of team members. While the roles are nine, they can be played by a less number of team members, depending on the task at hand (Belbin, 2011).

After scrutinizing all Belbin's nine roles critically, Danilo, Sirias and Brotherton (2007) proposed three people, indicating that each of the first three roles (plant, specialist and monitor/evaluator) can be played by a cerebral person. Each of the second three roles (implementer, sharper and completer/finisher) can be played by an action-oriented person, and each of the last three roles (team-worker, coordinator and resource investigator) can be played by a people-oriented individual. This reclassification of Belbin's roles fits well with the roles that tend to

be played by researchers who work as teams (Nyden, nd; Leviss, 2014). Gündüz (2008) agreed with the reclassification, arguing that an effective team does not have to always be made up of nine people as Belbin's roles may seem to suggest. The roles can be carried out by three people as long as one of them is cerebral, another is action-oriented and another people oriented. The work of Yeager and Nafukho (2012) and Sycara and Sukthankar (2006) indicate that the roles can also be played by two versatile people as long as one of them has the cerebral component and another is endorsed in being action-oriented, and as long as these two persons are effective and efficient in their respective roles. This is illustrated by Caya *et al.* (2013) by citing effective virtual teams, and arguing that these teams need much less of a people-oriented role because they do not involve physical personal interaction between team members.

In fact, Leviss (2014) indicates that working as part of a collaborative research team gets easier the less the number of team members and it gets harder the larger the number of team members becomes. Working as a team requires members to compromise, check their egos, and listen to colleagues' suggestions and opinions, which may sometimes be at variance with their own. These challenges get harder to overcome the larger the number of team members becomes. Accordingly, Leviss (2014) recommends small teams if effective and efficient teamwork is to be realised. It should be noted that while the preceding literature indicates how individuals can work together as an effective and efficient team, they do not describe teamwork that drives the effectiveness and efficiency, especially in the area of producing research output.

Research Output

Research output refers to the products realised from the process that involves the creation of new knowledge, the use of existing knowledge or the synthesis and analysis of previous research in a new and creative way that leads to development of new concepts, designs, methodologies, understandings (Australian Research Council, 2015) and applications (Ssebuwufu *et al.*, 2012). In universities, research outputs are usually produced by academics and students either as individuals or as groups or teams (Butler & McAllister, 2009; Archambault, 2006). These outputs fall into two broad categories, namely the traditional and the non-traditional research output. While the traditional category is sometimes referred to as eligible research output, the non-traditional category is sometimes referred to as creative works (European Science Foundation, 2011a; Archambault, 2006).

Traditional research outputs include innovations contributed to the progress of society (Bornmann, 2012) as well as authored research or books that not only contain critical scholarly texts, new interpretations of historical events and new ideas or perspectives based on established research findings but also have an International Standard Book Number (ISBN) (Bornmann & Mutz, 2011). These outputs also include chapters in ISBN research books, that is, chapters that consist of a substantial amount of new knowledge or empirical findings contributing to an

edited book or to a compilation whose content has been subjected to editorial scrutiny and is on sale either in hard bound copies, CD-ROMs, packaged, and/or in e-books on subscription or fee basis (Cronin & La Barre, 2004). The other research outputs include referred and scholarly journal articles (European Commission, 2010).

Journal articles are those published in one of the internationally recognized (ranked) journals after being peer reviewed by qualified experts who are independent of the author (Butler & McAllister, 2011). Journal articles that are regarded as research output include commentaries and communications of original research, research notes, letters to journals provided they satisfy the definition of research, critical scholarly texts which appear in article form, articles reviewing multiple works or an entire field of research, invited papers in journals, articles in journals which are targeted to both scholars and professionals; and articles in a stand-alone series (Mutz *et al.*, 2012; European Science Foundation, 2011b). It should be noted that the following articles tend not to qualify as research output: letters to the editor, case studies, articles designed to inform practitioners on existing knowledge in a professional field, articles in newspapers and popular magazines, editorials, book reviews; and brief commentaries and communications of original research (Huang & Chang, 2008). Conference publications are another indicator of research output. Those that qualify as research output must meet the definition of research, should have been presented at conferences, workshops or seminars of national or international significance, and should be peer-reviewed and published in full in different formats such as in volumes of proceedings, a special edition of a journal, a normal issue of a journal, a book or a monograph, CD- or DVD-ROM or conference or organizational website (Gonzalez-Brambila & Velosos, 2007). Conference publications that are not considered as research output include: keynote addresses, plenary addresses, participation in discussions as a panel member, poster presentations, facilitators' presentations at workshops or conferences, abstracts of conference publications, and papers that appear only in a volume handed out to conference participants (Huang & Chang, 2008).

As far as non-traditional research or creative works are concerned, outputs include original creative works such as paintings, designs, compositions, choreography, plays, or pieces of writing (e.g. novels, book reviews and/or articles in periodicals) that are in the public domain (Schwab & Borgdorff, 2014; Huang & Chang, 2008). Research outputs also include live performance of creative works, recorded creative works, and substantial public exhibitions and events (Gonzalez-Brambila & Velosos, 2007). The exhibition of an original creative work can be used to demonstrate that the work is in the public domain but each instance of such an output can only be claimed once (Butler & McAllister, 2011). This suggests that multiple exhibitions of the same work cannot be counted as multiple research outputs.

Generally, the preceding literature indicates that research outputs produced by universities include books published in soft and hard copies and with an ISBN, chapters in these books, peer-reviewed journal articles, peer-reviewed conference

publications, and original creative works such as paintings, designs, compositions, choreography, plays, or pieces of writing. It also shows that research output involves new knowledge or innovations that benefit society practically. Literature however, is generally descriptive implying that it does not delve into how the level of these various forms of research output relates to the level of teamwork exhibited among the producers (researchers), particularly those in Ugandan universities.

Teamwork

Teamwork is defined differently, but as a concept, it connotes a process by which two or more well-blended individuals work collaboratively, cooperatively, jointly, and cohesively in order to achieve a goal much more efficiently and effectively than when they work as individuals (West, 2012; Xyrichis & Ream, 2008; Baker *et al.*, 2006). Teamwork occurs when at least two individuals cooperate or work well together by combining their skills, knowledge and experience to accomplish a common task (Salas *et al.*, 2008). Teamwork prevails when each individual is contributing positively but differently to a joint effort intended to achieve a common goal (Salas *et al.*, 2005). This suggests that teamwork does not mean a situation where individuals are working together, but contributing same skills, knowledge, and same experience. Xyrichis and Ream (2008) refer to this situation as duplication of work. Teamwork is depicted in a number of indicators.

According to Denton (2007), the most conspicuous of these indicators is cohesion of skills and knowledge. This indicator involves more than one individual pooling their different but complementary competencies together in order to accomplish a joint task or to achieve a common goal. Another indicator of teamwork is open communication between two or more individuals, involving exchanging of ideas and feedback for the purpose of keeping a constant flow of information that the individuals need from one another in order to contribute optimally to the joint effort required to accomplish the task and realise the intended output (Kelbaugh & Earnest, 2008). Another indicator of teamwork is coordination that is purposeful in terms of ensuring not only that individuals involved in task planning and execution are contributing required skills and knowledge and effort in a harmonised manner, but also that they are progressing jointly together toward a common goal (Baker *et al.*, 2006).

According to DeChurch and Mesmer-Magnus (2010), teamwork is also manifested in terms of mutual support, that is, in terms of individuals reinforcing each other in order to accomplish a joint task. Williams (2002) refers to mutual support as the essence of teamwork, describing it as that which protects team members from work overload, errors and omissions associated with the joint task as well as other aspects that tend to reduce effectiveness and efficiency. Chong (2007) and Hoegl and Gemuenden (2001) indicate that indicator of teamwork as balance of contributions. Balance of contributions refers to a situation where individuals involved in execution of a joint task make an effort to equalize their

inputs (energy, skill, knowledge, time and other inputs) (Roberts, 2002). Specifically, individuals involved in research and innovation projects can balance their contributions by balancing the cerebral and action-oriented efforts required to conduct concept development, collection and analysis of necessary data, and discussion of implications and significance of the research (Mutz *et al.*, 2012). It is noted that the reviewed observations explain teamwork and its various indicators, but they neither cover the level of teamwork exhibited by researchers nor its relationship with the research output produced by Ugandan universities.

Teamwork and Research Output

Despite being one of the frequently spoken terminologies in the research world, teamwork has attracted relatively few studies, especially those that relate it to the research output produced by university academics and students. One of these studies was conducted by Johnson *et al.* (2012). This study is based on student and staff perceptions of teamwork in group writing for science honours. According to this study, teamwork plays a significant role in promoting scientific research, without teamwork there is no collaborative effort, which is crucial in making the conducting and writing of research easier and faster to accomplish. This collaboration is encouraged by enabling some of the team members to research and construct a scientific literature review suitable for publication in a peer-reviewed journal, others to develop research tools, others to collect data and others to analyse and interpret the findings (Marin-Garcia & Lloret, 2008).

According to the Association of University Teachers (2003), teamwork enables team members to complement each other in terms of research skills and effort, and this accelerates the research process and leads to enhanced quality of research output. According to Dudovskiy (2012), teamwork builds morale and actually results in getting greater output while using combined resources that would have resulted into less output when used individually. Teamwork encourages members to try their best in any circumstance. By encouraging cohesion, it minimises the weaknesses of individual researchers by replacing them with strengths of their colleagues, and in so doing, it enables the researchers to solve complex research problems, leading to greater research output (Culotta, 1993). In fact, the study of Marilin (2014) indicates that academic research output in medicine depends significantly on the level of teamwork among the involved researchers. Similar observations appear in the work of Rey-Rocha *et al.* (2006), Martín-Sempere *et al.* (2002), Carayol and Matt (2004), Lynn and Reilly (2000). The study of Rey-Rocha *et al.* (2002) indicates that in the absence of teamwork, university researchers do not realise significant research output. Since none of these studies was conducted about universities in Uganda, this paper intended to establish whether their observations are also valid among the researchers of these universities.

Methodology

A comparative correlational field survey was used to collect and analyse the data that was needed not only to establish and compare the levels of research output

and teamwork among researchers in Ugandan private and public universities but also establish the relationship between these levels. The data was collected using a structured questionnaire administered to these universities' academic staff and postgraduate students. The parent population, expected and actual sample sizes were determined as shown in Table 1.

Table 1: Sample Size Determination

Category	Parent Population	Expected Sample**	Actual sample	Response rate (%)
Universities	36*	35*	18*	51.4*
Lecturers	7676	367	236	64.3
Students	140087	384	379	98.7
Total	147763	751	615	81.9

* Not included in the total. ** Based on Krejcie & Morgan (1970)

Source: Uganda Bureau of Statistics (2014).

The population in Table 1 was considered appropriate for this study because much of the research in most of the universities in Uganda is conducted by lecturers and students. As far as students were concerned, the sample was restricted to postgraduate students because these students have to conduct research as part and parcel of their academic programme. Convenience sampling was used to select all the respondents according to their availability, accessibility and willingness to participate in the study. The universities from which these respondents were selected were themselves selected using stratified and simple random sampling techniques. Stratified sampling helped to partition all the 36 universities that were in operation at the time of data collection into two categories, namely (i) public universities, (ii) private universities. After stratification, simple random sampling was used to select universities from each stratum using a rotary method. This was intended to give each university an equal chance of participating in the study. While 35 universities were expected to participate in the study, 18 (51.4%) universities responded. These included four out of the six public and 14 private universities out the 30 private universities that were in operation at the time of data collection.

Data was collected using self-administered questionnaire because by virtue of their educational standards, all the selected lecturers and students were literate enough to read and respond to the questions in writing. The questionnaire was tested for validity using the Content Validity Method, and for reliability using the Cronbach Alpha coefficient method of internal consistency. The computed validity index was .896 and the Alpha was .832. This index and coefficient were greater than the 0.7, the required minimum threshold (Amin, 2005). Therefore, the items in the questionnaire were valid and reliable enough to collect accurate and dependable data. The data was analysed using descriptive, the t-test, correlation and linear regression techniques using the SPSS program.

Findings

The first objective of the paper was to establish the perceived level of research output produced by Ugandan private and public universities. This level was ascertained by asking the selected lecturers and students to use the Very High (5), High (4), Average (3), Low (2) and Very Low (1) response scale to rate the various indicators of research output as they applied to their universities. Descriptive and t-test analysis of the ratings led to findings summarized in Table 2.

Table 2: Mean Perception of Level of Research Output by Type of University

Indicators of research output		Public	Private	t	Sig.
Contribution of research conducted at the university to new applications and solutions used in society	Lecturers	1.60	1.57	1.010	.519
	Students	1.58	1.54		
Number of research-based books published online, CD-ROMs or in hard copy with an ISBN	Lecturers	2.07	1.59	1.022	.508
	Students	1.63	1.56		
Number of chapters edited and published in research-based books with an ISBN	Lecturers	1.77	1.54	1.019	.509
	Students	1.65	1.64		
Number of paper/articles published in peer-reviewed journals with recognised international impact rating	Lecturers	2.37	2.04	1.088	.504
	Students	1.61	2.34		
Number of paper/articles published in peer-reviewed journals recognised nationally	Lecturers	2.49	2.20	1.080	.506
	Students	2.41	1.52		
Number of research papers published in professional journals	Lecturers	2.12	1.51	0.891	.700
	Students	1.67	1.53		
Number of peer-reviewed conference/ workshop papers published in international proceedings	Lecturers	2.30	1.57	0.128	.770
	Students	1.68	1.50		
Number of peer-reviewed conference/workshop papers published in national proceedings	Lecturers	1.70	1.53	1.091	.502
	Students	1.89	1.56		
Pieces of creative writings (e.g. novels, articles in periodicals) in public domain	Lecturers	2.30	2.14	1.077	.505
	Students	1.62	1.55		
Number of research and innovation awards won	Lecturers	1.77	1.50	1.107	.400
	Students	1.78	1.54		
Number of live performance of new creative works (plays, music etc.)	Lecturers	1.61	2.22	1.267	.206
	Students	1.66	1.51		
Overall perception	Lecturers	1.50	1.54	1.173	.350
	Students	1.54	1.64		

The levels of significance (Sig.) in Table 2 were all greater than the .05 level of significance. This implies that none of the corresponding t-values was significant. Therefore, there was no significant difference in the level of research output produced by lecturers and students in the public and private universities of Uganda. A close analysis of the mean values reveals that all of them were close to '2'. This implies that both the lecturers and students indicated that the level of research output produced by their universities was low.

The second objective of the paper was to establish the level of teamwork among researchers (lecturers and students involved in research) in Ugandan universities. This objective was met by asking respondents to use the Very often (5), Often (4), Sometimes (3), Rarely (2) and Very rarely (1) to indicate their opinion on the different indicators teamwork. Descriptive and t-test results obtained from the responses are presented in Table 3.

Table 3: Perception of level of teamwork among researchers by university types in Uganda

Teamwork indicators	Respondents	Mean perception by university type		t	Sig.
		Public	Private		
Research for career development is conducted at the university by pooling complementary research skills	Lecturers	2.30	2.37	0.109	.417
	Students	1.58	1.54		
Students are encouraged to conduct their research in groups constituted according to their research competencies	Lecturers	2.04	1.69	0.028	.808
	Students	1.64	1.66		
Research for career growth is conducted through cooperative efforts	Lecturers	1.67	1.84	0.039	.803
	Students	1.68	1.74		
Communication involving exchange of ideas and feedback is encouraged in conducting research at the university.	Lecturers	1.57	2.05	0.045	.802
	Students	1.68	2.38		
When conducting research, team members assigned the different research activities are well-coordinated.	Lecturers	2.43	2.26	0.033	.806
	Students	2.46	1.82		
When conducting research at the university, those involved mutually support each other.	Lecturers	2.32	1.58	0.591	.244
	Students	1.77	1.83		
All research conducted at the university accomplished based on a balance of contributions from those involved.	Lecturers	2.33	1.55	0.721	.270
	Students	1.61	1.56		
Overall perception	Lecturers	2.09	1.91	0.173	.356
	Students	1.77	1.79		

The levels of significance in Table 3 were all greater than the .05 level of significance. This implies that the corresponding t-values were not significant. Therefore, the perceived level of teamwork displayed by researchers in universities in Uganda did not significantly differ whether the university was public or private. The analysis of the mean values reveals that almost all of them were close to '2'. This indicates that whether the universities' researchers were lecturers or students, teamwork was rare among them. This suggests that the level of teamwork was negligible among researchers in Uganda's public and private universities.

The third objective of the paper was to establish the relationship between the level of research output and level of teamwork among researchers in universities in Uganda. This relationship was established after using the SPSS to conduct factor analysis so as to identify the significant components of these variables. The significant components of level of research output (the global component) included research benefits to society, peer-reviewed publications, and creative works in public domain. The significant components of level of teamwork (the global component) included cohesion of research competencies and collaboration. Using the SPSS, cross-tabulation involving the Pearson method of correlation was conducted on these components. Findings are shown in Table 4.

Table 4: Level of Teamwork and Research Output

Independent variables	University types	Research benefits to society	Correlation (r) with dependent variables		
			Peer-reviewed publications	Creative works in public domain	Overall level of research output
Cohesion of research competencies	Public	.662**	.882**	.674**	.752**
	Private	.655**	.761**	.668**	.807**
Collaboration	Public	.701**	.714**	.624**	.756**
	Private	.721**	.696**	.575**	.632**
Overall level of teamwork	Public	.703**	.787**	.689**	.686**
	Private	.706**	.789**	.668**	.797**

** Correlation is significant at the 0.01 level (2-tailed).

All the correlations in Table 4 are positive and significant. This implies that all the variables related positively and significantly. In particular, the correlation between the overall level of teamwork and the overall level of research output is $r = .686$ for public universities and $r = .797$ for private universities. These correlations indicate that the relationship between the level of teamwork among the universities' research students and lecturers and the level of the universities' research output was strongly positive and significant. After establishing this kind of relationship, linear regression analysis was conducted to ascertain whether it was predictive. Findings are summarised in Table 5.

Table 5: Prediction of student indiscipline by student mentoring by types of universities in Uganda

				Predicted Statistics on the Dependent variable (Level of research output)								
Predictor: teamwork	Level	of	Type of university	Std Error	Beta	t	Sig.	R ²	Adjusted R ²	F	Sig.	Std. Error of Estimate
(Constant)				.222		9.899	.000	.697	.695	117.370	.000	.011
Cohesion of competencies	research		Public	.003	.502	7.765	.000					
			Private	.050	.463	7.681	.000					
Collaboration			Public	.102	.473	4.695	.000					
			Private	.079	.441	5.499	.000					

From Table 5, the magnitudes of the standard errors and the standard error of the estimate were small. This suggests that linear regression was largely appropriate to estimate the results in the table. The level of significance (Sig. = .000) indicates that the corresponding F-value ($F = 117.370$) was significant at the .01 level of significance (Sig. = .000 < .01). Therefore, the corresponding Adjusted R-Square value indicates that the level of teamwork predicted the level of research output in Uganda's public and private universities by a significant 69.5% (Adjusted $R^2 = .695$). This reveals that the relationship established in Table 4 was significantly predictive. The Beta coefficients in Table 5 reveal that the two components of teamwork were individually significant predictors of the level of the universities' research output. Specifically, cohesion of research competencies predicted a significant 50.2% of the level of the research output of Uganda's public universities (Beta = .502, $t = .7.765$, Sig. = .000 < .01) and collaboration predicted this level in the same universities by a significant 47.3% (Beta = .473, $t = 4.695$, Sig. = .000 < .01). Other beta coefficients are similarly interpreted.

Discussion, Conclusions and Recommendations

The strongly positive (Table 4) and significantly predictive (Table 5) relationship established between the level of teamwork and level of research output implies that these two variables vary in the same direction. This suggests that improving the level of teamwork among the researchers (lecturers and students) of the public and private universities in Uganda translates into significant improvement in the level of the universities' research output. Therefore, the findings concur with the observations made by Turégano (2015), Johnson *et al.* (2012) and Ruvinsky (2011) that teamwork contributes significantly to the research output produced by universities. The findings also support Hoegl and Gemuenden (2001) who found out that the success of any research undertaking is accelerated when teamwork is involved. It is therefore imperative that universities in Uganda pay attention to promoting teamwork amongst their researchers.

The need to promote such teamwork is evident in findings in Table 3. These findings reveal that teamwork is rare among the universities' researchers, be they lecturers or students. These researchers rarely carry out research based on cohesion of their research skills and competences. They rarely collaborate and support each other mutually. They also do not share among each other through open communication of research ideas and feedback. Clearly, these findings suggest that the level of teamwork among these researchers is negligible. At the same time, their level of the research output is low (Table 2). The number of research-based books, peer-reviewed journal and conference publications is low (Table 2). In the light of the established strong positive relationship, it is evident that the negligible level of teamwork among these researchers explains the low level of the research output they produce. Therefore, the need to encourage teamwork among these researchers cannot be overemphasised. The findings in

Table 5 indicate that significant improvements are bound to be realised in the level of research output when emphasis is placed on improving collaboration based on cohesion of the research competencies of all the researchers in these universities.

The management of the public and private universities should improve teamwork among the lecturers and students involved in research. This can be realised by adopting a research policy that:

1. Encourages collaboration among lecturers who get involved in research for career development, and the cooperation should be based on cohesion of research skills.
2. Encourages formation of effective research teams among lecturers
3. Replaces research conducted by postgraduate students as individuals by research that should be carried out by students as groups based on a balance of contributions.

References

- Adams, J, King, C., & Hook, D. (2010). *Global research report, Africa*. African Economics Research Consortium. [Online]. Retrieved on May 28, 2015 from <http://www.aercafrica.org/programmes/training.asp>
- Association of University Teachers. (2003). *Building the academic team: A report on the contribution of academic-related staff to the delivery of higher education*. London: Association of University Teachers.
- Australian Research Council. (2015). *Excellence in research for Australia: ERA 2015 Submission Guidelines*. Commonwealth of Australia. [Online]. Retrieved on June 3, 2015 from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=0CDMQFjAD&url=http%3A%2F%2Fwww.arc.gov.au%2Fpdf%2FERA15%2FERA%25202015%2520Submission%2520Guidelines.pdf&ei=pIBuVeX4J4PiUZaRgMAB&usg=AFQjCNH54AY5VGhQoVW_AGQsLMRPtBYsA&bv m=bv.94911696,d.d24
- Baker, D.P., Day, R., Salas, E. (2006). Teamwork as an essential component of high-reliability organizations. *Health Services Research*, 41 (4): 1576–1598.
- Baker, D.P., Salas, E., King, H., Battles, J., & Barach, P. (2005). The role of teamwork in the professional education of physicians: Current status and assessment recommendations, *Journal on Quality and Patient Quality*, 31(4): 185-202.
- Belbin, R.M. (1993). *Team roles at work*. Heinemann: Butterworth.
- Belbin, R.M. (2004). *Management teams: Why they succeed or fail*. (2nd Ed.). Heinemann Butterworth: Elsevier.
- Belbin, R.M. (2007). *Management teams: Why they succeed or fail*. (3rd Ed.). Heinemann Butterworth: Elsevier.

- Belbin, R.M. (2011). Size matters: how many make the ideal team? *News and Updates*. [Online]. Retrieved on June 1, 2015 from <http://www.belbin.com/rte.asp?id=73&pressid=31>
- Brint, S. (2005). Creating the future: New directions in American research universities. *Minerva*, 43(1): 23–50.
- Bush, G.P., & Hattery, L.H. (1956). Teamwork and creativity in research. *Administrative Science Quarterly*, 1(3): 361–372.
- Carayol, N., & Matt, M. (2004). Does research organization influence academic production? Laboratory level evidence from a large European university. *Research Policy*, 33: 1081–1102.
- Caya, O., Mortensen, M., & Pinsonneault, A. (2013). Virtual teams demystified: An integrative framework for understanding virtual teams. *International Journal of e-Collaboration*, 9(2): 1–33.
- Chong, E. (2007). Role balance and team development: A study of team role characteristics underlying high and low performing teams. *Journal of behavioural and applied management*, 8(3): 202–217
- Christensen, H.P. (2008). Interdisciplinary just-in-time teaching, active learning in a multicultural setting. Paper presented at the ALE workshop, Bogotá, Colombia, June 9–11.
- Cloete, N., & Maassen, (2015). Roles of universities and the African context. In Cloete, N., Maassen, P., & Bailey, T. (eds.), *Knowledge production and contradictory functions in African higher education*. Cape Town: African Minds.
- Cloete, N., Maassen, P., & Bailey, T. (eds.) (2015). *Knowledge Production and Contradictory Functions in African Higher Education*. Cape Town: African Minds.
- Cooke, N., & Gorman, J. (2007). Assessment of team cognition. In Karwowski, P. (Ed.). *International Encyclopaedia of Ergonomics and Human Factors*. Taylor and Francis Ltd.
- Culotta, E. (1993). Teamwork is key to solving complex research problems. *The Scientist*. [Online]. Retrieved on May 27, 2015 from <http://www.the-scientist.com/?articles.view/articleNo/16982/title/Teamwork-Is-Key-To-Solving-Complex-Research-Problems/>
- Ddumba-Ssentamu, J. (2013). *Strengthening public universities to generate knowledge and promote research uptake for national and regional development: Revised concept note for the Makerere-Sida bilateral research programme 2015–2020*. Kampala: Makerere University.
- DeChurch, L.A., Mesmer-Magnus, J.R. (2010). The cognitive underpinnings of effective teamwork: a meta-analysis. *Journal of Applied Psychology*, 95 (1): 32–53.
- Denton, D.K. (2007). Developing a performance measurement system for effective teamwork. *International Journal of Quality and Productivity Management*, 7(1): 28–38.
- Dudovskiy, J. (2012). *Importance of teamwork*. [Online]. Retrieved on June 3, 2015 from <http://research-methodology.net/importance-of-teamwork/>
- Farrands, B. (2012). A gestalt approach to strategic team change. *OD Practitioner*, 44(4): 18–23.

- Frimpong, S.K., & Agyemang, B.A. (2010). *Research on the role of teamwork in innovation management within manufacturing companies in China*. 2010 International Conference on Management and Service Science. [Online]. Retrieved on May 25, 2015 from <http://ieeexplore.ieee.org/xpl/articleDetails.jsp?reload=true&arnumber=5575868>
- Gündüz, H.B. (2008). An evaluation on Belbin's team roles theory: The case of Sakarya Anatolian Profession High School, Profession High School and Vocational High School for Industry. *World Applied Sciences Journal*, 4 (3): 460-469
- Harle, J. (2010). *Growing knowledge: Access to research in east and southern African universities*. London: The Association of Commonwealth Universities.
- Harle, J. (2013). Strengthening research in African universities: Reflections on policy, partnerships and politics. *Policy & Practice: A Development Education Review*, 16: 80-100.
- Hessels L.K., & van Lente, H. (2008). Re-thinking new knowledge production: A literature review and a research agenda. *Research Policy*, 37: 740–760
- Hoegl, M., & Gemuenden, H.G. (2001). Teamwork quality and the success of innovative projects: A theoretical concept and empirical evidence. *Organization Science*, 12 (4): 435–449.
- Hydén, G. (2006). *University and faculty research funds at universities in Mozambique, Tanzania and Uganda*. Sida Evaluation 06/23. Department for Research Cooperation
- Johnson, E.D., Al-Mahmood, R., & Maierb, A.G. (2012). Student and staff perceptions of teamwork in group writing for science honours. *International Journal of Innovation in Science and Mathematics Education*, 20(4): 25-41.
- Kandula, S.R. (2006). *Performance management: Strategies, interventions, drivers*. New Delhi: Prentice-Hall.
- Kariuki, N.W. (2009). *The challenges of financing research institutions of higher education in Africa*. Paper presented at the 12th General Conference of Association of African universities Sustainable Development in Africa: The Role of Higher Education.
- Kayongo, P. (2007). Financing and quality of education in institutions of higher learning. *Journal of Bankers*, 2 (5): 79-89.
- Kelbaugh, B.M., & Earnest, G.W. (2008). Indicators of success for teamwork: what extension professionals need to excel as team members. *Journal of Extension*, 46(4): 47-57.
- Kellerman, R., Klipstein-Grobusch, K., Weiner, R., & Wayling, S., & Fonn, S. (2012). Investing in African research training institutions creates sustainable capacity for Africa: The case of the University of the Witwatersrand School of Public Health Master's Programme in epidemiology and biostatistics. *Health Research Policy and Systems*, 10:11-25.
- Kirkland, J., & Ajai-Ajagbe, P. (2013). *Research management in African universities: From awareness raising to developing structures*. [Online]. Retrieved on May 27, 2015 from

- http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&ved=0CDcQFjAC&url=http%3A%2F%2Fcarnegie.org%2Ffileadmin%2FMedia%2FPublications%2FPDF%2FACU_-_Research_Management_in_African_Universities_Report_-_2013.pdf&ei=IIZIVc3wKYGV7AbF74K4BQ&usg=AFQjCNHSZzildXZhB1d3DEnFuip5vAV83A&bvm=bv.93990622,d.ZGU
- Lee, P. (2013). *African universities need improved research strategies*. World University News. Issue No. 282. [Online]. Retrieved on May 28, 2015 from <http://www.universityworldnews.com/article.php?story=20130811092517658>
- Leviss, P. (2014). *Boston youth justice research project: Teamwork*. [Online]. Retrieved on May 27, 2015 from <http://www.maxqda.com/boston-youth-justice-research-project-teamwork>
- Lynn, G.S., Reilly, R.R. (2000). Measuring team performance. *Research Technology Management*, 43(2): 48-56.
- Maassen, P. (2015). Research productivity at flagship African universities. *World University News*, Issue No: 357. [Online]. Retrieved on May 27, 2015 from <http://www.universityworldnews.com/article.php?story=20150226083557823>
- Mamdani, M. (2011). *The importance of research in a university*. Working Paper No. 3. Makerere Institute of Social Research.
- Marilin, R. (2014). Academic research in medicine: The need for teamwork and leadership. *Diagnostic Cytopathology*, 42(6): 553–554
- Marin-Garcia, J.A., & Lloret, J. (2008). Improving teamwork with university engineering students. The effect of an assessment method to prevent shirking. *WSEAS Transactions on Advances in Engineering Education*, 1(5): 1790-1979
- Martín-Sempere, M.J., Rey-Rocha, J., Garzón-García, B. (2002). The effect of team consolidation on research collaboration and performance of scientists. Case study of Spanish university researchers in Geology, *Scientometrics*, 55(3): 377–394.
- Mathieu, J.E., Gilson, L.L., & Ruddy, T.M. (2006). Empowerment and team effectiveness: an empirical test of an integrated model. *Journal of Applied Psychology*, 91: 97–108.
- McNabb, R. and Whitfield, K. (1997). Unions, flexibility, team working and financial performance. *Organization Studies*, 18: 821–838.
- Musick, M. A. (2011). *An Analysis of faculty instructional and grant-based productivity at the University of Texas at Austin*. Austin, TX: The University of Texas at Austin.
- Musiige, G., & Maassen, P. (2015). Faculty perceptions of the factors that influence research productivity at Makerere University. In: Cloete, N., Maassen, P. & Bailey, T. (Eds.), *Knowledge production and contradictory functions in African higher education*. Cape Town: African Minds.
- Nassuna, A. (2013). *Team building as a challenge to student completion as a measure of lecturers' effectiveness at the college of education and external studies, Makerere University*. Makerere University: Unpublished M. Ed dissertation.
- Nyden, P. (nd). *Collaborative university-community research teams*. [Online]. Retrieved on June 1, 2015 from <http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=11&v>

- ed=0CBwQFjAAOAo&url=http%3A%2F%2Fwww.compact.org%2Fwp-content%2Fuploads%2F2009%2F04%2Fnyden-final.pdf&ei=3BdsVfhU5LWwBI_8geAG&usg=AFQjCNF_LqATpYLjUa66Fo95j4LHbPBsag&cbvm=bv.94455598,d.cWc
- Okori, P. (2011). *Capacity building in agricultural research: A case study on Uganda's Makerere University*. Background paper prepared for the ASTI-IFPRI/FARA Conference on Agricultural R&D: Investing in Africa's Future—Analysing Trends, Challenges, and Opportunities held in Accra on December 5-7.
- Ontario Confederation of University Faculty Associations (2013). The university productivity we need: The Ontario Faculty perspective. *Trends in higher education*. Ontario: Ontario Confederation of University Faculty Associations
- Paris, C., Salas, E., & Cannon-Bowers, J. (2000). Teamwork in multi-person systems: A review and analysis. *Ergonomics*, 43(8), 20-35.
- Paton, G. (2014). UCL (University College of London) breaks Oxbridge stranglehold on university research. *The Telegraph*. [Online]. Retrieved on April 21, 2015 from <http://www.telegraph.co.uk/education/universityeducation/11299664/UCL-breaks-Oxbridge-stanglehold-on-university-research.html>
- Ratcliffe, R. (2015). *Businesses up their investment in UK University research projects*. Higher Education Network. [Online]. Retrieved on April 22, 2015 from <http://www.theguardian.com/higher-education-network/2015/jan/27/businesses-up-their-investment-in-uk-university-research-projects>
- Rey-Rocha, J., Garzón-García, B., & Martín-Sempere, M.J. (2006). Scientists' performance and consolidation of research teams in biology and biomedicine at the Spanish council for scientific research. *Scientometrics*, 69(2): 183-212
- Rey-Rocha, J., Martín-Sempere, M.J., Garzón-García, B. (2002). Research productivity of scientists in consolidated vs. non-consolidated teams: The case of Spanish University Geologists. *Scientometrics*, 55(1): 137-156.
- Roberts, A.G. (2002). Teamwork-A matter of balance and insight. *Perspectives on Educational Leadership*, 12(6): 1-3.
- Ruvinsky, J. (2011). Research: Improving teamwork. *Stanford Social Innovation Review*. [Online]. Retrieved on May 28, 2015 from <http://csi.gsb.stanford.edu/research-improving-teamwork>
- Salas, E., Nancy, J.C., & Rosen, M.A. (2008). On teams, teamwork, as well as team performance: Discoveries and developments. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 50 (3): 540–547.
- Salas, E., Sims, D.E., & Burke, C.S. (2005). Is there a 'Big Five' in teamwork? *Small Group Research*, 36 (5): 555–599.
- Schwab, M., & Borgdorff, H. (Eds.). (2014). *The exposition of artistic research: Publishing art in academia*, Leiden: Leiden University Press.
- Ssebuwufu, J., Ludwick, T., & Béland, M. (2012). *Strengthening university-industry linkages in Africa: A study on institutional capacities and gaps*. Accra: Association of African Universities (AAU).

