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Anthony MW | Karen Afandi

EDITORIAL NOTE

The African Research Journal of Education and Social Sciences presents Volume 8, Issue 1 as part of its continued commitment to disseminating scholarly research that addresses important educational and social issues affecting African societies. The studies published in this issue explore a range of interconnected themes that reflect the realities of communities, institutions, and social systems across the region. Through empirical investigation and contextual analysis, the contributions provide insights into how social structures, economic activities, educational practices, and community relations shape human wellbeing and development outcomes.

One of the themes emerging from the articles in this issue concerns the functioning of informal social and economic systems within urban environments. The study examining informal group financial welfare contributions among Jua Kali artisans in Nairobi highlights the ways in which collective financial practices strengthen social networks and contribute to the development of social capital among artisans. Such research offers valuable perspectives on how informal support structures promote cooperation, mutual assistance, and economic resilience among individuals operating within the informal sector.

The issue also addresses questions related to psychosocial wellbeing and educational transformation in times of social disruption. Research examining the prevalence of depression and anxiety among children affected by HIV-related loss provides insight into the psychological challenges faced by vulnerable populations, particularly in contexts influenced by broader public health crises. In addition, the study exploring the challenges and opportunities associated with online teaching of Religious Education in institutions of higher education in Uganda reflects the adjustments made by educators and institutions during the COVID-19 pandemic, highlighting both the constraints and emerging possibilities associated with digital learning environments.

The issue further engages with questions concerning community relations and their implications for economic development. The study examining the effects of social and community issues in inter-ethnic conflicts on economic growth in selected sub-counties in Kenya sheds light on the ways in which social tensions and community dynamics can influence economic activities and development initiatives. Collectively, the articles in this issue contribute to ongoing scholarly discussions on informal economies, social capital, mental health, educational adaptation, and the relationship between community cohesion and development, thereby providing a useful foundation for future research in education and the social sciences.

KAREN AFANDI
EDITOR
AFRICAN RESEARCH JOURNAL OF EDUCATION AND SOCIAL SCIENCES

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Influence of informal Group Financial Welfare Contributions on the Social Networks and Social Capital among the Jua Kali Artisans in Nairobi

Author: Stella Moraa Omari

School of Business and Economics Kisii University
P.O. box 408 Kisii 40200 Kenya.
Email: stellaomari@gmail.com

Abstract

The informal sector in Kenya contributes immensely to the economic development and activities of the nation. This sector is well placed in ensuring that the sustainable development goals are achieved as the country pushes forward towards the attainment of Vision 2030. However, most of the work in this sector is to a large undocumented in terms of Human Resource development and skill transfer. The purpose of this study was to examine the influence of informal group financial welfare contributions on the social networks and social capital among the jua kali artisans in Nairobi. An exploratory research design was used by the study. The target population was 375 mechanics operating in different pockets within Nairobi. A sample size of 75 respondents in two different cohorts was taken using stratified random sampling technique and later simple random technique was used to sample out the respondents from each strata. Purposive sampling on the other hand was used to select 6 key informants and 4 FGDs that took part in the study. Data was collected through questionnaires, interview guides and Focus Group Discussions. Word cloud was used to analyse qualitative data and the quantitative data was analysed through measures of central tendency and dispersion and presented in frequencies and percentages and summarised in figures and tables. Findings indicated that social capital enhances income generating opportunities and there is a free sharing of skills among the masters of the trade and the apprentices. Further findings revealed that the collectives thrive when trust is high and leadership is good and credible. The study concluded that skill transfer was a key component of collectives in the Jua Kali sector and all members benefited whether they were in a group or not. Based on the findings, the study recommended that a similar study can be conducted in other towns and include other jua Kali groups.

Keywords: Informal group financial welfare, financial welfare contributions, jua kali socionetworks, jua kali artisan, chama contributions

Introduction

Most countries in the world have a combination of formal and informal economies. Formal economies are composed of enterprises that are certified within a legal system and are regulated by statutory and professional bodies. On the other hand, enterprises in informal economies are not regulated by government and are characterized by unregulated markets, low capital inputs,

intensive labour and self-employed workers (Maslak 2018), who are usually supported by family members. It is widely accepted that the informal economy plays a vital role in the global and country specific economies. The Jua Kali sector is replicated in various clusters across the towns of the country however being an exploratory study this particular study was conducted in a cluster of jua kali in Nairobi. Social capital and social networks are two broad subjects and the study focused on both concepts as they are interconnected and by exploring both concepts and their role in trust building and skill transfer it will help to inform further specific studies in the areas. The collectives as expressed on the ground tend to be around ethnicity and it will be important to determine the extent to which ethnic inclusivity and diversity are embraced in the management and day to day interactions of these collectives.

According to Kenya"s Economic Survey (2018), the informal economy contributed to the generation of approximately 800,000 new jobs, which was 83.4% of all new jobs in 2017(Economic Survey - KNBS, 2018). The *jua kali* sector is a prominent feature in Kenya"s informal economy. This sector is made up of micro and small-scale entrepreneurs who work in makeshift structures, and most times along busy roads in urban settings. The sector has been in existence for over 30 years but little is known about it. *Jua kali* entrepreneurs are mainly engaged in businesses such as motor vehicle repairs, metalwork, woodwork, tailoring and dressmaking, manufacturing and small scale trading. One key characteristic of *jua kali* enterprises is the way they cluster in certain geographical spaces in urban centres. In these clusters, *jua kali* enterprises operate in close proximity to each other in small sheds and semipermanent workshops. Clustering of *jua kali* enterprises may happen spontaneously or they may be forced to operate in certain parts of urban settings by authorities. Clustering of *jua kali* enterprises and artisans fosters the emergence of complex economic and non-economic interactions and relationships between actors such as entrepreneurs, artisans, suppliers and financial institutions such as banks, micro-credit institutions, among others.

Interactions between actors in *jua kali* clusters involve flow of information, skills and technology. According to Kinyanjui *et al*., flow of information in a *jua kali* cluster may range from exchange of product ideas between entrepreneurs to the copying of product designs in an entire cluster. It is within these *jua kali* clusters that artisans learn from each other highly sophisticated market relevant skills away from formal environments of learning. Skills are also transferred from one generation of artisans to the next through master-apprentice relationships (Kinyanjui, 2000). *Jua kali* artisans also transfer skills and technology amongst each other through peer networks. Peer networks grow gradually over long periods of interactions within the cluster. Peer networks in clusters are often developed based on acquaintances, ethnicity and similar trade (Kinyanjui, 2006). Sometimes these peer networks morph into collectives such as table banking/investment groups (locally known as *chama*), or welfare groups.

Jua kali artisans and entrepreneurs conduct their businesses in complex and dynamic networks where they interact and relate with other actors within and outside their clusters. Their credibility, reciprocity and trusting relationships influence how they transfer skills to each other, work as teams, and refer business opportunities to each other and how they access financial capital for start-ups and markets for their products. These informal values that enable *jua kali* artisans to effectively ply their trade is referred to as social capital (Baum, 2003). There are two broad types of social capital. Bonding social capital is characterized by strong and enduring relationships between people of equal socioeconomic status. Secondly, Bridging social capital occurs when there are complex and fluctuating contacts between people from different socioeconomic status. There is limited empirical evidence on how collectives enhance social capital and networks among *jua kali* artisans and entrepreneurs in Nairobi. The need to understand the intricate skill transfer in the informal sector gave impetus to conducting this research whose purpose was to establish how collectives among *jua kali* artisans and entrepreneurs in Nairobi influence their social networks and social capital. This study was conducted among different *jua kali* artisans to assess how collectives impact on trust, mutual support and future engagements. No extensive study interventions have been conducted in the Kenyan Jua Kali sector targeting specific trades to establish the influence of collectives among jua kali artisans and entrepreneurs, therefore there was need to examine the influence of informal group financial welfare contributions on the social networks and social capital among the jua kali artisans in Nairobi, Kenya.

Methodology

This was an exploratory study aimed at providing evidence to inform the design and implementation of interventions aimed at enhancing social networks and social capital in the *Jua kali* sector in specific trades. An exploratory research design using mixed methods for data collection and analysis was used. This design was to provide a "snapshot" of social capital and networks amongst mechanic *Jua kali* artisans and entrepreneurs in Nairobi. There were two comparison groups in this exploratory study comprising members of a collective and non-members of collectives. Primary quantitative data analysis was done using measures of central tendency and dispersion. A review of literature was done to further contextualize the methodology of this study.

The exploratory study drew respondents from a population of 375 artisans from various trades namely; motor vehicle mechanics of both genders in Nairobi. Respondents were categorised as either *jua kali* business owners, experienced artisans, supervisors, apprentices and chairpersons of various collectives. This particular study was carried out among *jua kali* mechanics in Kiambiu area, along Rabai road in Nairobi"s Eastlands area. The study settled for this location because of its large cluster of mechanics from different ethnic backgrounds. There was also a contact person in the area, making entrance easier given the limited time available for this study.

Stratified random sampling technique was used to sample *jua kali* artisans who are in collectives. The study population was stratified by trade and then simple random sampling was applied to

sample respondents in the mechanical trade stratum. The sampling frame was the membership registers of the *jua kali* artisans" associations. For those not in collectives the random walk approach was used determined by a fixed landmark and using the Bauer principles. Stratified random sampling was applied to minimize bias in the findings and to enhance the external validity of the study.

The study was scaled down to 150 respondents (75 in collectives/ 75 not in collectives), 4 FGDs and 6 KIIs. The sample size was organized into three broad categories namely; „highly organised", „moderately organised" and „lowly organised". Highly organised sites indicated that these sites are made up of clusters of the specific trades and have well-established collectives and leadership structures. Moderately organised sites had pockets of different trades with relatively few collectives while poorly organised had sparsely distributed *jua kali* artisans with no leadership structures. The study settled for the highly organized collectives in the mechanical field as both those who were members and those who were not members of any collective.

Primary data was collected for this study. The study used structured questionnaires, interview guides and Focus Group Discussions. The Study used Focus Group Discussions and interview guides to gain further insights on the areas under study. Participants for focus group discussions and key informant interviews (KIIs) were selected purposively based on their knowledge of the topics and experiences in the *Jua kali* sector. Qualitative methods explored attitudes, knowledge and practice through;

Key Informant Interviews - that helped to collect first hand experts" knowledge and information about the *jua kali* sector and provide an understanding on the nature of the problems and recommendations. This tool was used to collect data from the financial institutions, leaders of collectives, master owners, master supervisors and the local chief. This information was used to corroborate that given by the respondents in the specific trade.

Focus Group Discussions - Focus group discussions were held with *Jua kali* artisans who are members of collectives and those who are non-members. This enabled the study to get qualitative comparison of similar groups of interests based on the outcome of collective intervention on financial support, trust and skill transfer.

Data was analyzed quantitatively and qualitatively. Quantitative data was analyzed using frequencies to describe the data and these were presented in pie charts and bar graphs. Qualitative data analysis was done using Word cloud (Tag cloud) which is a visual representation of text data. It displays a list of words, the importance of each being shown with font size or color. This format is useful for quickly perceiving the most prominent terms. This feature is found in the python software developed by Andreas Mueller.

The analysis of the results focused on only three FGDs and three KIIs because when analyzing the responses were very similar and thus the decision to use only three from each group.

Results

Demographic Characteristics of the Respondents

The study sought to find out whether the mechanics surveyed belonged to any collective (chama) and to establish how the membership to informal groups contributed to development of social capital.

Profile of chama and non-chama members
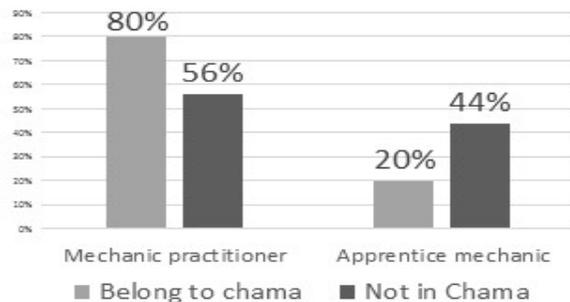
The findings revealed that mechanic practitioners (80%) were mainly members of a collective. The other group of members who belonged to *chama* were the apprentice mechanics (20%)

Influence of Informal Group Financial Welfare Contributions on the Social Networks and Social Capital among the Jua Kali Artisans

The study sought to establish whether there were any benefits of belonging to a Chama and in order to accomplish this members discussions from the Focus Group Discussions were analysed using word cloud and the responses are as shown. The actual and perceived benefits of membership are explained. The words of the respondents are highlighted.

On whether *chamas* reinforced a saving culture among members, FGD 1 reported the following: "today i"m here saving money. Before I joined *chama* I would be elsewhere wasting money with the wrong company"

The members were further asked whether *chamas* had a strong welfare component that was useful in times of trouble (sickness, bereavement), FGD 2 observed the following: the reason we are together is because of problems. In case of any sickness or death, this *chama* helps when we are together.

On whether *chama* helped achieve development goals, KII 1 reported that the *chama* has been very supportive in loans which are useful in acquiring tools and spare parts. This helps members working from the garage develop and attain their own goals.

On whether chama strengthen bonds among members especially when receiving support, KII 2 who is a chama leader reported the following:

> Yes they have benefited us a lot. Anyone who has been supported by any chama wouldn't want to leave. The only people who can assist you are the people who work with."

Despite not being in chama, non-members identified the following:

Non memebers perceived chamas to have a strong welfare components. KII 3 further reported that; "People contribute KShs. 100 and basically they don't look at it in terms of development in any way. The KII went ahead to explain that, "I think is about addressing death when someone dies, the *chama* members provide their support through contributions which is used to buy components such as coffin."

Non chama members perceived chamas as important vehicles for development and saving. One of the FGD non-chama member reported that what can make her join *chama* is the power and ability to develop.

Trust was found to be a major factor that helped build and sustain social capital amongst mechanics in *chama*s. Reciprocity proved to be a determinant, a sustainer and to a great extent helped strengthen the trust relationships among *chama* members. Some demonstrations of trust and reciprocity from the Focused Group discussions include; *"Yes we trust each other for example when I am late for a chama meeting I might call [name] and ask him to contribute money for me and then I will refund"* (FGD 1, Chama members)

Another factor that led to building trust was adherence to *chama* norms. This built confidence among members to trust that they will be helped when in they are in need. This is implied in this communication ;*"If you are not in a group that is normal, you cannot get along with people, how will you get help from people"* (FGD 2, Chama Members). Transparency in financial reporting was another factor that made members trust that they will receive their savings when their time comes - *"We welcome the members to the office to come and check if the money that was banked match the bank slips. After 3 months we bring bank statements for the members to confirm"* (KII, Chama leader). The integrity of leaders gave members confidence to take risks in entrusting their finances to persons in non-registered saving pools. A direct quote from one of the leaders implies *"We trust each other because we are not a registered chama. There are 3 members who have opened the chamas joint account, so if 3 people can be in-charge of that money until the year end and make it available when needed doesn't this show that chama members trust us"* (KII, Chama leader). These findings show a lot of social cohesion enhanced through trust among the mechanics that were studied and thus an increase in the social capital which implies a positive cohesion for development amongst members.
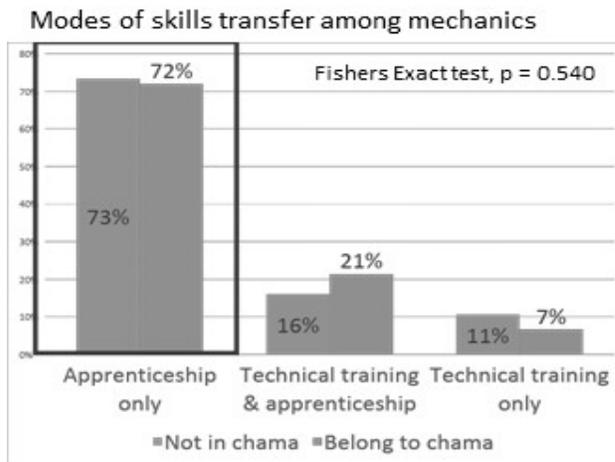
The study also sought to understand the reasons why mechanics were not in a chama. It was interesting to note that the complete opposite reasons that cause trusting relationships in chamas were the ones causing other mechanics to shy away from the chamas. The factors included; Lack of commitment among peers as reported in the FGD *"I used to be in one and we used to contribute Kshs. 200…I left because the members were not serious. You will find we were 10 people and only 5 are contributing"* (FGD 3, Non-chama members). This is further compounded by a breach of trust in a chama as captured in the following quote "Or you can save and fail to get money in the end when it is your turn to receive the money. This made me lose interest…*"* (FGD 3, Non-chama members). Similarly, lack of transparency in some chamas caused individuals to shy away "……conmen are many so I won"t join, whereby one saves the money and the treasurer disappears with the money. I have heard about people disappearing with money*".* (FGD 3, Non-chama members). This may not have been supported by facts but still the fear of losing one"s savings to a rogue treasurer was a motivating force for keeping away from chamas.

The study sought to explore the connections that enhance creation of financial capital for start-ups among jua kali mechanics and entrepreneurs in the study area of Nairobi. The study found that regular meetings bind members together since they are set to achieve common goals. The members held weekly meetings to make contributions. Among the groups surveyed 39% held weekly meeting and in these meetings 31% of the membership attended all meetings, while 30% percent attended most meetings only three percent did not attend any meetings at all. The chamas had their own internal control mechanisms that ensured compliance and they also provided sanctions for the errant members "In our constitution it is written that a member who miss up to 3 meeting without notification. If it is more than that then one ceases to be a member" (FGD 1, Chama members). Chama members were bound by rules. This made them adherent to meetings and contributions "If you fail to contribute twice you are removed from the group" (FGD 2, Chama members). In order to enhance the buildup of financial capital the banks did weekly monitoring. The Banks continuously monitored chamas to encourage them to maintain active accounts with withdrawals and deposits. The interview with the bank revealed the same "…our Group Lending Officers meet with these chamas on a weekly basis to…monitor progress with repayment of loans obtained from this bank" (Female Bank official, KII). To qualify to transact with the bank Chamas savings were the collateral for Group Loans. This is an important element as it pooled resources from members and made them access more money because of the group as compared to their individual capacity to borrow from the bank. Members repaid the loans to safeguard their social capital.

They did this by use of personal relationships, social sanctions and various collateral substitutes such as reputation, group responsibility and interlinked transactions "Group lending through chamas reinforces loan repayment...members are forced to repay loans to avoid risking the chama"s savings which are used as collateral" (Female Bank official, KII). Self-funding and easy access to capital was another way individuals in chamas raised money together that can be used to

fund start-ups "….our main agenda is to save money until the end of the year and loan money to members who need it….""….chama helps with investment as I am able to do my own projects with the money…." (Male KII Chama Leader). "…There are also aspects of savings and investments in the chama …" (FGD 2, Chama Members). As part of building financial capital there was the aspect of information gathering from local networks. The chamas were able to gather information at low costs using the existing predefined local networks "…Before membership you'd deal with own problem and being a member you get help from the chama. Before you dealt with your problem individually and now being together helps…" (FGD 1, Chama Members).

Figure 1: Bar graph showing social network and skills transfer

Figure 2: Bar graph showing willingness to share skills

The study found that leaders have a significant influence on building social capital. Leaders breach of trust destroys social capital "There are others that steal money… you hear money has been stolen and you don"t know when it was stolen, and people have disappeared…. (FGD 2, Chama members). As they chose their members they look at the history and reputation of the person handling of finances and thus it is a key leadership characteristic "Let"s say, if the members elect you as a chairman one of the things that they look at is how you handle finances. As you know our main agenda is money…." (KII 2, Chama leader). The mechanics came up with a way of ensuring the safety and security of the money handled by the leaders of the chama "Among the 3 signatories one of them is a garage owner. He can"t dare to mess with money belonging to the youth. We made him a signatory to act as security" *(FGD 2, Chama members).*

Discussion

The study findings implied that Social capital is strong among mechanics regardless of whether they are in chamas or not, there was evident togetherness in skills transfer and sense of belonging among mechanics and the high need for pooling of finances brought together by a common skill of mechanics in chamas. The study determined that the social capital generated through chama membership enhances access to loans and welfare support. All chamas had a strong welfare component. Trust and financial capital are key factors in sustaining chamas. Skill development

has always been assumed to be best passed in formal situations but this study was done to explore and understand the efficacy of the artisans who operate in the jua kali sector.

The study points out the fact that every group of skilled artisans has a space of teaching another one and that is the norm in the jua kali sector. The homogeneous nature of the groups helps to strengthen the resolve to stay the course and achieve the set objectives. The danger of relying on homogeneous groups is the possibility of excluding other groups or creating cartels (group capture) that may hinder the social mobility that they set out to achieve in the first place. It was clear that the members of the collectives are motivated to save and they have seen the benefits. The emphasis should be to let there be inclusivity form other trades. Being in a collective involves risk derived from the fact that people handle money on behalf of others. The potential destruction through poor governance is real and this is made worse when the majority of the members are not good with numeracy. Risk of leaders using members funds for their personal use are common and hence there is need of recognizing the chamas and let them get training. Much as the financial institutions train them, the training is narrowed to the interest of the lender and therefore the members do not get a holistic training that enhances their productivity and life skills. This is a gap that can be filled in future to harness the resources in this sector. Much as these groups seem to have achieved much there is still more to be done to enhance quality and sustainability as it was realized that the number of chamas that do not live on is much higher than those that survive the first two years of formation. The challenge to accessing the funds to join an existing group is real and more so from the perspective of youngsters willing to join the trade but cannot afford to save because they must eat. The purpose of this study was to demonstrate that in the absence of high unemployment and underemployment it is possible to develop soft skill sets that can spur leadership growth in the informal sector. Participation in the economic and social groups enhances skills in decision making, comfort and confidence in public speaking and the voice of the membership is heard in the group leadership.

Commonly in every urban center in Kenya one will find a section of the town that is run by the jua kali artisans and visibly the chamas are present for diverse skill sets. It is not surprising that the skills that feed on to one another also collaborate on making referrals for their colleagues. As an exploratory research the study brings out the uniqueness of contextualization in skill transfer and the role of soft skills in informal training and network building. The change that will be brought about with these groups is incremental and will be achieved over time. This calls for more engagement by the government and other groups that create synergies in all the sectors to create a highly productive society.