- Sycara, K., & Sukthankar, G. (2006). *Literature review of teamwork models*. Pennsylvania: Carnegie Mellon University Pittsburgh.
- Tasa, K., Sears, G.J., & Schat, A.C.H. (2009). Personality and teamwork behaviour in context: The cross-level moderating role of collective efficacy. *Journal of Organizational Behaviour*, 32: 65–85.
- Turégano, S.J.R. (2015). *Research teamwork methodology: An innovative approach*. [Online]. Retrieved on May 25, 2015 from <http://designinenglish.org/2015/01/27/research-teamwork-methodology-an-innovative-approach/>
- Uganda Bureau of Statistics. (2014). *Statistical abstract*. [Online]. Retrieved May 23, 2015 from http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CCCEQFjAA&url=http%3A%2F%2Fwww.ubos.org%2Fonlinefiles%2Fuploads%2Fubos%2Fstatistical_abstracts%2FStatistical_Abstract_2014.pdf&ei=jhVgVeWVMIj7AaFwoGQCQ&usg=AFQjCNEaHYsx5JPKggiEmjIkJkC56GSj3w&bvm=bv.93990622,d.ZGU
- Urama, K., Swilling, M., & Acheampong, E. (2013). Rethinking the research and research capacity agenda in African universities and higher institutions.
- West, M. (2012). *Effective teamwork: Practical lessons from organizational research*. Chichester: BPS Blackwell.
- Williams, J. (2002). *Team development for high tech project managers*. London: Arctech House.
- Xyrichis, A., & Ream, E. (2008). Teamwork: A concept analysis. *Journal of Advanced Nursing*, 61 (2): 232–241.
- Yeager, K.L., & Nafukho, M.F. (2012). Developing diverse teams to improve performance in the organizational setting. *European Journal of Training and Development*, 36(4): 388–408.



Analysis of the Proliferation of Private Universities in Uganda

Robert Kyaligonza ¹

Abstract. This paper analyses the mushrooming of private universities in Uganda over the last two decades. For period of seventy years, Makerere University had a near monopoly in providing higher education in Uganda until 1988 when the government allowed the Organisation of Islamic Conference to open the Islamic University in Uganda. The market friendly-reforms initiated under the Structural Adjustment Programmes of the 1980s, the deregulation and the divestiture policies of the government plus the financial crisis of the state created an encouraging environment for the emergence of the private universities. This paper attempts to analyse the development of these universities and its implications for higher education in the country. An effort is made to examine the universities' contribution to the country's development.

Keywords: Privatisation; Massification; Higher education for development.

Introduction

Studies across the world indicate that there are internal and external forces driving the surge in private higher education (Altbach, 2002; Obasi, 2007; Teferra, 2005). These studies reveal a wide range of experiences. The internal driving forces include the inability of public universities to cope with increasing demands for admission; inability of governments to fund expansion; the concomitant falling standards in public universities; frequent closures and unstable academic calendar due to staff and students' unrest among many others. The external driving forces

¹ Makerere University

Address Correspondence to:

Robert Kyaligonza, East African School of Higher Education Studies and Development, College Of Education and External Studies, Makerere University. P. O. Box 7062, Kampala, Uganda. E-mail: kyaligonzarobert@yahoo.com. Tel: +256772424775.

are rooted in the prevailing neo-liberal economic policies, globalization, and the ICT revolution, all of which have affected higher education worldwide.

In Uganda, as in many other African countries, the last twenty-five years have been characterized by rapid expansion in private university education. This article examines the implications of the proliferation of private universities for the growth of higher education in Uganda. The trend has shown that the demand for university education has been growing over the years. The implications of private higher education on the country's educational system are discussed in relation to the historical context of the emergence of private universities in the country: their programmes, admission and recruitment policies, quality of faculty, tuition fee structure, the existing physical facilities, the university work environment, regulation, control and quality assurance, governance structure and the achievement and challenges of these private universities. Although the focus of the article is on the growth of private universities, a comparison is made with public universities where necessary in order to achieve a holistic analysis of the implications of the proliferation of private universities.

Proprietorship of Private the Universities

Ownership of private universities is not homogeneous. Whereas some are owned by individuals others are owned foreign organizations and Non-Governmental organizations, others are owned by the four major religions in Uganda: Islam, Anglican Church of Uganda, the Catholic Church, the Seventh Day Adventist Church and those built by the Pentecostal churches (Table 1).

The speed at which private universities have mushroomed is not only observed from the time it has taken them to proliferate but also their status and category highlighted by the National Council for Higher education (NCHE). Out of 30 private universities, only 7 (23%) are chartered and therefore can be categorized as bona fide or mature universities, they include Bugema University, Kampala International University, Ndejje University, Nkumba University, Uganda Christian University, Islamic University in Uganda (IUIU) and Uganda Martyrs University. The other 22 universities (77%) have never been chartered and are provisionally licensed. Some known private universities such as Busoga University (1999), Kabale University (2001) and Agha Khan University (2001) do not have charters. The Challenge facing the government is that private providers are not meeting required educational standards, prompting it to develop stricter registration regulations.

Table 1: Evolution and Growth of Private Universities in Uganda (1992–2013)

Name of University	Established	Proprietor
Islamic University in Uganda*	1988	Organisation of Islamic Conference
Ndejje University*	1992	Anglican Church of Uganda
Uganda Martyrs University*	1993	Catholic Church of Uganda
Uganda Christian University*	1997	Anglican Church of Uganda
Bugema University*	1997	Seventh Day Adventist Church
Busoga University**	1999	Anglican Church of Uganda
Nkumba University*	1999	Citizens
Kampala International University*	2001	Citizens
Kabale University**	2001	Citizens
Fairland University**	2001	Citizens
Agha Khan University**	2001	NGO
Bishop Stuart University**	2003	Anglican Church of Uganda
Kumi University (KUMU)	2004	Anglican Church of Uganda
Uganda Pentecostal University**	2005	Pentecostal Church of Uganda
Kampala University**	2005	Citizens
Mountains of the Moon**	2005	Citizens
African Bible University**	2005	Pentecostal Church of Uganda
St. Lawrence University**	2006	Citizens
Mutesa I Royal University**	2007	Buganda Kingdom
All Saints University Lango**	2008	Anglican Church of Uganda
International Health Sciences**	2008	Citizens
Cavendish University**	2008	Affiliated
International University of East Africa**	2010	Citizens
Victoria University**	2011	Affiliated
St Augustine's International University**	2011	Citizens
African Rural University**	2011	Citizens
Virtual University of Uganda**	2011	Affiliated
Islamic Call University College**	2011	Islamic
Livingstone International University**	2011	Citizens
Uganda Technology and Management University**	2013	Citizens

Source: NCHE (2011). *Chartered; **Provisionally Licensed

Rationale for the Proliferation of Private Universities

A dramatic proliferation of private universities has occurred in Uganda over the past two decades. It used to be more or less taken for granted that higher education was a *public good*. That belief is no more! A well-educated citizenry is no longer regarded universally as offering collective benefits to the community, state, and nation. Instead, higher education is increasingly considered a private good that

benefits primarily the individual who receives the certificate, diploma or degree, in other words it is the individual who benefits from education not society and therefore should pay the cost. It can be argued that in Uganda with time and economic hardship, education gradually ceased being a Public good to Private Good and hence the declining state support for Higher Education in terms of grants or budgetary support.

Uganda has pursued policies where the government liberalized the economy through the deliberate divestiture to create a middle class and thus abandoning the quasi-socialist policies of the 1960s. Therefore the current government pursued a deliberate policy and shifted from the planned economy to market economy. Since the early 1980s, the government of Uganda has heavily invested in Universal Primary Education (UPE) and Universal Secondary Education (USE). With Makerere University being the only university, there was a crisis of access as the number of secondary schools offering pre-entry A-Level examinations dramatically increased. Kajubi (1999) states that Makerere as the only university then could only admit 25 percent of the candidates eligible for university education in Uganda. Therefore there was growing demand for university education. The inability of the social sector to satisfy the growing demand attracted investment in higher education by individuals, NGOs and religious organisations. The demand for various new marketable courses became a phenomenon and Public Universities in Uganda could not cope with the demand.

Rapid increase of the population of the country and the mushrooming of very many secondary schools from the early 1980s translated into the increased demand for higher education. Which Makerere University, the sole University in Uganda could not handle. As more candidates sat Advanced Level examinations, Makerere University became more stringent on entry grades and many qualified candidates would be locked out. A. Therefore the government was forced to enact University and other Tertiary Institutions Act (2001) which created favourable conditions for providers to invest in university education.

Between 1987 and 1990, Makerere University admitted only 38.7% of the applicants for university vacancies and leaving out 61.3 % of the applicants. All these show that Uganda's participation rate in higher education was very low because there was only one University. It is within this context that the emergence and rapid expansion of private universities in Uganda can be appreciated. The Uganda experience reflects global trends Altbach (2002), Mabizela (2004) and Teferra (2005). But again, this domestic context does not exist in isolation of the wider external driving forces of neo-liberal economic change (Mamdani, 2007).

There was demand for new courses not offered by the public universities in Uganda. Many courses which are marketable were being offered expensively abroad which was a burden to parents and students. The need for career-oriented new courses required by the employment market gave rise to the proliferation of universities. New courses in Business Administration and Management, Development Studies, Hospitality and Hotel Management and Information Communication Technology (ICT) became very popular. This is in line with

Kajubi (1992) who insists that students choose private universities as a result of demand for more, demand for better and demand for different.

Explicitly, the government refocused its attention from University education to primary and secondary education, following the World Bank and IMF conditionality. University education ceased to be free as cost- sharing was introduced and inter private sponsorship of students started. The government shifted from the elitist education to mass higher education by inviting the private sector to invest in University Education and reduce significantly its financial burden. The following are challenges facing private universities in Uganda:

Financing of the Private Universities

Tuition fees form the backbone of most private institutions of higher learning in Uganda. Private universities must meet their expenditure from the fees paid by their students. The total income of these institutions is determined by the number of students they enrol. Generally these institutions try to attract as many students as possible for profit reasons. This makes the charges in private universities very high because fees are the only source of income. The fees paid vary from institution to institution. In Uganda, private universities linked to religious organization equally charge higher fees without exception. With limited funds, the private universities try to make profit and to save. The dominant expenditure in these universities is the payment of staff salaries. Therefore these institutions devise a lot of tricks for survival. They employ retired professors and lecturers; part time lectures and Masters Lecturers. Those universities linked with religious affiliations also employ those involved in religious activities who teach without charging the university or accepting little pay for the sake of their institutions.

Table 2: University Fees for Selected Public and Private Universities

Course	Makerere	Kyambogo	IUIU	UCU
Law	1,500,000/=	1,600,000/=	1,500,000/=	1,826,000/=
Education	810,000/=	1,100,000/=	1,023,400	946,000
Arts/ SS	1,000,000/=	900,000/=	1,320,000	1,276,000
Science	1,200,000/=	1,200,000/=	1,540,000	1,600,000

Source: Kasozi (2012)

According to Table 2, private universities charge more fees than government sponsored. However the total enrolment is still very low and therefore private universities have devised many ways of creating money generating activities by setting up canteens on campuses, transporting students, canteens and starting new courses not offered by government-owned universities. This is done by of popular marketable courses on finances; the assumption is that a university should have adequate fiscal resources to run all university processes. This is because the

structures of a university require enough funding. It is argued by Mwapachu in Mosha (2000) that: ineffective funding and budgetary cutbacks is visible in terms of the unabated academic flight, moonlighting, erosion in standard of teaching, accommodation and service facilities, deferment of development and maintenance of physical infrastructure, failure to increase student enrolment, declining library standards due to acute shortage of new text and reference books and journals”.

It may be argued that insufficient funding neuter standards of achievement in university education. Notwithstanding, private universities depend heavily on tuition fees as a major source of financing the institutions (Varghese, 2004). Therefore, the lesser a university collects from tuition fees the higher the quality of education is undermined. The students’ learning experience and progress is measured through enrolment qualifications and examinations during study. Examinations are assessed by a designed grading system.

Programmatic Focus of the Private Universities

The courses offered in private universities in Uganda reflect either a commercial consideration or a religious orientation. It seems the primary objectives of establishing a university are reflected in the curriculum offered by the private institutions. The for-profit institutions such as Kampala International University, Kampala University and Mountain of the Moon University cater to the private business enterprises. Needless to add, the Private Universities of the for-profit category and those not affiliated to religious bodies offer course that are market-friendly. Courses in business administration, computer sciences, accounting, marketing, economics, communication, and related ones for-profit are very common in private universities in Uganda

In general, the private universities of recent origin offer courses that require less investment in terms of infrastructure and equipment. This is in contrast with some of the private initiatives in other countries, such as Indonesia and Malaysia, where Engineering and Medical colleges require a high level of investment in infrastructure and other facilities. At times, the courses offered and affiliation of the university with institutions abroad helps the universities to increase their fee rates. The trend in Private Universities in Africa shows that they mostly offer courses in subject areas which require lower levels of investment in infrastructure facilities.

NCHE (2011) shows that the courses offered in the universities vary depending on the basic orientation of the universities. Those which are self-financing and profit-generating institutions offer courses closely aligned to private sector employment. Courses on information technology, management, and business studies are very common among courses offered by these institutions. These are market-friendly courses where the demand will be sufficient levy the price high enough to recover the total costs and to generate profits. Moreover, these are courses that are not offered in many traditional universities, and when offered, the

number of seats available is very limited. The religion-oriented universities such as Uganda Christian University, Uganda Martyrs University and Islamic University in Uganda try to offer courses of a general variety, but make a serious effort to link them with theology.

The curriculum content and organization are assessed by relevance of the programmes offered and the quality of teaching staff. Kyaligonza (2010) posts a challenge facing universities in Uganda. He says that universities are unable to recruit and retain qualified applicants of international calibre. One of the major reasons is inadequate finances. Second, it is very difficult to recruit a qualified professor, for instance, bearing the fact that lecturers, in Uganda, are not adequately motivated and remunerated for example a lecturer in Uganda is paid 2Millions (\$754) per month and that and that universities are more or less market places. The consequence of this has been a reliance on part time lecturers. Arguably, a part time lecturer is never looking for improving quality of education rather extra money for a living. This argument finds support of Mamdani (2007) who argues that many lecturers from primary to university level are physically and psychologically absent.

It can be argued that programmes offered by universities must be able to foster development through innovation and competent labour of international calibre. One of the challenges facing developing countries including Uganda is the relevance of programmes offered by universities in relation to developmental objectives, both domestic and global. Supportively, Sicherman (2005) asserts that many educational institutions in Uganda are still offering traditional programmes that were designed two or three decades ago. Some of these programmes might not be adequately responsive to contemporary market demands. The situation is worse especially in private universities.

The national Council for Higher Education accuses private universities in Uganda for splitting programmes to register more students (NCHE 2011). This has increased duplication and reduced content in a number of programmes. The council also reports that few private universities have quality assurance units. The council attests that most cases, private universities are focused on few disciplines". Arguably, these disciplines are humanities, law and accounting. They hardly, focus on science and technology fields. One of the consequences of proliferation of private institutions in Uganda has been a commercialization without quality in higher education, and an increase in supply that does not meet the needs of those who cannot pay and the economic or social requirement of preparing human resources.

Profiling of Students in the Private Universities

In general, the students coming to private institutions are those with paying capacities. In many countries, the competition for admission to public universities is very high. In general, those who do not get admission to public universities seek

admission in private universities. In other words, the chances are that the academic profile of the participants may be lower in private universities when compared with their counterparts in public universities. Some of the private universities in Africa attract foreign students. The Uganda Martyrs University and Kampala International University are examples of institutions attracting foreign students, especially from the neighbouring countries. Some of the universities, given their religious orientation, attract students from the same community or denomination.

Private universities revolutionized higher education in Uganda. Since its inception in 1922, Makerere University which was the only public university in Uganda up to 1988 was dominated by male Ugandan students. The new public universities have changed the status quo by giving opportunities to female students to compete with males in numerical terms. Islamic University in Uganda has 30% females, Uganda Christians University has 49%, Nkumba University has 49% and Aga Khan University has 89% females (NCHE, 2011). This is positive for women emancipation and gender equality. Another phenomenon is the increasing number of foreign students from the East African region who are attending private universities in Uganda and who have found these universities to be affordable and offering marketable courses. Good cases are: Islamic University in Uganda with 20% foreigners, Bugema University with 69%, Kampala International University with 49% and Kampala University with 67% foreigners (NCHE, 2011).

There is a general belief that many of the private universities attract more male students than female students. The gender balance depends on the subjects offered and fees levied. Courses offered in the Faculties of Art and Humanities, communication, community development and marketing are areas where women outnumber men. However, courses offered in economics, business management, information technology, accounting, etc., attract more male candidates. It is interesting to note that although many of the students in the private universities have a lower level academic profile than those in the public universities and their academic performance, in general, is better. The dropout rates are low and the graduation rates are high in almost all private universities. This may be partly due to the fact that due to fees, only those who really want to pursue a study programme seek admission in the private universities and partly due to the fact that students, in general, are highly motivated and perhaps more motivated than their counterparts in the public universities. Private institutions, very often, monitor students progress more closely than what is being done in public universities. The reality is, at least in Uganda, that higher education has become commercialized (Mamdani, (2007). These private universities function more or less like commercial entities. They are there to make money for their owners while they provide substandard education to their students. They depend largely on student tuition fees. They absorb large numbers of students who fail to qualify for public universities. They have insufficient facilities and funding, they rely on part-time teaching staff and have low academic standards. They are regarded with disdain by the mainstream academic community.

The students who join private universities are those with paying capabilities as fee charged is very high. Those not admitted in public universities seek admission in private universities. Many private universities attract foreign students especially from neighbouring countries and others because of religious orientation.

Physical Resources of the Private Universities

The adequacy of resources is one base of assessing quality of private universities' education. The reference is made to sufficient physical buildings for library, lecture rooms, students' hostels, and cafeteria. The buildings of most private universities in Uganda have been upgraded from other activities. These buildings were constructed to serve some other purposes such as secondary schools, colleges, religious activities and even gineries. And thus, they are limited in terms of space and activities performed or services offered.

The implication of this is multifaceted: First, it affects students' living and learning conditions. In terms of accommodation, students are obliged to rent rooms outside university campuses. This is due to the fact that most universities do not have enough student hostels to all admitted students. Ndejje University opened its business in a Lady Irene Primary Teachers' College, Kampala International university started its work in a block of residential flats, Uganda Martyrs University took over premises of National Teachers' College Nkozi; Uganda Christian University took over the premises of Bishop Tucker Theological College in Mukono, Nkumba University was previously Nkumba College of Commerce; Kyambogo University took over from Institute of Teacher Education Kyambogo, Uganda Polytechnic Kyambogo and Uganda National Institute of Special Education (UNISE) and Mutesa I Royal University took over the premises of Masaka Technical Institute.

In these private universities, there is lack of teaching materials, student hostels, and inefficient legal and institutional framework, the quality of university education from private universities is undermined at escalating inflation. In support of this, Saint (1992) argues that university's physical facilities determine student enrolment and the number of academic programmes it can offer. Facilities conclude that physical facilities ultimately affect the quality of an individual student's experience. In other words, such facilities have impact to product-output. Learning resources and support services include: physical buildings for libraries, classes, offices, hostels and cafeterias; human resources i.e. lecturer-student ratio; availability of books, journals, newspapers, magazines, computers, internet services, and playgrounds for sports.

Moreover, the physical location of a university is also of great consideration. Majority of private universities are located in and around Kampala city where there is lots of chaos, crime and lack of housing for students and very little space for expansion. The programmes of study need to have the benefit of an adequate amount of teaching accommodation, both general and specialist, which is suitable

in type and location. It may be submitted that university infrastructures contribute to the quality of education offered. Kyaligonza (2010) provides findings which are supported by observation that poorly trained lecturers and a shortage of textbooks lead to poor educational results and lower social and private returns to education investment.

Adequacy and Quality of Faculty in Private Universities

The National Council for higher Education laments that “there is a critical shortage of academic staff that could see Uganda’s higher education sub sector come to a halt”. The few academic staff that we have are not only seeking better opportunities elsewhere, including overseas, but also moonlight. Table 3 shows the staff student ratios as unacceptable. In general, there is one academic staff for every twenty three students. Many of the private institutions of higher education are new and operate with a limited number of staff members. One of the unique features of private universities is that they have very few regular staff. The general trend is that of a large number of part-time lecturers and a limited number of full-time lecturers employed in private universities. In one of the recent studies by Varghese (2004), it is found that reliance on part-time lecturers is a common feature among private universities irrespective of their location and orientation. It is important to note that the chancellors, vice chancellors and senior lectures of private universities are retired lecturers from Makerere University.

Table 3: Academic Staff Adequacy

Institution Name	Enrolment	Faculty	Staff/ Student Ratio
Islamic University	3883	140	27
Uganda Christian University	7897	336	23
Uganda Martyrs University	3416	196	17
Bugema University	1245	75	17
Nkumba University	6804	139	
Kampala International University	13938	440	32
Aga Khan University	143	15	10
Cavendish University	530	60	9
St. Lawrence University	1607	-	-
Kampala University	600	66	9
Mountains of the moon University	807	74	10
Mutesa 1 Royal University	1828	93	20

Source: NCHE (2011)

Many private universities in Africa rely heavily on part-time lecturers. At times, some of the private universities in Africa are headed by senior professors retired

from the public universities (Kasozi, 2005). Most of the lecturers in Ugandan private universities have a Masters and a few have doctorate degrees. This is mainly because part-timers are drawn from public universities, and professors in public universities are well qualified. Relying on teaching staff from public universities is a mechanism to ensure quality in teaching and savings in expenditure.

Regulation and Quality Assurance

Judging by the enforcement of the guidelines on the establishment and operation of private universities so far, one can say that although the private universities are granted the necessary operational autonomy, they are strongly within the regulatory ambit of the Government through the National Council for Higher Education (NCHE). So far the NCHE appears to be carrying out its accreditation functions with some measure of seriousness. It has closed many academic programmes in some universities that failed to meet the required minimum standards. Furthermore, the NCHE has repeatedly warned that it would withdraw licences of the private universities which have failed to meet the basic requirements and the resources and facilities available in each university.

National Council for Higher Education (NCHE) itself has undergone some structural re-organization to enable it to cope with the demands of monitoring and evaluation of private universities. For example, it has established a Department of Quality Assurance headed by one of its experienced Directors and former Vice-chancellor who would be assisted by 35 other professors. Its major assignment is to conduct rigorous monitoring and evaluation activities of all universities in Uganda. It will demand compliance with NCHE's Benchmarks and Minimum Academic Standards and would recommend, for immediate sanction any university whose operation falls below the standards. And according to the NCHE Executive Secretary the thrust of the work of the Department is to guarantee Ugandans that in spite of the quantitative increase in private universities, the quality of the Ugandan university graduate will not be compromised (NCHE, 2011).

It has taken little time for the private investors and organizations to open up 30 Universities since 1992. At least thirty-privately owned universities have been established in a period of about twenty years from 1992. However, it does not mean that all these Universities meet the standards and requirements stipulated by the National Council for Higher Education (NCHE), a higher education watchdog in Uganda. Generally the National Council for Higher Education was established to set standards for higher institutions of learning in Uganda. The council was established and gets its legality from the Universities and Other Tertiary Institutions act (2001).

The council has tried to implement its mandate despite the fact that it is under-funded. The council lacks adequate funds, vehicles and offices. It is still being

housed in the premises of Kyambogo University. However, according to *The New Vision* newspaper of 27th March, 2012 the chairman of the NCHE said that the council had rejected 66 PhD degrees awarded by Kampala International University in 2011 and 2012 because of serious flaws in admission, poor quality examination processes, inadequate and unqualified supervisors who lacked expertise in the area of supervision. Subsequently, KIU was indicted by the commissioner of higher education in Kenya. In 2010, the NCHE also revoked the provisional license of Lugazi University as it had become insolvent (NCHE, 2011).

According to *the Weekly Observer* (2013), and *The University World news* (2013) the NCHE has adopted stricter regulations for the registration of private institutions in an effort to ensure higher standards. The council has warned that some private universities might be forced to close. The council closed Lugazi University and revoked the provisional license of Fairland University on March 11th 2013. Central Buganda University, Luwero University, Nile University in Arua, and Global University do not appear in the list of recognized HEIs (NCHE, 2011).

Universities without a sound academic environment are not allowed to operate. As well as meeting these requirements, universities must pay the council a steep fee to be granted a charter. The *Weekly Observer* (2012) reported that Global University and Nile University had only processed a letter of interim authority from the council, while Central Buganda University had been operating for two to three years without authorization.

The National Council for Higher Education (NCHE) has revoked Fairland University's operating license which had been issued on March 18th, 2005 over failure to meet the minimum standards. The university had been home to about 600 students. The university was found to be operating far below the standards set by the body. On March 11th, 2013 the license was revoked because the university had not progressed towards full establishment. The council argues that Fairland University failed to comply with the standards for the establishment and operation of a university, including but not limited to; management and governance, academic staff in terms of numbers and qualifications, library (materials and staff) and infrastructure. The council also accuse Fairland University of presenting false audited accounts.

The Private universities are not large organizations offering courses in a variety of subject areas. The academic interest and advances in frontiers of knowledge decide programmes of study and courses offered in all universities in general. The purpose of establishment and orientation of the operation of private universities is different from that of public universities. Many of the private universities in Uganda are self-financing and profit generating. The demand for particular courses and the fees levied are decided by the demand for those courses.

Governance Structure

Many private universities in Uganda have not departed substantially from the conventional governance structures of public universities. The nomenclatural

designation of their governance structures remain substantially the same as stipulated in the government's Universities and other Tertiary Institutions act (2001) guidelines on their establishment. Their Principal Officers go by the same names like their counterparts in public universities and organs of governance go by the same conventional names such as Colleges, Faculties, Schools and Departments. However, some adopt different governance structure. For example, the Islamic University in Uganda adopted its nomenclature of calling its Vice-chancellor a Rector. However, it still retains the names Deans for heads of the Faculties Also private universities have Board of Trustees or Governors instead of University Councils as found in the public universities. There are some innovations in programme administration. The dominant tendency is for all of them to have a collegial structure that combines many cognate courses into one department and faculties thereby saving costs. However, some of the universities operate non-flexible working hours for their lecturers from 8a.m to official close of work. This is considered strange in a university system especially against the background that one lecturer is known to have left a private university on account of this, in spite of the salary differential between the two. This is an area that requires closer investigation in the future because of its human resource management implications.

Contributions of the Private Universities

It is wrong to heap blame on the mushrooming of private universities without considering their positive contribution. The experience of private provision of higher education in Uganda in only a little over two decades (1999–2013), provides a ray of hope that given appropriate supportive public policy environment, the entire Ugandan higher education system could undergo considerable and robust amount of growth and diversification in the future. Presently, the success story of some private universities so far, has been a great challenge to the public universities in Uganda. This remains the greatest value added function of private universities in Uganda. It is hoped that these modest achievements of private universities would be maintained and improved upon in the future. This remains one of the challenges that the National Council for Higher Education (NCHE) should face for the future sustainability of private higher education in Uganda.

Whereas there is the mushrooming of universities and their quality is questionable, however, some are very good and meet international standards and may be described as “elite.” These are private institutions that were mostly established by the major religious groups and these are: Uganda Christian University, Mukono, Uganda Martyrs University, Nkozi, the Islamic University in Uganda, Mbale, Bugema University and Ndejje University. These universities are chartered by government of the Republic of Uganda and are relatively well off because they are able to mobilise resources from external sources. They offer

qualitatively superior higher education and have qualitatively superior teaching staff. They have better facilities and students are chosen selectively.

It is always imperative to know the motives of the founders. It may range from dissatisfaction with conditions in public universities, such as overcrowding and relatively poor quality of education, or was it a strategy to expand and exert their respective social influences as a means to achieve their ulterior religious motives. The mushrooming of private universities in Uganda is largely a consequence of the deregulation policies in various social and economic aspects. While some of these policies have led to the emergence of the private higher education sector or to the commercialization of higher education, it is not yet clear what the long term effect in terms of roles and responsibilities of these private institutions in ensuring the effective provision of high quality education, training, research and technology to address the 21st century development challenge will be.

So far, the private universities have proved to be a big challenge to the public universities in some areas they have made remarkable success. Olweny (2013) described the Uganda Martyrs University, Nkozi as a success story in the short period of its existence is proof that private universities are not necessarily mediocre. According to the Web Ranking of Universities, Uganda Martyrs University and Uganda Christian University are among the top 100 best universities in Africa because of stable academic calendars; absence of frequent strikes by staff and demonstrations by students, charging tuition fees according to market forces, serious policy on the research component, manageable size of student population, their emphasis on moral and spiritual and ethical training, relatively secure and peaceful learning environment.

Proliferation of private university for profit is part of a larger worldwide trend towards privatization as opposed to old universities who trained people for white collar jobs, these universities offer programs which are market oriented, that enhance employability of their graduates. They offer non-traditional market courses such as Business administration, Management, hotel management and tourism, leisure and hospitality. Despite the higher tuition, the unemployment rate among traditional arts and sciences graduates continue to climb (Banya 2001).

Private universities have been able to add value in the area of female gender enrolment. During the 2009/2010 session for instance, Agha Khan recorded the highest percentage of female enrolment in private universities with its 89 percent female enrolment. This was followed Bugema University 63 percent, Uganda Christian University and Mutesa 1 Royal University had more foreign female students than male female students. It is evident that in some universities such as Uganda Christian University, Nkumba University and Kampala International University, the number of females is almost surpassing that of male.

Restoration of the badly eroded dignity and welfare of student life: Public universities are known for their over-congested hostels and its inhuman and intolerable living conditions (Kyaligonza, 2010). As Tibarimbasa (2010) rightly observed, most of the private universities offer good boarding facilities in affiliated hostels and have smaller classes with fairly adequate infrastructure even though at

relatively high cost. The opposite is true for public universities; the concentration of so many young sexually active students in such overcrowded places has contributed to crime and deadly Sexually Transmitted diseases such as Acquired Immune Deficiency Syndrome (AIDS)

Private universities maintain a stable academic calendar. In general, these universities run their courses on time unlike the public universities whose activities are distorted by frequent student and staff strikes. In many public universities, for instance, students spend six to ten years on Masters and PhD programmes meant to be completed in three and five years respectively.

References

- Altbach, P. G. (2002). The Private Sector in Asian Higher Education. *International Higher Education*, 29 (6).
- Banya, K (2001): Sub Saharan Africa: The State of public higher education and the emergence of private sector universities. New York: World Education Service.
- Carrol, B (2005). Private Monies, Public Universities: Implications for Access and University Behaviours; A study of Makerere University, PhD Thesis, Stanford University
- Kajubi, S. (1998). From Elitist toward mass education. : The phenomenon of private universities in Uganda. *The Uganda Education Journal*, 1 (1) (23-28).
- Kasozi, A. B. K. (2005). State of higher education: executive summary. Kampala: NCHE.
- Kasozi A. B. K (2009). Financing Uganda's Public Universities - An obstacle to serving the public Good. Kampala: Fountain Publishers.
- Kasozi, A. B. K. (2003) *University education in Uganda: challenges and opportunities for reform*. Kampala: Fountain Publishers.
- Kyaligonza, R. (2010). Correlates of research output in public universities in Uganda. Unpublished PhD thesis, Makerere University
- Mabizela, M. (2004) *Whither Private Higher Education in Africa?* *International Higher Education*, No. 34, from of New York.
- Mamdani, M. (2007). *Scholars in the market place: The dilemmas of Neo-liberal reforms at Makerere University, 1989-2005*. Kampala: Fountain Publishers
- Obasi (2007). The Emergence and Development of Private Universities in Nigeria 60 JHEA/RESA Vol. 5, No. 2&3.
- Olweny, C. (2013): *Vice Chancellor's graduation speech 2012*. Kampala: Uganda Martyrs University.
- Saint, W. S. (1992). Universities in Africa: strategies for stabilization and revitalization. Technical paper No 194. Washington D.C.: World Bank.
- Sicherman, C. (2005). *Becoming an African university: Makerere 1922-2000*. Kampala: Fountain Publishers.
- Teferra, D. (2005) 'Private Higher Education in Ethiopia: The Current Landscape', *International Higher Education*, No. 40.

- NCHE (2011). The state of higher education and training in Uganda. Kampala: Author.
- The New Vision* newspaper of 27th March, 2012,
- The New Vision November 11th 2013 entitled: “116,027 to sit UACE exams 2013”.
- The Observer newspaper of 28-3-2013 The University World news 23-04-2013
- The Weekly Observer* (2012)
- Tibarimbasa, A. (2010) Factors Affecting the Management of Private Universities in Uganda. Unpublished PhD thesis, Makerere University
- Tiberondwa, A. K. (2001). Staff development in higher education: the case of Makerere University, Uganda. In: ‘Effective teaching in higher education’. Entebbe: Nkumba University. (pp. 187-205).
- Universities and other Tertiary Institutions act (2001). Entebbe: Uganda Printing and Publishing Company.
- University Word News, April 23rd/2013
- Varghese, N. V. (2004). Private higher education in Africa. Paris: UNESCO
- Web Ranking of Universities (2012).
- World Bank (2000) Higher Education in Developing Countries: Peril or Promise. Washington DC: *the Taskforce on Higher Education and Society*, World Bank/ UNESCO.



Access to Information among Primary Healthcare Practitioners in Rural Areas of North Western Nigeria

Hadiza Talatu Mohammed ¹

Abstract. This study investigated access to information among primary healthcare practitioners in rural areas of north western states of Nigeria. It was hypothesized that there was no significant difference among the healthcare practitioners in their levels of access to PHC information available in rural areas of the study area. Using a semi-structured questionnaire, data were collected from a stratified random sample of 1,192 healthcare practitioners. The data was analysed using frequency counts and percentages. The Internet, superiors, colleagues, conferences/workshops/seminars and meetings were the commonest means through which the primary health care practitioners access information. The study concluded that access to reliable PHC information is crucial for progress towards health for all. Since majority of the population lives in rural areas, lack of access to information can be a barrier to effective dispensation of PHC. It was recommended that PHC management board should be encouraged to establish effective and sustainable PHC information programme to enhance access to PHC information resources in various formats.

Keywords: Healthcare; Access to Information; PHC.

Introduction

Access to timely and accurate information play a vital role in the planning, development and maintenance of healthcare services, which is closely related to the role of awareness in information utilization is the notion of information access. World Health Organization (2008) posits that “sound and reliable information is the foundation of decision making across all health system building blocks and is essential for health system policy development and implementation, governance and regulation, health research, human resources development, health education and training and service delivery”. This is to say that for effective service delivery

¹ College Library, Federal College of Education, Zaria, Nigeria

Address Correspondence to:

Hadiza Talatu Mohammed, College Library, Federal College of Education, Zaria, Nigeria. E-mail: htmuhd@yahoo.com.

by primary healthcare practitioners there is the need for information that is accessible and if properly utilized will lead to improved patient outcome.

Concept of Information

Conceptually, information is the message (utterance or expression) being conveyed. Mohammed (2012) defined information as “anything we physically or otherwise come across consciously or unconsciously and accidentally or intentionally that adds positively or otherwise to our existing knowledge, ideas and experiences. In general sense, information is “knowledge communicated or received concerning a particular fact or circumstance”, or rather information is an answer to a question (Vigo, 2011). Information as defined by Floridi (2010) is data that is accurate and timely, specific and organized for a purpose, presented within a context that gives it meaning and relevance and can lead to an increase in understanding and decreases uncertainty. Information is an ethereal commodity. One definition of information is the data and knowledge that intelligent systems (human and artificial) used to support their decisions.

This point to the fact that we can make a difference in any circumstance to the extent we are able and capable of accessing and retrieving information about something and for something, as well as utilize information as something and in something. Essentially therefore, it could be said that information is a vital and strategic resource that shapes and impacts on our daily life as it is all around us especially due to its pervasiveness in our thinking about the world around and beyond us; its virtual and un-predefined attributes / characteristics; its discrete, distinctive and multi-dimensional nature; and its intertwined processes of learning, knowledge, skill and experience acquisition and utilization. Hence, the need to not only seek, acquire and secure information regardless of the type, nature, quantum and location, but manage, package and disseminate it far and wide irrespective of the media to meet the yearnings of the target audience regardless of the time and location”. Health informatics help doctors with their decisions and actions, and improves patient outcomes by allowing them to make better use of information—making more efficiently especially in the way patient data and medical knowledge is captured, processed, communicated and applied. These challenges have become important since the internet made access to medical information easier.

Access to Health Information

In a developing country like Nigeria, a large proportion of the population has limited access to health information and healthcare facilities. Equitable access to healthcare remains a challenge in developing and transitional countries, especially among the rural poor masses. There are chronic diseases which are terminal illnesses and the practitioners require comprehensive health information for their management. Thus, health practitioners and patients are not aware of available health information as well as the utilization (Obiora, 2013).

Access to information and information access are seen as functionally equivalent as they are used mostly by many scholars interchangeably (Oltmann, 2009). Jaeger and Burnett as quoted by Oltmann (2009) postulate that access is “the presence of a robust system through which information is made available to citizens and others”. They posit that such a system has physical, intellectual and social components. This means that information access is a combination of intellectual, physical and social elements that affect the availability of information to individuals. Burnett, Jaeger and Thompson (2008) suggest that access has three components: physical, intellectual and social. Physical access indicates “the physical structures that contain information, the electronic structures that contain information and the paths that are travelled to get to information”. Intellectual access refers to understanding information as a document, including “how the information is categorized, organized, displayed and represented”. Finally, the concept of social access suggests that element of one’s social world including social norms and world views which influence the information one accesses, and how and why particular information is sought. One can say that physical and intellectual access depends on one’s social behaviour to access to information.

Effective use of information and communication technology by healthcare practitioners and public health professionals can bring about an age of patient and public centred health information and services. Berkman et al. (2004) state that this will bring about (i) improved healthcare quality and safety, (ii) increase in the efficiency of healthcare and public health services delivery, (iii) improve in the public health information infrastructure, (iv) support care in the community and at home, (v) facilitate clinical and consumer decision-making, and (vi) build health skills and knowledge

Primary Healthcare

Primary healthcare forms an integral part of the Nigeria’s health system. The main focus of primary healthcare is the health of individuals, families and communities. PHC is equally concerned with addressing the overall social and economic development of communities thereby targeting the social determinant of health. Primary healthcare embodies a spirit of self-reliance and self-determination (Vukic & Keddy, 2002). Primary Healthcare is a conceptual model which refers to both processes and beliefs about the ways in which healthcare is structured. PHC encompasses primary care, disease prevention, health promotion, population health and community development within a holistic framework, with the aim of providing essential community-focused healthcare. (Shoultz & Hatcher, 1997 and World Health Organization, 1978). WHO (1978) states that “the cornerstones of PHC are access equity essentiality, appropriate technology, multi-sectorial collaboration and community participation and empowerment”. Hogg et al. (2008) concluded that Primary Healthcare “is in a state of evolution” They further stress that primary care constitutes the first element of a healthcare process that may also include the provision of timely and appropriate secondary and tertiary levels of care.

The International Conference on Primary Healthcare calls for urgent and effective national and international actions to develop and implement primary healthcare throughout the world and particularly in developing countries in the spirit of technical cooperation and in keeping with a New International Economic Order. The conference also urges governments; WHO and UNICEF and other international organizations as well as multilateral and bilateral agencies, non-governmental organization, funding agencies, all health workers and the whole world community to support the National and International commitment to primary healthcare. "In order to plan and manage primary healthcare the right kind of information is essential" (WHO, 2000). It further reiterates that it is important to identify and use relevant information on health. The information is an integral part of primary healthcare activities and their supporting services.

Primary Healthcare Information

The provision of primary healthcare requires planning and information is needed for planning. It is important that information should be made accessible to healthcare practitioners, planners and health policy formulators to enhance the provision of quality healthcare. Health information is a key ingredient to effective health delivery. It is in realization of the importance of communication to health service that Nakojimo (1997) remarked that "information and communication are at the very heart of World Health Organization".

WHO & UNICEF (1978) identified one of the fundamental principles of primary healthcare as "participation of community at all stages". For country to be intelligently involved, they need to have easy access to the right kind of information covering their health situation and how they can help improve it. It is important to have a clear explanation of the technologies available, their advantages and disadvantages, their success and failure, their possible adverse effects and their costs. Information given should be neither over sophisticated nor condensing but should be in the language people can understand. For example, newspapers, magazines, radio, television, films, plays, posters, community notice board and any other means available can be used.

Quality healthcare depends heavily on the knowledge and skills of its personnel. To ensure a high level of current awareness and research, PHC services and activities require the support of constant flow of information (WHO, 2008). Availability of health information in various forms at different locations calls for a need to coordinate them and make them accessible to those in need. In realization of this, the Federal Government of Nigeria (FGN) established the National Health Information System (NHIS) for planning, monitoring and evaluating health services.

Statement of the Problem

Health decisions depend on use of information. Health decisions require information from several sources. Information is an indispensable resource in

health decision situations. In the United States, healthcare information system is evolving into a national network of quality improvement initiative (Blumenthal & Egbert, 2010 and ONHTTT, 2008). The utilization of health information is a necessary component of quality improvement initiative because it is expected to enhance quality care, increase healthcare safety and provide cost effective health services for patients.

According to Pakenham-Walsh and Priestly (1997) studies have shown that people in the rural areas do not have access to basic information they need since majority of the population live in rural areas. Most of the primary healthcare centres that are in remote areas lack facilities like internet services. They lack adequate power supply, good road networks and most of the social amenities of life.

Information is valuable in the prevention of diseases and promotion of good health. "Both the public health and the personal care interventions have contributed to reversing the urban – rural differences in health status; better health among urban populations is due more to the application of improved knowledge" (WHO, 2000). It therefore follows that people in rural areas could enjoy better health if they accessed information to enhance their knowledge. Hence, factors which negate information access and use in rural areas need to be addressed in order that rural communities may reap the benefits of improved health knowledge (Musoke, 2005).

Despite the relevance of information for effective and efficient healthcare delivery there are still high rates of diseases in rural areas in Nigeria. Could the high rate of diseases in rural areas be attributed to poor or lack of awareness, access and utilization of primary healthcare information among primary healthcare practitioners? It is in line with the aforementioned problems that the researcher sought to determine the awareness, access and utilization of information among healthcare practitioners in rural areas of North-Western States of Nigeria.

Research Question

How do the primary healthcare practitioners in rural areas of North Western States of Nigeria access primary healthcare information?

Objective

To determine how healthcare practitioners in rural areas of North Western States of Nigeria access information for primary healthcare.

Hypothesis

There is no significant difference among the health practitioners in their levels of access to PHC information available in rural areas of North Western States of Nigeria.

Significance of the Study

The study is of immense importance to students of the School of Medicine in universities especially those in the Department of Community Health. This will create awareness and widen their horizon in the areas of community based health delivery and medical outreach programmes to the rural populace.

The study is also of great importance to the lecturers in Colleges of Medicine and School of Health Science all over the country. It will help them appreciate the role of information as it regards the achievement of their primary goals and objectives for which they were established.

The significance of this study lies in the fact that the findings of the study would be of immense assistance to the administrators of health ministries and institutions in designing action plans and interventions. This will also go a long way in encouraging Federal Ministry of Health, state ministries of health and their parastatals to provide more infrastructures for an uninterrupted flow of information for PHC and other health programmes.

The research is useful in designing health information programmes for federal, state, and local government. The research is also useful to proprietors of private hospitals and clinics in augmenting government effort in promoting Primary Healthcare from the grass root.

The research is also of help to Non-Governmental Organization (NGOs) to provide intervention programmes towards enhancing Primary Healthcare in Nigeria. Lastly the study will be of help to would-be researchers, who can build from where this research stops.

Concept of Information Access

Information access is defined as ‘the presence of a robust system through which information is made available to citizens and others (Burnett, Jaeger & Thompson, 2008). Access to health information by medical professionals is emphasized as something more than just a technical issue; it includes the interests of various stakeholders’ artefacts like computers, equipment and applications relating to health information systems, the practices of people and organizational routines (Bii & Otiike, 2003)

Gatero (2010) opined that information has been a critical part of the medical professional’s armament of tools to provide patient care. Utilizing ICTS can offer the healthcare practitioners with enhanced access to: key data at all levels from international to local, electronic of evidence, peer reviewed research and practice guidelines, and network of professionals in health and related disciplines. Information is important not only for effective healthcare, but also to support the generation of new knowledge and to allow critical interpretation of the relevance and quality of the highly variable new information that is increasingly accessible, particularly through increased access to Information and Communication Technology (ICT) (Pakenham-Walsh, 2008). Most of the information currently available to health practitioners is irrelevant to their needs; information must be in

clear language that is accessible and reliable. Information needs to be easy to use and accessible at the point of care. Shaughnessy et al (1994) explains that “the usefulness of any source of information is equal to its relevance multiplied by its validity, divided by the work required to extract the information”. For example, medical practitioners and the health system need to communicate effectively to enable them function properly. That is why so much money is spent to buy telephones, radio, television sets and computer sets. Therefore, for primary healthcare to be effective, it requires good communication network.

Shiferono & Zolfo (2013) opines that Information and Communication Technology (ICT) is revolutionizing our life, our ways of interacting with each other and day-to-day life and work. The application of ICT to health is described as e-health. This includes: telemedicine, electronic medical records and health information system with decision, support mobile health and e-learning tools. This has shown potentials in facilitating better healthcare delivery system, leading to better health and universal health coverage. The use of ICT in healthcare creates access to healthcare, enhances quality and improves primary healthcare intervention.

Access to reliable health information is crucial for progress toward health for all. Pakenham-Walsh and Priestly (1997) states that “lack of awareness and access to information can be a barrier to effective dispensation of primary healthcare and accurate and timely information can avert a local or national disease outbreak and at the same time prevent international crises”. Umar (2001) posits that time is very significant in any retrieval system. He further states that “information retrieval systems are measured by their speed”. Although Umar states that wait-time is mostly associated with classroom activities, the concept can be applied in the management of health activities as well especially in the retrieval of information from health reference materials. The library and information science research community has carried out a substantial body of work examining health professionals’ information needs, information seeking and use. Many health professionals and physicians seek health information for various reasons such as: the need to obtain answers to patient-specific questions and to keep abreast with new development. Devin & Nilan (2003) opines that the internet provides the possibility of immediate access to the most recent and reliable results of clinical research in everyday medical practice in developed countries. In developing countries on the other hand, the internet is still only available to a minority of health professionals and often not available at the point of care. In Nigeria, Healthcare Sector is divided into three namely, Primary Healthcare (PHC), Secondary and Tertiary Services.

The Primary Healthcare (PHC) is closest to the people and is constitutionally the responsibility of the Local Government (LG). Primary Healthcare services are available in rural and semi-urban centres in the country. In some rural communities, the PHC centre’s lack qualified medical practitioners and nurses provide services. Both Primary and Secondary Healthcare services are provided in rural communities and towns with limited or no access to internet facilities

(Andualem et al., 2013). Updating knowledge with relevant information is very important for healthcare practitioners to deliver quality and sustainable healthcare services to their consumers. According to Odunlade (2011) this is possible when there is sustainable access to health information. Health information is important to improve knowledge base on which evidence based decision is made to serve the clients of healthcare facilities. Also access to health information facilitates the use of new medical technologies, proper handling of medical procedures and treatment of patients.

Chetley (2006) opined that health workers involved in primary healthcare in developing countries are often isolated. They work in remote settings, often alone and have little or no access to up-to date information and opportunities to exchange experience with colleagues. Making use of new technologies and better use of existing technologies is beginning to improve this situation. In Ghana, Kenya and Uganda, satellites have been building experience around the use of Personal Digital Assistants (PDAs) – a small hand held device that enables health practitioners in remote settings to gain access to information, capture, store and share important health data, and link to the experience of other colleagues to improve their practice and outcomes for their patients.

Musoke (2001) who conducted a pilot project in eastern Uganda made use of a VHF radio and mobile walkie talkie to help improve a network of traditional birth attendants to partner with the public health service centres to deliver healthcare to pregnant women. This resulted in increased and timelier patient referrals as well as the delivery of healthcare to a larger number of pregnant women. One could say therefore, that there is the need for ICT use in the health sector to reach out to the poorest populations whether they are in the rural, remote and difficult environments that are underserved with the resources that are located in centre health services to achieve health for all. Godlee (2004) conclude that “universal access to information by health professionals is a prerequisite for meeting the Millennium Development Goals and achieving health for all”. Godlee (2004) also opine that “lack of access to information remains a major barrier to knowledge based healthcare in developing countries”.

Every medical information is created to achieve a pre-determined goal of healthcare institution in handling patients ailments at the same time to provide accurate data to advise successful treatment and otherwise. Akanyi (2006) opined that medical reports are created for the following purposes:

1. Access the performance of healthcare services rendered to patients.
2. Provide data for statistical evaluation in cases to determine the strength and weaknesses of treatment processes.
3. To provide information for training and educating healthcare providers through seminars and workshop.
4. To protect legal interest of patients, hospitals and healthcare practitioners against litigations.
5. To serve as reference source. In this respect, physicians can refer to previous cases to treat current and future ailments.

6. To provide information for research.

Equitable and universal access to healthcare information is an important part of world strategies to reduce global disparities in health and to achieve health related Millennium Development Goals (MDGs) by 2015. Health information professionals have a critical role to play in optimizing access to ICTs (Ajuwon, 2008). ICTs are tools that facilitate communication and transmission of information by electronic means. This includes the full range of ICTs from radio and television to telephones (fixed and mobile) computers and internet. If used effectively, ICTs have enormous potentials as tools to increase information flow and the dissemination of evidence-based knowledge and to empower the medical practitioners and the citizens (Chetley, 2006).

Methodology

Survey research method was adopted in this study. The population of this study comprised of all the primary healthcare practitioners in the rural areas of North Western States of Nigeria totalling 5958, comprising of 184 primary healthcare hospitals, 395 Doctors, 5,077 Nurses, 241 Pharmacists, and 245 laboratory technicians. One hundred and eighty four (184) primary healthcare centres were selected using stratified sampling technique while 1,192 healthcare practitioners were selected using stratified and random sampling.

The instruments used for collecting data in this research were questionnaire and interviews. On the other hand, interview method was used to collect basic information that was not possible to obtain through questionnaire. One set of Questionnaire was constructed and administered to all the Primary Healthcare practitioners. Doctors and Nurses were interviewed through face-to-face interactions.

In order to ascertain the validity of the instruments, the researcher subjected her instruments to research experts, colleagues and supervisors for validation. The instruments were corrected, and comments of the supervisor improved the items structure and format. Contents validity was adopted to validate the instrument.

The reliability of the instruments was established by conducting a pilot study within 7 days (1 week) in Billiri Local Government in Gombe State. Forty (40) health workers were issued the research instrument. The reliability of the questionnaire was determined using the split half technique. The value obtained was $r = 0.754$. The instrument was however found to be reliable.

The researcher administered the instruments personally with the help of two research assistants. This was because the research covered 7 states, the researcher took 1 state and the research assistants covered 6 states. The research assistants were university postgraduate students. With a little training coupled with their knowledge of research methodology, it was easy for them to administer the instruments and collect data that was used for the study.

The statistical techniques used in the analysis and interpretation of the data were the frequency counts, tables, charts and percentages. Analysis of variance (ANOVA) was also used to test the hypotheses. Mamman et al (2002) indicated ANOVA techniques allow comparing the mean of two or more groups simultaneously. According to Bordens and Abbot (2002), when experiment includes more than two groups, the statistical test of choice is analysis of variance.

Results and Discussion

Access to Primary Healthcare Information

This question was raised to determine the means through which the primary health practitioners access the PHC information for primary healthcare in rural areas of North Western States of Nigeria. In order to do this, a list of options was provided for the respondents to indicate the appropriate option as shown in Table 1.

Table 1: Means of Accessing PHC Information in Rural Areas of North Western States of Nigeria

Means of Access	State Public Healthcare														Total	
	KD		KN		KB		KT		JW		SK		ZF			
	F	%	F	%	f	%	f	%	f	%	f	%	f	%	f	%
Library	14	7.8	211	73.5	12	8.3	199	90.0	17	13.2	10	22.7	5	14.3	468	45.0
Internet	176	98.3	199	69.3	133	91.7	211	95.5	121	93.8	37	84.1	31	88.6	908	87.3
Databases	156	87.2	123	42.9	0	0.0	0	0.0	89	68.9	26	59.1	0	0.0	394	37.9
Superior	167	93.3	245	85.4	145	100.0	221	100.0	121	93.8	44	100.0	35	100.0	978	94.0
Colleagues	179	100.0	279	97.2	145	100.0	221	100.0	123	95.3	44	100.0	34	97.1	1025	98.6
Conference/ Seminars/ Workshops	123	68.7	211	73.5	89	61.4	177	80.1	99	76.7	25	56.8	25	71.4	749	72.0
Meetings	178	99.4	277	96.5	133	91.7	216	97.7	123	95.3	42	95.5	29	82.9	998	95.9
Focus Group Discussion	114	63.7	189	65.9	12	8.3	201	90.9	12	9.3	36	81.8	7	20.0	571	54.9
Archives/ Museum	0	0.0	166	57.8	0	0.0	156	70.6	0	0.0	0	0.0	2	5.7	324	31.2
Record Centres	175	97.8	247	86.1	13	8.9	45	20.4	125	96.9	39	88.6	5	14.3	649	62.4
KEY: KD - Kaduna	KB – Kebbi		JW - Jigawa		ZF - Zamfara		KN - Kano		KT – Katsina		SK - Sokoto					

Table 1 indicates that Internet (908:87.3%), superiors (978:94.0%), colleagues (1025:98.6%), conferences / workshops / seminars (749:72.0%) and meetings (998:95.9%) were the commonest means through which the primary healthcare practitioners access information in rural areas of North Western States of Nigeria with an average of over 70% scores respectively. It was also found that the states differ in the use of databases (394:37.9%), Focus Group Discussion (571:54.9%), Archives/Museums (324:31.2%) and record centres (649:62.4%) among the means of access to information by primary healthcare providers. The poor use of database, archives/museum and record centres might be attributed to the choice, convenience, preference and availability of the means of access to PHC information among the healthcare providers in the states studied. Thus, there is the need for the primary healthcare centres to be well equipped with libraries, databases and museum/archives in order to enhance and facilitate access to information by the primary healthcare providers. This will go a long way in improving the lives of pregnant women in the locality. Kukah (2005) identified library, internet, colleagues, meeting and conference as outlets for information access. These information outfits provide the primary healthcare providers with the latest development in medical practice.

A follow up question was raised to identify those facilitates access to information resources on Primary Healthcare in the PHCs in Rural areas of North Western States of Nigeria. To do this, a list of options was drawn for the respondents to tick as many as relevant. Their responses are shown in Table 2.

Table 2: Facilitators of Information Access in the PHCs in Rural Areas of North Western States of Nigeria

Facilitators	State Public Healthcare															
	KD		KN		KB		KT		JW		SK		ZF		Total	
	F	%	f	%	f	%	f	%	f	%	f	%	f	%	f	%
Librarian	45	25.1	189	65.9	33	22.8	56	25.3	12	9.3	0	0.0	7	20.0	342	32.9
Record manager	165	92.2	215	74.9	123	84.8	198	89.6	122	94.6	34	77.3	28	80.0	885	85.1
Archivist	0	0.0	0	0.0	0	0.0	12	5.4	0	0.0	0	0.0	3	8.6	15	1.4
Superiors	168	93.9	223	77.7	134	92.4	211	95.5	126	97.7	44	100.0	33	94.3	939	90.3
Colleagues	176	98.3	267	93.0	145	100.0	211	95.5	126	97.7	44	100.0	35	100.0	1004	96.5
Search engines	179	100.0	255	88.9	121	83.4	178	80.5	99	76.7	35	79.5	28	80.0	895	86.1
Catalogue/ Bibliographies/ Indexes	156	87.2	55	19.2	0	0.0	0	0.0	5	3.9	32	72.7	0	0.0	248	23.8
Self	179	100.0	287	100.0	133	91.7	199	90.0	127	98.4	39	88.6	35	100.0	999	96.1
Online Public Access Catalogue	134	74.9	0	0.0	0	0.0	43	19.5	0	0.0	0	0.0	0	0.0	177	17.0

KEY: KD- Kaduna KB – Kebbi JW - Jigawa ZF - Zamfara KN - Kano KT – Katsina SK - Sokoto

According to Table 2, record managers (885:85.1%), superior officers (939:90.3%), colleagues (1004:96.5%), search engines (895:86.1%), and self (999:96.1%) played major role in facilitating access to information on PHC in the rural areas of North Western States of Nigeria. However, it was found that Archivist, Librarians, Catalogue/ Bibliographies/Indexes and Online Public Access Catalogue were not major facilitators of access to PHC information with an average of less than 40% scores respectively. This situation could perhaps be due to the absence of libraries and archives in the Primary Healthcare centres studied on one hand and the low level of information literacy among the primary healthcare practitioners in rural areas of North Western States of Nigeria. It is therefore suggested by the researcher that libraries should be an integral part of a primary healthcare centres in order to facilitate access and use of PHC information by the primary healthcare providers.

Another follow up question was asked to determine the extent of accessibility to Primary Healthcare related information by the Primary Healthcare Practitioners in the areas of study. A five point Likert scale was used to collect the data. The scale was collapsed into three point levels to facilitate analysis and discussions. Table 3 show the extent of accessibility to the PHC information.

Table 3: Accessibility to Primary Healthcare Related Information by the Rural Primary Healthcare Practitioners

Type of PHC information	Very Accessible		Rarely Accessible		Not Accessible	
	f	%	f	%	f	%
Maternal child health	800	76.9	140	13.5	100	9.6
Immunization	750	72.1	310	29.8	0	0.0
Provision of adequate water supply	70	6.7	720	69.2	250	24.0
Water borne diseases	900	86.5	0	0.0	140	13.5
Environmental sanitation	780	75	210	20.2	50	4.8
Morbidity and mortality rate reduction	0	0.0	290	27.9	750	72.1
Control of endemic diseases	10	0.9	820	78.8	210	20.2
Provision of essential drugs	850	81.7	90	8.7	100	9.6
Prevalent diseases	830	79.8	10	0.9	200	19.2
Appropriate treatment of diseases and injuries	890	85.6	50	4.8	100	9.6
Good health habits	50	4.8	90	8.7	900	86.5
Rest	40	3.8	100	9.6	900	86.5
Poverty eradication	0	0.0	100	9.6	940	90.4
Unemployment	0	0.0	0	0.0	1040	100.0
Mental breakdown	50	4.8	890	85.6	100	9.6
Dental care	945	90.9	45	4.3	50	4.8
Availability of healthcare	0	0.0	140	13.5	900	86.5

Table 3 reveals that out of the 17 types of PHC information generated, only 8 (47.10%) were very much accessible to the primary healthcare practitioners in rural areas of North Western States of Nigeria with over 60% response scores respectively.

On the other hand, the respondents indicated that information on: morbidity and mortality rate reduction, (750:68.2%); good health habits, (900:81.8%); rest, (960:87.3%); poverty eradication, (1000:90.9%) and unemployment, (1100:100%) were not accessible in the primary health centres in rural areas of North Western States of Nigeria. This finding implies that not all the PHC- related information generated were accessible to the primary healthcare practitioners in the rural areas of North Western State PHCs. This might be connected to the lapses in the means of access identified in the area of absence of libraries, databases and museum/archives. The disparity could also be linked to the primary healthcare practitioners' levels of information literacy.

Based on the above discussions, it can be deduced that information on maternal child health, information on immunization, information on water borne diseases, information on provision of essential drugs, information on prevalent diseases, information on appropriate treatment of diseases and injuries and information on dental care, were the easily accessible. This calls for a more concerted effort to improve the information literacy level of the primary healthcare practitioners in the study area in order to strengthen their capacities and abilities to access and use information.

Test of Hypothesis

The hypothesis stated that there is no significant difference among the health practitioners in their levels of access to PHC information available in rural areas of North Western States of Nigeria. This was verified using ANOVA and the results are presented in Table 4.

Table 4 (a): ANOVA in the Levels of Access to the PHC Information

Source of Variance	Sum of Squares	DF	Means Squares	F	P	F critical
Between Groups	5166.200	6	1033.240	12.491	.000	2.44
Within Groups	354.279	1109	8.435			
Total	5520.479	1115				

Table 4(a) shows the analysis of variance on the levels of access to the PHCs information the PHC practitioners in the PHCs in rural areas of North Western States of Nigeria at $P < 0.05$ level of significance. The F calculated 12.491 is greater than the F critical 2.44. This implies that the null hypothesis (H_0) is rejected. It can therefore be concluded that there is a significant difference among the primary healthcare practitioners in the North-western States PHCs in their levels of access to information on Primary Healthcare. Table 4(b) shows the Post hoc analysis.

Table 4 (b): Scheffe Test of Multiple Comparisons

DV	(i) States	(j) States	Mean Difference (i-j)	Std Error	Sig.
levels of access to information	Kaduna	Kano	-2.94444(*)	1.53072	.000
		Kebbi	-0.91667(*)	1.56853	.000
		Katsina	-2.50000(*)	1.67682	.000
		Sokoto	-9.43939(*)	1.47401	.000
		Jigawa	-9.29234	1.56853	.000
		Zamfara	3.06061 (*)	1.47401	.000
	Kano	Kaduna	32.94444(*)	1.53072	.000
		Kebbi	12.02778(*)	1.41126	.000
		Katsina	20.44444(*)	1.53072	.000
		Sokoto	23.50505(*)	1.30541	.000
		Jigawa	23.65278(*)	1.41126	.000
		Zamfara	3.0606	1.34953	.000
	Kebbi	Kano	20.91667(*)	1.56853	.000
		Kaduna	-2.02778(*)	1.41126	.000
		Katsina	8.41667(*)	1.56853	.000
		Sokoto	11.47727(*)	1.34953	.000
		Jigawa	11.62500(*)	1.45217	.000
		Zamfara	14.07143	1.34953	.000
	Katsina	Kebbi	12.50000(*)	1.67682	.000
		Kano	-0.44444(*)	1.53072	.000
		Kaduna	-8.41667(*)	1.56853	.000
		Sokoto	3.06061	1.47401	.514
		Jigawa	3.20833	1.56853	.531
		Zamfara	-3.06061	1.34953	.000
	Sokoto	Kebbi	9.43939(*)	1.47401	.000
		Kano	-3.50505(*)	1.30541	.000
		Kaduna	-1.47727(*)	1.34953	.000
		Katsina	-3.06061	1.47401	.5141
		Jigawa	.14773	1.34953	.000
		Zamfara	-3.65278(*)	1.34953	.000
	Jigawa	Kebbi	9.29167(*)	1.56853	.000
		Kano	-3.65278(*)	1.41126	.000
		Kaduna	-1.62500(*)	1.45217	.000
		Katsina	-3.20833	1.56853	.531
		Sokoto	-.14773	1.34953	1.000
		Zamfara	9.29167(*)	1.47401	.000
	Zamfara	Kaduna	15.85714	1.67682	.183
		Kebbi	3.28571	1.53072	.996
		Katsina	11.28571	1.56853	.548
		Sokoto	9.57143	1.47401	.711
		Jigawa	9.28571	1.56853	.736
		Kano	3.28571	1.4740	.000

* mean difference is significant at 0.05 level of confidence.

Table 4(b) showed the post hoc Scheffe test on the levels of access to PHC information by the PHC practitioners in rural areas of North Western State PHCs.

The table showed that the levels of access to the PHC information in KD PHCs is significantly different from those of KT, JW and ZF respectively. The table also showed that a significant difference exists in the levels of access to PHC information in KT and JW states. This implies that the levels of access to PHC information in the rural areas of North Western States PHCs are not in the same proportion. It can therefore be said that there is indeed a significant difference among the PHCs practitioners in the states in their levels of access to PHC information in the rural areas of North Western State PHCs.

Conclusion

Information is a dynamic entity inherent in the society that is both powerful and important in our complex modern society. An ever-widening range of Health decisions, public and private, group and individual depend on wide use of information. Many Health decisions require information from several sources. Information is therefore an indispensable resource to the individual, family and society. It can be concluded that PHC information is mostly generated in form of reports, statistics, memos, notices and records in the PHCs in rural areas of North Western states of Nigeria.

Improved communication and access to information worldwide helps us to be better prepared and responds to disease out breaks. However, much knowledge is likely to remain in Research Institutes and Teaching Hospital if they are not properly communicated to health workers. Access to reliable health information is crucial for progress towards health for all. Since majority of the population lives in rural areas, lack of awareness and access to information can be a barrier to effective dispensation on PHC. Relevant, accurate and timely information can avert a local or national disease outbreak and at the same time prevent international crises. This is achievable when there is awareness, free flow and use of information among health practitioners.

Recommendations

1. Technological and cultural barrier against access to information on primary Healthcare should be removed.
2. The government of Nigeria (Ministry of Health) should make information for PHC available and accessible through awareness in national dailies and scholarly out lets in form of reviews and announcement.
3. Rural Healthcare Practitioners in the rural areas of North Western states of Nigeria and other stakeholders should be trained and re-trained through refresher courses, symposia, meetings and workshops on the latest trends in access to PHC information and use of PHC information.

4. State-of-the-art ICT facilities should be employed in rural areas north western states of Nigeria in both on-line and the conventional information carriers in their organisation to reduce the physical stress and time used when searching for information. ICT facilities such as computers, scanners, digital cameras, telecommunication infrastructure and Internet should be provided as a matter of urgency in all the PHC centres in the states to make the Healthcare practitioners appreciate the relevance and use of ICT in Primary Healthcare delivery. The Healthcare practitioners should be up to date and more responsive to the challenges of their profession in this digital age.
5. Librarians and other information providers in Nigeria generally and particularly in rural areas of north western states should create retrieval devices and other representational forms of information to create awareness and facilitate access to and retrieval of Health information for Primary Healthcare Development.
6. A model that will facilitate access to Primary Healthcare should be developed. This research has succeeded in developing a one that will facilitate access and use of information for Primary Healthcare.

References

- Alma-Ata (1978). *International Conference on Primary Health Care*. Alma-Ata, USSR, Sept. 6-12 1978. http://www.who.int/hpr/NPH/docs/declaration_almaata.
- Berkman, N. D., Dewalt, D. A. & Plynone M. P. (2004). *Literacy and Health Outcomes: Summary (Internet)*. Rock Ville, MD: Agency for Health Care Research and Quality, pp. 6 -8.
- Blumenthal, D. & Egbert, T. (2010). The Meaningful Use Regulation for Electronic Health Records. *The New England Journal of Medicine*, 363 (6), 501-504.
- Burnett, Jaeger & Thompson (2008). Health for All Beyond 2000: The Demise of the Alma-Ata Declaration and Primary Health Care in Developing Countries. *Medical journal of Australia* 2003; 178(1): 13-20.
- Floridi, L. (2010). *Information: A Very Short Introduction*. Oxford: Oxford University press.
- Herrington A. & Herrington, J. (2006). Effective Use of Internet: Keeping Professionals Working in Rural Australia. Barton Act: Rural Industries Research and Development Corporation.
- Hogg, W., Rowan, M., Russell, G., Geneau, R. & Muldoon, L. (2008). Frame Work for Primary Care Organization: The Importance of Structural Domain. *International Journal for Quality in Health Care*, 20, 308 – 313.
- John, O. R. (2006). Interface Model for Information Utilization in Research Institution. Lagos: *Journal of Library and Information Science*, Vol. 3. (2) pp. 147 – 152.
- Masters, K. (2008). For What Purpose and Reasons do Doctors Use the Internet: A System Review. *International Journal of Medical Information*, 77 (1), 4 – 16.

- Mohammed, Z. (2012). The Dynamics of Information: Embracing the Present to Cope with the Future. Seventh Tai Solarin National Memorial Lecture held on 27th September, 2012, Victoria Island, Lagos.
- Musoke, M.G. (2005). Access and Use of Information by Primary Health Care Providers in Rural Uganda: An Interaction-Value Model. *The University of Dar-es-Salam Library Journal*. 7 (1).
- Nakojimo H. (1997) "Getting the message across" *World Health* 50 (6) p. 1
- Obiora, N. E. F. & Anachabi E. S. (2013). Health Information Availability and Utilization by Medical Practitioners for Chronic Disease Management in Central Hospital, *IOSR Journal of Pharmacy*, Vol. 3 (3), pp. 18 – 23.
- Office of National Coordinator for Health Information Technology – ONHIT (2008). *Defining Key Health Information Technology Terms*. Washington, DC; US Government Printing Office.
- Oltmann, M. S. (2009). *Information Access* School of Library and Information Science. Indiana University. Bloomington pp. 6 – 22.
- Shanahan, M., Herrington, A. & Herrington, J. (2009). The Internet and the Medical Radiation Science Practitioner. *Radiography*, 15 (3), 233 – 24.
- Shoultz, J. & Hatcher, P. (1997). Looking Beyond Primary Care to Primary Health Care: An Approach to Community Based Action. *Nursing Outlook*, 45 (1) 23 – 26.
- UNICEF & World Health Organization (1978). *Primary Health Care: Report of the International Conference on Primary Health Care*. Alma-Ata, USSR 6-12 September. Paris: Geneva.
- Vigo, R. (2011). Representational Information: A New General Notion and Measure of Information. *Information Science*, 181; 4847 – 4859.
- Vukic, A. & Keddy, B. (2002). Northern Nursing Practice in Primary Health Care Setting. *Journal of Advanced Nursing*, 40 (5) 542 – 48.
- World Health Organization Report (1978). *Primary Health Care: Report of the International Conference on Primary Health Care*. Alma-Ata, USSR 6-12 September. Paris: Geneva.
- World Health Organization Report (2000). *Health Systems: Improving Performance*. Geneva: The World Health Organization (WHO).
- World Health Organization Report (2000). *World Health Report 2000 – Health systems: Improving performance*. Geneva: WHO www.who.int/whr/2000/en/whr2000.
- World Health Organization Report (2008). *Primary Health Care (Now More Than Ever)*. <http://www.who.int/whr/2008/en/index.html>.