Conclusion

The study concluded that Chamas among mechanics are an indicator of the underlying social capital and trust is a key ingredient in building social networks, collaboration and social capital. Social capital should be harnessed to be a vehicle for universal access to micro-credit/ finances to underserved jua kali artisans. The role of leadership in the transformation process cannot be

understated. This study can inform development of financial products by microfinance and banking institutions and form a basis for developing a comprehensive approach for government and other aid agencies to tap and train the manpower that is readily available in this sector for a developed and vibrant nation.

This was an exploratory study and it was carried out in a very small section of Nairobi. Given that the Jua Kali sector is huge there is need to expand the study area and replicate the study to other skill areas and towns. Chamas require training in financial management for them to reach their full potential in achieving their members" goals. The study mainly relied on qualitative analysis another study can be done which uses more of the quantitative approach. This is something the government can take up to enhance a sector that is already employing so many people.

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Perceived Psychosocial Impacts of COVID-19 among Students in Higher Learning Institutions in Dar-es-Salaam, Tanzania

Authors: Bertha, E. Losioki[1] & Mdee, K. Hemed[2]

[1&2]Department of Education, The Mwalimu Nyerere Memorial Academy,

P. O. Box 9193, Dar-es Salaam,Tanzania
Email: bertha.losioki@mnma.ac.tz

Abstract

Students in higher learning institutions are among the groups that experienced psychological difficulties due to COVID–19 disease. This study examined the perceived psychosocial impacts of COVID-19among students in higher learning institutions in Dar es Salaam region in Tanzania. The study employed a cross-sectional survey research design. Quantitative and qualitative approaches were used to collect data. The sample size of 200 students was drawn from two higher learning institutions with the population of about 10,375 undergraduate students. Primary data were collected using questionnaire with open and closed - ended questions. Secondary data were collected through documentary review. Data were analysed using descriptive statistics. The findings revealed that there was moderate to severe perceived fear of COVID-19 infection among students. Anxiety and depression due to challenges encountered by students were moderate to normal. In addition, there was high access to information on the prevention against COVID-19among students. However, access to counselling services was low among both male and female students. The study concludes that COVID-19 had emotional impacts among students in higher learning institutions. However, it had no severe cognitive functioning impacts. Students' concentration and attention in academic activities were normal. Higher learning institutions should provide counselling services that address emotional impacts such as fear, anxiety, and stress. Psychological counselling should target to mitigate stress, anxiety, and depression among students. In addition, training on stress management and coping skills should be provided and enhanced.

1. Introduction

COVID-19 is a highly infectious disease caused by a virus. It has had an impact on all people around the world causing psychological trauma that necessitated the provision of counselling and psychosocial support to those affected. University students have been among the affected group of

the population by COVID-19 due to psychological difficulties that affected teaching and learning activities (Gonzalez, Planchuelo- Gomez, Irurtia & Luis-Garcia, 2020; URT, 2020a). About 1.6 billion students have been impacted by closure of learning institutions due COVID-19 outbreak. The impacts were significant in terms of social and psychological development, knowledge acquisition and economic aspects (URD, 2020).

COVID -19 has affected teaching and learning directly due to lack of face – to - face interactions. Closure of learning institutions disrupted interactive learning and it negatively affected students learning (World Bank, 2020a; SADC, 2020). The learning process continued using distance mode through online technologies (E learning Africa, 2020). Students were engaged in learning mainly through online delivery including video conferencing and online meeting (e.g. Webex and Zoom). Online delivery also included email, phones, and mobile services (Mugo, Odera & Wachira, 2020).

Despite the challenges attributed by the threats of the pandemic, higher learning institutions continued to focus on their core functions (teaching, research and consultancy). However, restrictions of interaction between students' in higher learning institutions increased psychological effects leading to panic, anxiety, fear, stress, hopelessness, loneliness, and sadness

(World Bank, 2020; UNESCO, 2020a). Psychological impacts affected students' ability to think critically, impaired creativity and compromised academic performance. Students also feared for their safety and that of their families (Jezreel, Orendain & Djalante, 2020). Hence, the difficulties experienced by students affected activeness in academic activities and increased loneliness and mental health decline among students (UNESCO, 2020b).

Furthermore, psychosocial impacts affected social and psychological aspects leading moderate to high levels of fear of infection, anxiety, panic behaviour, stress, social stigma, loss of family members, traumatic events and psychological distress (Gellman & Turner, 2013, UNDP, 2020a; URT, 2020a). Moreover, students' emotional difficulties resulting from college closure and disrupted education, led to social isolation and loss of social connection. Mental well-being of the students, resilience and trust were also severely affected (Mboya, John, Kibopile, Mhando, George & Ngocho, 2020; WHO, 2020).

Guided by Emotional processing Theory which originated from Lang's ideas in 1970's, the study explains emotional difficulties that resulted from COVID-19 threats. It also explains disruptions experienced among students and their families that affected their studies. The theory shows that exposure to correct information about COVID-19 (habituation) helps to reduce anxiety, fear, and panic disorders associated with the pandemic. It therefore, allows compliance with preventive strategies and coping mechanisms for COVID-19 among students. Hence, in the context of this study, students continued with the studies despite the threat of the pandemic due to their ability to manage fear and stressful conditions related to COVID-19. The theory posits that absorption of emotional disturbances enables other behaviours and experiences to continue without disruptions (Foa, Huppert & Cahill, 2006).

Efforts have been made to ensure that people in Tanzania adhere to preventive measures against COVID-19. Among the efforts was the closure of education institutions at all levels. Other measures include provision of correct information about the pandemic. Prevention strategies were also insisted to all people countrywide. Despite the closure of schools and higher learning institutions for three months, education continued to be provided at all levels through distance teaching using TV and radio programmes coordinated by the Tanzania Institute of Education (TIE) and The Ministry of Education, Science and Technology(MoEST). The provided distance teaching ensured that every child in urban and rural area get access to education (URT, 2020b). Furthermore, higher learning institutions used online delivery mode such as emails, zoom, and video conference (SADC, 2020, UNDP, 2020b).

However, little is known on how the pandemic has affected students' psychological and social life. The study assumes that a sudden closure of learning institutions and the disruption of students' regular patterns of studies had psychosocial impacts. This study therefore, examined the perceived psychosocial impacts of COVID-19among students in higher learning institutions in Dar es Salaam region, Tanzania.

2. Methodology

The study employed a cross-sectional survey research design to collect data about the perceived psychosocial impacts of COVID-19among students in higher learning institutions. The study sample was 200 respondents selected from the population of about 10,375 undergraduate students in two higher learning institutions (Mwalimu Nyerere Memorial Academy and College of Business Education) in Dar es Salaam, Tanzania. Systematic random sampling technique was used to select the respondents in second and third year of study.

Data was collected after re-opening of learning institutions following a three month closure of schools and higher learning institutions. Questionnaire with open and closed-ended questions was used to collect Primary data. Secondary data were collected through documentary review. Data were entered and analysed using SPSS (Statistical Package for Social Science). The responses were scored 1 for a correct response and 0 for incorrect response. The scores were categorized in percentages as severe (75-100%), moderate (74-50%), and normal (0 – 49%). The respondents were required to indicate their perceived impacts based on the categories that were provided. Psychosocial impact of COVID-19was measured by 12 items. Cronbach alpha was used to assess the reliability of the items. The acceptable reliability coefficient is equal or greater than 0.70. (Lavrakas, 2008). In this study, alpha coefficient for the 12 items was 0.796, which is an acceptable range. Descriptive statistics were used to analyse data. Moreover, Pearson's Chi - square test was used to determine statistical significant difference of the responses across gender divide. Tables and Figure were used to present the results.

3. Results

3.1 Demographic Characteristics of Respondents

The characteristics of respondents were analysed according to age, sex, occupation, and area of residence. The findings are presented in Table 1

Table 1

Demographic Characteristics of Respondents

Characteristics of Respondents		M	F	n	%
Age	20 - 24	59	71	130	65
	25 - 29	25	17	42	21
	30 - 34	10	8	18	9
	35 - 39	6	4	10	5
Sex		100	100	200	100
Education	Bachelor Degree year 2	50	50	100	50
	Bachelor Degree year 3	50	50	100	50
Occupation	Student	78	77	155	77.5
	Self-employed	9	7	16	8
	Teacher	10	12	22	11
	Social worker	3	4	7	3.5
Residence	In - Campus	38	30	68	34
	Off - Campus	62	70	132	66

M=Female   F= Female

The findings in Table 1 show that more than a half (65%) of the students were between 20 - 24 years of age. Likewise, more than a half (77.5%) of the students were not employed. The findings show further that more than a half (66%) of the students reside in off - campus. The study findings suggests that students had to commute daily to their learning institutions. This had implication for COVID-19 infection risk due to interactions in various public facilities especially during an outbreak of COVID-19. Hence, community mobility contributes to a high risk of COVID-19 infection (URT, 2020a).

3.2 Perceived Psychosocial Impacts of COVID-19among Students

The respondents were required to rate their perceived impacts of COVID - 19 into three categories severe, moderate and normal. The results are presented in Table 2.

Table: 2 Perceived Psychosocial Impacts of COVID-19among Students (n=200)

COVID Impacts	Severe	Moderate	Normal	χ^2	df	P Value
Emotional						
Fear of being infected	141(70.5)	39(19.5)	20(10)	1.634	2	0.442
Anxiety about the pandemic	71(35.5)	98(49)	31(15.5)	0.322	2	0.851

Depression following the challenges encountered	73(36.5)	91(45.5)	36(18)	6.677	2	0.035*
Trauma for loosing loved ones	40(20)	55(27.5)	105(52.5)	6.943	2	0.031*
Grief for loosing family members and friends	35(17.5)	66(33)	99(49.5)	8.701	2	0.013*
Social and Cognitive						
Loss of concentration in studies	61(30.5)	61(30.5)	78(39)	0.295	2	0.863
Loss of attention in class	67(33.5)	48(24)	85(42.5)	5.781	2	0.056*
Memory loss	27(13.5)	63(31.5)	110(55)	0.216	2	0.898
Poor academic performance	67(33.5)	75(37.5)	58(29)	2.932	2	0.097
Inability to be creative in handling issues	58(29)	68(34)	74(37)	2.719	2	0.257
Socio-economic pressure	101(50.5)	69(34.5)	30(15)	6.063	2	0.048*
Loss of family livelihoods	96(48)	53(26.5)	51(25.5)	2.932	2	0.231

Numbers in brackets are percentages   * = significant at $p < 0.05$

3.2.1 Emotional Impacts

Regarding emotional impacts, the findings in Table 2 show that the perceived fear of being infected was severe as rated by 70.5 percent of the respondents. Also about a half, which is, 49 and 45.5 percent of the respondents reported moderate anxiety and depression respectively following the challenges encountered about the pandemic. In addition, trauma and grief for loosing family members and friends was found to be normal as reported by 52.5 and 49.5 percent respectively. The findings show further that there was a significant difference among the respondents in depression following the challenges encountered at $p<0.05$. The same was found with trauma and grief for loosing family members and friends with significant differences among responses at $p<0.05$. This implies that there was depression among students due to the challenges they experienced from the disruptions of their studies.

3.2.2 Cognitive and Social Impacts

Regarding cognitive impacts, the findings show that more than one third (39%) of the respondents reported normal concentration in the studies. The findings also show that attention in class was reported to be normal as reported by 42.5 percent of the respondents. Furthermore, there were significant differences among the responses ($p<0.05$) on concentration in the studies. Moreover, memory loss due to COVID -19 threat was normal as reported by 55 percent of the respondents. These findings suggest that COVID-19did not affected students' memory hence it has had no impact on students' studies. Therefore, students managed to concentrate on their studies despite the threat of COVID - 19 infection.

The findings also show that one-third (33.5%) of the respondents reported that they have experienced severe poor academic performance. Moreover, more than one third of the respondents (37.5 %) reported to have moderate poor academic performance. The findings show further that there were no significant differences among respondents on levels of academic performance. The findings suggest that there were students whose academic performance was affected by the disruptions of studies due to the outbreak of COVID - 19. Despite that the number of affected respondents seems not to be alarming it calls for a need of assisting students to cope with impacts of COVID –19 that affected their studies.

In addition, the finding also show that more than one third (37%) reported that creativity and ability to handle issues was normal. This suggest that COVID –19 had no impacts in cognitive functioning of the students. The students continued with studies without cognitive impacts resulting from COVID – 19.

Regarding social impacts, the findings show that 50.5 percent of the respondents reported that social economic pressure was severe to them and their families. Likewise, one third (34.5 %) of the respondents showed that the social economic pressure was moderate. In addition, there were significant differences among the respondents at p<0.05 on social and economic pressure.
Furthermore, 48 percent of the respondents reported to have severe loss of family livelihoods. That is, the pandemic threats affected income generation activities.

3.3 Perceived Access to COVID - 19 Prevention measures

The study sought to determine how students get access to COVID -19 preventive measures. The findings in Table 3 provide the details.

Table 3: Perceived Access to COVID - 19 Prevention measures

Prevention Strategies	Male		Female		χ2	df	P
	Yes	No	Yes	No			Value
Access to prevention information and services	83(41.5)	17(8.5)	94(47)	6 (3)	5.944	2	0.015*
Access to counselling services	78(39)	22(11)	79(39.5)	21(10.5)	0.030	1	0.863

Numbers in brackets are percentages   * = significant at p < 0.05

The findings show that 47 percent of female respondents reported higher access to information on prevention and services against COVID-19compared to male respondednts (41.5 %). The findings also show significant differences across gender divide (p<0.05) on access to information on prevention and services against COVID. The findings showed further that only one third, that is,

39 and 39.5 percent of males and females respectively had access to counselling services. In addition, there was no significant difference among male and female respondents on access to counselling services. Figure 1 shows the results.
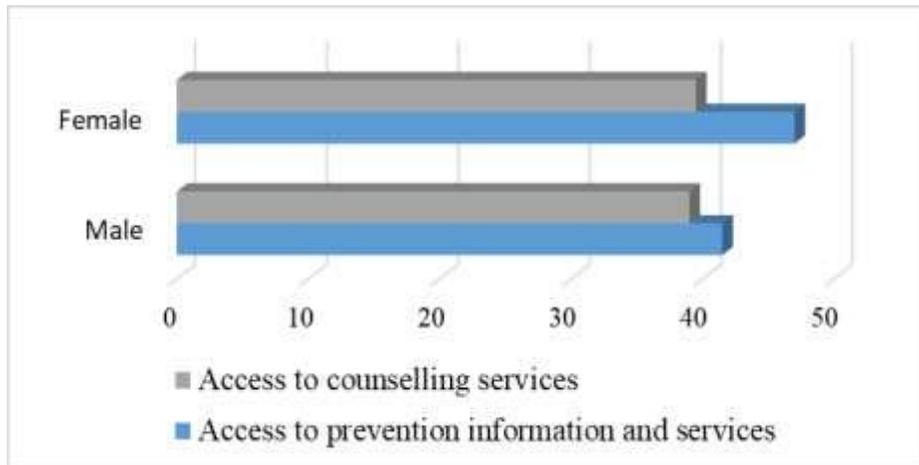
Figure 1: Perceived Access to COVID - 19 Prevention measures

These findings imply that even though both males and females seem to have access to information on prevention and services against COVID – 19, access to information was higher among females than was the case among males.

4. Discussion

The findings reveal that there was depression among students due to the challenges they experienced from the disruptions of their studies. Other studies also reported moderate to severe depression and anxiety as having had negative consequences on academic activities among respondents and low motivation to study (Akorede, Ajayi, Toyin & Uwadi, 2021; Li, Cao, Leung & Mark, 2020; Grubic, Badovinac & John, 2020). This study finding was in contrast with the finding in a study conducted in Northern Tanzania that shows that university students in Tanzania experience high levels of mental distress, which significantly impaired their cognitive functioning, causing learning disabilities, and poor academic performance (Mboya, John, Kibopile, Mhando, George & Ngocho, 2020).

The findings also indicate that the threat of the pandemic affected social economic activities among individuals and families despite absence of the lockdown. Fear of being infected with COVID-19 affected the normal running of both social and economic activities. This had implication in learning and educational outcomes. Students who relied on their own sources for meeting university costs including fees reported that they experienced challenges. UNDP (2020b) and World Bank, (2020b)

also revealed that COVID-19 had increased economic and social stress due to restricted movement, social distancing and isolation measures. These contributed in disrupting livelihoods.

The present study show further that even though both males and females seem to have access to information on prevention and services against COVID – 19, access to information was higher among females than was the case among males. This suggests that female were active in seeking for information about COVID -19 and complied with preventive measures more than did males. The study findings were in contrast with findings in other studies which show that information seeking behaviour and access to reproductive health education was low among females compared with males (Losioki, 2020; Dunor & Urassa, 2019). This also suggests that females were active in seeking for information on matters that were not related to reproductive health and cultural aspects. However, this calls for further investigation.

The study suggests that access to counselling services was low among the respondents. The findings of this study are in line with the finding from a study by Chengula and Losioki (2015) which revealed that there was low uptake of conselling among students. Moreover, counselling relationships and counselling seeking behaviour hindered complience with preventive measures among students. This implies that there were factors that impede provision of counselling services including counselling relationships, availability of counselling services and inadequate correct information about counselling services. This calls for improvement on counselling services in higher learning institutions.

5. Conclusion

This study examined psychological and social impacts of COVID-19among students in higher learning institutions. Specifically, the study assessed the perceived psychosocial impacts of COVID-19as well as the perceived accessibility to COVID -19 preventive measures among students in higher learning institutions. The study revealed that COVID -19 had psychological impacts among students in higher learning institutions. The study revealed further that perceived fear of being infected with COVID -19 was moderate to severe. Anxiety and depression following the challenges encountered by students were at a severe to moderate level. In addition, trauma and grief for loosing family members and friends was normal. The study revealed further that COVID -19 impacts were not severe in cognitive functioning of the students. Students' concentration and attention in the class was normal.

The study also revealed that the threat of the pandemic affected social economic activities among students and families despite the fact that there was no lockdown. Fear of being infected with COVID -19 affected the normal running of both social and economic activities. This had implication in teaching and learning. In addition, the study revealed that access to information on prevention and services for COVID-19 was high among females than was the case among males. Therefore, females were active in seeking for information about COVID - 19 and complied

more with preventive measures than did males. However, access to counselling services was low among both male and female students.

The study recommends that students should be provided with counselling services that address emotional impacts such as fear, anxiety, and stress. Psychological counselling will help to lower stress, anxiety, and depression among students. The study also recommends that training on stress management and coping skills should be provided as a matter of urgency to students. This would help students to identify irrational beliefs and address them logically.

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Prevalence of Depression and Anxiety among Children Affected by HIV-Related Loss in Two Selected Children's Organization in Nairobi County, Kenya

Authors: Caroline Rukunga[1] and Alice Munene[2]

The University of Nairobi
P. O. Box 30197 – 00100, Nairobi – Kenya
Email: ckathira@uonbi.ac.ke

[2] Clinical Psychology Department, Daystar University
P. O. Box 44400 – 00100, Nairobi – Kenya

Abstract

HIV-related loss for a child is a traumatic and hurtful experience that eventually results in disrupted attachment and emotional insecurity. It results in psychological distress and a high possibility of unresolved grief leading to the development of disorders like depression and anxiety among others. The purpose of the study is to examine prevalence of depression and anxiety among children affected by hiv-related loss in two selected children's organization in Nairobi County, Kenya. The study employed cross-sectional survey research design. The study selected a sample size of 220 individual through stratified randomization sampling procedure while the selection of the two children's institution were purposively selected. Data was collected using two standardized instruments;Children Depression Inventory (CDI) and Screen for Child Anxiety Related Disorders (SCARED). A structured Social Demographic Questionnaire (SDQ) was also used to gather information on various descriptive characteristics of the participants. The collected data was analyzed using Statistical Package for Social Sciences (SPSS) version 21. The results revealed that symptoms of anxiety had the highest point prevalence of 88.6 % while those of depression were at 58.1%. Such high prevalences may result from the worry attributed to the changing status of their lives and family circumstances, the child's fear that the surviving ailing parent/caregiver is also infected and may consequently die, the stigma and discrimination attributed to their parents' status and cause of death, as well as the repressed emotional feelings related to the loss. Due to the high prevalence found for both disorders, it was concluded that children affected by HIV-related loss represent a vulnerable group in terms of mental health hence psychological support relevant to the needs of this group should be provided.

Keywords*: Children anxiety, Depression, HIV-related Loss, depression prevalence, anxiety prevalence, emotional insecurity, unresolved grief, children traumatic experiences*

Introduction

Globally, millions of children are either partial or complete orphans as a result of Acquired Immunodeficiency Syndrome (AIDS), while others are living and taking care of their ailing and dying parents (United Nations Children's Fund [UNICEF], 2016). Consequently, such experiences may cause a probable intense long-term impact on the child's psychological well-being, thus compromising his or her future (Sherr, Hensels, Tomlinson, Skeen, & Macedo, 2018). Mood disorders such as depression, anxiety, and posttraumatic stress disorder are often a mental health concern for children affected by HIV-related loss (Sherr et al., 2018; Skeen, Macedo, Tomlinson, Hensels, & Sherr, 2016: Skeen et al., 2017).

Depression and anxiety develop in children going through HIV-related loss due to stress that is associated with their separation from attachment figures, loss of a home, failure to continue with education, stigma, discrimination, and guilt, with some believing that they are the cause of their parents' death (Betancourt et al., 2014).

Several studies on the prevalence of depression and anxiety among children affected by HIVrelated loss have been done in different countries worldwide. Among them is a study conducted in India involving 400 children affected by AIDS which found an overall depression prevalence score of 74.1% which was significantly higher for children orphaned by AIDS than those due to other reasons at 63.6% (Kumar, Dandona, Kumar, Ramgopal, & Dandona, 2014). This, therefore, indicated a significantly higher mean depression score of 34.6 for children orphaned by AIDS than the 20.6 for children orphaned by other means.

In Palestine, a study on the prevalence of PTSD, anxiety, and depression among orphaned children revealed that 55.6% of the 81 participants assessed had moderate PTSD while 34.6% of them had severe PTSD. In the same study, depression was rated at 67.9% and anxiety was at 30.9% (Thabet, Elhelou, & Vostanis, 2017). A cross-sectional descriptive study in Egypt on the prevalence and predictors of depression among orphans indicated a depression prevalence rate of 20% with a mean score of 72.65 among children orphaned by AIDS (Holmes, 2014). Depression was found to be higher in girls (68.8%) than boys (4.6%). Accordingly, Betancourt et al. (2014) conducted a case study in Rwanda on HIV and mental health. They found that both HIV-infected and HIV-affected children exhibited a depression prevalence of 1.68, an anxiety prevalence level of 1.77, and conduct problems prevalence of 1.59.