Determinants of Contraceptive Practice among Market Women of Childbearing Age in Lagos Metropolis

Adenrele Haastrup ¹, Lordson Daki ¹, Tawakalt Adebayo-Gafar ¹

Abstract. This survey on determinants of contraceptive practice among women of child bearing age looked at the variables of cost, variety of methods and desire for more children. Three hundred (300) market women of child bearing age volunteered information through a self-developed and validated questionnaire ($r=0.89$). The study revealed that availability and cost of contraceptive methods; and desire for more children were considered to be significant determinants of contraceptive use among market women in Lagos metropolis. As fallout of the study, the study suggests improving access to contraceptive services by making the various methods available and working on the cost dynamics. Also, contraceptive education programmes should be improved for women of child bearing age.

Keywords: Reproductive health; Contraception; Lagos

Introduction

Population increase is a major challenge affecting the world's economy. According to the Malthusian theory of population, the world population grows exponentially while resources/foods grow arithmetically (cgge.aag.org). This increase if not controlled, may lead to famine. For the increase in population to be positive, there is need to channel this increase to a more productive end rather than look idly at the pressure it puts on scarce commodity.

In curtailing the growing exponential population, many countries have devised ways in putting their population growth side by side with their resources by either rolling out policies on number of children or family planning uptake. For example, China in 1980 had a restriction on the number of birth per couple. It was just in

¹ University of Lagos

Address Correspondence to:

Adenrele Haastrup, Department of Human Kinetics and Health Education, University of Lagos, Akoka-Yaba, Lagos, Nigeria.

2015 that the policy was reviewed because of the aging labour force (nationalgeographic.com).

The quest for controlling the world population in line with scarce resources brought about the revolution in reproductive health care. Reproductive health care in the context of primary health care includes among others: family planning counselling, information, education, communication and services concerning reproductive and sexual health, including prevention of early pregnancies, promoting sex education and the prevention of STIs including HIV and AIDS. Access to confidentiality and privacy of these services were also emphasized as well as parental guidance and support (Irja, 2007).

One aspect of interest in reproductive health care is family planning/contraception. Contraception is a method or device used to prevent pregnancy. According to Mturi (1996) contraception is any deliberate practice undertaken to reduce the risk of conception. Similarly, Hennink (1997) defines contraceptive use as the deliberate employment of a technique or device to prevent conception.

Taking a retrospective look at the issue of family planning, Irja (2007) stated that “the concept of contraception has been promoted by WHO for decades. When the modern family planning movement began in the early 20th century, its primary purpose was to liberate women from social and health consequences of unwanted pregnancies. When organized family planning programmes reached developing countries in the early 1950s, these programmes were viewed as the means to alleviate the pressure of rapid population growth on economic development”. Irja also observed that in the last few decades, the purpose of family planning has broadened to encompass both these objectives and the objective of improving women’s health and welfare.

It should be noted that the importance of family planning is not limited to the objectives stated earlier. Family planning/contraception in addition reduces the need for abortion, especially unsafe abortion, reinforces people’s rights to determine the number and spacing of their children. By preventing unintended pregnancy, family planning /contraception prevent deaths of mothers and children (WHO, 2015).

In traditional Nigeria, children are seen as the fruits of marriage. We should however not ignore that raising a child requires significant amounts of resources: time, social, financial and environmental factors (United States Department of Agriculture, 2007). Planning can help assure that resources are available. Consequently, the purpose of family planning is to make sure that any couple, man, or woman who has the desire to have a child has all the resources that are needed including good health as an essential foundation.

Apparently, it is evident that there is a high level of awareness and knowledge of contraceptive methods in Nigeria. According to Nigeria Demographic and Health Survey (2008) about 70% of the women know of at least a method of contraception. However, this high knowledge of contraception methods may not necessarily have translated into a high contraceptive use. Some studies have

focused on the issues of religion and husbands' attitude/position as factors in contraceptive use among women of child bearing age. In this current study, effort was made to investigate the determinants of contraceptive use among market women of child bearing age in Lagos metropolis looking at some additional variables.

Objectives of the Study

The main objectives of this study are:

1. To assess availability of contraceptive methods as determinant of contraceptive practice
2. To assess contraceptive cost as determinants of contraceptive practice
3. To evaluate desire for more children as determinants of contraceptive practice

Theoretical Framework

Previous research (Castro & Juarez, 1994) has examined how women's roles and status influence their use of contraceptives and their fertility. It is pertinent to look at the Davis and Blake (1956) frame of work in this study. The framework is an integration of the intermediate determinants' framework and the fertility decision-making model presented by Bulatao and Lee (1983). The integration of the two approaches leads from the assumption that decisions have a direct input in altering the intermediate variables. While it might not be possible to include all the variables and pathways in any one model, it provides a useful starting point and guide in selecting the variables which have a direct influence on contraceptive use.

Knowledge about contraceptives should be accompanied by perceptions about access and availability of methods in order for proper considerations to be given whether to use or not. According to Davis & Blake model (1956) for women to adopt contraception, they should have a perception of the availability and accessibility of the means of fertility regulation, so that they can translate these perceptions into action.

Motivation is a key aspect of the decision-making process. Within a population, motivation is influenced by socio-economic, cultural and family life cycle patterns. The concept of motivation has been used widely in the economic models of fertility in which motivation is thus defined as the balance between supply and demand (Davis & Blake, 1956).

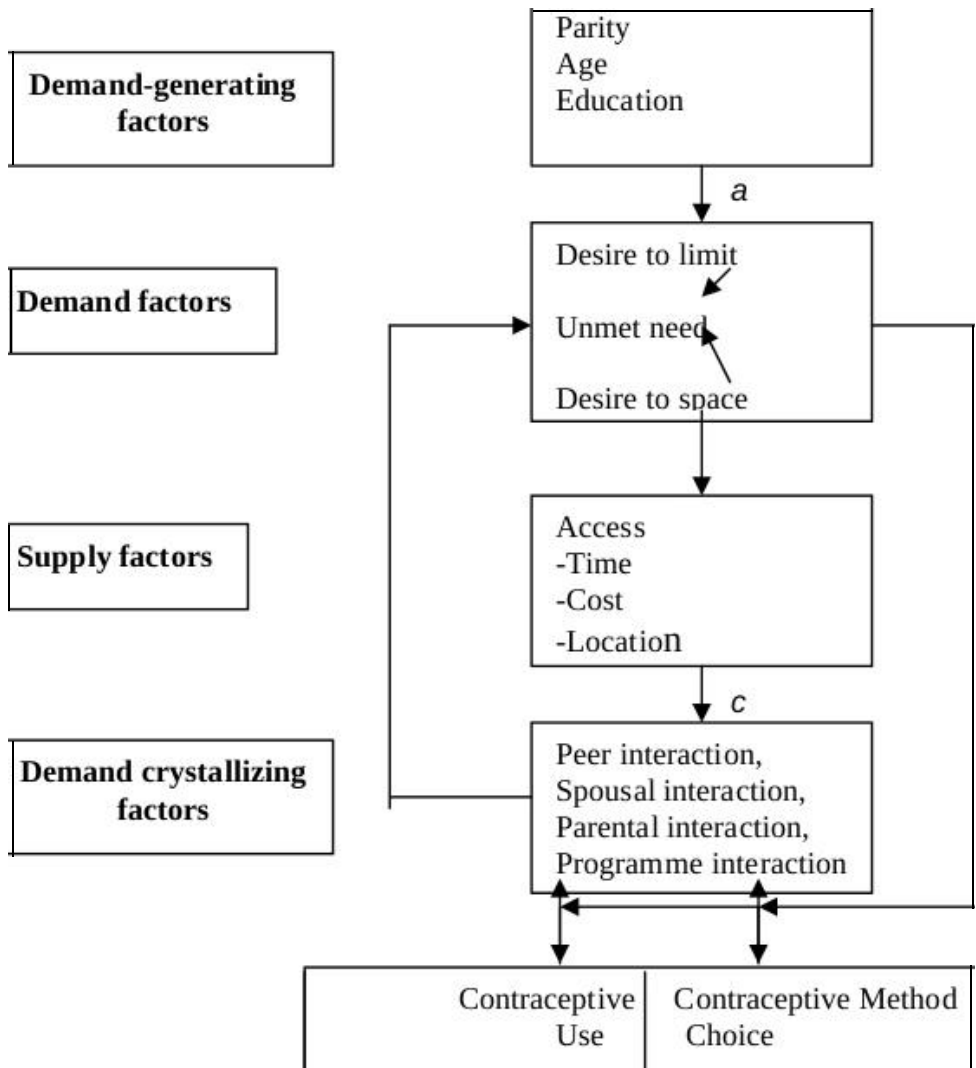


Figure 1: Model for Determinants of Contraceptive Practice

Source: Adapted from Davis & Blake (1956)

The model of contraceptive behaviour (figure 1) above sheds more light on the use and choice of contraceptives. In the model, four major elements were identified. They are: (i) Demand-gathering factor; (ii) Demand factors; (iii) Supply factors; and (iv) Demand crystallization factors. The demand-gathering factors show that the personal characteristics of the individual such as age, number of children, education and other personal characteristics come to play. Demand factors focus on the unmet need of the prospective user. It is the combination of the desire to limit the number of children and the desire to space children/births. Next to this are supply factors which borders on issue of access. Here,

consideration is given to cost, time it takes to be able to access the service variety of methods, attitude of providers and also the location of the facilities where the client can procure the service. The demand crystallisation factors as presented in the model are more of external influence on the client which can also be significant. Elements here include interaction of the client with peers, spouse's influence, parental influence and also the effect of programme package. All these are deemed to facilitate the outcome: use and choice of contraceptive behaviours.

Methodology

This study is a descriptive survey that made use of questionnaire for data collection on the determinants of contraceptive practice among market women of child-bearing age.

The population consists of registered market women in Lagos metropolis. In Lagos, the practice is that market women should register under the association belonging to what they sell. For example, women trading in 'tomato and pepper' have their association; likewise those trading in 'Ankara' (cloth) have their association too. There are also associations of meat sellers, fish sellers and others. This population is a mixed population of different tribes, religions and educational levels. The population however is predominantly of the Yoruba tribe with few other tribes, a factor which could be attributed to indigenes of the study area.

The questionnaire was the only instrument used in this study. The first part of the questionnaire named Market Women Contraceptive Practice Questionnaire (MWCPQ), consists of demographic section aimed at collecting specific personal details on the respondents. These include age, marital status, level of education, religion, number of children and age of last child. The other session focused on the respondents' opinions on factors influencing contraceptive practice among women. Specifically, availability of variety of methods, cost of contraceptives, desire to have children in future, reproductive age bracket and spousal influence were some of the variables considered.

Three hundred (300) registered market women within the child-bearing age were purposively selected for the study. The sample cuts across all units of the market women associations in Shomolu and Surulere Local Government Areas of Lagos State.

Content validity was used to ascertain the ability of MWCPQ to measure the variables in the study while the Test-Retest Method of reliability was used to measure the consistency of the instrument. The r -value was 0.89, using Cronbach's Alpha.

The researchers visited the management of both Shomolu and Surulere Local Government Areas Market Associations to obtain permission to conduct the study. The purpose and the significance of the study were explained to the executives of the association. A total of 325 copies of the questionnaire were administered while 300 of the retrieved copies of the questionnaire were found

useful giving a 92.3% response rate. The copies of the questionnaire were administered to the respondents in their stores. For those who cannot read nor write, the structured interview approach was used to collect information.

The retrieved copies of the questionnaire were coded and analysed using Statistical Package of Social Sciences (SPSS) version 17.0. Descriptive statistics of percentages and means were used to describe the data while inferential statistics of Chi-Square was used to test the hypotheses at 95% Alpha level.

Findings

Table 1: Demographic Representation of Respondents

Variables	Responses	Frequency	%	Mean
Age	15-19yrs	24	8.1%	30.17
	20-24yrs	50	16.8	
	25-29yrs	70	23.5	
	30-34yrs	69	23.1	
	35-39yrs	41	13.7	
	40-45yrs	44	14.8	
	Total	298	100	
Level of Education	No formal education	20	6.7	
	Primary	44	14.7	
	Secondary	129	43.0	
	Tertiary	107	35.7	
	Total	300	100	
Marital Status	Single	65	21.7	
	Married	173	57.7	
	Divorced	13	4.3	
	Separated	18	6.0	
	Widow	17	5.7	
	Cohabiting	14	4.7	
	Total	300	100	
Religion	Islam	143	47.7	
	Christianity	154	51.3	
	Others	3	1.0	
	Total	300	100	
Number of Children	None	35	11.7	2.85
	One	69	23.0	
	Two-three	112	37.3	
	Four and above	84	28.0	
	Total	300	100	
Age of last child	Less than 1 year	17	5.7	1yr 9mnths
	One-three years	173	57.7	
	Four to six years	71	23.6	
	Above six years	39	13.0	
	Total	300	100	

From the table above, the mean age of respondents is 30.17 years. Majority 173(57.7%) of the respondents were married, 65(21.7%) of the respondents were single, while 13(4.3%), 18(6%), 17(5.7%) and 14(4.7%) of the respondents were divorced, separated, widowed and cohabiting respectively. 20(6.7%) of the respondents had no formal education, 44(14.7%) had primary school education as their highest level of education, 129(43%) had secondary education as their highest level of education while 107(35.7%) had tertiary education. Majority 154(51.3%) of the respondents practiced Christianity, 143(47.7%) practiced Islam while 3(1%) practiced other religions. The mean number of children of the respondents is 2.85. The mean age of the respondents' last child is 1 year and 9 months.

Table 2: Availability of Contraceptives

Variable	Responses	Frequency	Percentage	Mean
I have access to contraceptive services	Strongly Disagreed			3.43
	Disagreed			
	Agreed	170	56.3	
	Strongly Agreed	126	41.7	
	No response	6	2	
	Total	300	100	
There is opportunity to pick contraceptive method of my choice.	Strongly Disagreed			3.43
	Disagreed	6	2	
	Agreed	159	53.7	
	Strongly Agreed	131	44.3	
	Total	296	100	
Availability of variety of contraceptive use encourage me to use contraceptive	Strongly Disagreed	1	0.3	3.39
	Disagreed			
	Agreed	178	59.3	
	Strongly Agreed	116	38.7	
	No response	5	1.7	
	Total	300	100	
With variety of contraceptive methods choosing a preferred method is easy.	Strongly Disagreed			3.4
	Disagreed	5	1.7	
	Agreed	165	55	
	Strongly Agreed	124	41.3	
	No response	6	2	
	Total	300	100	

From Table 2 above, the mean values for each of the items are positive since they are above 2.5. The maximum score should be 4.0 with a positive pass mark of 2.5.

Responses in the Table 2, show that respondents agree that preferred methods of contraception are not often available.

Table 3: Respondents opinion on the cost of contraceptives

	Responses	Frequency	Percentage	Mean
The contraceptive method I use is not expensive.	Strongly Disagreed	1	0.3	3.36
	Disagreed	11	3.7	
	Agreed	163	55.5	
	Strongly Agreed	119	40.5	
	Total	300	100	
There is opportunity to pick a preferred method of contraceptive when cost is low.	Strongly Disagreed	1	0.3	3.38
	Disagreed	11	3.7	
	Agreed	156	53.1	
	Strongly Agreed	126	42.9	
	Total	294	100	
Transportation to health centre adds to cost of contraceptive services.	Strongly Disagreed	9	3.1	3.09
	Disagreed	63	21.4	
	Agreed	118	40.1	
	Strongly Agreed	104	35.4	
	Total	300	100	
If contraceptive services are free, more people will use contraceptive.	Strongly Disagreed	3	1	3.49
	Disagreed	7	2.4	
	Agreed	128	43.5	
	Strongly Agreed	156	53.1	
	Total	294	100	

From Table 3 above, the mean values for each of the items are positive since they are above 2.5. The maximum score should be 4.0 with a positive pass mark of 2.5. Responses in the table above, shows that respondents agree that the cost of contraceptive is high.

Table 4: Desire to have Children

	Responses	Frequency	Percentage	Mean
Contraceptive choices are influenced by the number of children a woman has.	Strongly Disagreed	1	0.3	3.3
	Disagreed	17	5.8	
	Agreed	167	57.2	
	Strongly Agreed	107	36.6	
	Total	292	100	
Women who desire to have more children will not like to have permanent method of contraceptive.	Strongly Disagreed	1	0.3	3.4
	Disagreed	11	1.7	
	Agreed	156	54.9	
	Strongly Agreed	126	43	
	Total	294	100	
Women who plan to have children soon will not bother to use contraceptive.	Strongly Disagreed	39	13.3	2.89
	Disagreed	38	12.9	
	Agreed	133	45.2	
	Strongly Agreed	84	28.6	
	Total	300	100	
Some women may be afraid that using contraceptive will prevent them from having children	Strongly Disagreed	45	15.3	2.83
	Disagreed	49	16.7	
	Agreed	111	37.8	
	Strongly Agreed	89	30.3	
	Total	294	100	

From Table 3 above, the mean values for each of the items are positive since they are above 2.5. The maximum score should be 4.0 with a positive pass mark of 2.5. Responses in the table above, shows that respondents agree that the desire to have more children influence their choice of contraceptive use.

Hypothesis One: Availability of contraceptive methods will not be a significant determinant of contraceptive practice among market women in Lagos metropolis.

Table 5: Chi-square analysis of the availability and use of contraceptives

Variable	N	Mean	S.D	X ² calc	X ² tab	df	Remark	Decision
Availability of contraceptive methods	296	3.41	0.47	348.88	11.07	5	Significant	Rejected

From Table 5 above, the X² calc 348.86 is greater than X² tab 11.07. The null hypothesis is therefore rejected while the alternate hypothesis which states that availability of contraceptive methods will be a significant determinant on contraceptive practice among market women in Lagos metropolis is accepted at 95% Alpha level.

Hypothesis Two: Cost of contraceptive methods will not be a significant determinant on contraceptive practice among market women in Lagos metropolis.

Table 6: Chi square Analysis of the cost and Use of Contraceptives

Variable	N	Mean	S.D	X ² calc	X ² tab	df	Remark	Decision
Cost of contraceptive methods	300	3.33	0.49	560.82	15.51	8	Significant	Rejected

From Table 6 above, the X² calc 560.82 is greater than X² tab 15.51. The null hypothesis is therefore rejected while the alternate hypothesis which states that cost of contraceptive methods will be a significant determinant on contraceptive practice among market women in Lagos metropolis is accepted at 95% Alpha level.

Hypothesis Three: Desire for more children will not be a significant determinant on contraceptive practice among market women in Lagos metropolis.

Table 7: Chi square analysis of the desire for more children and contraceptive use among market women

Variable	N	Mean	S.D	X ² calc	X ² tab	df	Remark	Decision
Desire for more children	300	3.1	0.62	569.16	18.31	10	Significant	Rejected

From Table 7 above, the X² calc 569.16 is greater than X² tab 18.31. The null hypothesis is therefore rejected while the alternate hypothesis which states that desire for more children will be a significant determinant on contraceptive practice among market women in Lagos metropolis is accepted at 95% Alpha level.

Discussion, Conclusions and Recommendations

In table 5 (X^2 calc 348.86 > X^2 tab 11.07) the assumption that availability of contraceptive methods is not a determinant of contraceptive practice is rejected. This finding is in concurrence with a report by UNICEF (2005) in Ghana Millennium Development Goals framework. It reported that making available family planning commodities in health facilities is one of the major bottlenecks that need to be addressed in order to improve maternal health in Ghana. It further reported that making available family planning commodities is also linked with improved accessibility to family planning, increased family planning coverage as well as acceptability of these methods; all these lead to improved maternal and neonatal health. Also, Ntozi and Kabera (1991) found that the low use of modern methods of contraception was caused by the lack of knowledge of supply sources, low education, low levels of employment outside the home and unavailability of supplies.

In Table 6 (X^2 calc 560.82 > X^2 tab 15.51) the assumption that cost of contraceptive methods is not a determinant of contraceptive practice among market women of childbearing age is rejected. This finding is in support of the findings by Bloom, Lippeveld and Wypij, (1999); Griffiths, Hinde and Mathews, (2001). These studies revealed that cost has been shown to be a barrier in service use and it also influences the choice of source from which care is sought. Griffiths, Hinde and Mathews, (2001) in the study on the use of antenatal care in India, also show that although women perceive private services to offer greater quality care, the cost of such services often makes them unaffordable.

In table 7 (X^2 calc 569.16 > X^2 tab 18.31) the assumption that desire for more children is not a determinant of contraceptive practice among market women of childbearing age is rejected. This finding is in contrast with that of a study conducted by Nasra, Makhdoom and Zoran (1998) in Kuwait, the desire to stop childbearing did not have a significant effect on reported contraceptive use, once the effects of other variables were accounted for. However, women who had reached or exceeded their ideal family size were significantly more likely to be using a method than were women who had not reached their self-chosen ideal number of children. Hence, it appears that the ideal number of children is the more useful predictor of the woman's actual fertility behaviour.

In a publication by Ashraf and Joseph (1996) the parity and the number of surviving children of the woman not only reflect the past attitude of a couple regarding fertility preference and family planning practice, but also influence the future desire for children and contraceptive use. The authors also referenced a study conducted by Kim and co-workers who stated that "in reanalysing the Korean Fertility Survey (1974) data found similar results as we did in our study that the number of currently living children was the most important determinant in the decision to have another child" The authors further made reference to the Pakistan Demographic and Health Survey, 1991 report that the contraceptive use among currently married women increases as the parity of women increases.

Even when this current study did not go into pattern of contraceptive use among the respondents, some factors militating against their practice of contraception have been revealed. Most likely, if issues of cost and availability of contraceptives are appropriately addressed, there may be increased in the population's willingness contraceptive intake.

The willingness to have more children is more of an individual's desire but in most cases, have its root in the culture and traditional beliefs of a people. In a cultural setting such as Yoruba tribe where this study was carried out, more value is attached to multiple numbers of children. The consequence of this may be that even when the resources of the family economically cannot support more than one child, they will still want to have more children. The desire to have more children a times also makes the couple to ignore the warning signs regarding the health of the mother throwing into the wind caution in form of family planning/contraception.

The issue of cost was recognised by the respondents as a strong factor in family planning uptake. What should be noted regarding this position is that cost is not strictly monetary as some or most of the services are actually free. An average market woman sees leaving her 'trading' or stall to attend to other things as having financial implications. She is more concerned about how much money she would have made during the time she travels to the family planning clinic and the time she spends while waiting and consulting the health care provider (s) at the clinic.

For ease of access and to encourage patronage of family planning services, family planning centres should be built inside major markets in all the local government areas in Lagos metropolis.

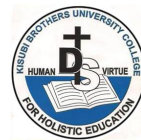
Awareness campaign and contraceptive education should be organised frequently for market women. This campaign should include but not restricted to the implication to the mother's health, the father's burden and the family's financial status.

This study might be useful to the government and other health promotion planners on contraceptive uptake among women. The study did reveal the dynamics in the cost for contraceptive uptake.

References

- Ashraf Lasee and Joseph B. McCormick (1996). Demographic and Socio-Economic Determinants of Contraceptive Use in a Low Income Community of Karachi. *Journal of Pakistan Medical Association*. Available at: http://jpma.org.pk/full_article_text.php?article_id=4464
- Bloom S. S., Lippeveld T. and Wypij D. (1999). Does antenatal care make a difference to safe delivery? A study in urban Uttar Pradesh, India. *Health Policy and Planning*, 14(1):38-48.
- Bulatao R.A. and Lee R.D (1983). Determinants of fertility in Developing countries: fertility regulations and institutional influences vol. 2: 757-787. New York Academic Press.

- Castro M. T. and Juarez F. (1994). Women's education and fertility in Latin America: exploring the significance of education for women's lives. *Demographic and health surveys working papers* No. 10, Maryland: Macro International.
- Davis K. and Blake J. (1956). Social structure and fertility: An analytic framework. *Economic development and cultural change* 5(4): 190-211.
- Griffiths P., Hinde A. and Mathews Z. (2001). Infant and child mortality in three culturally contrasting states of India. *Journal of biosocial science* 33(4):603-622.
- Hennink M. (1997). Trends in contraceptive use and method choice in Britain: A literature review. Unpublished paper. University of Southampton.UK.
- <http://news.nationalgeographic.com/2015/11/151113-datapoints-china-one-child-policy>.
- Irja Nelago Kandiwapa Indongo (2007). Contraceptive Use among Young Women in Namibia: Determinants and Policy Implications. <http://repository.up.ac.za/bitstream/handle/2263/25078/Complete.pdf?sequence=8>
- Malthus Thomas Robert (1798). *Essay on the Principle of Population*. http://cgge.aag.org/PopulationandNaturalResources1e/CF_PopNatRes_Jan10/CF_PopNatRes_Jan108.html
- Mturi A. J. (1996). Pattern of fertility and contraceptive use in Tanzania. PhD Thesis: Department of Social Statistics. Faculty of Social Science. University of Southampton.
- Nasra M. Shah, Makhdoom A. Shah and Zoran Radovanovic (1998). Patterns of Desired Fertility and Contraceptive Use in Kuwait. *International Family Planning Perspectives*; Volume 24, Number 3, September. <https://www.guttmacher.org/pubs/journals/2413398.html>
- Nigeria Demographic and Health Survey (2008). National Population Commission and ICF micro, Calverton, MD 0705, USA.
- Ntozi, J. P. and J.B. Kabera (1991). Family planning in rural Uganda: knowledge and use of modern and traditional methods in Ankole. *Studies in Family Planning* 22 (2): 116-23.
- UNICEF (2005). *Early Marriage: A Harmful Traditional Practice*. New York, NY, USA: United Nations Children's Fund
- United States Department of Agriculture (2007). Expenditures on Children by Families; Miscellaneous Publication Number. Centre for Nutrition Policy and Promotion.
- World Health Organization (2015). 'Report of a WHO Technical Consultation on Birth Spacing', viewed 12 August 2015, from http://www.who.int/maternal_child_adolescent/documents/birth_spacing05/en/index.htm.



Discrimination as a Correlate of Job Security among HIV/AIDS Patients Attending the ARV Clinic at State Hospital, Saki, Nigeria

Shehu Raheem Adaramaja¹, Oguntunji Isaac Opeyemi¹, Abdulraheem Adijat Mojisola¹, Ologele Ibraheem¹, Jidda Kafayah Adeola¹, Akorede Seun Nurudeen¹

Abstract. This study investigated discrimination as correlate of job security among HIV/AIDS patients attending the antiretroviral clinic, State Hospital, Saki, Nigeria. Discrimination remained one of the major hindrances to job security for HIV positive employees. Descriptive research of cross-sectional survey design was employed for this study. Sample size of 144 respondents was used. Data was collected using a close-ended questionnaire (reliability co-efficient = 0.79). Pearson Product Moment Correlation was used to test the null hypotheses set for the study at the .05 level of significance. The results revealed that employers significantly denied HIV/AIDS positive persons job opportunities and remained hostile to them. However, workmates of HIV/AIDS positive people closely related with them. It is recommended that employers be encouraged to accommodate HIV positive applicants and employees who are still agile and physically able to work rather than deny all categories of HIV positive people job opportunities. Also, employers should be educated on the consequences of hostility to the psychological state of HIV/AIDS positive people and respect the HIV/AIDS Anti-Discrimination Act.

Keywords: HIV/AIDS; Antiretroviral treatment; Stigmatisation.

Introduction

Globally, Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS) remain a public health threat with its devastating consequences upon the affected categories of individuals. Till this present time,

¹ University of Ilorin

Address Correspondence to:

Shehu Raheem Adaramaja, Department of Health Promotion and Environmental Health Education, Faculty of Education, University of Ilorin, Ilorin, Nigeria. E-mail: draheemshehu@yahoo.co.uk.

HIV/AIDS is not curable, but treatable, manageable and preventable. In 2009, an estimated 33.3 million people (adult and children) worldwide are living with HIV/AIDS and 1.8 million people have already lost their lives due to HIV/AIDS across the world (Joint United Nations Programme on HIV/AIDS, 2010). Worldwide, Nigeria has the second highest number of new infections reported each year and an estimated 3.7 percent of the population is living with HIV (Federal Republic of Nigeria, 2012).

The by-product of stigmatization is discrimination. Nwagwu (2004) defined stigmatization as a dynamic social process that arises from the perception that an individual has an undesirable attributes, thus, reducing him in the eye of the society. Also, discrimination occurs when people or institutions act upon stigma, and it entails unjust action or inaction towards individuals (Jane, 2012). Recently, the senate of the Federal Republic of Nigeria on April 10, 2014 passed a bill seeking to prevent the stigmatization of and discrimination against those living with HIV and AIDS in Nigeria (Aborisade, 2014). This bill equally made it an offence for any employer, institution, body or individual to requisite an HIV test as a pre-condition to a public or private services sectors or opportunities.

Workplace is an environment where diverse people of the same or different professions team up to achieve the goal of a specific organization. Social interaction cannot be left out in a workplace. Workplace is seen as a community that impacts positively or negatively on health of individual worker. In the view of Adeyemo and Oyinloye (2007), the workplace remains a potentially unsafe environment for HIV positive people whether they are currently at work, returning to work or looking for job for the first time.

In Oyo State, Nigeria, especially in private organizations, the researchers observed that discrimination remained one of the major hindrances to job security for HIV positive employees. In Nigeria, the findings of Global Network of People Living with HIV Stigma Index (2012) among 706 respondents who are HIV positive people revealed that in the previous 12 months, 53 percent lost their jobs/sources of income due to discrimination and poor health; 43 percent lost theirs as a result of HIV positive status; 27 percent had refused the opportunity to work; 30 and 25 percent of men and women had experienced job denial respectively; 28 and 33 percents were discriminated by their employers and co-workers respectively; and 14 percent were dismissed, suspended or prevented from attending educational institutions for further trainings in their workplaces.

In most cases, employers of labour subject their applicants and employees to tests that include HIV test without consultation and the results later used to discriminate them. Therefore, majority of HIV positive people affirmatively said that they cannot disclose their status in their places of work to anybody for fear of how they will be treated (Judd-Leonard, 2012). This is buttressed by the study of Iliyasu, Abubakar, Musa and Aliyu (2011) in Aminu Kano Teaching Hospital, Kano, Nigeria in which 40 percent of HIV/AIDS patients confessed that they had experienced discrimination in their workplaces. Moreover, in the workplace, if an employee is discovered to have HIV/AIDS, the general perception is that the

individual is not fit to perform his/her assigned or expected roles (Keba, 2011). Therefore, the affected person concerned suffers idleness, made redundant and later dismissed from workplace. The studies of Adeyemo and Oyinloye (2007); Rao, Agnell, Lam and Corrigan (2008) among employers in both Nigeria and China found strong reluctance to hire or retain employees with HIV seropositive.

According to Bill, Steven, Gina and Mukadi (2004); Nyblade, Stangl, Weiss and Ashburn (2009); Owolabi, Araoye, Osagbemi, Odeigah, Ogunniran and Hussain (2012); Jamaica Information Service (2012), reported that HIV/AIDS patients suffer stigmatization from both their employers and co-workers such as social isolation, ridicule or experience discriminatory practices such as termination or refusal of employment, unfair and unwarranted dismissal or denial of benefits. A study in France specifically examined employment discrimination and the result proved that 149 out of 478 HIV/AIDS patients had experienced loss of jobs within the study duration (Dray-Spira, Gueguen & Lert, 2008). In a bid for HIV/AIDS patients to escape the shame, nicknaming and isolation associated with stigmatization and discrimination, they were sometimes forced to quit their jobs and settle for menial jobs or keep moving between jobs.

Negative attitude of employers of labour towards seropositive employees calls for concern. Bill, Steven, Gina and Mukadi (2004) observed stigmatization and discrimination by co-workers in the workplace against HIV/AIDS patients. Also, Adeyemo and Oyinloye (2007) observed social isolation, hostility and attempts to dismiss HIV positive workers in the workplaces. In most cases, hostility emanated from co-workers and other staff who put pressure on management to sack HIV positive employees. Peradventure the employer of labour discovers the HIV positive status of his/her employee, stigmatization and discrimination in form of hostility may emanate. Adeyemo and Oyinloye, (2007) opined that the employer may breach confidentiality regarding HIV status, fail to accommodate their needs regarding the duties they are able to perform, the schedule and side effects of regimen of their drugs, time required for medical appointments and leave require for temporary illness.

People living with HIV/AIDS stigma index data clearly shows that HIV/AIDS stigmatization and discrimination directly impede access to work by people living with HIV by, obstructing entry to the labour market, changing the type of work individuals are allowed to perform, preventing promotion to more senior positions, triggering them being fired from jobs and impeding access to adult education and training (Global Network of People Living with HIV Stigma Index, 2012).

HIV/AIDS patients are being denied having keen interaction with their colleagues in the workplaces. Negative reactions towards HIV/AIDS patients in work places are well reported in several parts of the globe including Nigeria. Nwana (2005) in her study carried out in Makurdi, Enugu and Lagos metropolis observed that HIV/AIDS patients experienced discrimination at work in form of segregation and isolation in separate offices and many were not allowed to share toilets, canteens and sport facilities with other colleagues in workplaces. Therefore,

this study examined discrimination as correlate of job security among HIV/AIDS patients attending State Hospital, Saki, Nigeria.