Furthermore, a study in Ethiopia by Shiferaw, Bacha, and Tsegaye (2018) on the prevalence of depression and its associated factors among orphans indicated that children ranging from 11-17 years in orphanages had a depression rate of 24.1%. In Kenya, apart from a study by Kinai (2008) which found approximately 80% of the children who had lost their parents through AIDS continuing to grieve their parents' death across time even years later after the loss, there is no

evidence of a study that shows the prevalence of depression and anxiety among children affected by HIV-related loss. Therefore, the purpose of the study was to examine prevalence of depression and anxiety among children affected by HIV-related loss in two selected children's organization in Nairobi County, Kenya.

Methodology

A cross-sectional survey study was conducted among 583 children affected by HIV-related loss in two purposively selected children's organizations based in Nairobi County, Kenya.

A sample size of 220 participants aged between 8 and 12 years was determined through stratified randomization technique. First the entire population was grouped according to gender and then all children aged between 8 and 12 years. The participants' mean age was 10 years of which 50.4% were boys and 49.6% were girls.

Sampling of the children's organizations were on the other hand purposively selected. The selection of the two institutions was based on the fact that their closely related characteristics as they are both not-for -profit making organizations taking care of children who had lost their parents to HIV or were living with HIV-infected parents/relatives. The two institutions appeared to have the same problem of interest the study sought to investigate.

Data collection was done through the use of a structured socio-demographic questionnaire (SDQ) designed to gather information on the characteristics of the participants among them age, gender, category and nature of loss. In addition, two standardized instruments were utilized to screen for depression and anxiety, respectively. These were Children Depression Inventory (CDI) and Screen for Child Anxiety Related Disorders (SCARED).

The CDI is a 27-item scale that is self-rated and symptom-oriented. A total CDI score was calculated by adding all items that vary between 0 (indicating absence of depression) and 54 (indicating presence of all depressive symptoms). Clients rated themselves based on how they feel and think, with each statement being identified with a rating from 0 to 2. In particular, the cut-off scores for CDI are as follows: a score of 0-9 indicated absence of depression; a score of 20-29 indicated mild depression; a score of 30 - 41 reflected moderate depression, while a score of 42-54 was an indication of severe depression.

A pretest was done with 5% of the total sample size in a similar setup with children affected by HIV-related loss before the actual data collection commenced. This was aimed at trying out the instruments to be used in data collection in order to gauge their clarity, ease of use, and the extent to which participants would understand them. There was training given to research assistants concerning the objective and process of data. Considering the age of this study participants,

completion of the screening tools and filling of the socio-demographic questionnaire was conducted per class. Each class was guided by a trained research assistant who distributed the questionnaires, read aloud each question, and gave the participants time to answer before moving on to the next question. This procedure was adopted to ensure the understanding of the questions and guide the participants through the process in an orderly manner to ensure efficiency in data collection.

The completed and well-coded questionnaires and the clinical assessment tools were thoroughly edited before analysis   to identify any errors or omissions . The edited data was then arranged well to ease the work of coding and tabulation. Where errors and omissions were discovered, individual participants were contacted to give clarification. Data was then entered into Excel spread sheet database before being exported to Statistical Package for Social Science (SPSS) version 21 for statistical analysis. Prevalence of anxiety and depression was determined by use of frequency across the various socio-demographic characteristics among them age, gender, class, age, nature and category of loss, and family member currently sick. The proportions were further computed to estimate prevalence at the 95% confidence interval. The established results were presented in tables.

Results

Demographic characteristics of participants

In this study, data on gender, age, class level, nature, and category of loss was sought as indicated in Table 1 below.

Table 1: Distribution of Socio-demographic Characteristics of Participants

Variables	Total	Chi-square statistics	p-value
Age			
8&9 years	61 (29.0%)	4.426	0.035
10, 11 & 12 years	149 (71.0%)		
Gender			
Boy	110 (52.4%)	0.084	0.772
Girl	100 (47.6%)		
Class			
Lower class (3-4)	106 (50.5%)	2.735	0.098
Upper class (5-7)	104 (49.5%)		
Biological parents alive			

Yes	127 (60.5%)	36.135	<0.0001
No	83 (39.5%)		
Parents Died			
Mother	23 (27.7%)	6.075	0.048
Father	44 (53.0%)		
Both	16 (19.3%)		
Category of loss			
Single loss	60 (39.7%)	1.234	0.540
Double loss	37 (24.5%)		
Multiple loss	54 (35.8%)		
Family member currently sick			
Mother (N=18)	18 (34.6%)	2.105	0.349
Father (N=13)	13 (25.0%)		
Close Family Member (N=21)	21 (40.4%)		

For analysis purposes, the participants' age was grouped into two categories, those between 8-9 years and between 10-12 years. The findings showed that 71% of the participants were between 10-12 years while those aged 8-9 years were 29.0%. In terms of gender, male participants were 52.4% while the females were 47.6%. Regarding the participants'class in school, the classes from which the study participants came were categorized into either lower primary (class 3-4) or upper primary (class 5-7). The representation of this study's participants from the lower primary section was 50.5% and the one from upper primary was 49.5%. This shows that slightly more participants came from lower primary.

The researcher further sought to establish the distribution of participants based on their various support systems. Among the variables analysed was whether biological parents were alive or dead, type of parental death experienced (paternal or maternal), and the category of loss (single, double, or multiple). From a total population of 210 participants, the participants who had their parents alive were 60.5% and those whose parents were deceased were 39.5%. On the specific biological parents of the participants who were reported to have died, the statistical results indicated that 27.7% had lost their mothers, 53.0% had lost their father and 19.3% had lost both parents. This

indicates that more participants had their parents alive while slightly more than half had lost their fathers.

In terms of the distribution of participants according to the number of family members who had died, 39.7% suffered single loss, 24.5% double loss, and 35.8% had experienced multiple losses. As for sick family members, the majority were those who had other close family members currently sick at 40.4%, followed by those whose biological mothers were sick at 34.6%, and then those who were living with sick biological fathers at 25.0%.

Prevalence of Depression and Anxiety in Relation to Key Sociodemographic Characteristics

This study intended to first analyze the overall prevalence of depression and anxiety among children affected by HIV-related loss, and then in relation to key sociodemographic characteristics of the participants as indicated in Table 2.

Table 2

The Prevalence of Anxiety and Depression in Relation to Key Sociodemographic Characteristics

Variable	Anxiety (%, n; 95% CI)	Depression (%, n; 95% CI)
Overall prevalence (N=210)	88.6% (186); 95% CI: 83.6 – 92.2%	58.1% (122); 95% CI: 51.3 – 64.6%
Age		
8&9 years (N=61)	95.1% (58); 95% CI: 86.5% - 98.3%	62.3% (38); 95% CI: 49.8% - 73.4%
10, 11 & 12 years (N=149)	85.9% (128); 95% CI: 79.4% - 90.6%	56.4% (84); 95% CI: 48.4% - 64.1%
Gender		
Boy (N=110)	82.7% (91); 95% CI: 74.6% - 88.7%	53.6% (59); 95% CI: 44.36% - 62.7%
Girl (N=100)	94.0% (94); 95% CI: 87.5% - 97.2%	62.0% (62); 95% CI: 52.2% - 70.9%
Biological parent alive		
Yes (N=127)	85.8% (109); 95% CI: 78.71% - 90.85%	48.8% (62); 95% CI: 40.3% - 57.4%
No (N=83)	92.8% (77); 95% CI: 85.1% - 96.6%	72.3% (60); 95% CI: 61.8% - 80.8%
Category of Loss		
Single loss (N=60)	85.0% (51); 95% CI: 73.9% - 91.9%	56.7% (34); 95% CI: 44.1% - 68.4%

Double loss (N=37)	86.5% (32); 95% CI: 72.0% - 94.1%	54.1% (20); 95% CI: 38.4% - 69.0%
Multiple loss (N=54)	92.6% (50); 95% CI: 82.4% - 97.1%	64.8% (35); 95% CI: 49.6% - 74.6%
Family member currently sick Mother (N=42)	90.5% (38); 95% CI: 77.9% - 96.2%	52.4% (22); 37.7% - 66.6%
Father (N=17)	100.0% (17); 95% CI: 81.6% - 100.0%	82.4% (14); 95% CI: 59.0% - 93.8%
Close Family Member (N=46)	91.3% (42); 95% CI: 79.7% - 96.6%	67.4% (31); 95% CI: 53.0% - 79.1%

A total of 210 children aged 8-12 years participated in this study. The findings showed the overall prevalence of depression to be at 58.1% which was significantly lower than anxiety at 88.6%. These results indicated that the participants of the current study are more susceptible to anxiety than to depression. Further, analysis of the prevalence of anxiety and depression in relation to participants' sociodemographic characteristics such as age, gender, biological parent dead or alive, and the category of loss experienced was done. The findings were not statistically significant but there were differences in points towards prevalence across the said sociodemographic characteristics.

In terms of age, children between ages 8-9 recorded a depression prevalence of 62.3% and an anxiety of 95.1% . Those of ages 10-12 had a depression prevalence of 56.4% and and an anxiety prevalence of 85.9% . Furthermore, the prevalence findings regarding age coincided closely with those of the participants' class in school where the children in lower classes were found to record depression prevalence of 62.3% and anxiety of 92.5% with those in upper classes registering a prevalence of 53.8% in depression and 84.6% in anxiety.

On gender, prevalence of depression was at 62.0% and anxiety at 94.0% while boys registered a depression prevalence of 53.6% and an anxiety of 82.7% .

In regards to whether a parent was dead or alive, the findings revealed that participants whose parents had died registered a depression prevalence of 72.3% and anxiety of 92.8% as compared to those whose parents were alive who recorded a depression prevalence of 48.8% and an anxiety prevalence of 85.8%. On the category of loss experienced by the participants, the prevalence of anxiety and depression was higher for the participants who had suffered multiple losses with a prevalence of 92.6% in anxiety and 64.8% in depression.

Discussion

As tabulated in Table 2, the majority of the participants affected by HIV-related loss were found to be anxious (88.6%) as compared to those who were depressed (58.1%), with girls registering higher levels of both depression and anxiety, at 62.3% and 94.0% respectively. This indicated that children affected by HIV-related loss in the current study population are more prone to anxiety than depression. The above prevalence findings have been discussed separately in the light of reviewed literature from previous studies.

As mentioned above, this study established a depression prevalence of 58.1%, which was consistent with some previous study findings and inconsistent with others. For instance, a study conducted in Ethiopia by Shiferaw et al. (2018) established a depression prevalence of 24.1% among children between ages 11 and 17 years, orphaned by AIDS. This prevalence was much lower than the findings revealed by this current study. The difference may be caused by the age variation of participants from both studies as the current study's participants' age ranged between 8 and 12 years while that of the study done in Ethiopia was between 11 and 17 years. This shows that the majority of the participants of the study done in Ethiopia were older than those of the current study. That being the case, the current study findings on depression prevalence and participants' age, which revealed that the prevalence of depression among younger children (62.3%) was higher than of the older ones (56.4%), appear to concur with the findings of the study conducted in Ethiopia. Accordingly, a study done in Kenya among 775 children and adolescents in Kenyan schools by Ndetei et al. (2008) recorded a depression prevalence rate of 43.7%. Although t he specific age of the study participants was not indicated, the mention of adolescents implies that the majority of the participants were older than the participants of this present study.

Previous studies have attributed the above findings to the fact that children's cognition and language are underdeveloped hence chances of comprehending loss articulately and sharing their grief-related issues openly with older people are limited (Malchiodi, 2012; Penny, 2010; Webb, 2011). This explains why the older children of the current study and that of the other two studies discussed above registered lower levels of anxiety and depression compared to the younger ones. It suggests that older children and adolescents shared their distressing experiences with older people considering their level of cognitive development, consequently resolving their grief issues to some extent.

On the contrary, the depression prevalence of 58.1% is slightly lower compared to that of a study conducted in India involving 400 children affected by AIDS, which recorded a depression prevalence of 74.1% (Kumar et al., 2014). A similar study conducted among 81 AIDS orphaned children between 9 and 18 years in Gaza Strip (Palestine) by Thabet et al. (2017) revealed a depression prevalence of 67.9% which was also higher than the current study findings. The variance in these prevalence levels can be linked to the differing numbers of participants (400 vs 210) as well as to the differences in the nationalities involved. This implies that resilience levels in terms of loss experienced among non-African children is lower than that of Africans as reflected by the results of the two studies, 74.1 % in India and 67.9 % in Palestine, which are higher than

those from the African countries such as Kenya (58.1%) and Ethiopia (24.1%). The shame and stigma attributed to the HIV-related illnesses and cause of death, as well as the repressed emotional feelings related to the loss, maybe associated with the high levels of depression realized in the above studies (Cluver et al., 2007; Cluver & Gardner, 2007; Harms et al., 2010).

On the other hand, the anxiety prevalence realized for this study, 88.6%, is not only higher than the depression levels recorded among the same study participants but also significantly high compared to the findings of various studies previously done among similar populations elsewhere. For instance, a study by Thabet et al. (2017) in the Gaza Strip recorded an anxiety prevalence of 30.9%, which was much lower than the anxiety prevalence recorded by the current study (88.6%). Furthermore, a study done in Kenya among 775 children and adolescents in Kenyan schools by Ndetei et al. (2008) recorded a much lower anxiety prevalence of 12.9% compared to the current study findings.

The significant differences in anxiety prevalence rates of the above studies are attributable to the fact that the study from the Gaza Strip by Thabet et al. (2017) and the one conducted in Kenya by Ndetei et al. (2008) comprised of older participants than the current study, 9-18 years versus 8-12 years respectively. Considering that older children's cognition is better developed than those of younger children, participants involved in the study by Ndetei et al. (2008) were able to deal with their grief levels better than the majority of the younger participants with underdeveloped cognitions and language development. Apart from age differences, the variation in assessment instruments used, the number of participants, and the demographic characteristics of the participants may also be a contributing factor to the varying prevalences.

However, results from a recent study by Nyagwencha, Munene, James, Mewes, and Barke (2018) on the prevalence of PTSD, depression, and anxiety symptoms among 232 abused and neglected children in Kenya revealed closely related findings with this current study where anxiety was rated at 84.1% and depression at 50.4%. Though the above study participants were accommodated in a children's home contrary to this study's participants who lived with their guardians, there is a likelihood that they closely compared with some demographic characteristics, especially those related to loss experiences.

Since the present study was conducted among participants from an HIV-prone background, various factors may be attributed to their elevated anxiety levels. Among them is the worry and fear of having been infected by the virus themselves, the changing family status concerning financial instability after death or during the prolonged time of the parent(s) sickness, the effects of living with sick family members, and witnessing multiple deaths. As a result, the child is overcome by the fear of losing the surviving ailing parent/caregiver who is the breadwinner of the family as well as the source of security.

Conclusion

The relevance of this study lies in the field of academia by providing additional knowledge on the prevalence of depression and anxiety among children affected by HIV-related loss in Kenya. The effects of HIV-related parental illness and death cannot be overemphasized. The findings have shown that children who have lost their parents/guardians to AIDS or living with HIVinfected relatives experience high levels of depression and anxiety, with girls being more vulnerable than boys.

From the above findings and discussions, it is recommended that; Children organizations dealing with children with a history of HIV-related loss consider screening for possible psychological problems of the children and offer necessary support; Parents and guardians of the affected children need to be sensitized on the need to discuss their HIV-related health status with their children early enough but in a manner that is not frightening. This will help children overcome the guilt and anxiety that comes with observing their parents/relatives suffer a prolonged illness, believing they are the cause; A study on the severity of depression and types of anxiety among this population is required for a more informed treatment and to the policymakers, it is recommended that relevant professionals and stakeholders such as medical providers, social workers, psychologists, and psychiatrists need to work collaboratively to provide comprehensive support to children affected by HIV-related loss.

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Covid 19 Pandemic and Lockdown; Examining the Challenges and opportunities of Online Teaching of Religious Education in Institutions of Higher Education in Uganda

Author: Tuyizere Alice Peace

College of Education and External Studies (CEES)
Makerere University, P.o. Box,7062, Kampala, Uganda.
Emails; peacetuyizere@yahoo.com aptuyizere@cees.mak.ac.ug

Abstract

The purpose of this study is to examine the challenges and opportunities of online teaching of Religious Education in institutions of Higher Education in Uganda in the context of the COVID 19 pandemic and lockdown. The study employed interpretive research paradigm because it focused on peoples' experiences regarding challenges and opportunities arising from online teaching of RE to generate the meaning of the phenomenon being investigated. The target population comprised of postgraduate students of education offering humanities because they had a rich experience of information about challenges and opportunities of using online learning platforms. Eight students specializing in RE were purposefully selected because they possessed the characteristics the research sought for namely; were teacher trainees in the field of RE; were familiar with challenges /opportunities associated with RE online learning platforms. Data collection instruments employed by the study were interview guides and observations guides. Data was analyzed qualitatively. Data analysis involved identifying key ideas, concepts, incidences and feelings from responses captured from study participants. These were then interpreted and categorized thematically as aligned by the study objectives. Study findings indicated that prolonged school closure created opportunities for RE teachers' trainees to engage in e-learning. It also enhanced close relationships between parents and teachers of their students, teacher-student interactions, and student-to-student interaction using online opportunities. The study concluded that COVID-19 and lockdown have not only intensified technology use as a critical tool to support remote learning but it also has its challenges. The study recommended that stakeholders should strengthen opportunities of e-learning that have been ushered in by COVID 19 while addressing challenges that undermine E-learning.

 Keywords: *COVID 19 pandemic, lockdown challenges, lockdown opportunities, online teaching, Religious Education, Higher Education challenges, Higher Education opportunities, E-learning opportunities, E-learning challenges*

Introduction

Coronavirus 19 lockdowns have disrupted education across the globe leaving approximately 1.6 billion children around the world out of the classroom and 186 countries affected by school closures. The results of the disruption of education required is schools to make rapid adjustments

in their mode of traditional learning approaches to online teaching and learning (Umesh, 2020). In many countries of the world, even children in nursery schools have been subjected to online teaching, while students in upper classes and institutions of higher learning interact with their teachers online. With the sudden shift away from the traditional classroom learning approaches, educationists are wondering whether the adoption of online learning will continue to persist after the pandemic and how such a shift will impact the global education market (The World Economic Forum, 2020). COVID 19 has accelerated the use of digitalization in education but has also created gaps in terms of building technological skills, digital, and internet access for vulnerable communities (Lawless &Samantha, 2020).

COVID 19 pandemic is the ongoing global pandemic of coronavirus disease 2019 (COVID 19) caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Cov-2) which was first identified in December 2019 in Wuhan, China (Christensen &Senthilingam, 2020). A lockdown is an emergency protocol that prevents people from leaving a given area or people stay where they are without going anywhere. A challenge means is a situation being faced that needs a solution. On the other hand, an opportunity is an occasion, opening, or suitable time to grasp something (Cambridge Dictionary,2015). Religious Education refers to teaching about religions and their varied aspects, beliefs, doctrines, rituals, rites, customs, and roles. Higher Education is post-secondary education leading to an award of an academic degree (The Free Dictionary, 2012).

In Sub-Saharan Africa, the COVID pandemic arrived at a moment when technology and innovation were being increasingly embraced in education and other sectors across the continent. African countries are dealing with the COVID 19 pandemic through online studies. Whereas the pandemic's full impact has yet to be felt, the prolonged lack of investment in critical education systems has exacerbated grievances and inequality and increased gaps for Africa's vulnerable communities (UNESCO, 2020). In East Africa, governments responded to COVID 19 pandemic by closing schools. With limited internet facilities and technology options for most schools, there is an uphill task for most schools in years to come. In Uganda, the nationwide closures are impacting 15 million students which led the government to implement localized home learning, while other institutions of learning adapted television, radio, and online learning. The government of Uganda has just introduced ICT in educational institutions and only a small section of Ugandan teachers has the knowledge of digital technology and can access computers and other online learning devices. Despite the booming growth in technological capabilities during COVID 19 lockdown, the rates of computer literacy and learner application of technologies are still far from perfect due to the lack of training skills and digital appliances for both the students and their teachers.

COVID 19 has provided opportunities for schools and teachers to invest additional efforts in building strong connections between students and their families. Parents are constantly in touch with teachers of their children, consulting them about digital learning and performance. Elearning has improved teachers' engagement with students and paying attention to those learners with

additional learning needs during the pandemic and school closure (Umesh,2020). Elearning has also enhanced students' freedom to juggle with their careers and school because they are not tied down to a fixed schedule. In a traditional classroom setting, class meeting schedules are set, and the student has no power over this, forcing them to work their schedules around these dates. Most people who choose online learning tend to have other commitments and prefer this mode of learning as it gives them power over how they will delegate their time towards their different projects. Since everything is available online, accessing class materials, and submitting work are very convenient for students on E-learning programs.

Furthermore, students in traditional classrooms may not get the personalized attention when they need to have concepts clarified, yet, most colleges have large classes of students. This is not a problem for e-learning because online guided discussions and personal talk time with their professors and lecturers are a hallmark of online classes (Tomayess & Pedro, 2020). Online studies increase the chances of a student performing well due to the time their instructors give them. It also enhances their problem-solving and communication skills, as well as knowing how to defend their arguments (Tanju, 2019; Samantha, 2020).

Online studies are an important tool that helps RE teacher trainers to review lectures instantly. It is easy for minds to wander during a lecture but in online programs, students can review words from professors instantly, either by rewinding the audio or video or by reading the transcript that accompanies the lecture. Whereas students in classroom environments are not comfortable speaking in public, in an online environment, it can be much easier to share thoughts with others (Kehinde and Adewakun,2020). E-learning creates more time to think before sharing and it has a discussion element connected to it. On-campus students have to choose a stance or formulate a thought in class quickly, and sometimes speak before they've fully examined everything. In an online environment, students can spend as much time as they want thinking about and honoring their ideas (Bernad,2011). Online studies lead to greater confidence and more elegant discussions. When students are given assignments or research after their online lessons, they can access different educative search engines. The teachers are also able to use different media platforms to search for the best teaching methods and what they are teaching about (Lawless, 2020).