Statement of the Problem

The researchers observed various job risks facing HIV/AIDS patients in the workplaces as a resultant effect of discrimination. Among the pre-requisites for job recruitment is medical screening. Employers in some organizations demand HIV test as part of medical examination which serve as pre-condition for job opportunity. Even among the employees, employers of labour do demand periodic medical examination in which HIV test is emphasized. Sometimes, this put seropositive HIV patients' applicants at disadvantage of being gainfully employed or makes already employed personnel lose their jobs. This is corroborated by the assertion of Owolabi et al. (2012) that HIV infected individuals may face dismissal from their places of work, hostility, denial of gainful employment, forced resignation or retirement if their positive HIV status are known. Also, stigmatization and discrimination has the potential to deny HIV/AIDS patients right to work, undermine individual's ability to secure and retain employment and damage employment and career progression (Global Network of People Living with HIV Stigma Index, 2012).

The International Labour Organization (2010) reported HIV and AIDS related employment discrimination in China. They noted that national policy for recruiting civil servants specifies that those who suffer gonorrhoea, syphilis, chancroid, venereal lympho-granuloma, human papilloma virus, genital herpes or HIV/AIDS will be disqualified. Upon this premise, the researchers investigated stigmatization and discrimination as correlates of job security among HIV/AIDS patients attending antiretroviral clinic, State Hospital, Saki, Nigeria.

Research Questions

The following questions were raised in this study:

1. Is there any correlation between job denial and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria?
2. Is there any correlation between hostility in the workplace and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria?
3. Is there any correlation between isolation in the workplace and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria?

Research Hypotheses

The following hypotheses were tested in this study:

1. There is no significant correlation between job denial and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria.

2. There is no significant correlation between hostility in the workplace and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria.
3. There is no significant correlation between isolation in the workplace and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria.

Methodology

The study employed a descriptive research of cross-sectional survey type. The population for the study comprised all registered HIV/AIDS patients attending antiretroviral clinic, State Hospital, Saki, Nigeria totalling two thousand and ten (2,010) as at the time of field work. Only those on highly active antiretroviral therapy above 18 years formed the targeted population. Therefore, the targeted population was one thousand two hundred (1,200).

The study employed multi-stage sampling technique for the sample selection. The first stage was a stratified random sampling technique which was used to put into strata all categories of HIV/AIDS patients based on inclusion and exclusion criteria. The second stage was proportionate sampling technique which was used to select 12 percent from the targeted population which was one hundred and forty-four (144) respondents. In the last stage, simple random sampling technique was used to select the sample size required for the study on clinic days. Researcher's designed close ended questionnaire which was validated by three Jurors from the relevant fields with the reliability coefficient of 0.79r through test re-test method using Pearson Product Moment Correlation was used.

Ethical approval from the Ministry of Health, Oyo State Research Ethical Review Committee was obtained to carry out the research. Prior to the administration of the instrument, informed verbal consent of each respondent was obtained, privacy provided and confidentiality pledged. The instrument was administered to the respondents with the help of three (3) trained research Assistants. Data entry, processing and analysis were done with the use of Statistical Package for the Social Sciences (SPSS) software, version 21.0. Inferential statistics of Pearson Product Moment Correlation was used for the testing of all the three (3) postulated hypotheses at 0.05 alpha level of significance.

Findings

Hypothesis 1: There is no significant correlation between job denial and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria.

Table1: Pearson Product Moment Correlation Analysis between Job Denial and Discrimination among HIV/AIDS Patients

Variable	N	\bar{x}	SD	Df	Cal value	r-	Crit. r- value	Dec.
Job denial	144	4.231	1.312	142	0.782		0.159	Ho Rej.
Discrimination	144	25.22	3.421					

Table one above shows the calculated r-value of 0.782 against the critical value of 0.159 at 0.05 alpha level of significance with degree of freedom 148. Since the calculated r-value of 0.782 was greater than the critical value of 0.159, the null hypothesis was rejected. It implies that HIV/AIDS patients are being denied job opportunities due to discrimination.

Hypothesis 2: There is no significant correlation between hostility in the workplace and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria.

Table 2: Pearson Product Moment Correlation Analysis between Hostility in the Workplace and Discrimination among HIV/AIDS Patients

Variable	N	\bar{x}	SD	Df	Cal value	r-	Crit. r- value	Dec.
Hostility in the workplace	144	4.424	1.244	142	0.641		0.159	Ho Rej.
Discrimination	144	24.210	2.523					

Table two above shows the calculated r-value of 0.641 against the critical value of 0.159 at 0.05 alpha level of significance with degree of freedom 148. Since the calculated r-value of 0.641 was greater than the critical value of 0.159, the null hypothesis was rejected. It implies that HIV/AIDS patients experienced hostility from employers due to discrimination.

Hypothesis 3: There is no significant correlation between isolation in the workplace and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria.

Table3: Pearson Product Moment Correlation Analysis between Isolation in the Workplace and Discrimination among HIV/AIDS Patients

Variable	N	\bar{x}	SD	Df	Cal value	r-	Crit. r- value	Dec.
Isolation in the workplace	144	3.112	2.481	142	0.121		0.159	Ho Acpt.
Discrimination	144	7.002	1.734					

Table one above shows the calculated r-value of 0.121 against the critical value of 0.159 at 0.05 alpha level of significance with degree of freedom 148. Since the calculated r-value of 0.121 was less than the critical value of 0.159, the null hypothesis was upheld. It implies that HIV/AIDS patients were not isolated among colleagues in their workplaces.

Discussion, Conclusions and Recommendations

Hypothesis one revealed that there was significant correlation between job denial and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria. This corroborates Rao, Agnell, Lam and Corrigan (2008) that employers of labour in both Nigeria and China were strongly reluctant to hire or retain employees who were HIV seropositive. Also, the result further affirmed the assertion of Dray-Spira, Gueguen and Lert, (2008) that 149 out of 478 HIV/AIDS patients in France had experienced loss of job within the study duration.

The result of hypothesis two revealed that there was significant correlation between hostility in the workplace and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria. This was justified by the view of the scholars that hostility emanated and this made employers of labour to breach confidentiality regarding HIV status, fail to accommodate their needs regarding the duties they are able to perform, the schedule and side effects of drug regimen, time required for medical appointments and leave require for temporary illness (Adeyemo & Oyinloye, 2007).

Hypothesis three revealed that there was no significant correlation between isolation in the workplace and discrimination among HIV/AIDS patients attending State Hospital, Saki, Nigeria. This result is at variance with the assertion of Nwana (2005) that HIV/AIDS patients experienced discrimination at work in form of segregation and isolation in separate offices and many were not allowed to share toilets, canteens and sports facilities with other colleagues in workplaces. The result in this present study may be so probably other workers are trying to protect the image of their affected colleagues from their employers so as to prevent dismissal from job or premature termination of appointments.

Based on the findings from the analysis of the tested hypotheses, the following conclusions were drawn:

1. HIV/AIDS patients are being denied job opportunities due to discrimination.
2. HIV/AIDS patients experienced hostility from employers due to discrimination.
3. HIV/AIDS patients were not isolated among colleagues in their workplaces.

In view of the findings of this study, the following recommendations were made:

1. Employers of labour should be encouraged to accommodate HIV positive applicants and employees who are still agile and physically able to work rather than deny all categories of HIV positive people job opportunities.

2. Employers of labour should be health educated on negative implications of hostility to the psychological state of HIV/AIDS patients and respect national HIV/AIDS Anti-Discrimination Act.

References

- Aborisade, S. (2014). Senate passes HIV/AIDS anti-discrimination bill. Retrieved on June 21, 2014 from <http://www.punchng.com>>Home>News.
- Adeyemo, D. & Oyinloye, A. A. (2007). Predispositional factors in stigmatization and against HIV/AIDS seropositive persons in the workplace: A case study of Osun State, Nigeria. *Journal of Social Science*, 15 (3): 279-292.
- Bills, R., Steven, F., Gina, D. & Mukadi, Y. D. (2004). Workplace HIV/AIDS program: an action guide for managers. Implementing AIDS Prevention and Care Project. Publication of Family Health International.
- Dray-Spira, R., Gueguen, A. & Lert, F. (2008). Disease severity, self-reported experience of workplace discrimination and employment loss during the course of chronic HIV disease: differences according to gender and education. *Journal of Occupational and Environmental Medicine*, 65 (2): 112-119.
- Federal Republic of Nigeria (2012). Global AIDS response. Country Progress Report, Nigeria. Abuja: Publication of National Agency for the Control of AIDS.
- Global Network of People Living with HIV Stigma Index (2012). Evidence brief: stigma and discrimination at work. Findings from the PLWHA stigma Index. GNP+, Amsterdam, Netherlands.
- Iliyasu, Z., Abubakar, I. S., Musa, B. & Aliyu, M. H. (2011). Post diagnosis reaction, perceived stigma and sexual behaviour of HIV/AIDS patients attending Aminu Kano Teaching Hospital, Northern Nigeria. *Nigerian Journal of Medicine*, 20 (1): 135-143.
- International Labour Organization (2010). HIV and AIDS related employment discrimination in China. Retrieved on April 12, 2014 from http://www.ilo/asia/whatwedo/publications/lang--en/docName WCMS_150386.
- Jamaica Information Service (2012). Ministry seeks to end HIV food stigma. Retrieved on March 20, 2014 from <http://www.jis.gov.jm/news/leads/29596>.
- Jane, A. (2012). Health workers stigmatize HIV and AIDS. *Southern Sudan Medical Journal*. Retrieved on November 2, 2012 from <http://www.southsud anmedicaljournal.com/archive/november-2011/health-workers-stimatise-hiv-and-aids-patients.html>.
- Joint United Nations Programme on HIV/AIDS (2010). Getting to zero: 2011-2015 strategy. UNAIDS. Geneva: UNAIDS Publication.
- Judd-Leonard, O. (2012). Nigeria: HIV stigma rising in workplace, says Human Rights Commission. Daily Trust Newspaper, October 3.

- Keba, A. (2011). Reducing HIV/AIDS stigma & discrimination in Ghana. Retrieved on January 13, 2014 from <http://www.kebaafrica.org/2011/08/reducing-hivaidsstigmadiscrimination-in-ghana/>.
- Nwagwu, R. O. (2004). Stigmatization: a cog in the wheel of HIV/AIDS prevention. Punch Newspaper, November 7.
- Nwana, R. C. (2005). Social consequences of HIV/AIDS: stigma and discrimination in the workplace in Nigeria. Paper being presented at the XXV International Population Conference held at the Vinci Convention Centre, Tours, France, July 18-23.
- Nyblade, L., Stangl, A., Weiss, E. & Ashburn, K. (2009). Combating HIV stigma in health care setting: what works? *Journal of International AIDS Society*, 12 (1): 15.
- Owolabi, R. S., Araoye, M. O., Osagbemi, G. K., Odeigah, L., Ogundiran, A. & Hussain, N. A. (2012). Assessment of stigma and discrimination experienced by people living with HIV/AIDS receiving care/treatment in University of Ilorin Teaching Hospital (UTH), Ilorin, Nigeria. *Joint International Association of Physicians AIDS Care*, 11 (2): 121-127.
- Rao, D., Agnell, B., Lam, C. & Corrigan, P. (2008). Stigma in the workplace: employer attitudes about people with HIV in Beijing, Honk Kong and Chicago. *Journal of Social Science and Medicine*, 67 (10): 1541-1549.



Decision Making and Staff Commitment in the School of Finance and Banking in Kigali, Rwanda

Pascal Kiiza ¹, Epiphany Odubuker Picho ²

Abstract. The purpose of the study was to investigate the relationship between Decision Making and Staff Commitment in the School of Finance and Banking in Kigali Rwanda. A cross-sectional survey design was used with the target sample size of 97 out of 130 parent population. The total number of questionnaires that were filled and returned was 78, giving a high response rate of 80.5 percent. Due to the heterogeneous nature of the population, the researchers used stratified sampling and random sampling. Descriptive analysis involving frequencies, percentages and Pearson Product Moment Correlation Coefficient for inferential statistics were carried out. The correlation between the two variables was weak at 0.425, and significant at 0.000 value. The results were linearly correlated and this implies that staff commitment is positively correlated with participation in decision making; whenever employees are involved in decision making process, they are likely to be more committed and vice versa.

Keywords: Student Affairs Management; Discipline; Higher education.

Introduction

The purpose of the study was to investigate the relationship between Decision Making and Staff Commitment in the School of Finance and Banking in Kigali - Rwanda. Background of the study is given using the four perspectives approach, namely, the historical, theoretical, contextual and contextual perspectives. This is followed by the problem of the study, objective, scope, conceptual consideration, methodology, findings, discussion, conclusion and finally recommendation.

¹ University of Rwanda

² Muni University

Address Correspondence to:

Epiphany Odubuker Picho, Muni University, P. O. Box P. O. Box 725, Arua, Uganda. E-mail: epipicho@gmail.com.

Historical Perspective

The Government of Rwanda has various objectives that act as the point foci in its policy formulation and implementation. Amongst these is one of devising and implanting policies that promote the welfare of all its citizens. It was in pursuit of this objective that the School of Finance and Banking (SFB), a public institution of higher learning, was established in June 2002 and took up its training mandate in 2004, offering Masters in Business Administration (MBA) with specializations in Banking, Finance, Project Management and Association of Chartered Certified Accountants (ACCA) programmes, a professional course in accountancy. In addition, tailor-made short-courses and professional programmes were designed in various management disciplines to meet the changing needs of business leaders and managers. In 2005, the Cabinet decided that the Management Faculty that was part of Kigali Institute of Technology (KIST) was to be transferred to the School of Finance and Banking (SFB) with effect from January 2006. Therefore, in addition to Master of Business Administration (MBA), SFB started offering Bachelor of Business Administration (BBA) programme in Accounting, Finance, Human Resources Management and Marketing specializations. Today, various undergraduate programmes and short- courses are being implemented to cater for the needs of Rwandan and regional labour market so as to transform the SFB into an international business school.

According to National Council for Higher Education of Rwanda (NCHE, 2010) report on public higher institutions, School of Finance and Banking was among the leading institutions where staff commitment was reported to be low; this situation was worse during 2008 & 2009 academic years. Nonetheless, no single study has been carried out to find the extent to which leadership practice - participation in decision making, can explain Staff Commitment in the School of Finance and Banking (SFB) in Kigali – Rwanda; thus, a gap which this study attempted to fill.

Theoretical Perspective

Since time immemorial, leadership has been underpinned by numerous theories that have been categorized into historically distinct approaches that focus either on traits, behaviours, situational contingencies and transformational leadership. These theories attempt to simulate reality and thereby show an interrelationship of the various factors that are perceived to be involved in the leadership process which takes place between leaders and followers (Woodcock, 2010). The theory that guided this study was the Perceived Organizational Support (POS) theory. The theory encompasses the degree to which employees believe that their organization values their contributions and cares about their well-being (Eisenberger & Rhoades, 2002). According to the proponents, the theory holds that in order to meet socio-emotional needs and to assess the benefits of increased work effort, employees develop beliefs of perceived organizational and perceived supervisor support. Due to the norm of reciprocity, this support makes the employee feel

obligated to exhibit beneficial organizational commitment. Additionally, research has shown that collectivism is an individual level trait (Woodcock, 2010). Collective individuals are more group oriented and therefore, more committed to social groups. In sum, POS theory arouses employees' sense of obligation to help organizations to reach objectives, enhancing employees' emotional commitments to organizations, and make employees dedicated to organizations willingly. In this study, the researchers examined the exertion of participatory decision-making on staff commitment in the School of Finance and Banking in Kigali.

Conceptual Perspective

Conceptually, participatory decision-making in leadership is one of the world's oldest and most topical issues. Researchers usually define leadership according to their individual perspectives and the aspects of the phenomenon of most interest to them. Gerber, Nel & van-Dyk (1996) , for example, define leadership as an interpersonal process through which a leader directs the activities of individuals or groups towards the purposeful pursuance of given objectives within a particular situation by means of communication. While Gardner (1990) & Vecchio (1997) describe leadership as the process of influencing the activities of an individual or a group in efforts toward goal achievement in a given situation. In this study, leadership practices were used to refer to the process of guiding the behaviour of others towards the goals of an organization; specifically, participatory decision-making and staff commitment was considered.

Another concept is Participative Decision-Making (PDM) and this was defined as the extent to which employers allow or encourage employees to share or participate in decisions that affect their organization (Probst, 2005). It was envisaged that among the vital roles of PDM in an organization is promotion of staff commitment and this constituted the assumptions which this study sought to explore.

With regard to commitment, Pfeffer (1998) beheld this concept as the social and psychological processes whereby members of an organization develop and maintain an attachment to the organization. In other words, commitment occurs when the interests of an individual merge with the interests of an organization, resulting in the creation of identifications based on those interests. This study, however, adopted Meyer and Allen's (1991) conceptualization of commitment as a form of psychological attachment to an employing organization. While it is imperative that efforts are made to elicit staff commitment, it is equally imperative that the leaders of institutions demonstrate the practices necessary to be successful leaders, particularly through Participatory Decision Making.

Contextual Perspective

Although many institutions claim that their employees are their greatest asset and agents of their success, the notion of staff commitment is often overlooked, yet it

is of great importance to organizational functionality. Given the fact that institutional leaders usually work in unpredictable situations where they often experience stress and frustrations, institutional leaders' question is: what factors prevent their employees from being committed to the goals and values of their organizations. In many developing countries, Rwanda inclusive, initiatives for improving education systems have often been short-lived. Individuals implementing such initiatives seem to lack an understanding of effective leadership practices, especially participatory decision-making, ultimately resulting into lack of satisfactory loyalty from subordinates. According to NCHE for Rwanda (2010) report on public higher institutions, School of Finance and Banking was among the leading institutions where staff commitment was reported to be low. According to the report, this situation was worse during 2008 and 2009 academic years. A study by Public Service Commission (2010) found that 68 percent of public sector employee had changed institutions more than once between 2008 & 2009. One of the main causes of low staff commitment was poor management of human resources, as revealed by the report. But as Snowden & Gorton (2002) affirm, for improvement efforts to be realized, a leader is a key to providing the leadership necessary for such efforts to be met with success and this, among others, is through effective leadership practices, participatory decision-making, being one.

It is believed that leaders must, among other things, put in place adequate mechanisms of participatory decision making as a way of empowering their subordinates for commitment to occur. This study aimed at determining the relationship between leadership practice, specifically, participatory decision-making and staff commitment in the School of Financing and Banking in Kigali - Rwanda.

Statement of the Problem

Like other organizations, educational institutions have long recognized human capital as a competitive advantage for their effectiveness. Interaction with some members of staff, the researchers have noted with concern that most of the employees are not committed to their work with many of them expressing a strong desire to leave if they happen to get employment elsewhere, claiming that they stand nothing to lose if they left the school and demonstrating low signs of commitment to the school and many other expressions of discontent. Admissibly, NCHE Rwanda (2010) report on public higher institutions, School of Finance and Banking was among the leading institutions where staff commitment was reported to be low; this situation was worse during 2008 and 2009 academic years. To date, no empirical study has been conducted to find out the factors explaining the above phenomenon, but it is a hunch, that leadership practices, particularly, participatory decision making, exert a significant influence in accounting for low staff commitment. Accordingly, this has instigated the need to inquire about participative decision-making as one of the leadership practices and employee commitment in the School of Finance and Banking, Kigali.

Objective

To establish the relationship between participatory decision making and staff commitment in the School of Finance and Banking in Kigali - Rwanda.

Scope

The study was carried out in the School of Finance and Banking which is one of the higher public institutions in Rwanda. The institute was established under School of Finance and Banking statute law No. 21/2002. It is located at Mburabuturo in central Kigali City in Kicukiro District. The study focused on participatory decision making as a leadership practice as potential factor that affect staff commitment.

Methodology

Research design, target population, sample and sampling techniques that were used in data collection are here presented; others are, the instruments used in data collection, quality control techniques, research procedure and analysis of data.

The research adopted a cross sectional survey design. This enabled the researchers to collect a lot of information from a number of respondents at one point in time and its results may be generalised to a larger population within defined boundaries and can be extrapolated (Amin, 2005); both quantitative and qualitative research paradigms were employed.

The population was composed of both the teaching and non-teaching staff of the School of Finance and Banking. At the time of this research, the SFB had a total of 130 employees of which 70 comprised the teaching staff while 60 were the non-teaching staff.

From a parent population of 130 a sample of size of 97 was to be chosen as determined by Krejcie & Morgan (1970) as cited by Amin (2005). However, the total number of questionnaires that were completely filled and returned was by 78 respondents that gave a high response rate of 80.5 percent. Due to the heterogeneous nature of the population, the researchers used stratified random sampling where from each sub population, a proportionate sample was obtained in order to ensure that all groups were fairly represented in the study. Random sampling was then used because of the advantage, enabling each member in the target population to have an equal opportunity of being chosen (Amin, 2005); data was collected with the help of a self-administered questionnaire and interview guide (Trochim, 1996). This allowed the researcher to triangulate the quantitative findings from the staff with the qualitative data from the administrators. Data quality was ensured by checking the validity and reliability of the questionnaire. The CVI of 0.7 indicated that the instrument was valid since it was above the minimum recommended value of 0.7 (Amin 2005).

The reliability coefficient was computed using Cronbach's alpha formula coefficient. The average correlation between the items in the questionnaire was .894 which was above 0.7 the normal degree for acceptable reliability of instruments (Nunnally, J. C. & Bernstein, I. H., 1994).

Data was coded and analysed using the Statistical Package for Social Sciences (SPSS). Descriptive analysis was done involving frequencies, percentages and Pearson Product Moment Correlation Coefficient for inferential statistics. Critical assessment of qualitative data was done, examining it using thematic interpretation in accordance with the items that comprised the study objective.

Findings

Participatory decision making was a variable considered in accounting for variations in the commitment of staff to the institution. To verify this assumption, a series of closed ended items were formulated on which a sample of staff in the School of Finance and Banking were asked to indicate their levels of agreement or disagree to the different statements and the responses are as found in Table 1.

Table 1: Participation in Decision-making (% , N = 78)

Item	SD	D	N	A	SA	Total
Management believes in sharing decision making with other employees	9	29.5	15.4	37.2	9	100
Everyone in an institution participates in decision making process	20.5	44.9	26.9	2.6	5.1	100
I am always consulted for my work in this institution	9.6	31.5	26	27.4	5.5	100
I have limited influence or opportunity to participate in decision making process	14.3	31.2	26	24.7	3.9	100
My supervisor is responsible for creating a common goal which he/she communicates & share it with me or others	5.1	15.4	28.2	42.3	9	100
The views of employees are sought & considered before decisions are taken	15.4	38.5	30.8	12.8	2.6	100
My supervisor seek & take account of my views before making a final decision on a given matter	14.1	28.2	34.6	21.8	1.3	100
Employees in this institution are consulted on matters of interest to them	10.3	32.1	25.6	25.6	6.4	100
My institution provide ad hoc meetings & when a particular need arises	6.4	25.6	20.5	38.5	9	100

SD = Strongly Disagree; D = "Disagree" N = "Neutral"; A = "Agree"; SA = "Strongly Agree"

Evidence derived from Table 1 reveals a series of negative, mixed and positive responses from the participants where they tended to disagree, taking neutral positions or agree. For example, although some respondents 38 (46.2%) held that the institution management believed in sharing decision making with employees, a fairly large number of 30 (38.5%) disagreed. This could mean, participation is not a right but privilege of some few. This assertion is supported by the findings of the next statement where a significant number of the respondents 51 (65.9%) averred that participation in decision making was not for everyone in the institution. But in the interviews most of the Heads of Departments (HODs) and Directors of the different units stated that staff views are considered. To this effect, on being asked to explain how the subordinates were consulted, several responses were given - some of which are summarized in the following verbatim quotation.

“One on one discussions or normally meetings are organized” Interviewee 1 (from Academic services unit)

In a similar vein, although it is recommended that organizations should always consult their subordinates before taking fundamental decisions, the results in the table showed that it was only a selected few that were consulted 24 (33.9%) while majority of the participants in this study were hardly consulted. As the results indicate, most of these staff complained that they had limited influence in the decision making process of the institution.

Lack of participation of most of the employees means that the views of most of the employees were rarely sought and considered before decisions were taken. According to the respondents, it was always the supervisors who acted as a mouth piece for the subordinates where the latter sought the views of the former before final decisions on a given matter were arrived at. All these suggest that employees are rarely directly consulted by the top management of the institution to give an input as to what they considered to be the useful decisions that matched their interests.

On a positive note, however, it was reported that supervisors were mainly responsible for creating common goal which they always communicated and shared with their subordinates, perhaps through ad-hoc meetings and whenever a particular need arose. In relation to how employees participate in decision making, Interviewee 3 (from Students' affair unit) argued:

“They are always given an opportunity to present their ideas at the unit level”.

Another respondent from the Human Resource and Administration Unit revealed:

“We normally call every individual and we discuss with them the decision we plan to take so that they also become part and parcel of that decision since they were involved in its formulation” (Interviewee 4)

Furthermore, participants were asked to mention the mechanisms through which employees were consulted before making final decision on a given issue.

According to the responses, verbal communication, staff meetings, e-mails and use of telephones were mentioned as the major mechanisms. Interviewee 5 (from the Research and Consultancy Unit) clearly elaborated, thus;

“Normally, I call every subordinate to give in his/her ideas on a given issue and most of the views they raise are put into consideration”.

In order to establish whether the responses on participation in decision were related to staff commitment, Pearson Moment correlation Co-efficiency was used and the results of the analysis are presented in Table 2.

Table 2: Correlation between participation in decision making and staff commitment

		Participation in decision making	Staff Commitment
Participation in decision making	Pearson Correlation	1	.425**
	Sig. (2-tailed)		.000
	N	78	78
Staff Commitment	Pearson Correlation	.425**	1
	Sig. (2-tailed)	.000	
	N	78	78

** Correlation is significant at the 0.01 level (2-tailed).

In Table 2, the correlation between the two variables was 0.425 while the sig. value was 0.000. Thus, since the sig. value was less than 0.01. The findings led to the rejection of the null hypothesis and acceptance of the research hypothesis or research alternative and inferred that the variables were linearly correlated and the nature of the relationship was significant; this implied that staff commitment is significantly correlated with participation in decision making; whenever employees are involved in decision making process, they are likely to be committed and vice versa.

Discussion, Conclusions and Recommendations

The study was about the relationship between participation in decision making and staff commitment in the School of Finance and Banking in Kigali and according to the findings, a linear and significant relationship was established. The fact that a statistically significant correlation exists indicates that participation decision making was contributive toward staff commitment in School of Finance and Banking in Kigali - Rwanda. The findings align with a research study conducted by Poole, Lansbury and Wailes (2001) whose finding indicated that direct participation had a positive and significant contribution in enhancing organizational commitment at workplaces. Similar results were also proven by Torka (2003 cited by Dirk, 2007) who found that amongst Dutch metal workers,

employee involvement led to more affective and normative commitment to the department as well as to the organization. The empirical findings also corroborate Topolnytsky (2002) who found a positive correlation between affective commitment and employees' job involvement. In the same vein, Brewer (1996) demonstrated that participation in decision-making is one of the important factors in shaping organizational commitment. The findings further align with Darjan & Milan's (2004) research which revealed a significant positive correlation between participation in decision-making and staff commitment. The same analysis aligns with DeCotiis & Summers (1987) who found that when employees were treated with consideration of involving them in decision making, they displayed greater levels of commitment. The varying responses on the same question is suggestive of inconsistencies which cast doubt on the involvement of the employees in decision making in the School of Finance and Banking in Kigali - Rwanda.

According to Strauss (2006), participation in decision making can be thought of as three dimensions. The first two deal with the opportunity for employees to give input for decision (voice), and there is also the actual influence employees have. It is therefore suggested that when the staff are allowed to voice their opinions, at some point they also should have actual influence, otherwise they will get frustrated. Thirdly, for successful participation, employees need to be provided with relevant information (Harrison, 1985). In this respect, managers play an important role in the success of participation. The study further contributes new directions in the research of management by opening up a debate on the importance of participation and organizational commitment. Accordingly, the empirical evidence appears to support the view that practices like participation can influence the forms of organizational commitment. Therefore, organizations interested in their growth and in highly committed work force must involve their employees in decision making process. Organizations which make effective use of HRM practices on a wider scale can generate higher returns. In addition, the revelation of this research provides proofs for the organizations that whenever the workforce is not involved in their organization, commitment is adversely impacted. When an employee is not committed, there are multiple effects. The first is the loss of that person's skills and knowledge. The second is the loss of productivity of the organization. The third is the financial impact of replacing that individual. The fourth is the impact on employee morale, depending on the reason the employee left the company.

One way of addressing this could be by increasing the interactions with employees in staff meetings and increasing guided discussions of topics related to these issues. Employees could be interviewed to determine their perceptions of management's ability to address these issues. Changes in organizational variables, such as employee contribution in policy development, and better work environment could then be made in an effort to increase organizational commitment.

Probst (2005) submits that participation in decision making is most effective where a large number of stakeholders are involved and all from different walks of

life, coming together to make a decision which benefits everyone. When employees participate in the decision making process, they improve understanding and perceptions among colleagues and superiors, and enhance personnel value in the organization. In a participative decision making process each team member has an opportunity to share their perspectives, voice their ideas and tap their skills to improve team effectiveness. As each member can relate to the team decisions, there is a better chance of their achieving the results. When everyone in an organization participates in the decision-making process, organizational communication is much more effective and everyone produces more efficient results (Walker, 2007).

By sharing decision-making with other employees, institutions eventually achieve organization objectives that influence them. In this process, PDM can be used as a tool that enhance relationships in the organization, explore incentives of employees and increase the rate of information circulation.

Effective leadership practices are those approaches that bring about quality awareness in all organizational processes. In this study, it was established that participation in decision making was weak and that is statistically proven by the level of its relationship with staff commitment in the School of Finance and Banking in Kigali

From the results of the investigation and conclusion that arose from it, it was evident that leaders in the SFB should lay much emphasis on their participatory decision making, as one of the best practices in leadership, in order to elicit commitment of their staff. Similarly, it is important for leaders in the SFB to set a shared vision and mutual goals with their staff in order to gain employees' commitment towards the institution.

References

- Amin, M. E. (2005). *Social Science Research: Conception, Methodology and Analysis*. Kampala. Makerere University Printery.
- Brewer, A.M. (1996). Developing commitment between managers and employees. *Journal of Managerial Psychology*, 11(4), 24-34.
- Caldwell, R. (1993), "Is anyone listening? Communicating change to employees". *Journal of Strategic Change*, Vol. 2 pp.83-7.
- Darjan, GC and Milan, P (2004). Organizational Commitment in the Slovenian Police Force. <http://www.ncjrs.gov/pdffiles1/nij/Mesko/207996.pdf>
- DeCotiis, T. and T. Summers (1987). "A path analysis of a model of the antecedents and consequences of organizational commitment". *Human Relations*, 40, 445-470.
- Dirk, P.B (2007). *The relation between direct participation, organizational commitment and turnover: A test of the mediating role of organizational justice and Leader-member exchange*. Unpublished master thesis, University of Twente.

- Eisenberger, R. & Rhoades, L. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87: 698–714.
- Gardner, J. W. (1990). *On Leadership*. New York: The Free Press.
- Gerber, P. D., Nel, P. S. and Van Dyk, P. S. (1996). *Human Resource Management* (3rd Ed.). Johannesburg: International Thompson Publishing.
- Harrison, V.G. 1985, Natural Ventilation and Thermal Stimulation Studies of West Australian State Housing Commission Houses, Master of Building Science Thesis, University of Western Australia.
- Krejcie, R.V. & Morgan, D.W. (1970) Determining sample size for research activities. *Educational and Psychological Measurements*, 30, 607-610.
- Meyer, J. P. and Allen, N. J. (1991). A three-component conceptualization of organizational commitment”, *Human Resource Management Review*, 1 (1):61–89.
- Nunnally, J. C. & Bernstein, I. H. (1994). *Psychometric Theory* (3rded.). New York: NY: McGraw- Hill Series in Psychology, McGraw-Hill, Inc., 264-265.
- National Council for Higher Education, (2010). *Statistical Information on Higher Learning Institutions in Rwanda*.
- Pfeffer, J. (1998). Seven practices of successful organizations. *California Management Review*, 40 (2):96-123.
- Probst, T.M. (2005). Countering the Negative Effects of Job Insecurity through Participative Decision Making: Lessons from the Demand–Control Model. *Journal of Occupational Health Psychology*, 10, 320-329. doi:10.1037/1076-8998.10.4.320
- Public Service Commission, (2010). *Baseline Survey on Causes of work conflicts Causes of Labour Mobility, Skills and Competencies*. Kigali: Government of Rwanda.
- Snowden, P. E., & Gorton, R. A. (2002). *School leadership and administration: Important concepts, case studies, & simulations*. Boston: McGraw Hill.
- Strauss G. (2006) Worker Participation – Some Under-Considered Issues; *Industrial Relations*; 45 (4); 778-803; page 779
- Topolnytsky, J (2002). Affective, Continuance, and Normative Commitment to the Organization: A Meta-analysis of Antecedents, Correlates, and Consequences. *Journal of Vocational Behaviour*, Vol: 61, No: 1, pp: 20 – 52
- Trochim, D. (1996). The survey research: The research methods knowledge base. www.trochim.human.cornell.edu/ kb/ survey.htm
- Vecchio, R. P. (1997). *Leadership: Understanding the Dynamics of Power and Influence in Organizations*. United States of America, University of Notre Dame Press.
- Wailes, N. (2001). *Industrial Relations: A Journal of Economy and Society*. London: Sage.
- Walker, G.B. (2007). Public participation as participatory communication in environmental policy decision-making: From concepts to structured conversations. *Environmental Communication*, 1, 99-110.
- Woodcock, C. (2010). *Transformational leadership and employee commitment: The moderating role of perceived organizational support and individual level collectivism/ individualism*. Unpublished M.A Northern Illinois University, 2010.



Entrepreneurial Skills Potentials in Home Economics Education

Rakiya Ahmad ¹

Abstract. This short paper discusses the various entrepreneurial skills in Home Economics Education as a discipline. It brings to the fore the areas that Home Economics specialists can excel in when it comes to entrepreneurship. It further creates awareness of areas that home economists can explore in order to be employers of labour rather than job-seekers who wait for white collar jobs that have been oversubscribed in Nigeria. In conclusion, the paper argues that for home economists to succeed in their entrepreneurial efforts, there would be need for creativity, critical thinking, innovativeness and commitment to self-employment and job creation.

Keywords: Home Economics; Graduate unemployment; Higher education.

Introduction

Globally, education is considered as an important for attaining to national goals. In our country Nigeria, the high regard given to education was clearly stated in the National Policy on Education (2004) which have it that one of the National Education Goals is “the acquisition of appropriate skills and the development of mental, physical and social abilities and competencies as equipment for the individual to live and contributed to the development of the society”. Education therefore provides learners with basic skills needed for survival as a common saying is that “necessity” is the mother of invention and this manifest in different dimensions. Long ago entrepreneurship is an old phenomenon but it is just of recent that is gaining unprecedented attention because necessity for it has violently knocked at the door.

¹ Department of Home Economics Education, Federal University of Education, Zaria, Nigeria

Address Correspondence to:

Rakiya Ahmad, Department of Home Economics Education, Federal University of Education, Zaria, Nigeria. E-mail: Rakiyaahmed20@gmail.com.

Entrepreneurship in View

The concept entrepreneurship has evolved over the years and has been differently viewed by various authors/writers. According to Stevenson and Sahlman (1987) entrepreneurship is defined as the relentless pursuit of opportunity without regard to the resources currently controlled Chinyere (2009) define entrepreneurship as the focused practice that creates the knowledge based system that gives rise to excellence in all areas. According to Nnamani (2007) entrepreneurship education is an instrument that empowers youths to be in control of the future. It creates job and business, more opportunities exercise creative freedom, higher self-esteem and overall greater sense of control over their own lives. The crux is that programme and project that are viable must be initiated and established. Projects to be initiated must emerge from certain body of knowledge of which Home Economics Education is one.

Home Economics Education

Home economics is the study of human and material resources affecting homes and families and utilization of the knowledge for the benefit of mankind. Home Economics educations extend beyond the family to the larger society. It focuses on meeting the needs of individuals that make up the entire society (Ogbeni, 1998). It is a vocational subject aimed at helping people develop desirable social attitude and skills necessary for the world of work, resourcefulness and ability to adopt to life's changing situation. Home Economics is self-reliance oriented field of study whose central theme is hinged on the improvement of the lives of everyone in the society (Ogbene, 2006).

Anyakoha (2002) remarked that the greatest challenges of Home Economics is to determine those issues that pose various forms of challenges and threats to individuals, families and society at large and then address them most appropriately. Since the Nigerian society is faced with such problems as increasing unemployment, corruption, poverty among others, Home economics should identify with these problems and deal with them appropriately and decisively.

The Mission of Home Economics in Africa is to facilitate the process of individual, families and communities becoming responsible for improving their well-being in relation to their economic, social, cultural, political and physical environment (Home Economic Association for Africa, HEAA 1993).

Home Economics education is a unique area of knowledge that has a wide connectivity to human endeavour and as such there is large latitude of entrepreneurial skills inherent in it. In this paper, attempt was made to expose potentials entrepreneurial skills in Home Economics Education as well as approaches toward accomplishing them.

Areas and Careers in Home Economics Education

The philosophy of Home Economics is centred on the acquisition of knowledge and skills that can be applied for purposeful living. Hence Home Economics characteristically has several opportunities for small scale businesses. This gives the individual opportunities for gainful self-employment. Knowledge is power hence emphasis was made on teaching of Home Economics at every level of the school system. Home Economics encourages the expansion of knowledge and development of skills in a wide array of subject areas (Table 1).

Table 1: Home Economics-related Subject Areas

1. Food and nutrition
2. Clothing and textiles
3. Consumer education
4. Interior decoration
5. Home Management
6. A good Home economic programme showed aim at the following
7. Training students for proficient in specific occupation in the area of Home Economics
8. Making student to acquire special skills that can make them to be self-reliant.
9. Training students to acquire skills on how to float and succeed in a business enterprise (Ogbene, 1998).

All these areas in Home Economics have their career options which can also keep the graduates gainfully employed in the absence of paid employment. Home Economics related business include the opportunities shown in Table 2.

Table 2: Business Opportunities in the area of Home Economics

1. Food and Nutrition
2. Catering services, Restaurant Management
3. Bakery-bread making, snacks, cake making and decoration
4. Fast food business
5. Ice cream and yoghurt business
6. Preparation of Soya milk and other fruits drink
7. Yam making etc.
8. Clothing and Textiles
9. Fashion and design
10. Dyeing and batik making
11. Embroidery
12. Tatting and crocheting and knitting
13. Weaving
14. Hair dressing
15. Fabric store

16. Fashion school operation
 17. Home management
 18. Soap and body cream production
 19. Laundry and dry cleaning
 20. House keeping
 21. Rug cleaning services
 22. Child Development
 23. Nursery Management
 24. Day care centres
 25. Baby sitting
 26. Children's clothing merchandising
 27. Interior Decoration
 28. Making of crafts
 29. Interior decoration
-

Other areas include opportunities in teaching. Teachers in this area can teach clothing and textiles, home management, food and nutrition, family living and child development. Dietetics to work in hospitals, assist with diets suitable for the treatment and prevent of certain diseases or disorders. Beauty care and hair dressing e.g. beauty salon, cosmetics companies and hair products company among others.

The landscape of areas and career opportunities in Home Economics Education is wide and this accounts for the great deal of entrepreneurial skill potentials in the subject. A graduate of Home Economic either from College or Education of University must have attained certain professional competence to propel him/her to become an entrepreneur.

Entrepreneurial Potentials in Home Economics Education

According to the National Policy on Education (FRN, 2004), the potentials include as follows:

Primary Education Level: Gives the child opportunities for developing manipulative skills, that will enable child function more effectively in the society within the limits of his capacity; provide the child with basic tools for further educational advancement, including preparation for traders and crafts of the locality.

Secondary education level: Offer diversified curriculum to cater for the differences in talents, opportunities and future roles; provide trained manpower in the applied sciences technology and commerce at sub-professional grades; provide technical knowledge and vocational skills, necessary for agricultural, industrial, commercial and economic development.

Vocational Educational in Technical Colleges: Provide trained manpower in the applied science, technology and business particularly at craft, advance craft and

technical levels; provide technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development. Give training and impart the necessary skills to individual who shall be self-reliant economically.

Tertiary level: Contribute to national development through high-level relevant manpower training; acquire both physical and intellectual skills which will enable individuals to be self-reliant and useful members of the society.

Conclusion and Recommendation

It has been established in this paper that there is a wide latitude of entrepreneurial skill opportunities in home economics education. In line with the principle of entrepreneurship which is, turning ideas into actions, Home economists specialists have acquired a lot of ideas during which they could turn into entrepreneurial skills. The requirement for tapping entrepreneurial skills opportunities in home economics are creative thinking, commitment, dedication, innovative mind, risk bearing, enthusiasm, self-reliance and self-confidence to pursue tasks. Financial resources is a major consideration and it various as some other services require capital investment. An entrepreneurial should be realistic about his or her financial resource and take off simply with preparation for growth.

The scope of Home Economics Education keeps on increasing and this is bound to be so. James (2003) stated that Home Economist is a skill oriented subject which is capable of equipping the individuals with basic skills and knowledge that will help them to be self-reliant and thereby contribute to the social and economic development of individual, the family and the nation at large. The implication of this is that entrepreneurial skill opportunities in Home Economics education will keep on increasing.

References

- Anyakoha E.U. (2002) *Research Issues in Home Economics*. Home Economics Research Association of Nigeria, Nsukka.
- Chinyere, N.E. (2009) *Teachers Factors in Developing Entrepreneurship Skills Through STM Education*.
- Federal Ministry of Education (2004) *National Policy on Education* (Revised) NERD Press, Lagos, Nigeria.
- Home Economics Association of Africa (HEAA) in (1993) *Re-Orienting Home Economics in Africa*, Nairobi HEAA.
- James M.B. (2003) *Utilizing Home Economics Education for Nation Building*. 33rd Home Economies Teachers Association of Nigerian Conference Proceedings 3-11 pp.
- Nnamani, M. (2007) *Entrepreneurships Education for Secondary School*, Enugu, Nigeria. CIDJ AP Printing Press, Nigeria.

- Ogbene, A.E. (1998) Home Economics Education and Family Survival Skills: The Way Forward by the 21st Century. *The Asaba Educator Technical and Science Education Journal* Vol. 1 Number 1 pp.63-69.
- Ogbene, A.E. (2006) *Home Economics for Self-Reliance in a Depressed Economy; an Entrepreneurial Initiative*. Journal of Home Economics Research (Special Edition, 2006) vol. 7. Pp.107-112.
- Stevenson, H.H. and Sahlman, W.A. (1987) *‘Entrepreneurship: A Process, not a person’*. Working paper, Harvard Business School, Cambridge, M.A.



Vendor Inventory Management System and Sale Performance of Nigerian National Petroleum Corporation's Retail Outlets in South-West Nigeria

Johnson Olabode Adeoti ¹, Rotimi Ayodele Gbadeyan ¹, Babatunde Bayode Olusanya ²

Abstract. The attendant costs of stock-out have made vendor inventory management a mechanism through which such costs could be prevented. This study examined the influence of vendor inventory management system on sale revenue of NNPC's retail outlets as one of the chain distribution business in South-west Nigeria. Data were collected from NNPC's statistical bulletin (stocks of Premium Motor Spirit (PMS), Automotive Gas Oil (AGO, Dual Purpose Kerosene (DPK) as well as sale Revenue of the selected products) from (2005-2012). Descriptive method and Error Correlation Model of regression were used to analysis the data. The result revealed that the overall effect of the vendor management policies of the three products sold by the organisation has positive effect on the sales revenue of the organisation and the result is statistically significant ($P = 0.000, < 0.05$). From the findings, it was recommended that, organisations should embrace the Vendor Inventory Management (VIM) concepts to improve and achieve robust sale revenue in the present day chain distribution management business. Products should be replenished on continuous basis rather to be increasing the prices of the organisation's products.

Keywords: Vendor Inventory Management; Sale Revenue; NNPC

Introduction

In the present day business environment, there is the complexity created by ever increasing customer requirements and expectations, globalization, the pressure on cost, and access to resources. On top of this, managers are expected to achieve

¹ Department of Business Administration, University of Ilorin

² Department of Business Administration, Osun State University

Address Correspondence to:

Gbadeyan Rotimi Ayodele, Department of Business Administration, University of Ilorin.

E-mail: drgbadeyan@hotmail.com. Tel: +2348035755875.

robust sale revenue and increase profitability. Dall, Michael, Bailine & Adam, (2004) stated that quality of customer service delivery has decreased in recent years, and that this can be attributed to lack of effective decision, support, or understanding at the executive and middle management levels on effective inventory management policy. Organisations are keeping stocks today with the objective of profit maximization without putting adequate consideration on the customer's requirement (Nyanga, 2000).

Inventories are the soul and life wire of any manufacturing and marketing organisation. Many suppliers are attracted to Vendor Inventory Management (VIM) because it mitigates uncertainty of demand (Waller, Johnson & Davis, 1999). Effective procurement and inventory management leads to greater impact on organisation performance through trade off concept (Jonathan Alexander & Amoako, 2013). Inventories refer to stock of items used in the operation of the business. These include items used within the production system such as raw material, supplies of components, work in progress and finished goods ready to be consumed (Banjoko, 2002).

Vendor Inventory management system deals with managing stock in order to meet customer demand with aims of removing the intermediaries in the business to maintain lowest possible cost (Babatunde, 2015). It is an important function that determines the health as well as the financial balance of an organisation (Lawrence, 2013). Inventory management approach is necessary in order to gain more customers through customer satisfaction and in order for the third party logistics provider organisation to operate effectively through the preferable approach (Khan & Bosgraat, 2004). Therefore, organisations must constantly strive to maintain optimum inventory that can impact the financial figure positively. Many organisations today especially petroleum marketers are not fully taking into consideration appropriate quantity of products that need to be stocked which will in turn satisfy the need of the customers' requirement. Also the involvement of middle men (Major Marketers) is another issue that makes the available products to be sold at higher prices that is not affordable by the customers.

Many independents and major marketers of petroleum products have been in operations before the advent of Nigerian National Petroleum Corporation's (NNPC) retail outlets in 2002, but failed to put in place the strategies of effective inventory management system that would have given the best satisfaction to the end-users and increase sale performance of their organisation. However, many scholars have been agitating that vendor inventory management system is the best strategy for organisation to adopt in this present day market in order to achieve a strong market performance and satisfy customers profitably (Jonathan et al 2013; Waller, Johnson, & Davis, 1999). This attracted the attention of the researcher to examine the effects of vendor inventory management of the selected products (Premium Motor Spirit (PMS), Dual Purpose Kerosene (DPK) and Automotive Gas Oil (AGO) on sale performance of NNPC's retails outlets in South-west Nigeria.

The deregulation of the Nigerian economy through the Structural Adjustment Programme (SAP) in 1986 during Babangida's administration has affected the downstream oil and gas sector of Nigeria in many ways, one of which results in the adoption of the price mechanism by the major marketers and independent marketers as a determinant of retail price per litre. (Miles & Snow, 1978; Umunnaehila, 1996). The implication of the deregulation was a boost in the profit of the marketers. Many of them tampered with the dispensing pumps and thereby not selling the right quantity to the consumer.

Many of the filling stations across the country were forced to close shop during the day while some opened and sold PMS and DPK as high as N200 and N120 per litre respectively (Babatunde, 2015). This Frustrating experience eventually created a run in some filling stations and caused dissatisfaction to consumers. Many businesses especially those that depend on petroleum products liquidated and some ran into financial crisis as a result of poor performance in the market place. The standard of living was not encouraging and this led many of the Nigerian using different means to survive. For example, mixing kerosene with diesel to increase the quantity, the use of firewood, charcoal and a popular one called "Abacha stove" for domestic cooking

Statement of the Problem

Demand Volatility is the problem facing most supply chains, eroding both customer service and sale revenues. In traditional retail situations, sales fluctuations are made worse by management policies (Waller, et al, 2001). Anichebe & Agu, (2013) explained that the problem of inventory management have been around for a very long time. Lack of measurement tools to implement inventory decisions on effective supply chain system has been the order of the day. Nyanga (2000) argued that effective inventory management system is an inducement to business success, it is directly measurable by how successful a company is in providing high level customer service at lowest cost (Ellram, 1996). Today, organisations do not implement appropriate inventory management systems resulting in under stocking, supplying products at higher prices, poor quality, and quantity, which often result in customers' dissatisfaction. According to Barkindo (2012) over 133 filling stations has been taken over by NNPC because of their inability to manage their inventory successfully. The activities and involvements of middle men marketers (major suppliers) generate a lot of issues and make the supply chain system difficult in term of hoarding, inflating prices at any available opportunity. On this backdrop this study sought to examine the effectiveness of Vendor Managed Inventory systems of NNPC's retail outlets in South-west Nigeria.

Research Objective and Question

The objective is to examine the effect of vendor inventory management on sale revenue of the organization. Accordingly, the study attempted to respond to one

general research question: Does vendor inventory management system have any significant effect on sale revenue of the organisation?

Literature Review

Vendor Inventory Management System

Vendor Inventory Management (VIM) is a forward diversification concept in supply chain management. It is the involvement of major suppliers in managing the inventory system of the suppliers or retailers. Apple Computer Inc. has been more aggressive and has implemented vendor-managed inventory (VMI) by setting up a partnering deal with suppliers. A supplier keeps inventory in the warehouse on consignment and moves it to the factory on demand – only then is it considered sold (Bleakley, 1995). VMI is a supply chain coordination system where the vendor assumes responsibility for managing the stock. (Lee, 2000).

VIM improves operational efficiency and stock management, cash flows and risk management (Benson & Kenneth 2011). VIM is a new system of supplier partnerships. In this relationship, the supplier holds inventory on-site or near the customers, allowing the customers instant access to the inventory. This access to quantity is needed to enhance customers' satisfaction (Timothy, Patrick, Nebat, & Virginia, 2013). Lawrence (2013) stated that in order to manage inventory successfully and improve on performance (customer services) retailers should understand customers' need, vendor partnerships, technology, on – time delivery, order fulfilment and performance measurement.

Lee (2000) found that VIM greatly reduced carrying cost and stock out problem. To achieve significant level of objective managers must always keep inventory at optimal through the vendor inventory concept to cope with present day market demand of their products, the practice will also assist organisation to meet variations in product demand hence, tackle the problem of stock outs in an organisation.

Chain partners often enhance flexibility, repeat purchase, customer loyalty, reduced inventory returns due to improved quality (Wang, 2002; Eckert, 2007). Effective Customer partnering has become an important issue in marketing that lead to customer loyalty and improve customer retention rates (Wong & Sohal, 2003). Inventory management will yield good result when adequate consideration and close relationship exist between suppliers and consumers. The suppliers and consumers that communicate clearly are judged to be more effective; therefore, customers' need must be clearly understood for organisations to provide excellent business results (Timothy et al., 2013). Today, customers are expecting greater customization of products and services to meet their individual needs (Anderson & Lee, 1999; Schonfeld, 1998).

Vishal, Marshall & Ananth (2004) develop an empirical model using econometric analysis for 311 public-listed retail firms for the years 1987- 2000 to

investigate the correlation of inventory turnover with gross margin, capital intensity and sale surprise. The authors discovered that Inventory turns are negatively correlated with gross margin. The investigated overall trend in inventory turns in the retailing industry is downward sloping during 1987 - 2000. However, additional finding revealed that, capital intensity increased significantly during this period, just as it is positively correlated with inventory turnover. However, inventory turnover management has negative correlation with sales surprise (the ratio of actual sales to expected sales for the year). Therefore, the authors concluded that inventory turnover should not be used per se in performance analysis.

Inventory management is the maintenance of an optimum level of inventory necessary to support the production and distribution system of an organisation at the least possible cost (Anichebe & Agu, 2012). Specifically, the objective of inventory management system is to maintain adequate inventory levels of minimum inventory costs. Byongho (2004) argued that too large inventory may not be justified because the turnover does not warrant investment. This contradicts the opinion of Billington, Callioni, Crane, and Ruark (2004) that too small inventory result in reduction in sales, profits and inability to meet customers' need. Lee et al., (2000) stated that in order to manage inventory successfully and improve customer services, retailers should understand customer needs, vendor partnerships, technology, data integrity and performance measurement. Anichebe et al., (2012) established positive link between good inventory management and organisation profitability in Hadia manufacturing firm in Nigeria.

Inventory management is the activity which organizes the availability of items to the customers at a minimum cost. Wild (2002), explained inventory management as coordinating the purchasing, manufacturing and distribution functions to meet the marketing needs. It is a process of ensuring a sufficient level of stock and satisfying demands regarding quantity, quality, time and place and to control prices with appropriate approaches. Major approaches in inventory management as identified by (Wild, 2002).

A system with fixed ordering quantity, a cyclical ordering system approach, just in time (JIT) approach and Distribution Requirement Planning approach (DRP). In order to provide meaningful information on inventory management system these approaches must be discussed.

1. **Fixed order quantities approach.** This approach explains that whenever stocks are replenished, the same fixed quantity should be ordered (Economic order quantity) every time. This implies that, to manage inventory effectively, the level of customers' demand per day, week or month must be put into consideration whenever order is placed.
2. **Cyclical ordering system approach.** In this case, the level of all inventory items are received at a fixed predetermined times to find out whether sufficient inventories are available. The review cycles vary according to the nature of the inventory, but longer review cycles require higher maximum (as

well as average) inventory levels. Shorter reviews cycle however, means more orders and higher replenishment costs if customers are to be satisfied.

3. **Just –in – time system (JIT).** JIT system focus on reducing inefficiency and make available materials needed at the point of request. JIT helps to reduce wastage improve customer specification and satisfaction. Just- in – time philosophy is founded upon three fundamental principles: Elimination of waste, quality improvement (customers' satisfaction) and staff encouragement to participate in planning and execution.
4. **Distribution requirement planning (DRP).** DRP is a more sophisticated planning approach that considers multiple distribution stages. DRP is driven by customer demand. DRP operates in independent demand environment, Distribution requirement planning is the method or approach used by supply chain entities to plan orders in the whole supply chain taking into account the inventories to be kept along with buffer or safety stock, placing the orders with the supplier to replenish inventory to meet customer and increase customers' orders and increase their satisfaction. DRP manages the flow of materials between firms, warehouses, distribution centres and continually adjust changes in the demand, sending inventories from supplier centres to distribution retail centres where they are needed by consumers.

The major theory that explains the vendor inventory management is Transaction cost analysis theory (TCA). The TCA theory is based on inter organisational delivery of superior value of item at a less cost (Christopher, 1999). Transaction cost analysis offers a normative economic approach to determine the firm's boundaries and can be used to present efficiency as a motive for entering inter-organisational arrangements (Williamson, 1985, 1996). It is possible for a firm to reduce its total transaction costs by cooperating with external partners. Also, elimination of middlemen which result to cost reduction. TCA then form a useful instrument to maintain a very sound relationship between the parties involved in the transaction. It is a cost effective theory that allows operations to be carried out effectively (Jonathan, Alexander & Amako, (2013).

Market Performance and Sale Revenue of the NNPC's Retail Outlets (2005 - 2012)

In business, revenue or turnover is the income that a company receives from its normal business activities, usually from the sale of goods and services rendered by the organization to the customers. Revenue may be referred to as business income or as the amount in monetary unit received during a specific period of time.

Table 1. Sale Revenue of Premium Motor Spirit (PMS), Automotive Gas Oil (AGO) and Dual Purpose Kerosene (DPK) of NNPC's Retail Outlet in South-west Nigeria (2005 – 2012)

Year	PMS (N)	AGO (N)	DPK (N)
2005	108,183,40	4,423,80	3,003,195
2006	157,922,70	6,449,352.0	4,198,750
2007	206,754,04.25	5,445,195.6	3,9348,19.5
2008	323,733,59.9	1,024,283,0.05	5,912,900
2009	361,147,31.9	7,466,600.05	4,196,766
2010	645,762,51.35	2,038,448,3.96	5,255,201.5
2011	998,586,53.7	2,960,840,7.93	9,626,207.5
2012	153,827,042.9	2,190,750,4.7	5,526,241.5

Source: Adapted from NNPC's statistical bulletin 2015.

Table 2. Petroleum Products Distribution System of NNPC's Retail Outlet in South -west Nigeria (2005 – 2012)

Year	PMS ('000litre)	AGO ('000litre)	DPK (000litre)
2005	166,436	56,710	46,203
2006	242,958	82,684	83,975
2007	275,672.11	69,810.20	78,696.39
2008	462,476.57	123,303.60	118,258.00
2009	555,611.26	78,595.79	83,935.32
2010	993,480.79	133,572.40	105,104.03
2011	1,536,286.98	193,924.60	192,524.15
2012	1,619,232.03	141,338.74	110,524.83

Source: Adapted from NNPC's statistical bulletin 2012.

Table 2 above indicates petroleum products distribution system of NNPC's retail outlets in South- west Nigeria. From 2005 to 2012, the distribution of PMS increases on yearly basis, meanwhile, there is decrease of 15 percent, 27.7 percent and 26 percent in the sale distribution of AGO in the year 2007, 2009 and 2012 respectively. Also, DPK reflects decrease of 6.3 percent, 29 percent and 42.6 percent in the year 2007, 2009 and 2012 respectively. These decreases may be as a result of poor maintenance of domestic refineries within the specified years, which may likely affect the customers' demand.

Methodology

The study employed secondary approach. It is secondary source of data collection because the researcher extracted some useful information on distribution and sale revenues of the selected products from 2005 – 2012 from the NNPC statistical

bulletin. Information were extracted based on stocks level of PMS, AGO and DPK products as well as their sale revenue for the period of eight years. The years were converted to thirty- two quarters (32) in other to achieve long term effects of VIM system on sale revenue of NNPC's retail outlets using descriptive and regression analysis (Error Correlation Method) to analysis the data with the help of E-view package.

H₀: Supply chain stock level management does not have any significant effect on sale revenue of selected products in the organisation from inception (2005 - 2015).

$Y=f(x)$ where: Y= Dependent variable (Sale revenue) and X = Independent variable (Product Price, Stock Level PMS, AGO and DPK (2005 - 2012). $TSR_v = C(1) + C(2)*PMS_{sk1} + C(3)*AGO_{sk1} + C(4)*DPK_{sk1} + C_e$ where TSR = total sale revenue.

Results and Discussion

Hypothesis There is no significant effect of vendor inventory management on sale performance of the organisation from (2005 - 2012) (The eight years were converted to 32 quarters).

Table 3. Error Correlation Method (ECM) Results of the Price, Products Stock, and Sale Revenue

Variable	Coefficient	Std. Error	t- statistic	Prob.
C	1.190124	0.384972	3.091454	0.0046
LPP (-1)	0.396588	0.282560	1.403554	0.0418
PSTK (-1)	0.591355	0.056892	1.472516	0.0000
C	0.413440	0.230664	1.792390	0.0847
LPP (-1)	-0.233239	0.129558	-1.800273	0.0834
DSTK (-1)	-0.078636	0.197007	0.399154	0.0430
C	1.190124	0.114972	3.111541	0.1046
LPP (-1)	0.226508	0.212560	1.403542	0.0178
KSTK (-1)	0.391305	0.026892	1.425620	0.0000

b. Dependent Variable: TSR_v

Table 3 explains the significant impact of stock, price management on sale revenue of the organisation. The results show that there exist a positive relationship between the price of PMS in the immediate previous past quarter and present quarter sale revenue. The relationship is statistically significant ($P= 0.04 < 0.05$). Moreover, 1% increase in the price of the PMS in the previous quarter will lead to about 40% increase in the sales revenue in the previous quarter. While 1% increase in the stock of immediate past quarter will lead to about 59.1% increase in the sale revenue of the next quarter. In addition, the stock of petrol is statistically significant to the sale revenue of the organisation since ($P= 0.000 < 0.05$).

AGO product reveals negative relationship between the price in the immediate previous past quarter and sale revenue in the present quarter. However, the relationship is not statistically significant ($P=0.08 > 0.05$). Moreover, 1% increase in the price of the AGO in the previous quarter will lead to about 23% reduction in the sales revenue in the following quarter. While 1% increase in the stock of immediate past quarter will lead to 7% decrease in the sale revenue of the next quarter. In addition, the stock of AGO is statistically significant to the sale revenue of the organisation since ($P = 0.04 < 0.05$). This reflects the fact that AGO is not domestically used compare to other products and the demand level is relatively low.

The results also show that there exist a positive relationship between the price of DPK in the immediate previous past quarter and present quarter sale revenue. However, the relationship is statistically significant ($P = 0.01 < 0.05$). Moreover, 1% increase in the price of the DPK in the previous quarter will lead to about 30% increase in the sales revenue in the immediate quarter. 1% increase in the stock of immediate past quarter will lead to about 40% increase in the sale revenue of the next quarter. In addition, the stock of DPK is statistically significant to the sale revenue of the organisation ($P = 0.00 < 0.05$). The level of products stocked in the organisation actually generated more increase in sale revenue compared to when there is an increase in the prices of the products

Table 4. Effects Specification

Cross-section effects Specification	
R-squared	0.839296
Adjusted R-squared	0.805463
F-statistic	24.80743
Prob(F-statistic)	0.000000

b. Dependent Variable: TSR_v

In summary, Table 4 shows the overall effect of the vendor management policies of the three products sold by the organisation has positive effect on the sales revenue of the organisation and the result is statistically significant ($P = 0.000 < 0.05$). Adjusted R square 0.81 (%) explain the degree of variation between the variables measured. This study therefore, concluded by that vendor inventory management has significant positive influence on sale revenue of the organisation.

Conclusion and Recommendations

From the findings, it was revealed that there is a significant positive effect of Vendor Inventory Management on sale performance of the organisation. The stock level (inventory) of the products PMS, AGO and DPK were all statistically significant and relevant to the success of the organisation sustainability in term of sale revenue generated. The results supported the findings of (Lee 2000; Benson

& Keneth 2011; Anichebe et al., 2013). Generally, implementing and managing VIM in today business environment enhances sale performance. Since this study has successfully proven that, effective application of vendor inventory management system in Nigeria has the capacity to enhance and improve sale revenue, smart firms therefore should pay utmost attention to VIM while formulating their operational policies

However, this research would like to point out the limitation of the study, which provides meaningful directions for future research. Hence, further research could measure vendor inventory management systems and financial performance of service delivery organisations.

Since it has been established that VIM has the capacity to enhance sale revenue, therefore organisation should embrace the VIM concepts to improve sale performance in the present day chain distribution business. Products should be replenished on continuous basis rather than increasing the price of the organisation product. Organisation should place more advertisement on AGO product especially for industrial users to boost the sale revenue of the organisation. Since the product is not domestically use compare to other two product.

References

- Ace Research & Field Management Services (2009). *Customer Satisfaction and Perception Survey*. Kenya. Retrieved from www. Communication commission Kenya.
- Alan, R., Croucher, P., & Peter, B. (2010). *Logistic and distribution management* (4th Ed.). United Kingdom: British Library Cataloguing Publication Data.
- Anderson, D., & Lee, H, (1999). The internet-enabled supply chain: From the first click to the last mile. In Anderson, D. (2nd ed.), *Achieving supply chain excellence through technology*, Francisco (2) Montgomery Research Inc.
- Anichebe, N., & Agu, O. (2012). Effect of inventory management on organisation effectiveness. *Journal of knowledge management*, 3 (8), 92-100.
- Anthony, N., Dearden, J. & Vancil, R. (1972). Management control systems. Richard D. Irwin, Homewood, 2, 147
- Babatunde, B. (2015). Supply chain management practices and market performance of NNPC's retail outlets in South-west, Nigeria. Unpublished Ph.D. thesis submitted to Department of Business Administration, Faculty of Management Sciences, University of Ilorin, Kwara State, Nigeria.
- Banjoko, S. (2002). *Production and Operations Management* (1st ed). Ibadan: Oluyeyi Press limited.
- Barkindo, S. (2012). *NNPC target 50 percent ownership of the filling station*. Retrieved from <http://www.nnpcgroup.com>.
- Bechtel, C., & Jayaram, J. (1997). Supply chain management: A strategic perspective, *International Journal of Logistics Management*, 8(1), 15-34.

- Benson, K. & Kenneth, L. (2011). Effectiveness of vendor managed inventory systems in retail supermarkets in Kenya. *International journal of Business and Public management* 1(1) 85-89.
- Billington, C., Callioni, G., Crane, B. & Ruark, J. D. (2004). *Accelerating the profitability of Hewlett-Packard's supply chain*. Interfaces. Linthicum: Jan/Feb 2004.
- Bleakley, F. R., (1995). Strange bedfellows: Some companies let suppliers work on-site and even place order, *Wall Street Journal*, Jan. 13.
- Chopra, S., & Meindl, P. (2007). *Supply chain management: strategy, planning, and operations* (3rd ed.) River, Upper Saddle, NJ: Prentice Hall.
- Christopher, M. (1999). Creating the agile supply chain, in Anderson. D. *Achieving Supply Chain Excellence through Technology*: Montgomery Research Inc., San Francisco.
- Dall, Michael, Bailine & Adam (2004). Service this: *Winning war against customer disservice* (1st ed.). Last chapter First. ISBN 0 9753719 0 8.
- Drucker, P. F. (1973). *Management: Tasks, Responsibilities and Practices*. New York, Harper & Row, NY: Macmillan
- Eckert, G. (2007). Inventory management and its effects on customer satisfaction. *Journal of Business and public policy*. 1 (3), 1-3.
- Ellram, L. M. (1996). The Use of the case study method in logistics research. *Journal of Business Logistics*, 17(2), 93-139.
- Imai, M. (1998). Will America's corporate theme song be "Just in Time"? *The Journal for Quality and Participation*. Cincinnati: 21 (2), 26.
- Israel, G. D. (1992). Determining the sample size. Seminal series of the Agricultural Education and Communication Department, UF/IFAS Extension. Retrieved website <http://edis.ifas.ufl.edu>.
- Johnson, R.B. & Onwuegbuzie, A.J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7): 14-26.
- Jonathan, A., Alexander, F., Amoako, A. (2013). Assessing supply chain management practices on organisation performance in WAEC, International office, *America based Research Journal* 2 (6), 2304-7151
- Kang, S.S., Nobuyuki, O. & Herbert, D. (2004). Service quality and its effects on customer satisfaction and customer behavioural intention: Hotel and Ryokan Guests in Japan. *Asian Pacific Journal of Tourism Research*, 2(2).189-203.
- Khan, S., & Bosgraaf, M. (2004). *Inventory management in a high technology organisation: The impact on customers perspective of third party logistics provider*. Australia, (Unpublished paper) in logistics & supply chain management program, School of Management Program, RMIT University.
- Lawrence, I. (2013). Inventory management system and performance of food beverages companies in Nigeria. *IOSR Journal of mathematics*. 16 (1), 24-30.
- Lee, H. (2000). Creating value through supply chain integration, supply chain management review, September / October, 30-39.
- Lee, H. L., Padmanabhan, V., & Whang, S. (1997). The bullwhip effect in supply chains, *Sloan Management Review*. 38 (3), 93-102.

- Levesque, T. & Mc Dougall, G. H. (1996). Determinants of customer satisfaction in retail banking. *International Journal of Bank Marketing*, 14(7), 12-20.
- Liker, J., & Wu, Y. (2000). Japanese automakers, US suppliers and supply chain superiority. *Sloan Management Review*. 81-93.
- Miles, R.E. & Snow, C.C.(1978). Critical issues in implementing marketing. *Journal of Marketing Practice: Applied Marketing Science*, 2(3), 29-43.
- Morse, D.T. (1981). Minsize 2: A computer program for determining effect size and minimum sample size for statistical significance for univariate, multivariate, and nonparametric tests. *Educational and Psychological Measurement*, 59(3), 518-531.
- Narayanan, V.G., & Raman, A. (2004) Aligning incentives in supply chains. *Harvard Business Review*, 82(11): 94–102.
- Nyanga, P. (2000). *Financial Management*, (1st ed.). Uganda. Business Publisher Kampala.
- Pandey, M. (1995). *Financial Management Analysis* (7th Ed). New Delhi publishers.
- Porter, M. E. (1985). *Competitive advantage creating and sustaining superior performance*. London. Collier Macmillan.
- Schonfeld, E. (1998). The customized, digitized, have-it-your-way economy, *Fortune*, 28 September, 117.
- Sonja, P., Sohal, A. & Baihaqi (2007). *Supply chain management practices and supply chain performance in the Australian manufacturing industry*. (Unpublished paper). Monarch University Business and Economics Department of Management.
- Timothy, L., Patrick, B., Nebat, G. & Virginia, K. (2013). Impact of inventory management practices on financial performance of sugar manufacturing firms in Kenya. *International Journal of Business, Humanities and Technology*, 3 (5). 77 – 79.
- Turban, S., & Efrain, L. (2002). *Electronic Commerce: A managerial Perspective* Prentice Hall ISBN 013 185461 5.
- Umunnaehila, A. (1996). *Oil failures in Nigeria: History causes and remedies*, Lagos: Foundation Publishers.
- Vishal G., Marshall L., & Ananth R. (2004). *An Econometric analysis of inventory turnover performance in retail service*. New York, (Unpublished paper).School of Business University, 8-72, 44 West.
- Waller, M., Johnson, E., & Davis, T., (1999). Vendor-managed inventory in the retail supply chain. *Journal of Business Logistics*, 20 (1), 183-203.
- Wang (2002). How to implement customer relationship management system in third party logistics companies. Retrieved from <http://www.bschoool.nus.edu.sg/staff/bizteocp/ jonathan.doc>
- Wild, R. (2002). Understanding Collaborative Supply Chain Relationships through the Application of the Williamson Organisational Failure Framework, *International Journal of Physical Distribution & Logistics*
- Williamson, O. (1985). *The Economic Institutions of Capitalism: Firms Markets, Relational Contracting*, the Free Press, New York, NY.
- Williamson, O. (1996). *The Mechanisms of Governance*, Oxford University Press, Oxford

Wong, A., & Sohal, A. (2001). *Evaluating service encounters from the customers' perspectives: the effect of service quality on overall relationship quality*. Department of Management, Working Paper 69/01: Monash University.