Despite schools and online teachers having opportunities to invest in online teaching of religious education in institutions of higher education in Uganda due to COVID 19 pandemic, they experience a number of challenges in their services**.** In this particular case, for students with disabilities and additional learning needs, the move to remote learning has presented additional challenges, including engaging with technology, reduced access to supports and individualized learning interventions, and loss of social connections (UNESCO,2020). The majority of school children, college, and university students from disadvantaged communities face challenges of unreliable internet; lack of digital tools such as laptops, data, smartphones, and computers to use

for their school work. In Uganda, according to Social Media reports on 15th, October 2020, Guild Presidents from different Universities moved to petition parliament through the office of the speaker on challenges surrounding online studies. Among the challenges, the students noted that online studies are not favorable for science students; disabled learners; students living in rural areas, and the poor. The majority of university students live in rural areas with poor internet penetration, the majority lack smartphones, electricity, and money to buy data for zoom lectures. With these challenges put before the parliament, the guild requested the speaker to halt online studies because they were not inclusive (The Daily Monitor & Social Media Reports, 2020).

In traditional classrooms, teachers can give students immediate face-to-face feedback. Students who are experiencing problems in the curriculum can resolve them quickly and directly either during the lecture or during the dedicated office hours. Personalized feedback has a positive impact on students, as it makes learning processes easier, richer, and more significant, all the while raising the motivation levels of the students (Quammen, 2013; The Lancet, 2014; Ameacin, 2019). On the other hand, in online learning, the teacher tends to struggle with student feedback. Students completing regular assessments become dissatisfied when they experience a lack of personalized feedback. The traditional methods of providing student feedback don't always work in an online learning environment, and because of this, online education providers are forced to look towards alternative methods for providing feedback (Olowokure, 2014; WHO, 2020). The online teaching and learning methods currently practiced in education tend to make participating students isolated and unable to communicate with friends which may lead to mental health issues. Face-to-face communication with professors, peer-to-peer activities, and strict schedules all work in unison to keep the students from falling off track during their studies (Oostdam & Hooge, 2013; Australian Government, Ministry of Health, 2020).

In the setting of an online learning environment, there are fewer external factors that push the students to perform well. In many cases, the students are left to fend for themselves during their learning activities, without anyone constantly urging them towards their learning goals. Students taking online learning courses find that they are often required to learn difficult materials in a comfortable home setting without any of the added pressure normally associated with traditional college support (Frieden, 2020). As a result, keeping up with regular deadlines during online studies can become difficult for those students who lack strong self-motivation and time management skills. Online teaching and learning methods are proven to be highly effective at improving the academic knowledge of the students but require self-driven learners. Due to a lack of face-to-face communication between peers, students, and teachers in an online setting, the students might find that they are unable to work effectively in a team and individualized setting (Clark & Mayer, 2011; Olowokune, 2015).

One of the biggest disadvantages of online studies continues to be cheating through various methods. Compared to on-campus students, online students can cheat on assessments more easily as they take assessments in their environment and while using their personal computers. The students cannot be directly observed during assessments without a video feed, making cheat detection during online assessments more complicated than traditional testing procedures. The problem is that a large portion of online learning training providers chooses to focus largely on developing theoretical knowledge, rather than practical skills (Archambault, 2010; Tanju, 2019; Frieden, 2020).

Online studies require the use of computers and other related devices. Lack of access to computers and smartphones, whether it be for economic or logistic reasons, will exclude otherwise eligible students from the course. This is a significant issue in rural and lower socioeconomic neighborhoods. As far as Internet accessibility is concerned, it is not universal, and in some areas of Uganda and other countries, Internet access poses a significant cost to the user. Some users pay a fixed monthly rate for their Internet connection, while others are charged for the time they spend online. If the participants' time online is limited by the amount of internet access they can afford, then instruction and participation in the online program will not be equitable for all students in the course.

As a result of the sudden health challenges posed by the COVID 19 pandemic, many educational institutions were forced to switch from the traditional face-to-face mode of learning to online learning platforms. While this mode of learning provides a ray of hope to millions of students who would otherwise be trapped at home because of lockdowns and school closures, it equally poses several challenges that students and teachers in institutions of higher education have come to grapple with. For example, Daily Monitor and Social Media (2020) content that the majority of university students live in rural areas where internet penetration is poor, the majority lack smartphones, computers/laptops, and many rural areas lack electricity. Many students cannot afford to buy data for Zoom lectures. No studies have ever been undertaken to determine the impacts of using online teaching strategies in institutions of higher learning in Uganda. To generate meanings from this subject area that was being investigated, it is against this background that the study intended to examine challenges and opportunities of online teaching of Religious Education in institutions of higher learning in Uganda.

Methodology

The interpretive research paradigm was used because the study is grounded on how human beings construct and merge their own subjective and intersubjective meanings as they interact with the world around them (Packer,2011). The philosophical foundations of interpretive research are rooted in the belief that reality is personally constructed (Mayers,2008), and as such uses

qualitative methods to explore in depth each individual's experience of a phenomenon, event, or social world. The rationale for adopting the interpretive research paradigm was based on the following criteria (Chinedy and Van Wyk, 2015); interpretive data is based on the participant's construction of meaning and therefore, highly relevant in problem-solving. It is effective and relevant for studying small numbers of participants or for in-depth cases, in response to how and why questions. It is also effective for describing the complex social world of the participants; it allows for deep exploration of individual cases as opposed to relying only on what can be observed from the majority of respondents. The research design selected for this study was a case study design.

The target population for this study was 49 Master of education students of humanities for the academic year 2020/2021. These groups of students were the most suitable categories that have considerable information on challenges and opportunities of using online learning during COVID 19 lockdown and prolonged school closure.

The sample size for this study was 8 Postgraduate students, where 7 male students offered Postgraduate Diploma in RE and I female student offered Masters in Education, specializing in RE for the academic year 2020/2021. The study employed purposeful sampling techniques whereby only students offering RE at the postgraduate program were selected to participate in the study.

Data collection instruments used in this study were;

(i)   Face-to-face interviews were supplemented by online interviews, emails, and digital WhatsApp conversations, which were used to collect the qualitative data from the postgraduate RE students. The qualitative data collected using an interview guide was categorized, classified, interpreted, and analyzed.

(ii)   Observations guides that involved the researcher's physical scrutiny of challenges and opportunities emanating from the COVID 19 pandemic. When the students returned to the institution to complete their studies after lifting the ban on universities, the researcher observed how COVID 19 had changed the students learning skills, with the majority having bought smartphones and laptops to engage in online study.

The qualitative data generated by this study availed quotations to support positions as well as to provide the necessary authenticity to research findings.

Results

Demographic Characteristics of the Respondents

Five demographic characteristics of the respondents were considered in this study and these were age, gender, residence, level of education, and income status. Participants' ages ranged from 25-years of age and were all postgraduate students. 3 (37.5%) students were urban dwellers, while 5(62.5%) were from a rural setting and this had implications of internet access and electricity. The majority of the respondents were males (87.5%) offering PGDE and one female (12.5%) student offering Masters in Education (MED) which was a reflection of gender disparities in higher education where males are the majority.

COVID 19 Opportunities in RE teaching in Higher Education

The study found that COVID 19 has provided opportunities for increased provision of online learning alternatives for students. E-learning practices have emerged as a response to the closure of institutions. Students showed the zeal to create themselves a conducive e-learning environment, despite the challenges they faced in their homes. This revelation was corroborated by a student who raised issues surrounding the home environment for conducting the online study;

> I had a disagreement with parents over house organization when I wanted privacy where I could participate in online learning. My parents could not understand why I needed the house free of noise. Sometimes children would call me for something as online classes were going on which was so distractive, this caused me frustration but I had to control myself, while in
>
> an online class for the fact that my lecturer worked on time
> (KII 1, 2020)

The narratives generated from the majority of students concerning the above revelation suggest that they are unable to participate effectively in e-learning due to poor home environments that distract their participation. One student revealed an impediment to the online community as having no smartphones and internet connection for online studying;

> I have a small phone, no computer, or laptop, therefore, I used to walk 10kms from my place of residence to a trading center in search of digital platforms. Each time, I went there wherever an assignment or an online study was being conducted by my lecturer but I would find many students on these laptops, so I would wait for them to finish. Sometimes electricity would go off and the internet was unstable which frustrated my efforts due to limited transport and time (KII 3, 2020).

The above discourse from the respondent indicates that many students live in rural areas where they cannot access the internet or electricity. Respondents incur transport costs and have to plan

for the time to move to areas where they can access digital Additionally, the female student had this to say on the use of digital phones for online study;

> I don't have a smartphone or laptop. Whenever there is an online study or WhatsApp discussion with my lecturer, I borrow my husband's phone. Sometimes when the lecturer has organized a zoom study, my husband is not there so I miss out (KII 5, 2020).

This response indicates that many students are supported by their spouses, parents, relatives, and guardians who cannot incur additional costs in terms of buying smartphones for e-learning or

data. In line with this, a student could not hide his excitement when he said; My lecturer called me on the phone before we could begin our online discussion and asked me whether any of my parents were around. When I said, yes, she said she wanted to talk to him. My father received the phone call and my lecturer asked him to support me financially to do the online study. What excited my father most was talking to my lecturer at Makerere University and since then, he increased his support towards my online study during the lockdown (KII 7, 2020).

These discourses reveal that COVID-19 has provided opportunities to strengthen partnerships between students and their colleagues, teachers, and parents of the students.

Respondents on Challenges of Online Studies in RE

Responding to the question of digital devices and costs of the internet, a study participant had this to say;

> The cost of 100 megabytes is Uganda shs.1000, yet, this cannot run a full hour of zoom class. This forces me to dig deeper into my pockets and spend lots of money on buying data. In addition to unstable networks, the high costs of the internet make it difficult for me to maintain online learning (KII 4, 2020).

In another incident a student of education expressed the challenges they experience as indicated in a letter which he addressed to stakeholders and the Council

Makerere University for attention;

> This is to inform you that the students' bodies are facing a hard and miserable time sustaining online lectures. On average as an

> education student, I spend 30,000/= daily to purchase data bundles to have online lecturers. And this additional cost is not reflected to be compensated by the university in any way or the other yet the impact is deeply felt by we students on top of that other compulsory costs like welfare have to be faced. We, therefore, suggest that the university council, if possible, should either; Bring back physical classes for all academic years since all other universities are having physical lectures or Reduce the functional fees as a way to cover the additional cost of online classes (KII 8, 2020)

Additionally, a female lecturer from curriculum studies who was conducting online teaching

with finalists, had this to say on School of Education staff WhatsApp;

> I would like to hear your experiences of teaching online with finalists. I just had a lesson with a small class of 5 students but only one or two students were online, the others kept on dropping on and off until we agreed to end the class (KII 4, 2020).

In line with the above, when finalists returned to the university, in our first lesson as students shared their experiences of COVID 19 and online learning had this to say;

> During COVID 19 I knocked a child when I was driving. I was put in prison and was forced by police to pay hospital bills even when I was behind the bars. Yet, I was financially broke. My classmates were not aware of what I was going through. No one could know why I was not participating in the online program. I thought of giving up in life because I thought this was too much for me, I had no one to share with and my colleagues did not know that I was in prison (KII 2, 2020).

In another related incident a disabled student whom I teach in RE but in an

undergraduate class   called me on a phone during COVID;

> I am one of your Religious Education students at the Rhino refuge settlement camp. I am a disabled student and since school closure learning online has become a great challenge. I don't have a smartphone, and even though I had the phone, the connectivity of electricity to charge the phone is a huge problem. I cannot afford to raise money to buy data. The learning environment is extremely poor

because of congestion in camps. My friend told me that you posted a question for an assignment on our WhatsApp platform but I am completely cut off from learning (KII 5, 2020).

The majority of the respondents indicated that lock-down had a negative effect not only on their education but also on their social, economic, mental, physical, social life, finances, and

food security. With this observation, one student teacher shared his experiences; I have not met any of my colleagues since lockdown. I just stay at home and even raising money for airtime is a big problem. Each coin I get, I think of buying food and paying house rent or buy food for my

children or water or charcoal for cooking food. I can't afford online study (KII 1, 2020).

In another related incident, a WhatsApp a very disturbing and touching text of online teaching posted on staff platform by a deaf student but a different subject revealed the following; Hero Dr, I am a deaf student in a development studies class. I have tried to attend the zoom class yesterday but I didn't pick anything from you except the shots you kept sharing. Anyway, you can assist me to catch up with you. I shall be grateful sir, have a blessed week.

This text from a student raised many questions from teaching staff such as these were raised; How does a deaf student attend face to face and online teaching? Are there no interpreters for the disabled? Does the system care? Have all the teaching staff been given university laptops for online teaching? These questions raised by teaching staff pointed to the revelation that online teaching should be all-inclusive and teaching staff should be facilitated in terms of laptops and finances for buying data. The deaf students' experiences also revealed that heads of departments need to guide students with disabilities to ensure inclusiveness in the ongoing blended and online teaching and deliberate attempts should be made to send students with disabilities some reading materials as a special group.

Discussion

The study suggested that COVID 19 is changing the way Religious Education is taught. The use of E-learning is enabling the teacher to reach out to many students through RE WhatsApp, chat groups, zoom video meetings, and document sharing during the lockdown.RE student-teachers were of the view that when institutions of higher learning open, traditional classroom teaching and E-learning should go hand in hand. Tomayess and Pedro (2020) note that currently, worldwide the education sector is facing a huge impact as a result of COVID 19, with universities forced to shift

their teaching to e-learning and blended learning modes. Institutions of higher learning are adopting the use of online studies to teach and assess learning. In turn, this has generated several challenges and opportunities for both academics and students. Universities have also urged RE teachers to load their courses online for student consumption. In the same vein, a study carried out by Kehinde and Adewakun (2020) in Nigeria, acknowledges that with the coronavirus pandemic and lockdown of schools and institutions of higher learning, there has been a shift towards virtual classrooms as a mode of education delivery. Students are taught through electronic platforms. The majority of states in Lagos began to use the broadcasting corporation to connect to students and teachers both in primary and school schools. In Nigeria, all core subjects are taught and transmitted via television and radio stations. Additionally, Whiting (2020) believes that the integration of information technology in education will be accelerated and online education will eventually become an integral component of education. Businge (2020) adds that the first lady of Uganda, Janet Museveni who also serves as the minister of education instructed all universities to start online teaching. She cautioned stakeholders to ensure that no continuing learner should be left behind or excluded from the e-learning approach as a coronavirus response intervention. Universities in Uganda such as ISBAT, Victoria University, International University of East Africa, Uganda Christian University, and Makerere University are already using e-learning during COVID 19 pandemic and lockdown with continuing students.

The study further found that many RE teachers were facing challenges on how to reach out to their learners during COVID 19 due to lockdown measures to contain the spread of the pandemic. Many teaching staff did not know how to teach students using online digital platforms. Businge(2020) also notes that many Ugandan universities have been left out because they were caught off-guard and unprepared. Both teaching staff and students were not trained on how to use e-learning approaches. She also quoted the minister of state for Education, Muyingo, who said that there is a need to teach all students online using a blended approach to allow students to have more control over the time, space, and style of their learning. All universities should adopt online teaching because it is a potential source of income and academic continuity. Whereas the government is insisting on online studies for universities and colleges, UNESCO (2020) acknowledges that students and lecturers lack skills to handle online teaching, have limited gadgets to use; lack connectivity, no access to the internet at home, poor mobile networks, high cost of internet, lack of technological and pedagogical skills. Whiting (2020) urges that COVID 19 has caused a move by education institutions to use the unplanned and rapid intervention to conduct online teaching with no training of staff, insufficient bandwidth, and limited preparation. This results in a poor user experience that is unconducive to sustainable growth. Additionally, some students are without reliable internet access, lack digital tools and skills to participate in digital learning. This gap is seen across urban and rural dwellers and income brackets within countries. In Uganda, there is a significant gap between those RE students from privileged and disadvantaged backgrounds. Children from vulnerable communities lack computers and money to buy data.

The study established that the learning environment for online studies of the RE students happened differently compared to the traditional classroom system. In rural areas the majority of students are pre-occupied with household work, assisting parents in business and farming. Collaborative research by UNESCO (2020) found out that many learners in developing countries especially those from underprivileged communities are occupied with domestic work and are not fluent enough in the language of instruction. Even when they can access the content they can understand, they are faced with challenges of poor living conditions, economic stress, and low education levels of their parents, including digital skills. This means that even when home learning and e-learning are in place, the majority of children from underprivileged families do not benefit from the new learning support systems and receive adequate support needed to adapt to the new modes of instruction. Furthermore, children from lower socioeconomic backgrounds lack reading opportunities, a table, and parental support during school closure and less help to complete their homework. Students, especially females are occupied with domestic chores or run other household errands, work on farms, and fetch water which can prevent them from participating in online teaching. Studies conducted by Archambault (2010) argue that creating the right online environment for students is the primary responsibility of the instructor and the parents. This is because online learning requires time-management skills, and self-directed mechanisms to be successful. In support of this, Bernard (2011) mentions that the e-learning environment lacks the support and presence of the teacher, student interaction, and technological support to ensure its smooth learning.

Conclusion

The advent of COVD 19 has brought completely new ways of life among the population and a new dimension to our education system. It has facilitated the rapid development of long-distance education that has helped in the fight against the spread of the virus and saved many learners and parents from undue expenses. However, much as we appreciate this development, a lot is yet to be done to make it effective since it came in as the last resort to allow the continuity of the learning of our children. The Ministry of Education and Sports should streamline many issues related to electronic learning such as assessment, giving feedback, and learners with healthrelated problems. Besides, since it is an expensive venture, the government should increase the budget of education to allow all these innovations to be implemented. Teachers of Religious Education and learners must embrace the shift away from traditional classroom practices to an e-learning approach to education. Although today's learners are digital natives, the use of technology for e-learning can be overwhelming and provide RE teaching staff with opportunities and challenges. The rapid spread of COVID-19 has demonstrated the importance of building resilience to face various threats from the pandemic and to embrace the rapid technological changes of e-learning.

Based on the study findings, the study drew the following recommendations: Strengthen opportunities by training staff and students how to use e-learning as a mode of teaching; Address challenges of connectivity and mobile internet network; Equip staff with gadgets to use for online teaching; Increase students' access to e-learning in vulnerable communities.

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Effects of Social and Community Issues in Inter-Ethnic Conflicts on Economic Growth in Selected sub-counties in Kenya

[1]Jacob Asige Chavulimu & [2]Godrick Bulitia Mathews

[1]Division of Academics and Students Affairs,
The Murang'a University of Technology,
P.O.Box 75-10200, *Murang'a*, Kenya
Email: chavusija11@gmail.com

[2]Division of Academics and Students Affairs
Masai Mara University, P.O. Box 861 - 20500,
Narok, Kenya

Abstract

The Government efforts in mitigating the vice has bone no fruits as the number of deaths keeps on rising from an estimate of 7, 9 and 13 people in 2012, 2014 and 2016 respectively.The main purpose of the study was therefore to assess the effects of social and community issues in interethnic conflicts on economic growth in Muhoroni and Tinderet Kenya. Karl Marx's Conflict theory was adopted. A correlational study was conducted using a population of 1051 from which simple random sampling was used to obtain a simple of 220 respondents. Questionnaires were the main tools used for data collection. The collected data was analysed using both descriptive and inferential methods which entailed frequency counts and percentages, means and standard deviations and regression models respectively. A response rate of 80.7% was realized thus affirming the significance and relevance of the data. The findings revealed that social issues had a negative effect with significant contribution to the economic growth ($\beta=..666$, $p<.05$) while community issues had a slightly weaker significant effect ($\beta=.198$,$p<.05$).Social and community issues of Inter-ethnic Conflicts had an effect on economic growth and accounted for 58.1% significant variance in economic growth (R square $=.581$, $F(2, 217)=261.296$, $p=.000$). The study concluded that the inter-ethnic conflicts in Nyando, Muhoroni and Tinderet sub-counties were the root causes of the stagnated economy. The study recommended various approaches namely enactment of legislation that can enforce punitive actions against the perpetrators; adopting multiagency approach in curbing the vice; stakeholder involvement and engagement in finding a lasting solution to inter-ethnic conflicts; the national government, lands commission and the members of the community explores ways to deal with matters land.

Keywords: Community Issues, Inter-Ethnic Conflicts, Economic Growth, community conflicts

1. Introduction

In many situations, ethnic polarization generates conflicts that could eventually lead to political instability and civil wars with long-lasting economic effects. In other cases, the potential conflict represented by an ethnically polarized society can affect negatively the rate of investment and induce rent-seeking behaviour that increases public consumption. These situations armed conflicts, reduced investment, or higher government consumption have been shown to have a negative effect on economic development (Nirola & Sohini, 2019). Pelle and Ola (2012) shows that a high level of ethno linguistic diversity implies a lower level of investment. Tom Kirk, Danelle and Annette (2018) suggest that ethnic diversity is one of the factors explaining the quality of government.

Civil wars kill people directly and immediately. They also destroy property, disrupt economic activity, and divert resources from health care. Huge refugee flows put people into crowded conditions without access to clean water and food; refugees become trans-border vectors of infection. Crime and homicide rates rise in wars and may remain high afterwards in a culture accustomed to violence. Many of these effects last for years after the fighting. Some articles reviewed the public health literature on both immediate and long-term effects (Knerr, Gardner& Cluver, 2013). Blattman, and Miguel (2010) document that there were war-related deaths from tuberculosis during the war in Wang et al, (2017) report war-derived disease deaths in Congo during the war as 6 times greater than those from direct violence. In regards to Stevens, Bisno, Chambers, Dellinger, Goldstein and Wade (2014), effects beyond the war period are less clear, though the longer term risk from tuberculosis, respiratory infections, and malaria is wellrecognized.

Polachek and Sevastianova (2010) find that the effect of conflict on economic growth is greater for high-intensity conflicts as well as for non-democracies, low-income countries and countries in Africa. The findings of Polachek and Sevastianova (2010) further suggest that conflict depresses growth more significantly in the short term, as economies recover from the adverse effects in the long run. It is also clear that wide-spread civil wars cost five times more than narrowly fought internal conflicts. Francesco Amodio and Michele Di Maio (2018) also show that various sectors of the economy are differentially impacted by conflict. He argues that capital -intensive sectors like manufacturing, construction etc. tend to contract at a faster rate than GDP as whole, whereas labour-intensive sectors like subsistence agriculture tend to expand.