Technical Skills among Small-Scale Entrepreneurs in Kampala, Uganda

Kibuuka Muhammad ¹, Amina Sani ², Novembrieta Sumil ¹, Manuel Sumil ¹, Nakate Sylvia ¹, Kiweewa Emmanuel ¹

Abstract. This investigation studied 386 small-scale entrepreneurs (SSEs) in Kampala Uganda in two aspects: (1) extent of technical skills possessed and (2) differences in extent of technical skills possessed in terms of gender. The data were elicited using a validated and tested for reliability questionnaire and revealed the following results: the technical skills (mean=3.29; $t_s=5.401$) were moderately possessed; the extent of technical skills possessed differed significantly according to gender (male more than female). Anchored on these findings, the technical skills needed to be more promoted through education and training of small scale entrepreneurs in business skills, legal aspects of the business, marketing and time management.

Keywords: SME; Entrepreneurship; Technical skills.

Introduction

Entrepreneurs today are viewed not only as business founders but more importantly as those who can invent new ways of managing ventures so that they become more competitive and more successful. Owners of existing organizations are also struggling to make their organizations more entrepreneurial (Brown, *et al*, 2001), strategic and competitive (Hitt *et al*, 2001). The need then for the businesses to be managed technically becomes paramount. This has its origin from the fact that the issue of initiation of businesses (whether by entrepreneurs or none) is no longer a problem, since very many people have started; instead the problem is on

¹ Kampala International University

² Federal University of Education

Address Correspondence to:

Kibuuka Muhammad, Kampala International University, P. O. Box P. O. Box 20000, Kampala, Uganda. E-mail: muhammadkibuuka@yahoo.com.

the survival, productivity, growth and performance of these created ventures. It is important to look at different ways of boosting the performance of these mushrooming enterprises to contribute to national development by taking into considerations their management skills. One type of management skills which is almost a must for all businesses to survive global competition is technical skills, which pertain to how different products are made within the required standards and quality.

Technical skills are particularly important for small-scale entrepreneurs (enterprises) to enable them adapt quickly to changing market needs. While technical skills are generally a constraint among most small-scale entrepreneurs globally, the extent to which they are constrained differs across countries and therefore the approach to provide solutions may also differ. To identify the needs, priority areas and solutions with reference to constraints in technical skills under the Ugandan context, this empirical investigation delved into the extent to which the technical skills were possessed by the small scale entrepreneurs under study and hypothesized that gender, educational level and business form may account for significant differences in technical skills.

Review of Related Literature

Skills

Zuzana and Matej (2007) defined a skill as the ability to smoothly carry out one's roles or activities involving ideas (cognitive skills), things (technical) and people (interpersonal). For Wickham (2001), a skill is knowledge that is demonstrable by action and ability to perform in a particular way. In a similar fashion, the UK Department of Education defines skills broadly as the ability to perform tasks according to a pre-defined standard of competence (cited in Tustin, 2003). While Al-Madhoun and Analoui (2002), considered a skill as an ability which can be developed and which is manifested in performance, not merely in potential but the ability to translate knowledge into practice. Whereas skills are of different types and uses, this study examined managerial skills required in managing businesses of a small size.

Technical Skills

Technical skills refer to one's ability to understand and the proficiency in a specific kind of activity, particularly one involving methods, processes, procedures, or techniques; it involves specialized knowledge, analytical ability within that specialty and ability using tools and techniques of a specific discipline (Katz in Arul, 2009). Vocational and on-job training programs largely do a good job in developing this skill. According to George and Jones (2001) technical skills refer to job specific

knowledge and techniques required to perform a role. They depend on the nature of the organisation and task. For example, the owner of a restaurant needs cooking skills, a school director needs teaching skills and so on. In case of any problem, the entrepreneur can fill the gap or identify it. They also help evaluate performance of delegated workers. Other technical skills entrepreneurs need are accounting, book-keeping and budgeting.

Technical skills according to Kunene (2008) are also called vocational skills and refer to those specific skills needed to work within a specific occupation and include expertise, knowledge of the industry, its standards and practices, ability to use tools, procedures and techniques of a specified field, understanding of how specific things work, product/ service specific knowledge that enables one to know what a particular product could do and what it can be used for, process knowledge or how to manufacture relevant products and all steps that need to be taken to develop and produce products or perform tasks necessary to render the service (Tustin, 2003; Perks & Struwig, 2005). Examples of technical skills required by SSEs are those related to job specific knowledge and include professional skills, marketing skills, bookkeeping skills, budgeting skills, time management skills and legal skills (Zuzana & Matej, 2007).

Professional Skills

Professional skills, also called technical or operational skills (Mullins, 2002) are trained abilities that enable a practitioner to perform specific tasks with particular instructions, standards, methods and tools (Bevan, 2002). Having some business training (professional skills) can enhance small-scale entrepreneurs' business management success. Entrepreneurs who are professionals in their business fields have higher chances of performing better than those who are not (Zuzana & Matej, 2007). Bekele and Worku (2008) found out that shortage of professional skills was responsible for about 49% failure of small-scale firms in Ethiopia. Raduan *et al.* (2006) found the same in Malaysia, Audretsch and Lehman (2004), Baghai *et al.* (1999), Smith and Schallenkamp (2005) supplemented these findings, while Chandler and Jansen (1992) argued that as small ventures grow, founding entrepreneurs should be replaced by professional managers. On the other hand, Carol Yen-Yun Lin (1998) concluded that professional skills are critical for short term not long term survival, arguing that in the long run, professional skills need to be supplemented by other management skills, such as motivation, delegation and teamwork. The findings of Davila *et al.* (2003) suggested that professional/or technical skills are a prerequisite to identification of an appropriate opportunity and pursuing it successfully.

Marketing Skills

Marketing skills are theorized to have a positive relationship with business management success (Kotler, 1983:6). Schultz and Robinson (1986) showed that

Nelson Company's effective marketing strategy increased its sales, profitability and competitiveness in the late 1970's. Marketing skills help to improve product quality and increase customer satisfaction which culminates into increased sales and profits (Price & Ferrell, 2005). Mayanja (2001) noted that only 29% in a sample of 123 self-employed technicians in Kampala, Uganda had sound marketing skills and out of these, 58% were more successful. He also indicated that the other important factor in marketing skills is product pricing. The skills part here is on how to set competitive prices, but which enable a company to make some reasonable profits. Ligthelm and Cant (2002) had also discovered that inappropriate pricing negatively affected the performance of a business venture.

Kiwanuka (1998) contends that entrepreneurs who are competitive aggressive, are more likely to succeed than those who are less. Lumpkin and Dess (1996), define competitive aggressiveness as the ability of entrepreneurs to directly and intensely challenge own competitors through cutting prices, spending aggressively on promotions, product or service quality and adopt new competitive marketing strategies all the time. Marketing skills enable an entrepreneur to analyse market opportunities, select target markets, develop marketing mix, identify new markets and customers (through cutting prices, increase advertisement budgets, improving advert message, getting more dealers, review demographic, institutional and geographical markets, change product by size, new packaging, launch new products etc.) and manage the marketing effort, that enhance survival, increase sales and venture profitability.

The report of Mezher *et al* (2008) unearthed internal factors explaining success and failure among small-scale entrepreneurs in Lebanon, indicating that poor product quality is among the most important failure factors. Price and Ferrell (2005) also observed that product quality was a prerequisite for entrepreneurs to enter the market and it was a vital aspect of marketing. In view of this, Nieuwenhuizen and Kroon (2003) agreed with Rogerson (2000a) that technical knowledge is a key factor affecting successful business performance. Cornwall and Naughton (2003) confirmed that entrepreneurs who are incompetent in technical skills cannot be able to create excellent products.

Bookkeeping Skills

Bookkeeping refers to a system of recording financial transactions regarding sales, purchases, incomes and payments (Accounting SAGE, 2009). In organizations then, bookkeeping skills therefore refer to the ability of a manager or an entrepreneur to properly record financial transactions regarding sales, purchases, incomes and payments in the organization.

Several studies have shown the importance of records management skills in a business (Australian Government, 2009; Bell *et al*, 2008; Linda & Jerry, 1993). In most of these studies, it had been indicated that records management skills help to monitor business health, make vital decisions, manage cash flows and show business financial position to lenders. Bekele and Worku (2008) found that failure

to demonstrate standard bookkeeping, auditing and record keeping skills accounted for 54% failure in micro, small and medium enterprises in Ethiopia.

Budgeting Skills

Budgeting skills refer to the ability of a business manager to establish and manage budgets that requires some knowledge or skills of finance and accounting principles (Accounting SAGE, 2009). Important in this skill area is the ability to perform cost estimates for project budgeting and understanding the different methods used to determine business costs (Sharpiro, 2001). Such skills range from estimating individual activities and rolling the estimates up to estimating the business cost. Reading and understanding vendor quotes, preparing or overseeing purchase orders, and reconciling invoices are budgeting skills that will be used by a business manager in most entrepreneurial ventures. These costs will be linked back to venture activities and expense items in the budget.

Budgeting skills enhance entrepreneurs' ability of setting performance standards, motivate towards goals, metering results and direct attention to more essential areas (Narasimham, 2009). Other studies in this line include Smith and Schallenkamp (2006), Jukes and Bruce (2007), Schallenkamp (2008), Thwala and Mvubu (2008) and Spellman (2009).

Time Management Skills

Time management skills thus refer to the ability to know what to do, when and actually do it (Raftorpoulos *et al.*, 2009). Since time is a scarce resource, it is important that small-scale entrepreneurs spend it wisely, as it is irreplaceable, irreversible and for this matter, the business man's proverb "time is money" stands (Inyang & Enuoh, 2009). Since time is money, anybody who does not properly manage it is bound to, not only lose money but also fail in business.

Time management skills increase effectiveness, improve performance and lead to personal development (Sandberg, 2004; Raftorpoulos *et al.*, 2009). Time management skills are crucial for identifying timely market opportunities. In Kampala and Uganda in general several businesses are immensely affected by time and seasons, such that untimely planning may significantly and adversely affect the sales.

Legal Skills

Legal skills according to Kunene (2008); Finch and Fafinski (2007) and Botha (2006) encompass ability to deal with business forms, contractual laws, business ethics, ability to register trademarks, logos, designs and acquiring licenses. Several researches identify legal skills to be a possible factor affecting entrepreneurial survival and growth; for example, Kunene (2008) found that legal skills enhance

success of small and medium enterprises in South Africa; Tobias *et al.* (2008) showed that legal requirements was among the barriers to entrepreneurial growth internationally; Botha (2006) asserted that without legal skills the business may collapse; Tumbunan (2009) found that legal issues are a vital constraint to women entrepreneurs in Indonesia, however Bushe (2007) and Svensson (2008) did not find a significant correlation between the two.

Methods

This study employed a retrospective-prospective and descriptive comparative survey designs. Data on technical skills possessed were collected by asking individual small business owners and managers to rate themselves on validated researcher devised questionnaire items. The technical skills questionnaire was factor analysed and Cronbach alpha coefficients were computed using SPSS. The results revealed that all items in the instrument had higher variances which were at least above 50%, indicating that the items were valid in explaining the constructs in the instrument. Results also indicated that the instrument had a high degree of reliability ($0.899 > 0.7$). From a total of 11003, 386 small-scale entrepreneurs, the respondents were selected using purposive and stratified random sampling techniques. Mean ratings were computed for each item and compared with respect to gender, business form and level of education using One Way ANOVA.

Findings, Discussion and Conclusions

Technical Skills Possessed

Entrepreneurs' technical skills were measured using six components namely; I) marketing skills; II) book keeping skills; III) budgeting skills; IV) time management skills; V) legal skills; and VI) professional skills. For each of these six concepts, entrepreneurs were asked a number of questions related to the concept and they were required to rate themselves on the extent to which they possessed each, on a scale of five points, where 1 represented very little or no skill at all and 5 for very much skills. Their ratings were analysed using means descriptive statistics as indicated in table 1.

Table 1: Means and Standard Deviations on Extent to Which Technical Skills were possessed by Small-scale Entrepreneurs in Kampala

Types of Technical Skills	Mean	SD	t	Interpretation	Rank
1. Marketing skills					
Ability to apply competitive strategies	3.38	0.8	4.225	Moderate	1
Ability to develop a marketing budget	3.34	0.866	3.857	Moderate	2
Ability to identify new markets and/or customers	3.17	0.879	3.606	Moderate	3
Ability to respond quickly to competitive forces.	3.16	0.834	3.789	Moderate	4
Ability to satisfy customer needs	3.13	0.809	3.869	Moderate	5
Ability to identify customer needs	3.13	0.809	3.869	Moderate	5
Ability to identify competitors' strength and weaknesses	3.12	0.886	3.521	Moderate	7
Average mean	3.21	0.66	4.864	Moderate	
2. Book keeping skills					
Ability to prepare financial documents	3.37	2.416	1.395	Moderate	1
Ability to manage cash flows (income & expenditure)	3.21	0.847	3.79	Moderate	2
Ability to audit & understand business financial position	3.21	0.824	3.896	Moderate	2
Average mean	3.26	1.074	3.035	Moderate	
3. Budgeting skills					
Ability to set performance goals and standards	3.46	0.98	3.531	High	1
Ability to evaluate results basing on budgetary goals	3.27	0.835	3.916	Moderate	2
Ability to prioritize according to goals and objectives	3.26	0.8	4.075	Moderate	3
Average mean	3.33	0.762	4.37	Moderate	
4. Time management skills					
Ability to time table tasks and activities (determine what activity to do & when)	3.37	0.824	4.09	Moderate	1
Ability to apply time saving measures (e.g. quick decision making, clear delegation)	3.21	0.781	4.11	Moderate	2
Ability to meet deadlines and appointments.	3.14	0.826	3.801	Moderate	3
Average mean	3.24	0.687	4.716	Moderate	
5. Legal skills					

Ability to understand rights & consumer protection law	3.25	0.938	3.465	Moderate	1
Ability to deal with business legal forms, contracts & laws	3.18	0.943	3.372	Moderate	2
Ability to register business trademarks & acquire licenses	3.13	1.025	3.054	Moderate	3
Average mean	3.19	0.79	4.038	Moderate	
6. Professional Skills					
You have adequate training in line with this business	3.66	1.057	3.463	High	1
You have adequate qualifications in line with the business you are doing	3.41	1.206	2.828	High	2
You have ever worked in a similar business related to the one you currently own	3.4	1.128	3.014	Moderate	3
Average mean	3.49	0.879	3.97	High	
Overall mean	3.29	0.611	5.385	Moderate	

Entrepreneurs in Kampala were found to possess a relatively moderate level of technical skills, but with high professional skills and low legal skills. The problem of inadequate technical skills has been documented in many parts of the world. For example, Kunene (2008) noted inadequate technical skills among small and medium entrepreneurs in South Africa. The same results were earlier revealed by Botha (2006), Berreira (2004) and Bosma *et al.* (2000).

Basil (2005) found low levels of records or bookkeeping skills in Nigeria. He also found an inadequacy in other aspects of technical skills such as professionalism (where many Small-scale entrepreneurs are lacking relevant training in their fields of operation), financial or budgeting skills, marketing and legal skills. While this problem has been well documented, Bosma et al (2000) showed that financial management skills are a necessity for entrepreneurial success and unfortunately they found them inadequate among small scale ventures in Netherlands, explaining their low level of success. This (and other similar ones) implies that the level of technical skills required for small-scale entrepreneurs success should be beyond moderate, an indication that the level of technical skills for small-scale entrepreneurs in Kampala is still below the required level for business venture success.

Differences in Technical Skills Possessed by Gender

Possession of technical skills significantly differed between male and female entrepreneurs, with male entrepreneurs scoring more on all the skills (Table 2).

Table 2: Differences in Technical Skills Possessed by Gender

Skill	sex	Mean	t- value	Sig.	Decision on H ₀
Marketing Skills	Male	3.27	1.860	0.064	Accepted
	Female	3.13			
Bookkeeping Skills	Male	3.31	1.262	0.208	Accepted
	Female	3.19			
Budgeting Skills	Male	3.45	3.455	0.001	Rejected
	Female	3.17			
Time management Skills	Male	3.34	3.391	0.001	Rejected
	Female	3.10			
Legal Skills	Male	3.34	4.202	0.000	Rejected
	Female	2.98			
Professional Skills	Male	3.61	3.002	0.003	Rejected
	Female	3.33			
Technical Skills	Male	3.41	3.944	0.000	Rejected
	Female	3.15			
Overall Technical Skills	Male	3.41	3.944	0.000	Rejected
	Female	3.15			

The findings revealed that men possessed technical skills more than women. Men usually acquire more education than women; they tend to go in for more specialized courses, where such skills are trained and acquired. Similarly, men tend to take part in business related activities and get experience required to do a particular job compared to women. Tajaddini *et al* (2011) indicated that men have significantly higher levels of technical skills than women in Iran, while Kaifi and Mujtaba (2010a) found the same in Afghanistan and similar results were found in India, USA and UK (Kaifi & Mujtaba, 2011). Similar reasons were given in almost all these studies explaining differences according to gender, suggesting that there is need for women entrepreneurs in Uganda to go for more education.

In many parts of the world (Uganda inclusive), various socioeconomic factors are responsible for women's lower educational and managerial skills attainment, including direct costs, the need for female labour, low expected returns and social restrictions (Ghosh & Bharati, 2005). Such differences explain differences in managerial skills possessed which are critical in effective management of a business venture. Further, shared values tend to regularize human behaviour and make individuals more predictable. A study by Munene *et al* (2000) concluded that the African and Asian cultures tend to emphasize hierarchy, paternalism, and mastery in contrast to egalitarianism, autonomy and harmony. As a matter of fact, the position of women in traditional African societies can be measured by their autonomy in decision making and by the degree of access they have to the outside world (Ghosh & Bharati, 2005). Moreover, Asian and African managers often stress reliance on formal rules and superiors in reaching decisions as compared with the cultural profile of people in the United States or most European countries (Kaifi & Mujtaba, 2011).

Kampala SSEs have moderate technical skills. Most small-scale entrepreneurs in Kampala are professionals in their business fields, however, the business technical skills are still missing. Business technical skills are very vital if the venture is to succeed, therefore, other technical business skills should be harnessed like business legal matters (business registration, acquiring licenses and dealing with agreements and contracts), marketing (how to identify competitors' strengths and weaknesses, identifying and satisfying customer needs, quick response to competitive forces and identifying new markets), time management and bookkeeping.

There is need for the Government of Uganda to promote more women entrepreneurs in Kampala, in order to promote gender equality in business and economic growth. This study found that men dominate women in ownership of small-scale enterprises. There is need to educate small-scale entrepreneurs in Kampala on formation of joint ventures as well as trainings in these areas: (1) legal aspects of their business, more especially on business registration procedures and how to deal with business legal forms, contracts and laws; for example they need to be taught on how to formulate partnerships and joint stock companies, how to develop and design legal documents like partnership deeds, articles and memorandum of associations; (2) time management such as on how to meet

deadlines and appointments; (3) marketing in the angle of how to identify their competitors' strengths and weaknesses, customer needs and how to satisfy them. Special entrepreneurial training sessions for women on the basics of business such as how to make business plans, how to make departments and how to delegate effectively, are also recommended; more skills on how to register businesses and acquiring licenses; more time management skills such as how to fulfil schedules, meeting deadlines and appointments and applying time saving measures. Women entrepreneurs' associations should help women by highlighting the procedures of registering a business, printing them on posters and the like.

References

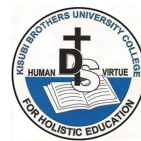
- Accounting SAGE (2009). In the SAGE Glossary of the social and behavioural sciences. Thousand Oaks, CA: Sage Publications. Retrieved from <http://search.credoreference.com/content/entry/sagegsbs/accounting/0>
- Al-Madhoun, M. & Analoui, F. (2002). Developing managerial skills in Palestine. *Education and Training* 44(8/9): 431-442.
- Arul, M.J. (2009). *Managerial Skills; A summary of Katz's HBR article*. Retrieved on 10th/Dec./2010, from <http://arulmj.tripod.com/mgrlskls.html>
- Audretsch, D.B. & Lehman, E. (2004). What determines variations in entrepreneurial success? *Journal of Evolutionary economics*, Vol. 23, pp.165 – 186.
- Australian Government (2009). *Record keeping for small business; Guide for small business operators*; Australian tax office.
- Baghai, M., Coley, S., & White, D. (1999). *The Alchemy of Growth: Practical Insights for Building the Enduring Enterprise*. Reading, MA: Perseus Books.
- Bell *et al*, 2008.
- Basil, A.N.O. (2005). *Small and Medium Enterprises (SMEs) in Nigeria: Problems and Prospects*. Unpublished PhD Dissertation St. Clements University, Nigeria.
- Bekele, E. & Worku, Z. (2008). Factors that Affect the Long-Term Survival of Micro, Small and Medium Enterprises in Ethiopia. *South African Journal of Economics* Vol. 76:3 September
- Bevan, N. (2002). *Technical competence, definition for usability professionals*; <http://www.e-skillsnto.org.uk/sfia>., retrieve on 15/ 12/2009.
- Bosma, N., Van, M.P. & Gerrit de, W. (2000). *Determinants of successful entrepreneurship, scientific analysis of entrepreneurship and SMEs*, SCALES, Netherlands.
- Botha, M. (2006). *Measuring the effectiveness of the women entrepreneurship programme as a training intervention on potential start-ups and established women entrepreneurs in South Africa*. Unpublished PhD thesis, University of Pretoria.
- Brennan, J. et al., (2001). *The employment of UK graduates: comparisons with Europe and Japan: a report to the HEFCE by the Centre for Higher Education Research and Information*. London: Open University.

- Bushe, S. (2007). Business ethics: Where philosophy and ethics collide. *Journal of Asian Entrepreneurship and sustainability*, Vol.3, Issue 2, pp. 95 – 131, September.
- Chandler, G.N. & Jansen, E. (1992). The founder's self-assessed competence and venture performance. *Journal of Business Venturing*, pp: 223-236.
- Churchill, N.C., & Lewis, V.L. (1983). The five stages of small business growth. *Harvard Business Review*, 61(3), 30-50.
- Cornwall, J.R. & Naughton, M.J. (2003). Who is the good entrepreneur? An exploration within the Catholic social tradition. *Journal of Business Ethics*, 44:16-75
- Daft, R.L. (1994). *Management*, third Edition; The Dryden Press, Harcourt Brace College Publishers, USA.
- Davila, A., Foster, G. & Gupta, M. (2003). Venture capital financing and the growth of start-up firms. *Journal of Business Venturing*, 40(4):302-313
- Finch, E. & Fafinski, S. (2007). *Legal Skills*. Oxford University Press, UK.
- George, J.M. & Jones, G.R. (2001). *Understanding and Managing Organisational Behaviour*, 3rd Edition, Prentice Hall, USA.
- Ghosh, R., & Bharati, P. (2005). Women's status and health of two ethnic groups inhabiting a peri-urban habitat of Kolkata City, India: A micro-level study. *Health Care for Women International*, 26(3), pp. 194-211.
- Hitt, M.A., Ireland, R.D., Camp, S.M., & Sexton, D.L. (2001). Guest Editors' introduction to the special issue strategic entrepreneurship: entrepreneurial strategies for wealth creation. *Strategic Management Journal*, (22) 479-491.
- Inyang, B.J & Enuoh, R.O. (2009). Entrepreneurial Competencies: The Missing Links to Successful Entrepreneurship in Nigeria. *International Business Research Vol 2. Nos 2. Pg. 62 -71*
- Jukes, I., & Bruce, M. (2007). *21st Century fluency skills: Attributes of a 21st Century Learner*; the info savvy group, November.
- Kaifi, B.A. & Mujtaba, B. G. (2010b). Transformational leadership and the impact of socialization in the Afghan culture: a study of behavioural differences based on gender, age, and place of birth. *International Leadership Journal*, 2(2), pp. 33-52.
- Kaifi, B.A. & Mujtaba, B.G. (2011). A Study of Management Skills with Indian Respondents: Comparing their Technical, Human and Conceptual Scores Based on Gender. *Journal of Applied Business and Economics* vol.11 (2).
- Kaifi, B.A., & Mujtaba, B.G. (2010a). Transformational Leadership of Afghans and Americans: A study of culture, Age and Gender. *Journal of Service Science and Management*, 3(1), pp. 151-158. DOI:10.4236/jssm.2010.31019.
- Kiwanuka, R. (1998). *The effect of entrepreneurship behaviour on performance of small food processing firms in Kampala*; Unpublished Master of Business Administration dissertation, Makerere University, Kampala.
- Kotler, P. (1983). *Principles of marketing*, second edition, Prentice-Hall, Inc., USA.
- Kumar, D.M. & Jain, V. (2010). Survival Skills of Business Management Graduates: A Study With Reference to Retail and Banking. *Far East Journal of Psychology and Business. Vol. 1 No 1, December 2010*

- Kunene, T.R. (2008). *A critical Analysis of Entrepreneurial and Business Skills in SMEs in the Textile and Clothing Industry in Johannesburg, South Africa*. Unpublished PhD thesis in Entrepreneurship, University of Pretoria, South Africa.
- Ligthelm, A.A & Cant, M.C. (2002). Business success factors of SMEs in Gauteng: A proactive entrepreneurial approach. UNISA. Bureau of market research. Research report no. 311. Faculty of economic and management science.
- Linda, P. & Jerry, J. (1993). *Keeping the books*, second edition, Upstart Publishing Company, Inc.
- Lois, S. & Annette, A. (2005). Support for Growth-oriented Women Entrepreneurs in Uganda. International Labour Organization, Geneva, Switzerland.
- Lumpkin, G.T. & Des, G.G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21, 135-165.
- Mayanja, A.M. (2001). Entrepreneurship skills and Business success among self-employed technicians in Kampala. Unpublished Master of Business Administration Dissertation, Makerere University Kampala.
- Mezher, T., El-Saouda, R., Nasrallah, W. & Al-Ajam, M. (2008). Entrepreneurship in Lebanon; a model for success and failures; *International journal of Arab culture, management and sustainable development*, Vol. 1, No.1, pp. 34 – 52.
- Ministry of Finance, Planning and Economic Development (2008). *Enhancing the Competitiveness of Micro, Small and medium Enterprises in Uganda*. Discussion Paper No. 15, Kampala Uganda.
- Mujtaba, B. G. (2010). Workforce Diversity Management: Challenges, Competencies and Strategies (2nd edition). ILEAD Academy Publications; Davie, FL., United States. ISBN-10: 0-9774211-9-8; ISBN-13: 978-0-9774211-9-0.
- Mujtaba, B. G., Chen, L. Y. and Yunshan, L. (2010). Leadership Orientation of Chinese Professionals in the Automotive Industry: Comparing their Task and Relationship Tendencies. *Global Journal of Management and Business Research*, 10(2), pp. 151-163.
- Mujtaba, B. G., Maliwan, R., and Atthyuwat, P. (2010). Transformational Leadership Orientation of Asian Respondents: a Study of Age, Gender, and Education in Bangkok. *Proficient: An International Journal of Management*, 2(1), pp. 1-14.
- Mujtaba, B.G. & Kaifi, B.A. (2011). Management skills of Afghan respondents: a comparison of technical, human and conceptual differences based on gender. *Journal of International Business and Cultural Studies*
- Mullins, L.J. (2002). Management and Organisational Behaviour, London: International Thomson Business Press.
- Munene, J. C., Schwartz, S. H., & Smith, P. B. (2000). Development in sub-Saharan Africa: Cultural influences and managers' decision behaviour. *Public Administration and Development*, 20(4), 339-351.

- Narasimham, G. (2009). Strategic handling to changes in small manufacturing organizations in India. *International Journal of business and management*, Vol. 4, No.1, July, P. 141.
- Nieuwenhuizen, C. & Kroon, J. (2003). The relationship between financing criteria and the success factors of entrepreneurs in small and medium enterprises. *Development Southern Africa*, 20(1):129-142.
- Oxford Dictionary (2005). An on-line Dictionary available at <http://www.askoxford.com>. Accessed 13-05-2010.
- Perks, S. & Struwig, M. (2005). Skills necessary to grow micro entrepreneurs into small business entrepreneurs. *South African Journal of Economic and Management Sciences*, N.S., 8(2): 171-186.
- Price, W.M. & Ferrell, D.C. (2005). *Marketing, expanded edition*, Houghton Mifflin Company, USA.
- Raduan, C.R., Kumar, N. & Limli, Y. (2006). Entrepreneurs Success Factors and Escalation of Small and Medium-sized Enterprises in Malaysia. *Journal of Social Sciences 2* (3): 74-80, 2006.
- Raduan, C.R., Kumar, N. & Limli, Y. (2006). The dynamics of entrepreneurs' success; factors influencing venture growth. *Journal of Asian Entrepreneurship and sustainability*, Vol. 2, issue 2.
- Raftoropoulos, M., Coetzee, S. & Visser, D. (2009). Work-readiness skills in the Fasset Sector. *SA Journal of Human Resource Management*, SA Tydskrifvir Menslikehulpbronbestuur, 7(1), Art. #196, 8 pages. DOI: 10.4102/sajhrm.v7i1.196
- Rogerson, C.M. (2001). Growing the SME manufacturing economy of South Africa: Evidence from Gauteng Province. *Journal of Contemporary African Studies*, 19(2):267-291.
- Sandberg, J. (2004). "Though time-consuming to-do lists is a way of life". *The Wall street Journal*; a report to-do Lists and the people who make them and use them. Available at <http://www.careerjournal.com/columnists/cubicleculture/20040910-cubicle.html>. Accessed on 20th /Feb. / 2010.
- Schallenkamp, K. & Smith, W.L. (2008). Entrepreneurial development assessment: the perspective of SBDC directors. *International journal of management and enterprise development*, Vol. 5, No. 1, May 14th.
- Shapiro, J. (2001). *Budgeting toolkit*, Civicus, South Africa, Available at <http://www.civicus.org>; accessed on 1st / Feb. / 2010.
- Smith, W.L. & Schallenkamp, K. (2006). *Entrepreneurs Vs Experts; which skills are critical to success? Entrepreneurial skills assessment*; the perspective of SBDC Directors USA.
- Spellman, P. (2009). *Indie business power, A step-by-step guide for 21st Century music entrepreneurs*; at mbsolutions.com, accessed on 1st/Feb./ 2010.
- Svensson, F. (2008). Entrepreneurship and bureaucracy explaining economic development across countries: Applying the actor-structural approach to economic development. *Journal of Asian Entrepreneurship and sustainability*, Vol.4, No.1, pp.1-21.

- Tajaddini, R., Bahaudin, G.M, Mahzad, B. (2011). Management Skills of Iranians: a Comparison of Technical, Human and Conceptual Differences based on Gender, Age and Longevity in Management Ranks. *Journal of Leadership Studies*, 4 (1): 36-46. DOI: 10.1002/jls.20153. Accessed on 20th September 2011 at www.na-businesspress.com/JABE/Jabe112/KajfiWeb.pdf
- Thwala, W.D. & Mvubu, M. (2008). Current challenges and problems facing small and medium size contractors in Swaziland. *African Journal of business management*, Vol. 2, No. 5, pp. 093 – 098, May 14th.
- Tobias, J.M., Mair, J., & Barbosa-Leiker, C. (2008). Towards a theory of transformative entrepreneurship: Poverty reduction and conflict resolution in Rwanda's entrepreneurial coffee sector. *Journal of Business Venturing*, 28(6), 728-742.
- Tumbunan, T. (2009). Women entrepreneurs in Indonesia: their main constraints and reasons. *Journal of Asian Entrepreneurship and sustainability*, Vol.5, No.3 pp. 37–51, December.
- Walter, Thomas, Balunywa, W. Rosa, R., Sserwanga, A. Barabas, S. & Namatovu, R. (2003). *GEM Uganda 2003 Executive Report*. Kampala: Makerere University Business School.
- Wickham, P.A. (2001). *Strategic Entrepreneurship. A decision-making approach to new venture creation and management*. 2nd Edition. United Kingdom. Prentice Hall.
- Zuzana, P. & Matej, M. (2007). Importance of Managerial Skills and Knowledge in Management for Small Entrepreneurs. *E-Leader Prague*, available at <http://www.g-casa.com/PDF/Papulova-Mokros.pdf> accessed January 2010.



Self-Concept and Behaviour Patterns of Students with Hearing-Impairment in Integrated Schools in South Western Nigeria

Bolanle Segun Olakitan ¹, B. O. Olawuyi ², A. A. Adegoke ¹

Abstract. This study investigated the self-concept and behaviour patterns of students with hearing-impairment in integrated schools in South-western Nigeria, with specific reference to gender and age. A descriptive survey design of correlational type was adopted for the study. A purposive sampling technique was used to select 550 respondents with hearing-impairment from the six states of South-Western Nigeria. A “Self-concept and Behaviour Patterns of Students with Hearing-impairment Questionnaire” was used to collect data. The findings showed that students with hearing-impairment had a negative self-concept and exhibited more of Type A behaviour pattern. There was a significant correlation between the self-concept and behaviour pattern of respondents. However, there was no significant difference in the behaviour patterns of respondents based on gender ($F=1.236$, $p>0.05$). Age did not influence the self-concept of students with hearing-impairment ($F= 2.20$, $p>0.05$). It was recommended that parents with hearing-impaired children should foster good child rearing practices in order to enhance positive self-concept and behaviour patterns among these children. Functional integration should also be promoted in order to encourage appropriate inclusion of challenged students in schools.

Keywords: Self-concept; Hearing impairment; Special needs education.