It is estimated that in West Africa particularly in Nigeria when there were conflicts, the production in the agricultural growth dropped to an average of 12.3% (Kimenyi et al.,2014). In the same way, studies have also looked at how conflicts in Kenya affected the production and exportation of flowers negatively or rather the flower industry (Ksoll, Macchiavello & Morjaria 2010). Inter-

ethnic conflicts lead to a total waste of resources and material that could enhance economical milestone. According to the 2005 – 2006 unemployment statistics, young people aged 15 to 19 and 20 to 24 years fall in the category of 25% and 24% rate respectively of unemployment. People in this bracket are the most vulnerable, energetic and easily influenced to take part in inter-ethnic conflicts (Munga & Eldah, 2014).It is a fact that a big number of people, both young and old, have lost lives in various inter-ethnic conflicts in Africa. In that respect, (Shirley, 2015) confirmed that the unprecedented loss of lives in areas of inter-ethnic conflicts is in turn taking away the skills, talents, and potentials that have to steer economic growth.

The fact that the top contenders for the position of president always have most of their votes from the community they come from show that most of the voters believe that only someone from their community should hold the highest positions in government. Alternatively it could be perceived that the only guarantee for maximization of the community's interest in government is when one of its own is in power. In this framework, any disputes in election results become an ethnic issue leading to violence against each other as was the case in 2007/2008 post-election violence. Just as in the case of the raids among the pastoralists, the election related conflicts also leave many dead, property destroyed, grabbed or lost to looters, displacements of people from their homes and gross violation of human rights (Human Rights Watch, 2016).

In the northern Kenya, conflicts have led to degradation of the rangelands as mobility is constrained and the institutions that traditionally ensure their sustainable use are rendered ineffective (Odhiambo, 2012). Due to insecurity, grazing of livestock, even in times perceived to be peaceful, is restricted to a radius of 15 kilometres for fear of raids and the concentration of livestock in limited places results in overgrazing and general degradation of the environment. The concentration of people and livestock lead to overuse of resources with exposure to soil erosion and increased scarcity of pasture and water which poses a potential source of new conflict. While this happens, other areas with pastures and water remain unutilized. For instance, in the year 2009, the rangelands south of Loya, located between the Turkana plains and the highlands of Pokot, which are rich in pasture were not being accessed by either of the communities because of insecurity (Schilling *et.al.* 2012). The under-utilization of pasture bares the risk of encroachment of certain species which deplete the pasture or make it inaccessible and the unused water sources present opportunities for livestock poisoning (Huho*et al*. 2009).

There are cases where violent conflicts even lead to closure of trading (market) centres, schools and dispensaries. Apart from the fact that costs of essential commodities soar up as a result of high costs of business (transport, security etc.) as well as exploitation by individuals who know the people have limited alternatives (Odhiambo, 2012). He further posits that the communities also experience reduced prospects of higher human development due to closure of schools and

dispensaries which impede equality in quality educational achievements as well as access to health services. As children in the conflict affected areas remain out of school, their counterparts in other areas continue with their learning. The women are also forced to assume additional responsibilities beyond the traditional ones of providing for the family. The coping mechanisms are undermined thereby engendering general economic decline *(ibid,* 2012).

The other impact that ethnic polarization has on the economy is the effect on the real GDP and the per capita because of the opportunity cost of the rebellion aspect of the violence. This means that as the masses go to the street to protest and fight, the same people ought to be involved actively in economic activities which contribute to the GDP of a nation. Therefore failure to work means reduced per capita income. This is more so when there are two major ethnic groups fighting each other and the government is intervening. According to Elain K. Denny and Barbara F. Walter (2014), the opportunity cost and the cost to the economy is far much less if the conflict is between an ethnic group (the rebels) and the government- in which case the government is the other ethnic group. On their part, Kefeer and Knack (2008) agrees with Easterly and Levine that polarization of an ethnic cause always destabilizes all social, political and economic institutions which may hence reduce economic growth. The mistrust generated by from the ethnic divisions and clashes does not allow the building of cohesive institutions. Without these cohesive institutions, then economic growth and development is barred.

Montalvo and Reynal (2017) establish that ethnic diversity leads to bad policy, which, in turn, decelerates growth, both effects being quite powerful. Indeed, much of Africa's slow growth is attributable to its ethnic diversity. Ethnic diversity has also been shown to contribute to government dysfunction in several areas of economic policies, both in developed and in developing countries alike. For example, local or central governments in ethnically diverse societies tend to under-spend on public goods and education, produce low quality of services, generate greater political instability (Alexander, 2017); or misuse foreign aid and divert it into corruption (Kono & Montinola, 2013). Africa specific literature based on survey data, also finds evidence of dysfunction in government and civil society organizations. For example, United Nations Discussion Paper (2014) found that employment in the public sector in ethnically diverse Ghana was determined by patronage, not merit.

Conflict threatens Kenya tourism. It was noticed that the post-election violence affected the tourism sector which is a major income for Kenya. This conflict time was the peak season for the service industry and evidently, hotels and parks remained empty whereby the booking and occupancy mainly by the foreigners went down by over 60%. According to Capital News on 28th January 2008, over 1 billion shillings was lost in the flower industry in the two months of post-election

violence. Ochieng' and Maxon (2012) avowed that the post-election violence of 2007-2008 together with the global financial crisis reduced the economic growth of Kenya to a GDP growth of 1.7%. In 2012, Gaye (2013) mentions that the economy was still at 5% even with the same weak global economy.

Ethnic polarization brings about violence that in so many cases could generate into a big civil war which in most cases will have serious economic consequences Gaye (2013). In the wake of inter-ethnic conflicts, people of the same tongue that is in offices employ and promote the less qualified tribes mates who serve them. Because of this tribalism, the level of economic growth slumps because the employment is not of qualified people. Collier et al. (2013) asserts that conflicts results to development in reverse while in the report by the Daily Nation (January 24, 2005: 1), the infrastructure in general has also been the target hence being destroyed by the conflict and not forgetting that many projects stall due to conflict.

Erkan (2012) observes that ethnic conflicts can affect the rate of investment negatively and bring in the so called rent-seeking behaviour which in turn will lead to increased public consumption. There is also loss and destruction of property which involves burning of homes and subsequent displacement of people as they seek to be in more secure places (Schilling *et. al.*, 2012). In the report by the African Development Bank, (2008), the massive deaths of young men who engage in the violent raids reduces the productive capacity of communities.

Many economic problems are generated by conflicts such as insecurity of food, disruption of manpower and labour on the farms/firms and loss of land. Besides that, breakdown in communication, diversion of resources, allocation, and miss-allocation in terms of unexpected expenditure, destruction of the established infrastructure, unstable pricing of commodities, and environmental degradation becomes the norm of the time (Oucho, 2010). In view of this report by (Oucho, 2010), one of the far-reaching economic consequences in this area of research was food shortage. This was because production dropped as a result of failure to get an adequate supply of raw material meant for agro-based firms such like cereals, coffee, sugar, tea and other inputs. These subjected clash victims to starvation in the wake of famine that necessitated an appeal for food relief from international organizations. According to Detges (2014), the effects of clashes include and not limited to fertility and mortality – whereby temporal marital dissolution is realized when the displacement of the people take place in the time of inter-conflict thus halting reproduction and family formation. Inter-ethnic conflicts also rock the foundation of nationhood, render the existing administrative structures respect less, and derail to a big extend the spirit of national cohesion and integration.

Kimenyi et al., (2014) and Ksoll, Macchiavello and Morjaria (2010) also indicated a negative effect of ethnic conflicts on growth of flower industry. From these and other studies reviewed, it can be deduced that inter-ethnic conflicts can negatively affect economic growth of the clash prone areas. However, these studies fall short of the social and community issues as indicated in the current study. The study therefore intended to examine the effects of social and community issues in inter-ethnic conflicts on economic growth in Nyando, Muhoroni and Tinderet sub counties in Rift valley in Kenya.

2. Methodology

Correlational research design is the most appropriate design for exploring relationships among variables. Onono et al, (2016) affirm that in order to clearly establish whether there is relationship between two variables, pearson product moment correlation is more appropriate to answer this question.

Households that are directly affected by the conflicts more often as per sub regions are: Nyando Sub County (391), Muhoroni Sub County (340) and Tinderet Sub County (320) totaling to 1051, (Local Capacities for Peace International, 2015). However, consideration various variables such as education, age and availability, only 550 households were eligible for the study.

The sample size of the households was done using Krejcie and Morgan (1970; cited in Sekaran, & Bougie, 2016) sample size Table. According to this Table, a sample of 220 subjects was arrived at. Therefore simple random sampling was used to collect data from the eligible households. These entailed 82 respondents' from Nyando, 71 from Muhoroni, and 67 from Tinderet.

Data collection instruments entailed questionnaires, interview guides, Focus Group Discussions and document analysis. Questionnaire, which were both closed ended and open as too for primary data collection from household heads particularly national government local administrators, local politicians while interview guides were used to collect data from other stakeholders and key informants who included religious leaders, and members of the police service. For secondary data, the study used existing literature review from the government publications as well as documents. Interview guides and focus group discussions were used to collect qualitative data from key.

Quantitative data analysis entailed both descriptive and inferential methods. Qualitative data analysis entailed thematic, verbatim reports and general discussions of the observed findings. Means, standard deviations, frequency counts and percentages were used to summarize the quantitative information. For inferential analysis, multiple regression was conducted to establish

the effect of inter-ethnic conflicts on economic growth. The regression model used in the data analysis is presented as follows;

$Y = \beta_0 + \beta_1 X_i + \beta_2 X_{ii} + \varepsilon$; where Y= Dependent Variable (Economic Growth), X= Independent Variables (Social issues and Community issues), β_0 =Y intercept in the equation, β_1 =the model coefficient and ε = Residual in the equation

Qualitative results on the other hand were reported in themes and discussed

3. Results

3.1 Demographic Characteristics of the Respondents

3.2 Effects of Social and Community Issues in Inter-Ethnic Conflicts on Economic Growth

Inter-ethnic conflict instrument items were combined through coding in order to obtain a single mean for each of the constructs. The constructs included social issues and community issues which were deemed to construct the predictor variable that is inter-ethnic conflicts. However, for the dependent variable, the items were coded and their means computed to obtain one single mean which reflected economic growth. Descriptive statistics are presented on both social issues and inter-ethnic conflicts.

Table 1
Social
Issues

Social Issues	SD F(%)	D F(%)	NS F(%)	A F(%)	SA F(%)
Political interference/hate speech/incitement	0(0.0)	22(10.0)	7(3.2)	64(29.1)	127(57.7)
Land distribution/demarcation related issues	0(0.0)	18(8.2)	22(10.0)	104(47.3)	76(34.5)
Cultural differences	0(0.0)	17(7.7)	24(10.9)	110(50.0)	69(31.4)
Traditional Justification of Cattle Rustling	0(0.0)	26(11.8)	11(5.0)	88(40.0)	95(43.2)
Inability to negotiate and resolve tension through legitimate and peaceful structures	0(0.0)	42(19.1)	12(5.5)	81(36.8)	85(38.6)

Owning of firearms and the Media	0(0.0)	14(6.4)	37(16.8)	87(39.5)	82(37.3)

Source: Survey data (2016)

Table 1 above shows that slightly more than a half (57.7%) of the respondents strongly agreed that national political interference was a factor not to be ignored when tackling inter-ethnic conflicts in this area of study, 29.1% agreed, while 10.0% disagreed.

According to interview schedule findings, it emerged that the respondents blamed political leaders across political divides. Those in opposition zone blamed those in the government and those in the government blamed those in opposition. The leaders incite their followers using their cultural myths, idioms, and sayings to either degrade their opponents or down look upon them. This in return is met by resistance thus escalating animosity amongst the ethnic groups.

Concerning land distribution/demarcation related issues, slightly more than a third (34.5%) of the respondents strongly agreed that land demarcation and distribution was a key factor in the wake of inter-ethnic conflicts in Nyando, Muhoroni and Tinderet sub counties, 47.3% of the respondents agreed, while 8.2% disagreed. Cultural differences are another source of social issues. Table 1 above shows that 31.4% strongly agreed, 50% agreed, 10.9% were not sure while 7.7% disagreed. Both who strongly agreed and agreed added together produced the highest data percentage of 81.4% of the respondents an indication that cultural differences contributed much in social issues in Nyando, Muhoroni and Tinderet sub counties.

According to Table 1 above, 43.2% strongly agreed that cattle rustling was real, 40% agreed, while only 26 11.8% disagreed. Cattle rustling factor has been a thorn in the flesh amongst the pastoralists for ages.

Slightly more than a third (38.6%) strongly agreed that lack of ability in negotiating and resolving tension through legitimate and peaceful structures was a contributing factor for the inter-ethnic conflicts, 36.8% agreed, 5.5% were not sure, while 19.1% disagreed. The number of respondents 19.1% was far below those who agreed supporting the reliability of the findings.

Slightly more than a third (37.3%) of the respondents strongly agreed that owning of firearms was undisputable, 39.5% agreed while 6.4% disagreed. The respondents reported that this plays a major role in incitements thus igniting and escalating violence in Nyando, Muhoroni and Tinderet sub counties.

Table 2
Economic Growth in the area of study

Statements on economic growth	SD F(%)	D F(%)	NS F(%)	A F(%)	SA F(%)
Loss of foodstuff/burning of granaries	0(0.0)	21(9.5)	9(4.1)	49(22.3)	141(64.1)
Loss of cattle and other domestic animals	0(0.0)	19(8.6)	7(3.2)	128(58.2)	66(30.0)
Outbreak of communicable diseases	0(0.0)	21(9.5)	3(1.4)	92(41.8)	104(47.3)
Inter-ethnic conflicts and insecurity	0(0.0)	17(7.7)	21(9.5)	95(43.3)	87(39.5)
Land grabbing	0(0.0)	5(2.2)	14(6.3)	83(37.7)	118(53.6)
Fall of Agro-chemical industries depending on raw farm products	0(0.0)	14(6.4)	19(8.6)	82(37.3)	105(47.7)

The first indicator was that of loss of food stuff and burning of granaries. According to the findings in Table 2, slightly less than two thirds (64.1%) of the respondents strongly agreed that this is a factor that has effect on economic growth, 22.3% agree, while 9.5% disagreed.

Through oral interview with a respondent, observation and secondary data established that one of the main economic factors that could be felt by every victim of inter-ethnic conflicts is the loss of food through arson when the attackers set the food stores and granaries on fire as indicated by a respondent below.

> "*During these conflicts we lose our food reserves, making our lives hard in different annual seasons. It takes us a bit long to settle from the effects of these conflicts. I wish people could understand the effects of the conflicts and just decide to live in peace*" (KII 1, 2021).

These findings imply that the respondents lose quite a lot during conflicts. These include food reserves which causes their lives to be more miserable. In addition, they take more time to settle thus bringing about another issue of settlement. Other aspects that may not have come out may include psychological torture that leads to lack of peace and thereafter drop in the economy.

More discussions with the responds drew a statement from another respondent indicating: *Conflicts results to famine and starvation. Nothing hits us as a community hard as lack of food and starvation. This in itself is the gateway to poverty and unending misery of the citizens. Loss of cattle and other domestic animals is almost similar to the loss of food*" (KII 2).

These findings imply that there is lack of basic needs such as food leading to famine as well as poverty among the residents of the areas. Loss of animals such as cattle's is other drawbacks of the economy.

Slightly less than a third (30.0%) of the respondents strongly agreed that conflicts lead to the loss of cattle and other domestic animals thus affecting economic growth, this was supported by 58.2% of them who agreed with the statement. Only 8.6% disagreed with the statement.

According to the findings presented in Table 2, slightly less than a half (47.3%) of the respondents strongly agreed that outbreak of communicable diseases was a key factor that affects economic growth, 41.8% agreed, while only 9.5% disagreed. Based on the interviews with the respondents, outbreak of communicable diseases was a key factor in hampering economic growth in times of and during conflicts in Nyando, Muhoroni, and Tinderet sub counties. Conflicts and the emerging of communicable diseases go together.

3.3 Regression Analysis

Multiple regression was carried out whereby economic growth was regressed against inter-ethnic conflicts. The findings are presented as shown in Table 1 as follows.

Table 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.762[a]	.581	.579	.907	.581	261.296	2	217	.000
a. Predictors: (Constant), Social issues, Community issues									

Coefficients

Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Correlations		
	B	Std. Error	Beta			Zeroorder	Partial	Part
1 (Constant)	.987	.083		11.881	.000			
Social issues	.992	.054	.666	18.509	.000	.740	.690	.617
Community issues	.154	.028	.198	5.507	.000	.447	.273	.184
a. Dependent Variable: economic growth								

Source: Survey data (2016)

Results indicated that there is a high correlation between inter-ethnic conflicts and economic growth (R=.762). This means that economic growth is associated to inter-ethnic conflicts. Besides, the findings further shows that inter-ethnic conflicts accounts for 58.1%% variance in economic growth, R^2=.581, which is significant, $F_{(2, 217)}$ =261.29, p<.05. This implies that out of 100% causes of economic growth or decline, inter-ethnic conflicts accounts for a larger percentage in the area of study. Therefore economic growth of the area largely depends on the peace or reduced ethnic conflicts.

4. Discussion

These studies are in line with other previous findings in the literature review. This includes studies such as Justino, (2011), Kimenyi et al.,(2014), Huho, (2012); Human Rights Watch, (2016), among other who agreed with the current study findings which indicate that inter-ethnic violence have adverse effects on the economy. However, these studies may be limited in other areas such as domestic but the hallmark is that they support the fact that ethnicity, inter-ethnic violence and conflicts leads to slow or drop in economic growth. This implies that inter-ethnic violence negatively affects economic growth.

According to key information from the respondents, the Nandis, to some extent carry out attacks with a purpose of acquiring animals for bride price. The Luos in this area carry out similar attacks in retaliation or to repossess the cattle taken by the Nandis. Since time in memorial, pastoralists used to attack other communities for the same purpose and as part of initiation rites to prove that the initiate can acquire and manage wealth. The higher percentage in those who agreed is a clear indication that the findings were reliable considering how the factor influences inter-ethnic conflicts in Nyando, Muhoroni, and Tinderet sub counties: Inability to negotiate and resolve tension through legitimate and peaceful structures.

Further findings using the model coefficients indicates that for inter-ethnic conflicts, social issues was the strongest contributor of economic growth, β=.666, p=.000 implying that for every one unit increase in social issues or , there are 0.666 unit decrease in economic growth. This means that social issues are strong predictor of economic performance and therefore have influence on economic performance. Another variable found to have significant effect on economic growth was community issues (β=.196, p<.05). This means that one unit change in community issues will lead to 0.196 unit changes in economic growth. Therefore community issues have a significant effect on economic growth such that the more the community issues the slower the economic growth.

It is imperative to examine the above studies in detail. For instance, Odhiambo, (2012), statistics has revealed that ethnic conflicts have a negative impact on investments and thus a hindrance to economic growth but failed to establish the overall economic growth while Reksulak (2000) found a drop in per capita income due to ethnic conflicts. Reksurlak studies were however too general as they examined the overall per capita of a country. Ksoll, Macchiavello and Morjaria (2010) also indicated a negative effect of ethnic conflicts on growth of flower industry. Further studies by Nirola and Sahu, (2019) also indicated that inter-ethnic conflict negatively affected growth while Rockmore, (2011) notes that ethnic conflicts are the main impediments to economic growth. From these and other studies reviewed, it can be concluded that inter-ethnic conflicts have a negative effect on economic growth of the clash prone areas. This studies coupled with the theoretical reviews clearly indicates that there is a serious negative effect of violence and ethnicity on economic growth in the areas of the study. Therefore these and other studies strongly support the current study that has revealed that ethnic conflicts negatively affect economic growth as purported in the study findings as well. This implies that such effect can be extended to the other areas if the problem if not solved early in advance. Therefore proper measures should be taken into consideration when such conflicts phenomena occur.

5. Conclusions

The objective of the study sought to evaluate the effect of inter-ethnic conflicts on economic growth. The findings revealed that inter-ethnic conflicts, more rampantly, social issues in the communities had a significant effect on economic growth. Thus it was concluded that interethnic conflicts have a negative impact on economic growth of the study area, therefore whenever conflicts occur, it scares off investors and instils fear among the people who own businesses in the area thus slowing economic growth significantly.

Inter-ethnic conflicts affect the economic growth of the affected area, the researcher recommends that policies be established to govern the conflict prone areas such as the study area in the form of protecting businesses. It is also recommended that the residents be put under constant programmes of fostering peace within the area so as to enhance economic growth. The study recommended

various approaches namely enactment of legislation that can enforce punitive actions against the perpetrators; adopting multiagency approach in curbing the vice; stakeholder involvement and engagement in finding a lasting solution to inter-ethnic conflicts; the national government, lands commission and the members of the community explores ways to deal with land matters. There are efforts by the national government to foster peace through the administrative units and the county governments so as to avoid ethnicity. Significant progress has also been observed over the government's commitment to narrow down to perpetrators of violence and hate speech causing fights. Plans that are put in place to oversee execution of justice should be enhanced and effective to ensure persons that become victims receive justice. The findings may aide the economic and peace integration commission stakeholders in advising potential investors as well as the government on promoting peace in the area. Scholars could also benefit by coming up with a model and more information in the area for guiding new researchers.

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A Review of the Roles of Dissertation Supervisors as Mentors

Authors: Betty. M. Macharia

Department of Research and Evaluation
Faculty of Education
The Catholic University of Eastern Africa
P. O. Box 62157, Nairobi, Kenya
Corresponding Author Email: betty23001@yahoo.co.uk

Abstract

This paper is a review of the roles of dissertation supervisors as mentors. Primarily, research and enquiry skills are important for doctoral students. Doctoral supervisors should therefore become mentors to assist their students in developing a theory-driven and a research-based approach. The model that dissertation supervisors embed in their students encompasses different approaches that encourage doctoral students to participate in functional thinking, critical thinking, relationship development and emancipation. Effectively, dissertation supervisors should pursue mentorship strategies that will provide their students with a framework for writing to integrate different research approaches in reviewing relevant research and literature in the completion of their doctoral projects. The benefit of mentorship for doctoral students is that it creates an opportunity to develop requisite skills for academic development to conduct an enquiry based learning process. The review content is divided into subsections which explore the relationship between dissertation mentors and doctoral students with a view of assessing whether the involvement of dissertation supervisors as mentors can lower doctoral attrition rates and increase dissertation completion times. The implication and the conclusion of the paper is to urge postgraduate faculties to create a framework where dissertation supervisors act as student mentors.

Keywords: *Dissertation supervisors, doctoral students, dissertation mentors, doctoral projects supervision, mentorship strategies, doctoral attrition rates, doctoral student mentors, doctoral student supervision, doctoral student mentorship*

Introduction

Taylor, Kiley & Humphrey (2017) argue that numerous studies have been conducted to demonstrate the importance of dissertation supervisors in playing a mentorship role. In spite of the

view that doctoral research students exercise a sense of independence, there is need for mentorship from dissertation supervisors. Taylor et. al. (2017) reiterate that the focus of supervision and mentorship is to instruct students in appropriate learning methodology and proper research methods. These may include various activities of mentorship such as sponsoring, coaching and assisting students in developing reflective practices in the research process. Kamler & Thomson, (2014) observe that supervisors who oversee the work of doctoral students could develop a research framework to assist students in improving their academic research skills. Orellana, Darder, Pérez, & Salinas, (2016) outline that effective mentorship by dissertation supervisors lies in proofreading and guiding students on the research methods that are appropriate in the doctoral research process.

Dissertation supervision is essential since it assists students in understanding how they should approach the writing process at every stage of their research work. Dissertation supervisors who act as mentors can help doctoral students to fill grant application forms. The supervisors could also assist doctoral students in upgrading their papers by providing feedback on the selected thesis for the writing process. Erichsen, Bolliger, & Halupa, (2014) argue that dissertation supervisors who act as mentors resolve problems associated with conceptual thinking which teaches the process of synthesising research material to assist doctoral students in completing their projects in good time. Granted, mentorship by dissertation supervisors is an integral part of the learning process as it enables doctoral students to complete their projects within the scheduled time. Bitchener, (2016) posits that mentorship in doctoral writing is crucial as it creates a supervisory framework to implement different approaches designed to assist students in completing their research projects. Therefore, the study is intended to determine the role of dissertation supervisors as mentors to explore the benefits to students when dissertation supervisors become mentors. Furthermore, the study will seek to establish the relationship between dissertation mentors and doctoral students with a view of assessing whether the involvement of dissertation supervisors as mentors can lower doctoral attrition rates and increase dissertation completion times.

The Role of Dissertation Supervisors as Mentors

Basturkmen, East, & Bitchener, (2014) observe that dissertation supervisors should adopt the role of mentors to assist doctoral students pursuing various disciplines. Dissertation supervisors have several roles in supporting doctoral students in completing their research projects. One of the principal roles that dissertation supervisors perform is a functional role where they help students in managing their projects. Pyhältö, Vekkaila, & Keskinen, (2015) have demonstrated that dissertation supervisors perform the role of assisting students to be critical thinkers where they assist students in analyzing their work critically. Dissertation supervisors should strive to develop an interpersonal relationship with students. As a matter of fact, supervisors perform the role of emancipation where they challenge students to question their knowledge base and to review it before they present a full review. Holloway & Brown, (2016) demonstrate that mentorship is

essential to assess the abilities of doctoral students to be inspired to perform an elaborate research process and to complete the project. Dissertation supervisors are also preferred since they are more acceptable to students and they assist them in understanding how they should conduct the research process.

Hakkarainen, Hytönen, Makkonen, & Lehtinen, (2016) argue that writing tasks are considered to be a significant part of the completion of the doctoral project. Dissertation supervisors who are mentors assist doctoral students in completing their research projects and in assessing the root cause of their research problems that they are writing about. Rogers, Zawacki, & Baker, (2016) argue that mentors should also encourage doctoral students to attend seminars and workshops to assist them in the research process. Devos, Boudrenghien, Van der Linden, Azzi, Frenay, Galand, & Klein, (2017) make the case that the process of mentorship is essential to assist students to develop writing skills in the project completion process. Accordingly, mentors are important as they assist students in understanding the different purposes of writing that exist with the intention of helping them in formulating ideas and in developing their research projects. The establishment of a research framework is necessary to demonstrate how effective writing strategies should be improved. Lim, Loi, Hashim, & Liu, (2015) demonstrate that dissertation supervisors who play the role of mentors play a critical role in assisting doctoral students in developing a conceptual approach which facilitates the process of collecting information from different sources to complete their research projects. Parker-Jenkins, (2018) highlights that mentorship for doctoral students is important as it enables them to focus on different academic approaches instead of working on a limited scope of the research.

Tangen & Borders, (2016) observe that the experiences dissertation supervisors posses enable them to act as mentors to doctoral students through an efficient system of self-assessment. To a large extent, doctoral supervisors play a pivotal role in assisting their students in developing their writing skills and in facilitating the creation of joint learning support groups that provide a framework to assist students in receiving the writing support that they require. According to Aitchison (2015), dissertation supervisors can also assist doctoral students in focussing on areas where they formulate practical solutions to improve on their areas of weakness. The success of dissertation supervisors is increased by mentoring doctoral students and assisting them in brainstorming, drafting and editing their research projects. Lepp, Remmik, Leijen, & Leijen, (2016) argue that academic mentors should assist students in developing a conceptual understanding of how each stage of research should be tackled with a goal of completing the project according to preset schedules and according to set requirements (Aitchison, 2015). At any rate, dissertation supervisors should assist doctoral students in performing research which is holistic and integrates core research ideas.

The Benefits of Dissertation Supervisors Becoming Mentors

Taylor et al. (2017) outline that dissertation supervisors should also act as mentors to doctoral students to provide psychosocial mentorship where students are assisted in articulating their research ideas. Alternatively, dissertation supervisors could also be career mentors who assist the doctoral students in developing appropriate research channels. Pakdaman, Shafranske, & Falender, (2015) have shown that elements of role modelling, friendship and counselling should be adopted in the mentorship process. A review of the relationship between doctoral students and faculty members should be improved through mentorship and academic supervision. Mehr, Ladany, & Caskie, (2015) state that dissertation supervisors who take the role of mentors enhance their effectiveness by instructing students on the most effective research methodology to improve the quality of doctoral education that is offered. Kyiv & Thune, (2015) suggest that mentorship is important as it provides doctoral students with an opportunity of receiving helpful academic advice. It is crucial for dissertation supervisors to mentor doctoral students. Taylor et al. (2017) further demonstrate that mentorship creates a positive environment in the academic faculty thereby leading to successful socialisation between the department and students pursuing doctoral programs. Blessinger & Stockley, (2016) reiterate that doctoral mentorship is critical in promoting psychological health and propagating student development to assist doctoral students to complete their degree programs on a timely basis. Dissertation supervisors should also act as mentors to guarantee professional development, productivity and identity development immediately after graduation.

The relationship between dissertation supervisors and doctoral students should transition from being a primary academic mentorship role of providing supervision to a new role in providing mentorship (Taylor et. al, 2017). Another objective of mentorship is to assist students in identifying job opportunities in the market and available research opportunities in the field. Carter-Veale, Tull, Rutledge, & Joseph (2016) suggest that mentors could also perform the role of advising students on upcoming conferences and give them advice on how they should balance their personal and academic life. Academic mentors who are dissertation supervisors have also assisted their students in writing grant proposals, preparing presentations and publications and assisting them in accessing research resources. Carter & Kumar, (2017) attest to the fact that dissertation supervisors should be relied upon as mentors to help doctoral students to attain requisite skills and to assist them in executing administrative tasks in their professional life. Mehr, Ladany and Caskie (2015), on the other hand state that academic mentors who are dissertation supervisors can integrate reflective teaching methods in a manner that encourages academic modelling and the coaching of doctoral students. Woo, Jang, & Henfield, (2015) argue that doctoral students who are under mentorship can improve their communication skills as they engage with their fellow students and other members of the academia to receive assistance in completing their research projects.

One of the significant challenges that have affected doctoral students is a lack of sufficient pedagogical preparation (Nethsinghe & Southcott, 2015). Dissertation supervisors who act as

mentors have a supervisory role that includes educational mentoring activities which enable students to prepare for a teaching career that they may choose to pursue after completing their research projects. Ghosh, Chauhan, & Rai, (2015) insist that apprenticeship is considered to be critical in assisting students in seeking relevant courses to encourage doctoral students to liaise with their advisors to pursue a teaching career. Dissertation supervisors who act as mentors facilitate their students to gain pedagogical skills by observing them, teaching them and advising them. Berman & Smyth, (2015) conclusively state that the intention of teaching mentorship is to assist doctoral students in satisfying the academic requirements set by institutions.

The Relationship between Dissertation Mentors and Doctoral Students

The role of a dissertation supervisor who becomes a mentor is to create an environment for career preparation suitable for doctoral students. Academic mentors have the responsibility of preparing PhD students to become skilled researchers in their field of study. According to Tribe & Tunariu, (2016) mentorship can be achieved by ensuring that students receive appropriate training which ensures that they can function according to the regulations set by the academic faculty. Kumar & Coe, (2017) note that a good mentorship program provides an opportunity for socialisation by instructing doctoral students on the intricacies of academic life. In this manner, doctoral students work within a framework which enables them to understand research theories and the teaching methodology that is employed in academia as well as the functioning of different universities. Anderson, (2017) outlines that the dissertation supervisor who is perceived as a mentor guides students to achieve their academic objectives.

The creation of formalised mentoring structures is essential to facilitate idea sharing and to allow students to experiment with their ideas to gain confidence before presenting in public forums. The primary focus of mentorship should be on research and career preparation. Stockman, (2015) has shown that students who associate with the career path of their mentors are also provided with an opportunity to emulate the personalised elements of their mentors. The career path of the mentor could also create a framework which doctoral students can follow and relate to. Mehr et al. (2015) demonstrate that the desire to emulate a mentor's career path is a critical objective in promoting career advancement and in ensuring that the competence of doctoral students is considerably improved. Mentorship relationships between dissertation supervisors and doctoral students are also considered to be critical in assisting doctoral students in achieving capability and in carving out their identity in the academic sphere Aitchison, (2015) has shown that doctoral mentors can assist doctoral students in presenting their ideas coherently.

Dissertation supervisors who become mentors play a critical role in assisting students in achieving academic competence. Dissertation mentorship is made possible through asynchronous communication where feedback is provided, and doctoral students can integrate the feedback received in completing their research projects. Taylor et al. (2017) demonstrate that mutually

beneficial relationships that exist between mentors and their doctoral students are considered to be beneficial and motivating than the one-sided relationships that exist between dissertation supervisors and doctoral students. Pakdaman et al. (2015) suggest that doctoral students who benefit from mentorship programs can improve their managerial, social, cognitive and communication competences.

The Involvement of Dissertation Supervisors as Mentors to Lower Doctoral Attrition Rates and Increase Dissertation Completion Times

In doctoral mentorship, students are presented with opportunities that positively engage them in using alternative research methodologies to develop their research projects even as they use appropriate research methods to complete their projects. Pakdaman et al. (2015) posit that mentorship is critical for doctoral students as it ensures that a dissertation supervisor assists doctoral students in achieving research competence and in increasing their skills and knowledge levels. Cognitive capability in the completion of doctoral projects is also considered to be critical as it is necessary for providing doctoral students with expert knowledge which they can use in disseminating knowledge. Stockman (2015) exemplifies the fact that the benefits of a mentor relationship are assessed by measuring the satisfaction level, the competence level and the academic opinions of the learner.

Taylor et al. (2017) point out to the fact that dissertation supervision and mentorship is necessary to reduce the level of doctoral student attrition which is considered to be a severe problem among students in pursuing doctoral programs. By using mentors in academic research, it is possible for the competence of doctoral students to be enhanced as they will be able to attain self-efficacy in research and expertise in their fields of study. Pakdaman et al. (2015) reiterate that mentorship is critical to encourage doctoral students to get involved in professional organisations and to increase their contribution to academic research processes. In further analysis, Taylor et al. (2017) designate that mentorship also assists doctoral dissertation students to exhibit a high level of commitment, personal responsibility and motivation. As a matter of fact, effective mentorship can help doctoral students in undertaking complex tasks and in ensuring that they have access to professional guidance. Mehr et al. (2015) have shown that when students are demotivated due to the challenges they face, mentorship at the doctoral stage can assist them in regaining their motivational levels and in developing a system of self-regulation. Additionally the role of a doctoral mentor lies in assisting learners to set their goals, analyse their tasks and to monitor the development of projects in completing their dissertation.

Institutions of higher learning are required to create elaborate mechanisms to support doctoral students to complete their research projects. There should be more mentorship programs for doctoral students to establish systems to develop their cognitive abilities, their research skills and their presentation skills. The creation of mentorship programs and the role of dissertation supervisors as mentors remain critical as it enables doctoral students to acquire pedagogical skills to prepare them to teach undergraduate and graduate courses. Further research should be done to evaluate how mentors can assist doctoral students in completing their projects within the scheduled time to achieve their research objectives.

Conclusion

In the increasingly complex academic environment within which doctoral students operate, it is necessary for dissertation supervisors to become mentors. This is an objective that is achievable if academic supervisors adopt a holistic approach to assist doctoral students by providing them with critical support in the research process. By utilizing the role of a mentor, doctoral supervisors assist students in presenting their research in a timely fashion. Dissertation supervisors who act as mentors also create a supervisory framework to assist students in writing papers which are holistic and conceptually sound. The use of a mentorship approach is helpful to a doctoral student who faces difficulties to complete their research projects by using integrated and varied approaches. Dissertation supervisors who act as mentors are also relevant as they assist students in completing their research projects. There is a need for further research to be conducted to establish critical factors which prevent doctoral students from completing their PhD dissertations. New research is required to determine how dissertation supervisors can become mentors to assist students in achieving their PhD programs according to pre-agreed time frames.

Going forward, there is a need to review the current set up where most dissertation supervisors are not mentors to doctoral students. This review intends to increase doctoral completion rates to ensure that doctoral students complete their dissertations rates within the scheduled time. Since doctoral programs have a high workload, dissertation supervisors who act as mentors guide doctoral students to ensure that they have the requisite skills to complete their dissertations according to preset research methodologies to meet set research objectives. It is also essential for dissertation supervisors to act as mentors to reduce doctoral students' attrition rates.

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Drivers of Induced Abortion among Women in Igembe Community of Eastern Kenya

Authors: Charity Kinya Koronya[1], Charles Owuor Olunga[2] & George Odipo[3]

[1&2] University of Nairobi, Institute of Anthropology Gender and African Studies P. O. Box 30197 – 00100, Nairobi
Corresponding author email: bundimarete13@gmail.com

[3] Population Studies and Research Institute,
P.O. BOX 30197, Nairobi

ABSTRACT

Induced abortion is one of the major global public health problem that governments, including Kenya, are still grappling with to date. Induced abortion is a health risk to the lives of millions of women of reproductive age and a leading cause of maternal mortality and morbidity. The purpose of this study was to assess the prevalence of induced abortion in the Igembe community. This study adopted a case study research design. The study targeted 34 people including, women who had procured abortion, community leaders and health workers. A sample size of 21 people was interviewed. The study used purposive and snowball sampling techniques in identifying the informants. Data collection instruments employed by the study included: Focus Group Discussion and interview guides. To conduct analysis, transcripts were generated verbatim, and then data was analyzed thematically along with the study objective. The findings of this study established that there was a high incidence of induced abortion in Igembe. The study therefore recommended that, there is need to increase the number of trained abortion care service providers in order to advocate for safe abortions and reduce the stigma associated with postabortion care in order to reduce maternal morbidity and mortality.

Key terms: Abortion drivers, induced abortion, unplanned pregnancy, abortion risks

INTRODUCTION

Globally, much of the available abortion-related information is largely generated from medical reports, anthropological evidence further demonstrates that induced abortion is an ancient practice in every culture of human life. According to Stubblefield, Carr-Ellis and Borgatta (2004), the incidence of induced abortion is viewed as a common event in women‟s lives. It is also recorded as a prevalent response to unplanned and or unintended pregnancies among women of reproductive age (Galati, 2015; Popinchalk, & Sedgh, 2019; Ahmad & Shah, 2011). Other authors have noted that the global attitude towards induced abortion is swarmed with numerous debates and split arguments about its legality and acceptability across the nations (Guttmacher, 2018; Pacheco & Kreitzer, 2015; Thomas et al., 2017; Woodruff et al., 2018). Similarly, around seven million women were admitted to hospital every year in Africa as a result of ill-health and complications of induced abortions In Kenya, the rate of induced abortions is significantly higher in developing and low-income countries (49.5%) than in the developed countries (12.5%) (Singh, Remez, Sedgh, Kwok & Onda, 2018). Besides this overview, alternative reports on the prevalence of induced abortion reveal that a vast majority of abortions occur in response to unintended pregnancies. To begin with, a 2018 report titled „Abortion Worldwide 2017: Uneven Progress and Unequal Access‟ shows that on average, 56% of unintended pregnancies ended in induced abortion worldwide each year (2010-2014). In Kenya, abortion is highly restricted and regulated by. The study, thus, sought to understand the current situation on induced abortion in the Igembe community as most of the studies were undertaken some time back and situations may have changed thus the need to update scholarly debates. This study, thus, the purpose of this study was to assess the prevalence of induced abortion in the Igembe community.

METHODOLOGY

The study design used qualitative methods of data collection which included case narratives, indepth interviews and focus group discussion. This entailed in-depth investigations of induced abortion among women in Igembe community exploring community members‟ knowledge, attitude, practices and drivers and consequences of induced abortion. The study used various qualitative data sources which included case narratives, in-depth interviews, focus group discussions and observation to explore induced abortion in Igembe. The study participants were all interviewed in the research site.

The study was undertaken among the residents of Igembe community in Meru county. This region covers three sub-counties out of the nine sub-counties of the County of Meru, namely: Igembe South, Igembe North, and Igembe Central. The other six sub-counties that cover the vast region of Meru are Tigania East, Tigania West, Buuri, Imenti Central, Imenti North, and Imenti South.

The wards were the units of analysis for this study, while the units of observation were members who had lived in the Igembe community.

The study targeted 34 people including, women who had procured abortion, community leaders and health workers. This population was particularly targeted since it provided key information on the drivers of induced abortion among women in Igembe Community of Eastern Kenya

A sample size of 21 people was interviewed. The study used purposive and snowball sampling techniques in identifying the informants. The selection of these respondents was due to the fact that they are the key informants whose opinions and ideas are of specific interest to this study (Luborsky and Rubinstein, 1995).

Data collection instruments employed by the study included: Focus Group Discussion and interview guides. Interview method was used since it generally yield the highest cooperation and lowest refusal rates, offers high response quality, takes advantage of interviewer presence and it's multi-method data collection (Owens, 2002).

Data collected through interview was analyzed qualitatively. The collected data was first transcribed before coding into themes. This involved breaking down the data into manageable pieces, sorting and sifting while searching for types, classes, sequences, processes, patterns or themes. The aim of this process was to assemble or reconstruct the data in a meaningful or comprehensible fashion (Jorgensen, 1989). The categorizing typically based on the major research question guiding the study. Data was later presented in form of narratives. Generalization from the themes about the phenomena in question and discussion in the light of the available literature was made.

RESULTS

Demographic Characteristics of the respondents

A profile of the respondents was necessary so that it could show the characteristics of the respondents for the purpose of obtaining reliable data from them. Bearing in mind that the 58 study respondents were selected using the purposive sampling technique, the results revealed that majority of the participants had completed primary education level. The other respondents had neither completed primary education nor attended formal education. This study established that many of the female respondents were followers of Christianity, with more members being affiliates of the Catholic and Methodist churches than the other denominations. However, some male respondents reported that they subscribed to the traditional religions. Among the Ameru

people, the traditional names used to refer God include *Murungu, Kini-kiiru, Mwene-inya, Kaiimba, Ngai -e Nyambene,* and *Kiumbee.*

Additionally, the study noted that the majority of the respondents were married, while others were either widowed, single, separated or divorced. Notably, all the study participants confirmed that heterosexual marriage, whether monogamous or polygamous, is the only culturally valued practice of marriage among the Igembe people. As most of the respondents acclaimed, every adult male and female are customarily expected to get into an acceptable heterosexual marriage and have a family (including children) of his own.

Drivers of Induced Abortion among Women

The major drivers covered by the study include: Social-cultural Drivers, Personal Drivers.

Social-cultural Drivers

This section presents findings that established the factors that facilitated induced abortion among individuals and members of the Igembe community. This study established that induced abortion is one of the reproductive health issues that are not discussed in public among the Igembe people. To affirm this finding, the participants agreed that there are traditional decrees that regulate induced abortion among the Igembe people. This assertion was acclaimed by KII 2 during FGD session as captured in the eexcerpt below:

> "If a girl became pregnant before she was circumcised, she would be prepared for an induced abortion. Once the abortionist (*muritii wa ndaa*) was contacted by an elder, the pregnant girl would be put on seclusion (self-isolation). Her grandmothers and aunts were engaged in preparing her for abortion. Thereafter, she would be sent to an abortionist with a firm warning to obey and accept the recommended procedures" (KII2, 2021).

From the findings of this study, it was established that abortion was traditionally performed on a girl/woman who conceived before circumcision and or before marriage. Moreover, the abortion process was a communal affair that entailed several rituals. This process is narrated by k13, a key informant, in the excerpt below from the in-depth interview transcript.

> "If a girl was found to be pregnant before circumcision and marriage in the Igembe community, the first step was for the mother to have a special session with the girl to get details of the man responsible for the pregnancy. The mother counseled the daughter on the consequences of conception before circumcision and marriage. The counseling

sessions included the effects on the family, the clan, and the community in general. During these counseling sessions, the mother would also counsel the girl on the need for abortion … and how her daughter will have to undergo the process (of terminating the unwanted pregnancy) … and … including the related consequences… Remember, in a case where the man accepts responsibility for the pregnancy and agrees to marry the girl in an arranged marriage, the girl‟s circumcision was fast-tracked to avoid embarrassing the man and or parents on the matter" (KII 3, 2021).

In an   in-depth interview with a male key informant, KII 4 elaborated the process as captured in the excerpt below drawn from the in-depth interview.