Introduction

Disability is a complex phenomenon; it is an umbrella term covering impairments, activity limitations and participation restrictions. Disability can occur early in life

¹ Department of Counsellor Education, University of Ilorin, Nigeria

² Department of Social Sciences Education, University of Ilorin, Nigeria

Address Correspondence to:

Bolanle Segun Olakitan, Department of Counsellor Education, University Of Ilorin, Nigeria. E-mail: bolseg2020@yahoo.com.

or even at birth (Obani, 2004). The word handicapped, exceptionality, sub-normal, impairment and special are terms that are used to describe disability. WHO (2011) and Panda (2007) stated that these terms have a functional relationship. Impairment can lead to disability and disability also can lead to handicap. The Oxford Advanced Learner's Dictionary (2006) described people with disabilities as those people with a permanent illness or injury that make it difficult for them to use part of their body functionally.

People with hearing-impairment are those individuals who by birth, illnesses, diseases, infections or accidents are impaired in one or both ears. These also include people that their hearing of sounds becomes difficult except it is magnified with the use of hearing aid. This category of people ranges from mild to profound hearing loss (Obani, 2004; Panda, 2007). Jones (2008) stated that physical, medical, clinical and educational definitions of hearing loss are similar. The North Carolina Self Help for Hard of Hearing People (NCSHHHP) (2011) defined the hearing-impaired as technically accurate description of those who are deaf and those who are hard of hearing. The researchers concur with this definition because it is all encompassing. It includes all the categories of people with hearing-impairment (deaf and hard of hearing) and cuts across all cultures, religion and ethnic background. Hearing-impairment could be described with the age at which the hearing loss occurs (Akinpelu, 1998). In this perspective, hearing-impairment could be congenital due to birth defect, genetic constituents, effects of drugs such as *chloroquine*, *streptomycin* and sickness such as rubella and German measles contacted during the first trimester of pregnancy. This type of hearing-impairment is regarded as *Prelingual* hearing-impairment because it occurs before speech and language have developed.

Hearing-impairment could also be adventitious or acquired due to sickness, old age, accident, misuse of drugs, industrial and environmental noise. If this occurs after the child had developed language and the person with hearing-impairment is able to produce speech, he/she is described as a *postlingual* hearing-impaired child (Ajibade, 2010 & Akinpelu, 1998). Congenital hearing loss greatly interferes with normal language and speech development. Adventitious or acquired hearing loss can occur gradually or suddenly at any time of life and therefore could be described in relation to the development of language and speech. People with hearing-impairment often develop poor self-concept and inadequate social skills (Dagbo, 2010). According to Panda (2007), people with hearing-impairment develop this problem because they have a pathological auditory system. Consequently, they are disabled by the difficulty of perceiving speech and sounds in their environments. This makes them severely handicapped by limiting their overall personal functions.

Kar (2007) described integration as a process of educating people with disabilities and those without disabilities in the same school environment. Okuoyibo (2007) and Gbegbin (1991) explained that integration is a system in which we fuse, absorb, stream or assimilate students with disabilities into regular classes. Kar (2007) noted that integration is synonymously used with these two

terms mainstreaming and normalization. Today, inclusion, which had become widespread in the 1990s, is often used in place of integration. This gives opportunity to children to learn with their peers; regardless of individual differences (Stainback, 2008).

Self-concept is a multi-dimensional term that has an ordered behaviour paradigm (Shavelson, Hubner & Stanton, 1996; Bong & Clark, 1999). Lawrence (1996) described self-concept as an individual's awareness of their identity. There are three aspects of this concept- self-image (what the person is), ideal self (what the person want to be) and self-esteem (what the person feels about the difference between what he/she is and what he would like to be. Fulgosi- Masnjak (2003) stated that the process leading to increase or decrease in the self-concept of student with disabilities in integrated schools setting begins with the interaction between the teacher and the students. Researchers such as Montgomery (1994); Westling-Alloddi (2000); Van Gurp (2001); Mrug and Wallander (2002); Cambra (2002); Jambor and Elliot (2005) in their various studies enumerated possible factors that can influence the self-concept of students with special needs. These are; the severity or degree of the disability, age of onset of the disability, acceptance of the disability by parents, types of schooling (education in regular or special schools and special support) labelling and identification and group adherence. Johnson and Kenneth (2006) opined that it is not disability that contributes to an individual's low self-concept but the way an individual perceives himself/ herself in the face of disability. Determination and readiness to face the challenge in the atmosphere of disabling condition would contribute to high self-concept of the affected person. Whether the individual would develop, high or low self-concept depends on one's personality make up and their immediate environment.

Hutchinson, Duffy and Kelly (2005) described behaviour as the sum total of one's personality. Behavioural patterns were born from the proven observation of Friedman and Rosenman (1959, 1960). There are two major behavioural patterns the Type A and Type B. These behavioural patterns are also known as personality types. Personality type theory aims to classify people into distinct categories of behavioural pattern. This is important to understand, because it helps to distinguish a personality type approach from a personality trait approach as it affects behaviour. Hearing-impaired people are rigid thinkers and aggressive which eventually affect their behaviour (Higgins, 1980).

Rohner's theory (1980) reviewed in Mrug and Wallander (2002) hypothesized that feeling accepted or rejected by others can affect the way people view, evaluates themselves and the world. The feelings of rejection can lead to hostility, low self-respect, emotional instability, unresponsiveness, and a negative view of the world. People with hearing-impairment suffer from feelings of rejection and consequently manifest some behavioural patterns such as aggression, despair, underachievement and inferiority complex (Olubela, 2008). In the same vein, Loeb and Saregiani (1986) discovered that people with hearing-impairment developed

temper tantrum and are submissive, rigid and egocentric, lacking in empathy, as well as are impulsive and lack creativity.

Chess and Fernandez (1980) identified four personality characteristics such as impulsivity, hyperactivity, rigidity and suspiciousness frequently reported as the characteristic of adults and children with hearing-impairment. However, some related studies such as Fellingner, Holzinger, Schoberberger and Lenz (2005) reported that the prevalence of selected psychiatric disorders (ICD 10 F1, F2, F3, F4, F6) in people who are hearing-impaired was found to be similar to that in hearing populations. In addition, Gesinde and Busari (2007) carried out a study on multi-causal survey of cheating behaviour among students with hearing impairment. They explained that as students study on multi-causal survey of cheating behaviour among the students with hearing-impairment, explained that as students without disabilities have reasons to cheat so also are students with disabilities. This shows that behaviour patterns of students with hearing-impairment and that of the hearing counterparts are similar. However, an individual's expectations about their self-concept determines their behaviour patterns.

Statement of the Problem

Most researches on self-concept of students with hearing-impairment and their hearing counterparts in integrated schools had been inconsistent. For instance, studies by Frustenberg & Doyal (1994); Leigh, (1999); Musselman, Mootilal, & Mackay (1996) have found that integrated students with hearing-impairment have higher self-concepts and more realistic self-images and are better socially and emotionally adjusted than the students with hearing-impairment in Special schools

The findings of the studies by Kluwin (1999); Nunes, Pretzlik and Olsson (2001) on co-enrolment programme in the United States of America, showed that individuals with hearing-impairment do not have a lower self-esteem nor differ from their peers in behaviour. Similarly, the studies by Stinson and Antia (1999); Kluwin, Stinson and Colarossi (2002); Stinson and Kluwin (2003) further supported the assertion that children with hearing-impairment in integrated educational settings often develop low self-concepts that negatively affect their behaviour. They have less interaction with hearing peers and are more often rejected or neglected than their hearing peers, consequently, they may feel isolated and lonely. To the best knowledge of the researchers none of them have worked on self-concept and behaviour patterns of students with hearing-impairment in integrated schools in south western Nigeria, hence the need for the study.

Purpose of the Study

The main purpose of this study was to examine self-concept and behaviour patterns of students with hearing-impairment in integrated schools in South-western Nigeria. Specifically, the study investigated if there was any significant difference between the studied variables: Self-concept and Behaviour Patterns.

The study also sought to find out whether the significant difference (if such relationship exist) between the studied variables would be moderated or influenced by gender and age of the respondents.

Research Questions

The following research questions guided the conduct of the study:

1. What is the self-concept of students with hearing-impairment in integrated school settings in South-western Nigeria?
2. What are the Behaviour patterns of the students with hearing-impairment in integrated schools in South-western Nigeria?
3. Is there any significant relationship between self-concept and Behaviour patterns of students with hearing-impairment in integrated schools in South-western Nigeria?
4. Will gender significantly influence Self-concept of students with hearing-impairment in integrated schools in South-western Nigeria?
5. Will gender significantly influence Behaviour patterns of students with hearing-impairment in integrated schools in South-western Nigeria?
6. Will age significantly influence Self-concept of students with hearing-impairment in integrated schools in South-western Nigeria?
7. Will age significantly influence Behaviour patterns of students with hearing-impairment in integrated schools in South-western Nigeria?

Research Hypotheses

Based on the research questions the following hypotheses were formulated:

1. There is no significant relationship between Self-concept and Behaviour patterns of students with hearing-impairment in integrated schools in South-western Nigeria.
2. Gender will not significantly influence Self-concept of students with hearing-impairment in integrated schools in South-western Nigeria.
3. Gender will not significantly influence Behaviour patterns of students with hearing-impairment in integrated schools in South-western Nigeria.
4. There is no significant difference in Self-concept of students with hearing-impairment in integrated schools in South-western Nigeria on the basis of age.
5. There is no significant difference in Behaviour patterns of students with hearing-impairment in integrated schools in South-western Nigeria on the basis of age.

Methodology

A descriptive survey design was used in this study. This was necessary because respondents were purposively selected from the target population. Inference was drawn and generalization made. The population of this study consists of 1,057 students with hearing-impairment in integrated secondary schools in the South-

western Nigeria. South-western Nigeria has six States - Ekiti, Lagos, Ogun, Ondo, Oyo and Osun states. The purposive sampling technique was adopted to select 550 integrated secondary school students with hearing-impairment from the aforementioned states.

The instrument used to obtain relevant data for this study was a questionnaire titled "Self-concept and Behaviour patterns of students with hearing-impairment in special and integrated school Questionnaire (SEBPASHIQ). The battery of test has 42 items with two sections. Section A and Section B. Section A elicits information about the personal data of the respondents such as gender and age, while Section B consists of two (2) scales with 20 items each to elicit information about Self-concept and Behaviour Patterns of the respondents. Scale A is the Self-Concept Sub-Scale (SCSS) while Scale B is Behaviour Patterns Sub-Scale (BPSS).

Validity is the extent to which a test instrument measures what it purports to measure (Sanni, 2002; Nkpa, 1999). However, the validity of the instrument was established by giving copies to experts for vetting. Useful suggestions were offered and effected and thus, face and content validity was ascertained.

Reliability is the ability of a test to consistently measure what it was supposed to measure (Sanni, 2002). Reliability is given by the degree of correlation between the scores of a set of students in two administration of the same test within four weeks. The two scores obtained were correlated using Pearson Product Moment Correlation Formula (PPMC). The correlation coefficient of 0.76 was obtained, which indicates a positive and high correlation between the responses of the two periods of administration. The correlation coefficient was considered high enough to conclude that the instrument was reliable to carry out the study.

Results

Descriptive Data Analysis

The distribution of respondents based on Socio-Demographic characteristics of the study such as gender and age were presented in Table 1.

Table 1: Socio-Demographic Characteristics of Respondents

Variable	Categories	Count	Percentage
Gender	Male	280	51
	Female	270	49
	Total	550	100
Age	10 – 15 years	247	45
	16 – 21 years	272	44
	22 - 27 years above	20	4
	28-33years	8	1
	34 and Above	3	2
	Total	550	100

Table 1 indicates that 280 (50.9%) were males while 270 (49.1%) were females in integrated schools. This shows that the numbers of males compare to females students with hearing-impairment in integrated schools are almost the same. Also, the distribution of respondents based on age. 247 (44.9%) are between the age of 10 -15, 272 (49.4%) are between the age of 16 -21, 20 (3.7%) are between the age of 22 -27, 3 (0.6%) are between the age of 28 -33 while 8 (1.5%) are between the age of 34 years and above. This shows that there are more students with hearing-impairment between the age of 16 -22 closely followed by those between the age of 10 -15 years while those between the age of 22 -27 followed. But, those between the age of 28 -33 and 34 years and above in the integrated schools were insignificant.

Self-Concept of Students with Hearing-Impairment

The findings on the self-concept of students with hearing impairment are shown in Figure 1.

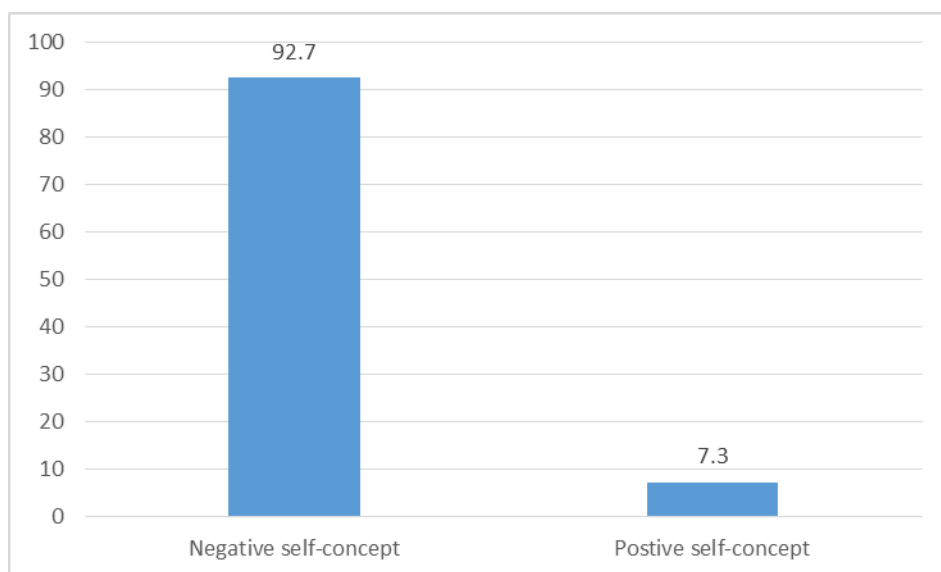


Figure 1: Distribution of Respondents by Nature of Self-concept

Figure 1 show that negative self-concept is generally prevalent among students with hearing impairment in integrated schools. However, the result indicates that 510 (92.7%) students have negative self-concept while 40 (7.3%) have positive self-concept.

Behaviour Patterns of Students with Hearing Impairment

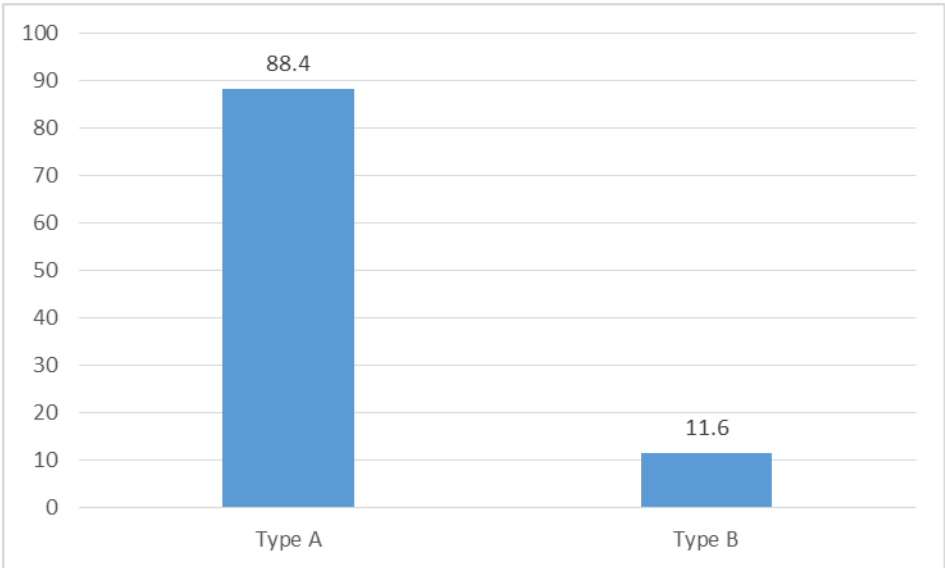


Figure 2: Behaviour Patterns of Respondents

Figure 2 indicates the behaviour patterns of students with hearing-impairment in integrated schools in South-Western Nigeria. This figure clearly shows that 486 (88.4%) were Type A and 64 (11.6%) were Type B behavioural patterns in integrated school. Thus, Type A behaviour pattern is prevalent in integrated schools in south-western Nigeria.

Hypothesis 1: There is no significant relationship between Self-concept and the Behaviour patterns of students with hearing-impairment

Table 2: Self-Concept and Behaviour Pattern of Students with hearing-impairment

Variable	Mean	r	p-value
Self-Concept	41.64	.387*	.000
Behaviour Pattern	40.42		

* Significant, $p < 0.05$

Table 2 shows the correlation output between self-concept and behaviour patterns of students with hearing-impairment in integrated schools. The result indicates a positive significant correlation ($r = 0.387$, $p < .05$) between self-concept and behaviour patterns of students with hearing-impairment. Therefore, an improvement in self-concept will entail a similar improvement in behaviour

patterns of the students with hearing-impairment, and vice-versa. Based on these findings hypothesis 1 was rejected ($r = 0.387$, $p < .05$).

Hypothesis 2: Gender will not significantly influence the Self-concept of students with hearing-impairment

Table 3: Gender and Self-Concept of Students with hearing-impairment

Gender	Mean	df	t-calc	p-value
Male	42.78	548	3.72*	0.000
Female	40.46			

*Significant $p < 0.05$

Table 3 is a t-test showing significant difference in self-concept of male and female students with hearing-impairment in integrated schools in South-western Nigeria. Specifically, the findings in Table 3 shows that there exist significant difference in self-concept of male and female students with hearing-impairment in integrated schools ($t\text{-cal} = 3.72$, $p < 0.05$).

Hypothesis 3: Gender will not significantly influence the Behaviour patterns of students with hearing-impairment

Table 4: Gender and Behaviour Patterns of Students with hearing-impairment

Category	Mean	df	t-cal	p-value
Male	40.51	541	0.26	0.798
Female	40.32			

Table 4 shows significant difference in behaviour patterns of students with hearing-impairment in integrated schools in South-Western Nigeria based on gender. The findings in table 4 shows that there is no significant difference in behaviour patterns of male and female students with hearing-impairment in Integrated schools ($t\text{-cal} = 0.26$, $p > 0.05$). Hypothesis three not rejected

Hypothesis 4: There is no significant difference in Self-concept of students with hearing-impairment

Table 5: ANOVA in Self-concept of Students with hearing-impairment based on Age

Source	Sum of Squares	df	Mean Square	F	p-value
Age	478.558	4	119.640	2.21	.068
Error	29616.162	545	54.342		
Total	30094.720	549			

Table 5 shows the Analysis of Variance (ANOVA) result for significant difference in self-concept of students with hearing-impairment in integrated school on the basis of age. The analysis yielded $F = 2.21$ and p -value of 0.068, which was not significant since $p > 0.05$. This implies that there is no significant difference in self-concept of students with hearing-impairment in integrated schools in South-western Nigeria on the basis of their age. Therefore, hypothesis 4 was not rejected.

Hypothesis 5: There is no significant difference in the Behaviour Patterns of students with hearing-impairment on the basis of age

Table 6: ANOVA output for significant difference in Behaviour patterns of students with Hearing-impairment of Integrated Schools based on Age

Source	Sum of Squares	df	Mean Square	F	p-value
Age	918.936	4	229.734	3.29	.011
Error	37591.002	538	69.872		
Total	38509.937	542			

*significant, $p < 0.05$

Table 6 shows the Analysis of Variance (ANOVA) result for significant difference in behaviour patterns of students with hearing-impairment in integrated schools on the basis of age. The analysis yielded $F = 3.29$ and p -value of 0.011, which was significant since $p < 0.05$. This implies that there exists significant difference in behaviour patterns of students with hearing-impairment in integrated schools in South-western Nigeria on the basis of their age. Therefore, hypothesis 5 was rejected.

Table 7: Duncan Multiple Range Test for Behaviour patterns of students with hearing-impairment

Age	Mean	Group
22 – 27 years	35.95	A
10 – 15 years	39.94	A
16 – 21 years	40.99	A
34 years and above	45.00	AB
28 – 33 years	52.00	B

A Duncan Multiple Range Test (DMRT) was conducted to determine where the significant difference lies across the age group of students. Result of the DMRT in Table 9 shows that the significant difference in behaviour patterns exists mainly between students aged 22 – 27 years (35.95), 10 – 15 years (39.94), 16 – 21 years (40.99), and those aged and 28 - 33 years (52.00).

Discussion of Findings

The study showed that Self-concept of the students with hearing-impairment in integrated schools was negative or poor. This finding supports Udo (2010) assertion which revealed that people with disabilities often have negative perceptions about themselves that they are different from the non-disabled counterparts. In addition, the study of Loeb and Saregiani (1986); Leigh and Stinson (1991); Maxon-Brackett, Van den Berg (1991) affirmed that students with hearing-impairment have a lower self-concept. However, this finding negates the study of Bolanle (2012) which stated that self-concept of students with hearing-impairment in mainstreamed school was positive. The plausible reason could be that the level of education of respondents in the mainstreamed or integrated school is higher than that of the respondents in this study.

This study also showed the behaviour pattern that is prevalent among students with hearing-impairment in integrated secondary schools is Type A. This is probably because the hearing-impaired seem to suffer from feelings rejected and consequently manifests some behavioural patterns such as aggression, despair, under-achievement and inferiority complex (Olubela, 2008). This finding corroborates Eysenck (1997) dimension of personality which stated that Type A behaviour patterns are classified as neuroticism indicating that they are anxious, tense, impulsive, vulnerable, touchy, and emotionally unstable. The study furthered revealed that positive self-concept is a prerequisite to Type B behaviour pattern and negative self-concept is a prerequisite to Type A behaviour patterns. However, the Type A behaviour pattern characteristics displayed by majority of the students with hearing-impairment in integrated schools in this study are aggression, impatient and competitiveness. Higgins (1980); Loeb and Saregiani (1986) also confirmed that most people with hearing-impairment are aggressive due to their lack of language skills. Purkey (1988) revealed that self-concept dictates human personality by providing consistency in personality and the direction for behaviour.

However, the finding did not support Mustapha (2010) assertion, which stated that significant relationship between self-concept and behaviour pattern do not exist among secondary school bullies in Ilorin metropolis such that a high self-concept do not lead to Type A or Type B behaviour pattern. Plausible reason for this difference might be as a result of the fact that respondents in this study are disabled while respondents used by Mustapha (2010) were not disabled. The disabled are susceptible to negative perception in the face of their disability and the societal attitude to them. This could be the reason why Johnson and Kenneth (2006) opined that it is not disability that contributes to an individual's low self-concept but the way an individual perceives him or herself in the face of disability. Therefore, the determination and readiness to face the challenge in the atmosphere of disabling condition would contribute to the high self-concept of the affected person.

The study particularly indicated that male students with hearing-impairment in integrated schools have higher self-concept compared to female counterparts. As such, gender is a factor that determines the self-concept of the students with hearing-impairment. The difference in self-concept based on gender could be that the male students with hearing-impairment in integrated schools intermingled with the hearing peers more than the female students with hearing-impairment thereby increasing their self-concept more than the female students with hearing-impairment in integrated schools. On the other hand Bolanle (2012) and Akinpelu (1998) found that no significant difference existed in the self-concept of students with hearing-impairment based on gender. The behaviour patterns of males and females students with hearing-impairment are similar. Reason could be that both males and females students with hearing-impairment exhibit poor self-concept due to inability to communicate with peers without hearing impairment.

The self-concept of the respondents was not significantly different across age groups. This lends credence to Bunch (1994); Kirk and Gallaher (1997) assertions that full integration in the educational sense implies that all students with disabilities should have the opportunity to be enrolled in the regular schools along with age-appropriate peers. Also, they should attend the same school with the non-impaired students and interact as much as possible with their peers in the least restrictive environment.

This study revealed that the behaviour patterns of the respondents differ across the age groups in integrated schools. This finding supports Levine (1960) assertions that the age when the respondents started school and the type of school attended, home and family factors among others can influence the behaviour patterns of the hearing-impaired. However, the common approach by psychologists in classifying human beings into type or behaviour pattern is based on characteristic features or traits and not on the basis of age. Despite the differences in the behaviour patterns of students with hearing-impairment on the basis of age, overwhelming percentage of them across these age groups still share similar behaviour patterns. Therefore, this finding supports Chess and Fernandez (1980) and Levine (1956) which stated that personality characteristics such as impulsivity, hyperactivity, rigidity, suspiciousness, suggestibility and egocentricity are prominent in the characteristic of hearing-impaired adults and children. These characteristics are typical of Type A behaviour patterns.

The following recommendations are made in relation to the findings of the study:

1. Counsellors and Educational Psychologists should be trained on the use of American Sign Language (ASL) in order to enhance effectiveness and the ease of communication with the hearing impaired.
2. Parents of students with hearing-impairment should foster good child rearing practices in order to develop positive self-concept and consequently enhance the hearing-impaired behaviour patterns.

3. Integrated schools across the States of South-western Nigeria should be well equipped so that students with hearing-impairment will have access to facilities that will enhance their behaviour.

References

- Ajibade, I. O. (2010). A study of articulation errors of some fricative sounds of the post lingual deaf children. *The Journal of Advocacy and Rehabilitation in Special Education (JARSE)*, 8 (1), 78-84.
- Akinpelu, O. F. (1998a). Managing handicapped students in schools. In A.I. Idowu (Ed.) *Guidance and counselling in education*. (pp.145-169). Ilorin: Indemac Publishers.
- Akinpelu, O. F. (1998b). *Self-concept and academic achievement of hearing impaired in Nigeria*. Retrieved May 5, 2011 from <http://www.bbi.syredu/publications/.../NJGC>.
- Bolanle, S. O. (2012). Influence of mainstreaming on self-concept and social behaviour of hearing-impaired students of federal college of education (special) Oyo. Unpublished seminar paper. University of Ilorin Nigeria.
- Bong, M., & Clark, R. E. (1999). Comparison between self-concept and self-efficacy in academic motivation research. *Educational Psychologist*, 34 (3), 139-153.
- Cambra, C. (2002). Acceptance of deaf students in regular classroom. *American Annals of the Deaf*, 147
- Chess, S. & Fernandez, P. (2012). Do deaf children have a typical personality? *Journal of the American Academy of Child Psychiatry* 19 (4), p654-664. Retrieved January 20, 2013 from <http://www.journals.elsevierhealth.com/periodicals/jacp/article/S0002-7138%2809%2960968-7/abstract>
- Chopra, R. (2003). What is personality? Retrieved November 30, 2012 from
- Dagbo, S. S. (2010). *Language methods for the hearing-impaired: A reading text for teachers and parents of hearing-impaired children*. Ibadan: Glory-Land Publishing Co.
- Eysenck, H.J. (1997). Personality and experimental psychology: The unification of psychology in the possibility of a paradigm. *Journal of Personality and Social Psychology*, 73, 1224-1237.
- Friedman, M. & Rosenman, R. H. (1974). *Type A behaviour and your heart*. New York: Knopf.
- Friedman, M. & Rosenman, R. (1959). Association of some specific overt behaviour pattern with blood and Cardiovascular findings. Retrieved June 5, 2012 from http://en.wikipedia.org/wiki/Type_A_and_Type_B_personality_theory
- Frustenberg, K., & Doyal, G. (1994). The relationship between emotional-behavioural functioning and personal characteristics on performance outcomes of hearing students. *American Annals of the Deaf*, 139, 410-414.

- Fulgosi-Masnjak, R. (2003). Samoprocjena, emocije i postignuće u školskoj situaciji, u: L. Kiš-Glavaš i R. Fulgosi-Masnjak (Ur.) *Do prihvaćanja zajedno: integracija djece s posebnim potrebama: priručnik za učitelje*. Zagreb: Hrvatska udruga za stručnu pomoć djeci s posebnim potrebama–IDEM.
- Gbegbin, J. A. (1991a). Mainstreaming exceptional children” problem and prospect. In E. D. Ozoji, J.U. Umolu and S. O Olaniyan (Eds.) Contemporary issues in mainstreaming the exceptional child in Nigeria 6.3’3.4 system of education he educational child
- Gesinde, M. & Busari, A. O. (2009).A multi-causal survey of cheating behaviour among the hearing-impaired students. In E. D. Ozoji & J. M. Okuoyibo (Ed.). *The practice and future of special needs education in Nigeria. (A book of readings in honour of Prof. (Rev. SR) T. B. Abang*. Jos, Department of Special Education and Rehabilitation Services, University of Jos.
- Higgins, A. (1980). *A deaf personality*. Retrieved January 20, 2013 from http://labspace.open.ac.uk/file.php/2467/lvia/oucontent/course/166/d251_1blk2.11.pdf
- Jambor, E. & Elliot, M. (2005). Self-esteem and coping strategies among deaf students; *Journal of Deaf Studies and Deaf Education*, 10: 63-81.
- Johnson, K. & Kenneth, C. (2008).Impact of disability on children self-concept. In Owoade, B. & Olawuyi, O. (2009). Self-concept and academic performance of auditory challenged secondary school students in Oredo Nigeria. *The Journal of Advocacy and Rehabilitation in Special Education (JARSE)*, 7 (1), 136-143
- Jung, C. (1923). Psychological types. In Hutchinson, K. M., Duffy, T. L. & Kelly, L. J. (2005). How personality types correlate with hearing aid outcome measures. *The Hearing Journal of Personality and Hearing aid Outcome*, 58 (7), 28-34.
- Kar, C. (2007). Exceptional children: Their psychology and education. New Delhi, Sterling Publishers Private Limited.
- Kirk, S. A. & Gallagher, J. J. (1997). *Educating exceptional children*. In Eleweke, C. J. (2006).The challenge of inclusion of deaf students in Nigerian schools. Boston, MA: Houghton Miffling.
- Kirk, S.A. & Gallagher J. J. (1989).*Educating the exceptional children*. Boston: Houghton Mifflin Company.
- Kirk, S.A., & Gallagher, J. J. (1993). *Educating exceptional children* (7th Ed.) Boston Houghton Mifflin Company.
- Kluwin, T.N, Stinson, M.S. Colarossi, G.M. (2002).Social processes and outcomes of in-school contact between deaf and hearing peers. *Journal of Deaf Studies and Deaf Education*, 7:200-213.
- Lawrence, D. (1996) Enhancing Self-esteem in the Classroom. In Schmidt, M. & Çagran, B. (2008). Self-concept of students in inclusive settings: *International Journal of Special Education*, 23 (1) 8-17.
- Leigh, I. W. (1999). Inclusive education and personal development. *Journal of Deaf Studies and Deaf Education*, 4, 236–245.
- Levine, (1956).In A. Higgins (1980).A deaf personality. Retrieved January 20, 2013 from

- http://labspace.open.ac.uk/file.php/2467/lvia/oucontent/course/166/d251_1blk2.11.pdf
- Loeb, R., Saregiani, P. (1986). The impact of hearing impairment on the self-perceptions of children. *Volta Review*, 88, 89-100.
- Mattoon, M. (1981). Jungian psychology in perspective. In Hutchinson, K. M., Duffy, T. L. & Kelly, L. J. (2005). How personality types correlate with hearing aid outcome measures. *The Hearing Journal of Personality and Hearing Aid Outcome*, 58 (7), 28-34.
- Mrug, S. & Wallander, J. L. (2002). Self-concept of young people with physical disabilities; does integration play a role? *International Journal of Disability Development and Education* 49, 267-280.
- Musselman, C., Mootilal, A. & Mackay, S. (1996). The social adjustment of deaf adolescents in segregated, partially integrated and mainstreamed settings. *Journal of Deaf Studies and Deaf Education*, 1: 52-63.
- Myers, I. B. (1962). Manual: The Myers-Briggs Type Indicator. In Hutchinson, K.M., Duffy, T. L. & Kelly, L. J. (2005). How personality types correlate with hearing aid outcome measures. *The Hearing Journal of Personality and Hearing aid Outcome*, 58 (7), 28-34
- Nkpa, N. (1999). *Educational research for modern scholars*. Fourth Dimension Publishing Co. Ltd.
- North Carolina Self Help for Hard of Hearing People (NCSHHHP) (2011). *Hearing-Impaired*. Retrieved November 20, 2011, from <http://www.nchearingloss.org/hi.htm>
- Nunes, T., Pretzlik, U. & Olsson, J. (2001). Deaf children's social relationship in mainstream school. *Deafness and Education International*, 3: 123-136.
- Obani, T.C. (2004). *Handicap, disability and special education: What parents and teachers want to know*. Ibadan. Book Builders.
- Okuoyibo, J. M., Oyewumi, A. M., & Adediran, D. A. (2007). Hearing impairment. In J. M. Okuoyibo (Ed). An introduction to the education of children with special needs (revised edition). Ibadan; Emola- Jay Communication (Inc.).
- Panda, K.C. (2007). *Education of exceptional children*. New Delhi: Vikas Publishing House Printing Ltd.
- Rohner, E. C. (1980). In S. Mrug & J. L. Wallander (2002). Self-concept of young people with physical disabilities; does integration play a role? *International Journal of Disability Development and Education* 49, 267-280.
- Rosenman, R. H. & Friedman, M. (1974). *Type A behaviour and your heart*. New York: Alfred A. Knopf Inc.
- Rosenman, R. H. (1986). Current and past history of Type A behaviour pattern. In Dembroski, M. I., Schmidt, T. H. & Rhomenhan, C. (Eds). *Biological and Psychological Factors*. New York: Springer-verlag.
- Sanni, R.I.O. (2002) *Educational measurement and statistic: A pragmatic approach (2nd Ed)*. Lagos: Ziklag Publishers.
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46, 407-441.

- Stainback, S. B. (2008). Inclusion. Microsoft Encarta 2009 (DVD) Redmond, WA: Microsoft Corporation.
- Van Gorp, S. (2001). Self-concept of secondary school students in different educational settings. *Journal of Deaf Studies and Deaf Education*, 6: 54-69.
- World Health Organisation (WHO) (2011). *Disability*. Retrieved August 13, 2011 from <http://www.en.wikipedia.org/wiki/Disability>.

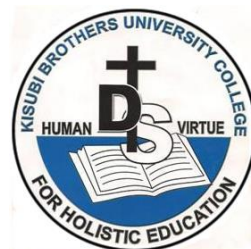
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P. O. Box 5498 Kampala
Uganda

Tel: +256782464691

Fax: +256782464691

E-mail: admin@kbuc.ac.ug
Home page: www.kbuc.ac.ug