"The girl was also counseled by the grandmother and some of the girl‟s aunts (sisters to the mother and father and wives to the uncles) who are close relatives and were also required to mentor her after that. Part of the counseling sessions focused on what to expect during the abortion procedure and the need to cooperate with the abortionists. The girl was reminded of the shame that her pregnancy had brought to the family and community at large. Thereafter, the girl would remain in seclusion in preparation for the abortion…" (KII 4, 2021)

On a similar note, this study further revealed that whenever a girl became pregnant before circumcision or marriage, something that was hardly approved in the Igembe community, the significant portion of blame was on the mother. As revealed by most respondents in the FGD1 of this study, the council of women „*Kiama kia akaa'* would heavily fine the girl‟s mother because it was believed that the girl‟s pregnancy demonstrated the mother‟s inadequacies in parenting her girls.

Personal Drivers

In the findings of this study, majority of the participants associated abortion-seeking decisions with family and societal expectations, personal aspirations, lack of support from the male partners and fear of the financial constraints incurred in raising the baby. For instance, from the case narratives, three respondents indicated that they procured abortion because they engaged in unprotected sex and conceived while unmarried. Arguably, the respondents were well aware that Igembe traditions and norms, including Christian teachings, prohibited pre-marital sex and pregnancy before marriage. Thus, abortion was the best option to avoid shame and stigma in society. The predicaments that such women find themselves in were explained by KII 5 (pseudonym) as she described her *experience in the excerpt below:*

"That (pregnancy) was the last thing my people (parents) would have ever expected from me. If my parents imagined I have slept with a man, leave alone getting pregnant, I would have been skinned alive … especially by my mother! They were so much respected in the village … and were role models of many Christian families. I had no choice … I had to abort to spare them the shame. Again, I had elder siblings who had not given birth at home … and being the last born, they would have been shocked that I had a sexual relationship before getting married … had to! My boyfriend also understood my problem and supported my decision … and I went ahead" (KII 5, 2021).

In another finding, the respondents clarified that their unplanned pregnancies threatened their chances of continuing with education, and induced abortion was the best alternative. As the respondents shared their experiences, it emerged that there exists a high prevalence of school dropout of girls in Igembe, most of which being pregnancy related. This sentiment was affirmed by FGD 4 who reported about her sister"s incidence of abortion while still in high school as captured in the excerpt below:

"My sister conceived when she was 17 years old and in Form 3. I believe that she was very much aware that by dropping out of school due to that pregnancy, that would have been the end of her school life. Moreover, our parents were very strict … they would not have accepted to take care of the baby in case my sister wanted to return to school … she visited a clinic around here (name withheld). I think that her life would be more difficult today had she kept that pregnancy" (FGD 4, 2021).

These study findings established that the social setting of the Igembe community forces women, particularly young girls, to seek induced abortion services when an unplanned pregnancy occurs. K17 narrates how she had a long-time affair with a married man with several episodes of unprotected sex during the friendship. However, when she conceived, she reports that the man was quick to have her procure an abortion - and then he deserted her.

"I never thought I would conceive … but when I informed him that I was pregnant, he immediately gave me money to get an abortion … and thereafter, he disappeared … I have never seen him after I confirmed to him that the abortion was successful. I do not regret this action because I was equally unprepared (financially) to raise that child alone … today I would be a single-mother … which I avoided all my life" (KII 7, 2021).

In one more case, the participants also indicated that there are women who abort pregnancies that arise from failed contraceptives or a family planning method that was not effective. In the excerpt below from FGD2 with KII 8, she explains how she once assisted a woman to terminate a

pregnancy that she conceived when her family planning method failed. In the transcript, the pregnant woman was already a single mother of three children and carrying another pregnancy was not feasible.

> "When I was a nurse at XXX hospital, I was in charge of the family planning clinic, and there is this lady whose family planning method failed, and she conceived. When she approached me in confidence for assistance to abort, I was obliged because I knew that she was already struggling to raise her three children single-handedly – after her husband died. I assisted her in my private clinic and did not even charge her any fees for the procedure (induced abortion) because I knew that she could not afford it … and she was very desperate at that moment." (KII 8, 2021).

This study further established that one of the roles of herbalists and TBAs in the Igembe community is to procure abortions of pregnancies that are unwanted, stigmatizing and regarded as unacceptable. This view is captured in the excerpt below by k19 as part of her experiences at a local health facility within Igembe.

> "….so often we handle patients (women) who present with heavy bleeding or genital injuries or incomplete abortion in our clinic. Upon follow-up we always get to learn that these are girls in school … other women are either unmarried or divorced and they are not expected to have sex, leave alone to become pregnant … they will be expected to name the man behind it … They also argue that they go for abortion because they fear that their family members will stigmatize them. Out of this, most pregnant girls and women rush to get an abortion from the local herbalists and those who pose as traditional birth attendants before they are known. The „doctors" (as they call them) use very crude methods to assist them procure abortions … many of these women have died in their hands … and others have ended up with permanent disabilities, including infertility" (KII 19, 2021).

This study established that traditionally, whenever an unmarried woman would get pregnant before circumcision, through incest, or was impregnated by an uncircumcised boy, the Igembe council of women *'kiama kia akaa,'* investigated and facilitated the abortion procurement process. This is indicated in the following excerpts which are transcripts of KII 20 and KII, 21.

> "Kiama kia akaa or the council of women, clan elders (males only) and "Njuri Ncheke (council of elders) was the key traditional decision-makers in Igembe. However, the decision on induced abortion was planned and executed by the clan elders. The Njuri Ncheke, which was considered as the Supreme Court, got involved in the abortion case when a particular man was notorious of making uncircumcised girls pregnant and could not accept responsibility. In this regard, the elders took the case to the Council of elders (Njuri Ncheke) who sentenced the person to pay a fine to the elders, his age mates, and

the parents of the girl. In some extreme cases, the man would be hang at the road junctions. This was the highest form of embarrassment … and was also a warning to the community members". I remember before the white men invaded our Land, there was one notorious man from our village who was hanged because he notorious of raping young girls in the village……. and also beating them up……….. (KII 20, 2021)

K21 affirms the argument in the excerpt below:
"Remember, induced abortion in Igembe was traditionally a communal affair, even though it was executed very secretively…Once the elders decided to have a pregnancy terminated, the girl"s decision was not sought …she had no option here because abortion was conducted as a form of penalty for breaking the norms of our community. Traditionally, her mother and the aunts would be sent to inform the pregnant woman that she was to undergo an abortion procedure – this mainly targeted girls who got pregnant before circumcision, which was against the community norms" (KII 21, 2021).

The patterns that emerged in this analysis indicated that abortion is considered as both a personal and cultural dilemma in managing unwanted pregnancies among the people of Igembe. This study also revealed that even though there are legal frameworks against induced abortion in Kenya, there are influential personal factors that cannot prevent women from obtaining an abortion once a woman has made the decision to procure abortion.

DISCUSSION

This study finding revealed that young girls (those who are uncircumcised) and unmarried women are traditionally prohibited from pregnancy before marriage. Customarily, the marriage rites of courtship and payment of bride wealth paved the way for sex and pregnancy among girls and young women in Igembe. In addition, Igembe culture demanded that girls should be virgins before marriage hence the community stigmatised and sanctioned pregnancy before marriage and circumcision and if, an uncircumcised boy made a girl pregnant. In addition, majority of young women register the largest proportion of individuals who choose abortion as avenues to resolve events of unintended and untimed pregnancies (Bankole et.al., 2015). Arguably, these women were subjected to induced abortion to ensure the social norms were adhered to and was a deterrent to reduce pre-marital sex and aversion of having many children born outside wedlock. In addition, maintaining and ensuring parents honour for bringing up their children well and pride for getting the whole bride wealth, and ensuring the girls were married as first wives to potential husbands were the key motivations for induced abortion in Igembe. In addition, this study finding affirmed that most women sought induced abortion services to terminate pregnancies which occur when they –as individuals and the community especially in the older days are unprepared for motherhood. Women in the Igembe community abort pregnancies that are culturally termed as

unplanned and unacceptable. This study further established that the Igembe community holds to their traditional practices and customary norms, many of which influence decisions for induced abortion.

Among the current generation, this study established that, even women who are in legitimate relationships and also in marriages, may seek abortion services to avoid some personal and marital difficulties. Further, it was evident that this study established that another driver of induced abortion among the school going girls is to enable them to continue with their education. Similarly, the bulk of women who seek induced abortion services are relatively young and unmarried. Most of those who reported inducing abortion indicated that they terminated their pregnancies because they were either students in school (secondary or college) or not married. The women wanted to complete their education and secure employment with the hope of having a bright future to enable them become self-sufficient. They desire to have a favourable economic and social climate including the presence of a responsible father who is ready to provide for the children and give them a sense of identity. These findings concur with the studies by Loi et al. (2018), Marlow et al. (2014), and Ndunyu (2013) among women in Western and Coastal regions of Kenya, and Shell-Duncan, Gathara and Moore (2014); and UNICEF (2016), that there are influential personal factors that cannot prevent women from obtaining an abortion once a woman has made the decision to procure abortion.

These findings are supported by Popinchalk and Sedgh (2019), that over 90% of all abortions happen before 13 weeks with more than two-thirds occurring before the first nine weeks of gestation.

CONCLUSION

This study concluded that abortion decision making is motivated by both internal and external forces that are carefully considered. The decisions to procure abortion override social, religious convictions, and legal restrictions because a woman‟s views on abortion are considered necessary and inevitable at that particular time. Further, this study finding concluded that women who procured abortion irrespective of the internal or external drivers, the women are still ardent proponents of motherhood. Even within the dilemma of unwanted and unplanned pregnancies, they seek induced abortion with the desire to bring up their future children in a socially acceptable setting and better relationships. The findings further concluded that the high prevalence of induced abortion services is evident that the traditional norms and legislations have not been successful in achieving positive outcomes against induced abortion. On the other hand, customary norms and the socio-economic forces that regulate sexual and reproductive health rights, including sustainability of marital relationships are very instrumental in predicting women‟s

decision to terminate or keep unplanned pregnancies. Finally, this study concluded that the widespread availability of induced abortion services is a direct response to a „felt social problem" arising from the unending prevalence of unplanned pregnancies in Kenya and around the globe.

The prevalence of unplanned pregnancies among adolescent girls and unmarried women needs concerted efforts between the government and the traditional community gatekeepers of the Kenyan communities. There is need for robust awareness on of sexual and reproductive health rights and information at the family, the community and the school levels. The traditional settings should educate the public on the social and health risks of induced abortion.

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Effect of Provision of Nutritious School Meals on Educational Achievements in Secondary Schools in Kibra Sub-County in Nairobi, Kenya

Author: Margery Wanjira Muriuki

Department of Postgraduate in Education
The Catholic University of Eastern Africa
P. O Box 62157-00200, Nairobi –Kenya
Email: mmuthire@yahoo.com

ABSTRACT

Over the past decade, a number of school health intervention programmes have been implemented in Kenya. Despite the implementation of these interventions, questions on their effectiveness to educational outcomes still arise. This study attempted to investigate effect of provision of nutritious school meals on educational achievements in secondary schools in Kibra Sub-county in Nairobi, Kenya. The research was guided by the question of how provision and access to adequate nutritional school meals affects educational achievements in secondary schools in Kibra Sub-County. The study used a mixed method design, namely convergent parallel design. The following people were included in the study's target population: form 3 and 4, and school matrons. A target population of the study was 3277 students and 18 matrons. A sample size of 354 respondents was selected through a combination of sampling techniques: cluster random sampling, homogeneous purposive sampling, proportionate sampling, simple random sampling and expert sampling. Student's questionnaires and matron's interview guide were used to collect data. The data gathered was both qualitative and quantitative. Thematic analysis was used to analyze qualitative data, and the results presented in verbatim and narrative form. The descriptive and inferential statistics were used to analyze quantitative data from students' questionnaires. The quantitative data obtained was analyzed using descriptive statistics such as percentages and frequency counts. SPSS statistical software was used to analyze the quantitative data (version 23). The data were then presented using frequencies and percentages and summarized using tables. The study found that nutritious school meals have a significant effect on education achievement in schools. The study recommended that concerted effort is required to ensure that quality and quantity of nutritious school meals was maintained at all times for better education outcome in secondary schools. Further, school management should promote healthy diets by providing a variety of foods, such as high-fiber foods, plenty of fruits and vegetables, legumes, and limiting intake of fats, free sugars, and sodium.

Keywords: *Nutrients provision, nutritious school meals, educational achievements, secondary school achievements, nutritional meals.*

1.0 INTRODUCTION

A nutritious meal is one that contains the right proportions of carbohydrates, proteins, fats, vitamins, and minerals to keep one healthy (FAO & WHO, 2014). Nutritional meals are important for allowing the brain to function at its best and enhancing learning (Dheressa, 2011). Proteins found in foods such as meat, milk, fish, beans, pigeon peas, cow peas, green grams, and others are used to make most body tissues, including neurotransmitters, which are used to carry information in brain cells (Nabarro, Monon, Ruel &Yosef,,2012). Students become lethargic, withdrawn, and passive as a result of a protein deficiency, which has an impact on their ability to learn. Carbohydrates, which can be found in grains, fruits, and vegetables, provide enough energy to keep the brain going. Dizziness and mental confusion can be caused by fluctuating carbohydrate levels, both of which have an impact on cognitive performance and, as a result, learning outcomes. Fats, which make up to 60% of the brain, act as a messenger in the partial control of moods.

Students' foods should always be enriched with the proper amounts of fats because they are growing and learning at the same time. Vitamins and minerals aid in the transmission of messages as well as the cognitive process. As a result of their inadequacy, students' attention spans are short, resulting in poor academic performance (Dheressa, 2011). Each country has its own set of dietary guidelines for school meals, so schools should commit to providing highquality meals that provide the energy and nutrients that students require to achieve their full potential.

According to a study on School Meals and Classroom Effort: Evidence from India (Afridi, Barooah, & Somanathan, 2013), school lunches have the potential to improve academic performance in the classroom. In concurrence, Prangthip, Soe, and Signar (2019) indicated that students who eat a balanced diet perform better in exams, have better behavior and attendance at school, and complete their assigned tasks more thoroughly than students who do not eat a balanced diet.

Ngussa,(2016) established that students in schools that provide food services have a significantly higher mean score in learning participation than students in schools that do not provide food services. As a result, food availability has a significant impact on the rate of learning participation. According to Rotimi's (2019), students who have access to a balanced diet perform better than students who do not; nourished students outperform malnourished students; and food availability has a significant impact on academic performance.

In Kenya, the school feeding program is a worthwhile intervention that is well-received by parents, teachers, and students because it improves access to education and school enrolment, particularly among poor communities living in informal settlements (Aila, 2012). As a result of the feeding

program, students are more likely to participate in class since they have access to a well-balanced diet that keeps them active.

Students from low socioeconomic areas experience greater educational impact due to poor health emanating from poor nutrition. As such, improving their health through provision of nutritious school meals improves their ability to benefit from education. Furthermore,since students spend much time at school, schools that actively work to improve student's health through nutrition interventions report higher educational achievements. On the contrary, the unavailability of these interventions transforms schools into unfriendly environment with poor educational achievements. Therefore, this study intended to examine effect of provision of nutritious meals on educational achievement in secondary schools in Kibra Sub-county in Nairobi, Kenya.

2.0 METHODOLOGY

This study employed a mixed research method. In a mixed method study, researchers gather, analyse, and combine both quantitative and qualitative data in one study. Because both quantitative and qualitative approaches provide a greater grasp of the research problem when used together, the researcher was able to examine multiple perspectives and identify links between the variables under inquiry by using a mixed methods approach (Creswell & Clark, 2011).

The study comprised of all the 18 secondary schools in Kibra Sub-County; 8 were public while 10 were private secondary schools. All the 18 school matrons, 3277 form 3 and 4 students. From this target population, samples for data collection were selected.

Cluster and random sampling procedures were used to select 4 public and 6 private secondary schools. The schools were categorized as: public/private day, public/private boarding secondary school. The selection made a total of 10 secondary schools. This formed 55% of the total 18 secondary schools that is higher than the minimum 10% as recommended by (Creswell, 2014). Expert sampling was used to pick school matrons who, in the researcher's opinion, had a high level of understanding about the research subject. For form three and four students, homogeneous purposive sampling was utilized in the selection process. These students were expected to bring on board several characteristics that enabled the researcher to make generalizable conclusions because they were believed to have stayed longer in the schools and comprehended the nutrition and WASH resources put in place in the schools.

The study determined sample size of different respondents. Table 1 shows a summary of the sample size of the respondents.

Table 1

Summary of sample size of the respondents

Respondents	Target Population	Sample Size
Students	3277	344
School matrons/Cateress	18	10
Total		354

The sample size of students was 344 from a target population of 3277. The study sampled 10 matrons out of 18 giving a total of 354 respondents.

Data were collected using questionnaires and interview schedules. Questionnaires were utilized to collect information from students, while interview schedules were used to acquire information from school matrons. Students' questionnaire and matron's interview guide generally covered background information on effect of nutrition on students' educational achievement.

The descriptive and inferential statistics were used to analyze quantitative data from the matrons' and students' questionnaires. The quantitative data obtained were analyzed using descriptive statistics such as percentages and frequency counts. SPSS statistical software was used to analyze the quantitative data (version 23). On the other hand, qualitative data obtained from matron's interview schedule were analyzed by thematic analysis. This method is a concept of qualitative analysis for identifying, analyzing and interpreting themes from the acquired data. A six-stage thematic analysis framework devised by Braun and Clarke (2006) was followed. These stages included: transcription, initial coding, identifying themes, reviewing the themes, defining and naming the themes, and producing the report.

3.0 RESULTS

3.1 Demographic Characteristics

Slight below a half (47%) of the respondents were male and 53% were female. In terms of age, a vast majority (82.3%) were aged 17 years and above while 17.7% were aged between15 and 16 years. Regarding the school category, 57.1% of respondents were from public schools while 42.9% were from the private schools.

All the 6 matrons interviewed were female. Besides, a vast majority (83.3%) had attained a certificate as the highest level of education and 16.7% had a diploma. In terms of their work experience, slightly above a third (33.3%) of the respondents had worked as matrons for less than 3 years, half (50%) of the respondents had work experience of between 3 and 5 years while 16.7% had an experience of more than 5 years. In determining whether the matrons had received training on health intervention of nutrition, slightly above two thirds (66.7%) of the respondents had never received such training while slightly above a third (33.3%) of respondents confirmed to have been trained.

3.2 Effect of Provision of Nutritious Meals on Student's Educational Achievements

The study was interested in establishing the effect of provision of nutritious meals on educational achievements in secondary schools in Kibra Sub-county in Nairobi, Kenya. In answering this objective, the study examined the level of availability and adequacy of nutritious school meal, nutritional composition of food served and effects of provision of nutritious meals on educational achievement.

3.2.1 Level of Availability and Adequacy of Nutritious School Meal

The level of availability and adequacy of nutritious school meals in the selected schools was assessed through the use of a questionnaire which sought the student's responses on availability of lunch programme, adequacy and composition of the meals offered. Table 2 shows the level of availability and adequacy of nutritious school meal.

Table 2

Level of Availability and Adequacy of Nutritious School Meal

Lunch program in schools	Category	Frequency	Percent
Lunch program offered	Yes	254	100%
	No	0	0.0%
Amount of meals served	Adequate	186	73.4%
	Not adequate	68	26.6%

All respondents (100%) strongly agreed that lunch program was offered in their respective schools as shown in Table 2. Majority (73.4%) of the respondents rated the portions of food served to them for lunch as adequate while 26.6% of the respondents reported that the amount of food served for lunch was not adequate. This was explained by one of the matron on an interview as follows:

> It is always our wish that we provide students with adequate meals, but at times when the suppliers who provide us with foodstuffs are not paid in good time, they stop bringing food to the school and we are forced to cook and serve whatever food is in the store. This make the students complain of the small rations given to them (Interview with matron 3, March, 2021).

Another matrons' view was that girls received lesser amounts of food than boys and supported her sentiments by saying that:

> In future, boys and girls should be served separately since when the food is being distributed, boys by virtue of being stronger than girls demand a bigger share of food. This result to some girls retreating and sharing the little food that boys remain (Interview with matron 5, March, 2021)

Another matron emphasizing the need for adequate school meals posited that:

> Lack of adequate school meals has a bearing in school discipline. When we serve little food, some students who are not satisfied with the amount end up stealing money from their peers to buy snacks from the school canteen. Since this behavior is socially unacceptable, they end up being rejected and isolated by others. Hence, they develop low self-esteem and this even makes them miss school (Interview with matron 6, March, 2021).

Still in support of these findings, another matron reported that the challenge of inadequate food was not difficult to sort but according to her views, schools received little support from the stakeholders especially parents. She had this to say:

> Actually, when the administration invite parents to come to school and discuss
>
> the issue of students' meals, many do not turn up. This leaves the school with no option but to tell us to cook and serve what is available in the stores (Interview with matron 1, March, 2021).

These findings implied that all of the schools sampled in this study had a lunch program. The findings also showed that majority of the sampled schools provided adequate food to the learners. The findings further revealed that the school administration had an administrative role in ensuring that parents participated actively in the issue of providing adequate nutritious meals to students.

3.2.2 Nutritional Composition of Food Served

On composition of food served to the students, the study established that a combination of rice, maize, beans, cabbage/sukumawiki, beef, ugali, cooking fat and salt was provided for lunch but on alternate days. This was in line with the Homegrown School Meals Guidelines (2009) on composition of nutritious school meals. The guidelines outline the composition of nutritious school meal as one which comprises of cereals (maize, rice, sorghum, and millet), pulses (beans, pigeon peas, cow peas, and green grams), vegetable oil and iodized salt. Table 3 gives a summary of the composition of food provided to students in both public and private schools.

Table 3

Nutritional composition of food served

Food composition	Public	(n=145)	Private (n=109)	
	frequency	percent	Frequency	percent
Rice + beans + cabbage + oil + salt	145	100%	109	100%
Maize + beans+ cabbage +oil + salt	145	100%	65	59.6%
Ugali + meat + Sukuma + oil + salt	83	57.2%	86	78.9%

Research findings on Table 3 showed that the composition of rice, beans, cabbage, oil and salt was the most popular meal served across public and private secondary schools as confirmed by all of the respondents (100%). On the other hand, all of the respondents (100%) interviewed from the public schools indicated that composition of maize, beans, cabbage, oil and salt food was offered in their schools while 59.6% of respondents from private schools category admitted presence of maize, beans, cabbage, oil and salt food meal in their school. This implied that the composition of maize, beans, cabbage, oil and salt was a dominant meal in the public schools. In addition, majority (78.9%) of the respondents in private schools indicated that the composition of ugali, meat, sukumawiki, oil and salt was the one mostly served in their schools while 57.2% of the respondents from public schools confirmed that this meal was offered in their schools. The variation in meal composition between the two school categories could be explained by the difference in parents' socio-economic status. Parents in private secondary schools were thought to be more financially endowed, hence could afford to provide their children with a choice of school meals. Overall, children in Kibra Sub-County in both private and public secondary schools received nutritious meals; however, different meal compositions were more popular in one school category than the other.

3.2.3 Effects of Provision of Nutritious Meals on Educational Achievement

On effects of provision of nutritious school meals on educational achievement, respondents were given questionnaires with statements on which they were asked to indicate their level of agreement or disagreement on a five-point Likert scale. This was to help the researcher gain a better knowledge of the impact of appropriate nutritious school meals on students' educational achievements. To make it easy for inferential analysis, the responses were condensed into three continuous scales of either agree, undecided or disagree. A comprehensive descriptive analysis of these statements on effect of provision of nutritious school meals on educational achievement is summarized in table below.

Table 4

Effect of Provision of Nutritious Meals on Educational Achievement

	Agree	undecided	Disagree
Good nutrition in my school leads to high attention and retention among students.	145 (57.2%)	23 (9.0%)	86 (33.7%)
Provision of adequate nutritious school meals has resulted to high student's enrolment.	127 (50.0%)	20 (7.7%)	106 (41.6%)
Provision of adequate nutritious school meals has reduced absenteeism among students.	101 (39.6%)	26 (10.1%)	128 (50.3%)
Quality school nutrition improves students' performance through improved cognitive functions.	172 (67.6%)	27 (10.6%)	55 (21.8%)
Provision of adequate nutritious school meals has led to reduced cases of health problems in my school.	175 (69.0%)	23 (8.9%)	56 (22.0%)

As shown in Table 4, 57.2% of the respondents agreed to the statement "Good nutrition in my school led to high attention and retention among students," while slightly above a third (33.7%) of the respondent disagreed. Another 9% of the respondents was unsure of whether good nutrition played any role in students' attention and retention. This demonstrated that providing good nutrition in the school resulted in high levels of attention and retention among students.

The statement "Provision of adequate nutritious school meals had resulted to high student enrolment" was agreed by half (50%) of the respondents while 41.6% disagreed. Others 7.7% were completely undecided. As a result, it was concluded that providing regular school meals led to higher students' enrollment.

The statement "Provision of adequate nutritious school meals had reduced absenteeism among students" was agreed by 39.6% of the respondents, while slightly more than half (50.3%) disagreed. Others 10.1% were undecided. This could have been due to the fact that school meals were provided every day; hence the daily routine provision of school meals did not serve as a motivation for students to attend school. This implied that school meals could increase attendance only when they were served intermittently in alternate days.

Slightly above two thirds (67.6%) of the respondents agreed to the statement "Quality school nutrition improved students' performance through improved cognitive functions" while 21.8% disagreed. The rest 8.9% were undecided. This inferred that good school nutrition helped boost performance by improving cognitive functions such as attention, alertness, memory among students.

The majority (69.0%) of respondents agreed to the statement "Provision of adequate nutritious school meals had led to reduced cases of health problems in school," while 22% disagreed with the same statement. The remaining 8.9% of them were undecided. As a result, providing adequate nutritious school meals reduced the number of cases of health problems in schools.

4.0 DISCUSSION

The study examined nutritional composition of food served in secondary schools in Kibra Subcounty in Nairobi, Kenya. The study found that there was no micro-nutrient supplementation to protect students from micronutrient deficiencies. The findings were consistent with those of Yendaw and Dayour (2015), who found that meals prepared for students were of moderately low quality and quantity. This finding highlighted the importance of good monitoring of nutrition intervention implementation in secondary schools by the Quality Assurance and Standard Officers.

The study looked into the effects of proper nutrition on student attention anretention. According to the findings, students with good nutrition had better attention and retention. The finding was in agreement with a study conducted by (Golley et al., (2010). In the study, the researchers discovered that school food and dining room interventions increased alertness, concentration, memory and engagement among students in the hours following lunch.

The researcher investigated the effect of providing adequate nutritious school meals on student enrolment. The study found that providing regular school meals resulted in a high level of student enrolment. This was in line with the findings by Githuku (2015), who concluded that the frequency of school feeding programmes aided in increasing early childhood education. Indeed, presence of

well-organized school meals programmes was reported to encourage parents to enroll their children in such schools.

The effect of providing adequate nutritious school meals on student absenteeism was also examined by the study. The availability of adequate healthy school meals, according to the study findings, had no effect on students' absences. This was explained by what Anderson, Gallagher and Ritchie (2018) discovered in their study; that school meals boost attendance only in schools where meals are not served on a daily basis but learners receive the meals only when they attend school.

Furthermore, the study investigated how nutritious school meals affected student performance. According to the study findings, good school nutrition boosts performance by improving cognitive functions such as alertness, attention, memory and good visual display. These study findings were in agreement with what Anderson, Gallagher, and Ritchie (2018) found that providing quality nutritious meals influenced students' academic achievement.

The study also looked at how providing adequate nutritious school meals had affected cases of students' health at school. According to the findings of this study, providing adequate nutritious school meals reduced the number of health problems in schools. In concurrence, the National School Health Policy reports that poor students' nutrition leads to ill health, which has detrimental influences on school attendance and enrolment (Government of Kenya, 2009).

5.0 CONCLUSION

The study examined effects of provision of nutritious school meals on educational achievements in secondary schools in Kibra Sub-county in Nairobi, Kenya. Overall, the findings suggested that provision of nutritious meals to students was associated with higher educational achievements. However, despite the fact that nutritious school meals had a significant effect on education achievements in schools there were gaps in terms of provision, quality and quantity. As such, the study recommended that concerted effort was required to ensure that the quality and quantity of nutritious school meals was maintained at all times for better education outcome in secondary schools. Further, school management should promote healthy diets by providing a variety of foods, such as high-fiber foods, plenty of fruits and vegetables, legumes, and limiting intake of fats, free sugars, and sodium. This should not be a difficult task for school administrators, as the Ministry of Education in Kenya, like many other countries, has a National School Food Guidelines in place.

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ASSESSING LEARNERS' ERRORS IN THE SPECIFIC LANGUAGE ELEMENTS IN ESL CLOZE TESTS IN SELECTED PUBLIC SECONDARY SCHOOLS IN KAJIADO

WEST, KENYA

Authors: Rosemary Makena, Caroline Kinuu Kimathi & Beth Njeri

The Catholic University of Eastern Africa
P.O Box 62157 – 00200, Nairobi – Kenya
Email: makenarosah@gmail.com

ABSTRACT

The purpose of this study was to assess learners" errors in the specific language elements in English of Second Language cloze tests in selected public secondary schools in Kajiado West, Kenya. The study employed cross-sectional survey research design. Both random and purposive sampling procedures were used to arrive at the study sample. Two public secondary schools in Kajiado West Sub County were selected using purposive sampling procedure. Further, Form Four learners were purposively selected because they are in their final year of the secondary school course having learned English as a second language for close to 12 years. The study sample size included fifty (50) ESL learners in two selected public secondary schools in Kajiado West. This study adopted the following cloze test as the main tool to measure leaners" ESL proficiency. Scoring of the Close Test was done using the exact word technique and the results were analyzed and presented using quantitative approach. The study established that there is confusion among students about use of various elements of speech including but not limited verbs, prepositions, nouns and adverbs. Thus, more concerted effort is needed to improve students "performance in cloze test and to avoid unwarranted errors.

Keywords: *English of Second Language, cloze tests, specific language errors, specific language elements.*

1. INTRODUCTION

Language testing is a process of gathering information about test-takers' performance under test conditions. Testing is essential in language learning to determine where students are struggling in a language course, to investigate progress in order to reflect how well students are learning a specific subject, and to provide a general idea of students' proficiency in the target language (Bachman, 2010).

The cloze procedure, according to various studies, is a good test of overall English language proficiency. The cloze procedure, according to Klein-Braley (2016), is an integrative, global measure of language competence. Cloze tests, she explains, assess the grammar of expectancy, which underpins the abilities of thinking, understanding, speaking, reading, and writing. According to Lee and Wu (2018), Taylor (1953) coined the term "cloze" from the Gestalt school of

psychology's concept of "closure," in which people tend to fill in the blanks with their prior experiences or background knowledge. He goes on to say that humans have the ability to foresee what will happen next in a sequence of events.

According to Alduais (2012) the cloze test is an integrative, global measure of language competence of grammar of expectancy underlying the skills of thinking, understanding, speaking, reading and writing. A cloze test requires test takers to fill in words that have been removed from a passage in a systematic manner. Every word, such as every sixth, seventh, or eighth word, could be deleted. Standard-length blanks replace the missing words, and test takers must fill in each blank with an appropriate word (Brown, 2013). Bachman (1981) states that different deletion rates would either make the text more difficult or cause unpredictable differences in difficulty, thus influencing performance. He goes on to say that the nature of the text, such as its familiarity and difficulty level, will affect the cloze's reliability and validity, and that these factors will either help or hinder cloze performance. Other considerations include scoring procedures and reader familiarity with the content. The exact word method, multiplechoice scoring method, and contextually acceptable word method are all examples of scoring methods. The „exact word method' requires test takers to provide the original word that was deleted from the text, whereas the „contextual acceptable word method' allows for the use of synonyms or semantically acceptable words to fill in the gaps. Therefore, the goal of the study was to assess learners'' errors in the specific language elements in ESL cloze tests in selected public secondary schools in Kajiado West, Kenya

2. METHODOLOGY

2.1 Research Design

Research design is a plan, a roadmap and blueprint strategy of investigation conceived so as to obtain answers to research questions (Kothari, 2004). This study employed cross-sectional survey research design. This design was used for the following reasons: The design is useful in describing the characteristics of a large population, makes use of large samples, thus making the results statistically significant even when analyzing multiple variables, many questions can be asked about a given topic giving considerable flexibility to the analysis. The design also allows use of questionnaire as a method of data collection. Further, the findings of the study can be generalized (Owen, 2002). This design was used in this study since it involved two public secondary schools in Kajiado West.

2.2 Sampling Technique Sample Size

In this study, both random and purposive sampling procedures were used to arrive at the study sample. Two public secondary schools in Kajiado West Sub County were selected using purposive sampling procedure. This procedure was used since the schools had characteristics of study interest. The researcher is also a practising teacher of English from the locality hence more convenience in the logistical considerations. Further, Form Four learners were purposively selected because they are in their final year of the secondary school course having learned English as a second language

for close to 12 years. Moreover, the Ministry of Education English syllabus clearly lays emphasis on the acquisition of communication competence and becoming proficient in language as a desirable goal at the secondary school level. Simple random sampling procedure was also used to arrive at the sample of four students who took part in the study. From each school, a representative number of form four students was randomly picked. In total, fifty ESL learners were randomly selected from the two schools.

The study sample size included fifty (50) ESL learners in two selected public secondary schools in Kajiado West. This sample size was deemed adequate for quantitative analysis.

2.3 Data Collection Instruments

This study adopted the following cloze test as the main tool to measure leaners" ESL proficiency: Neither time nor affluence removes memories ___ childhood poverty. Experiences of poor children illustrate how significant ___ and status are in our society. Some adults think their ___ or father was responsible ___ their attitudes about money. The current understandings of ___ parents" past problems with money often provide little solace. A ___ of adults overcome the stigma of having been ___ as children. There are ___ children who also develop unhealthy attitudes about money. Such ___ imagine that money is all they need to ___ it in life. There is, however, more to life than money.

The cloze test tasks were administered to the sampled language learners. This study used one cloze test derived from the past KCSE English paper 1 Test materials from the year 2007-2018 since the incorporation of the cloze test in English language test. The Cloze Test was administered in a testing setting in order to determine the learners" performance on specific language elements and the errors committed by learners in the specific language elements.

2.4 Data Analysis Procedure

Scoring of the Close Test was done using the exact word technique and the results were analyzed and presented using quantitative approach. Qualitative data collected using the Cloze Test was coded using a statistical application, namely SPSS version 21. The qualitative data was quantified to produce statistical proportions using frequencies and percentages. Data was further summarized using tables. The findings on language elements, language errors and Cloze Test performance were presented using frequencies and percentages.

3. RESULTS

3.1 Introduction

This section presents the findings of the study based on the following five cloze test items that were given to learners in selected public secondary schools in Kajiado West: Neither time nor affluence removes memories ___ childhood poverty; some adults think their ___ or father; was responsible

___ their attitudes about money; there are ___ children who also develop unhealthy attitudes about money and such ___ imagine that money is all they need

3.2 Neither time nor affluence removes memories ___ childhood poverty

The study assessed the students" response to the cloze test item, "*Neither time nor affluence removes memories ___ childhood poverty*". Table 1 shows the learners" response to the item.

Table 1

Neither time nor affluence removes memories ___ childhood poverty

Response	Frequency	Percent
Of (Answer)	34	68.0
On	3	6.0
About	3	6.0
From	5	10.0
In	2	4.0
For	2	4.0
Make	1	2.0
Total	50	100.0

As shown in Table 1, slightly above two thirds (68%) of the respondents were right by indicating

"of" as the correct answer. The remaining 32% of them erroneously answered the question. As shown in the table, they provided answers such as "on", "about", "in", "for", and "make" which are erroneous.

3.3 Some adults think their ___ or father…

The study assessed the students" response to the cloze test item, "*some adults think their ___ or father*". Table 2 shows the learners" response to the item.

Table 2

Some adults think their ___ or father

	Frequency	Percent
Mother (Answer)	40	80.0
Provide	1	2.0
Own	1	2.0
Parents	3	6.0
Status	1	2.0
	1	2.0
Ancestors		

Guardian	1	2.0
Money	1	2.0
Elders	1	2.0
Total	50	100.0

The vast majority (80%) of the respondents were right by indicating "mother" as the correct element. The remaining 20% of them erroneously answered the item. They provided answers such as "provide", "own", "parents", "status", "ancestors", "guardian", "money", "elders" which were erroneous.

3.4 Was responsible ___ their attitudes about money

The study assessed the students" response to the cloze test item, "*Was responsible ___ their attitudes about money*". Table 3 shows the learners" response to the item.

Table 3:

Was responsible ___ their attitudes about money

Response	Frequency	Percentage
For (Answer)	26	52.0
In	2	4.0
To	13	26.0
Afford	1	2.0
On	3	6.0
Towards	1	2.0
Of	3	6.0
At	1	2.0
Total	50	100.0

As shown in the Table 3, slightly above half (52%) of the respondents were correct by indicating "for" as the correct answer. However, nearly half (48%) of students provided wrong element (preposition).

3.5 There are ___ children who also develop unhealthy attitudes about money

The study assessed the students" response to the cloze test item, "*There are ___ children who also develop unhealthy attitudes about money*". Table 4 shows the learners" response to the item.

Table 4

There are ___ children who also develop unhealthy attitudes about money

	Frequency	Percent
Some (Answer)	16	32.0
The	1	2.0
More	1	2.0
Adults	1	2.0
Several	1	2.0
About	2	4.0
Many	20	40.0
Few	1	2.0
Poor	2	4.0
Those	3	6.0
Me	1	2.0
Also	1	2.0
Total	50	100.0

Slightly over two thirds (68%) of students gave a wrong answer to the item on *"there are ___ children who also develop unhealthy attitudes about money". Only 32% of them gave a right answer.*

3.6 Such ___ imagine that money is all they need

The study assessed the students" response to the cloze test item, "*Such ___ imagine that money is all they need*". Table 5 shows the learners" response to the item.

Table 5

Such ___ imagine that money is all they need

Response	Frequency	Percent
Children (Answer)	17	34.0
Can	3	6.0
Would	1	2.0
In	1	2.0
Case	1	2.0
Chacters	1	2.0
Kind	1	2.0
People	8	16.0

They	4	8.0
That	6	12.0
As	3	6.0
Do	1	2.0
May	1	2.0
Also	1	2.0
Should	1	2.0
Total	50	100.0

As shown in the table, slightly over a third (34%) of the respondents indicated the correct element "children" as the answer. Two thirds (66%) of the respondents gave the wrong element.

Some of them indicated answers such as: "can", "would", "in", "case", "characters", "kind", „people", "they", "that", "as", "do", "may", "also", "should" . In addition, some of the students drifted away from the intended element by specifying other elements that were not nouns such as "they", "that", "as", "do", "may", "also", "should" as the answer.

4. DISCUSSION

Limited studies have been done to examine the errors that are frequently made by students on a cloze test. Erisanti (2018) posits that an error is a digression committed by students due to limited understanding of the rules of the language. The findings from the current study are intended to shed more light on the common errors made by students. In addition, the findings provide know-how for teachers to focus on the elements of language which the students have not quite mastered.

The study revealed nearly half (48%) of students gave erroneous answer on the item testing use of prepositions. The existing body of knowledge has similarly revealed that students are faced with the problem of understanding propositions. Saravanan (2014) conducted a study on the use of English prepositions. The study findings showed that students experienced difficulty in the use of prepositions of place and prepositions of direction as opposed to the prepositions of time.

The study found slightly over two thirds (68%) of students gave a wrong answer to the item on

"there are ___ children who also develop unhealthy attitudes about money. The item tested use of adverbs. Some of the previous studies indicate that students are still facing challenge on the use of adverbs as elements of speech. Mat Awal et al. (2007) undertook a study on a sample of form two students and found that morphological aspect of the English language was a weakness among many students. The findings showed that students specifically had a problem in adverbs and adjectives.

According to the study, two thirds (66%) of the respondents gave the wrong element, specifying other elements that were not nouns such as "they", "that", "as", "do", "may", "also", "should". The existing body of knowledge has limited research on student''s understanding of nouns as elements of speech. Some of the existing studies have carried out a correlative study between nouns and other elements of speech. Lubis, Srg, & Lubis (2015) conducted a study to investigate whether there was a correlation between student''s ability to identify nouns and adjectives to analyzing compound nouns and compound adjectives. The study findings revealed that there was indeed a significant relationship between student''s ability to identify nouns and adjectives to their ability to analyze compound nouns and compound adjectives.

5. CONCLUSION

The study established that there is confusion among students about use of various elements of speech including but not limited verbs, prepositions, nouns and adverbs. Thus, more concerted effort is needed to improve students "performance in cloze test and to avoid unwarranted errors.

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INFORMATION AND COMMUNICATION TECHNOLOGY AGILITY AND PERFORMANCE OF ELECTRONIC-COMMERCE SMALL AND MEDIUM-SIZED ENTERPRISES IN KIAMBU COUNTY, KENYA

Author: Gathoni Millicent Nyokabi
Kenyatta University, , Nairobi
P.O.BOX 43844001000
Author Email: gathonimillie@gmail.com

ABSTRACT

Small and medium-sized enterprises (SME's) are commercial entities that operate in cooperation with formal and informal sections cutting on all economic segments. They have immensely contributed to the economic growth, social structure and prolific source of employment in Kenya. The Inclusion of E-commerce has consequently become a re-known term in business and industry, especially over the last decade. ICT creates a platform that provides for the efficient running of companies and disseminating global users at profound speeds and relatively cheap means. However, its application to SME's has been scanty and short of depth. The general objective was to determine the effect of ICT agility and the performance of E-commerce SME's in Kiambu County. A sample of 503 E-Commerce SME's was identified in Kiambu County. The study narrowed down to 50 E-Commerce SME's selected through stratified random sampling. The data collection method was the semi-structured questionnaires distributed to various ECommerce SMEs serving in the region. The drop and pick up later form was employed in the questionnaire distribution. Descriptive and inferential statistics were employed to examine the data. Descriptive included the percentages, mean and standard deviation, while inferential involved linear regression. Analysis was done using qualitative data and procedure of context analysis, and inferences realized thereof. Findings revealed that an increase in Service Delivery, Infrastructure, Innovation, and government policy increased E-commerce SME performance. Therefore, this study has demonstrated that for ICT agility to be quick-paced, service delivery must be enhanced, better ICT infrastructure, more advanced ICT innovation and finally enhanced government support.

Keywords: *ICT agility, E-Commerce SME's, Performance of SME's, Government Policy, ICT infrastructure, ICT Innovation, ICT in service delivery*

INTRODUCTION

Different countries have different definitions of SMEs. This is according to their level of economic progression (Berisha & Pula, 2015). The recognized values for the description of SME's, as explained, are businesses whose sale amount to a maximum of Kshs 500,000 a year, has Ksh 5,000,000 invested in it and has between 1-9 employees. E-Commerce is additionally

made up of four modes, Business to Business i.e. (B2B), followed by Business to Consumer i.e. (B2C), Consumer to Consumer (C2C), and finally Business to Government (B2G). These organizations are necessary for sustainable growth, In Africa, SME's account for over 60% of jobs, and as a result of this, majorities of countries have stepped up their budgetary allocations towards the same (Iddris, 2012).

E-commerce, therefore, offers a platform for evolving countries to play favorably in the world company. In Kenya, the government has integrated internet connectivity and ICT as a driving force for socio-economic progression and growth by forming the customer service centers and Ecitizen portal and reorganizing the segment that houses customer services (Kevin, Sonny, Tigineh & Sriram, 2017). They have also created a platform for businesses to register their work online.

SMEs are identified as the driving force of any growing economy (Bradford, Johnson, *et al* 2012). They are referred to as enablers of other sectors. Dealing more directly with the customers allows them to meet their requirements more accurately and offer an extra precise, individualized service. SMEs are the main employment source in Kenya and act as the major contributors to value creation. They are key players and they take on a significant role in the wider ecosystems of firms. Aiding them to adapt and flourish in a more enabling environment and active participation in digital renovation is essential for boosting economic advancement and delivering more comprehensive globalization.

Changing technologies have facilitated SMEs to strengthen their comparative advantage while reducing its structural disadvantages, stemming from resource constraints and the ability to reap economies of scale (Fred & Kolfschoten, 2012). Focus on E-commerce SMEs, and the industry has completely changed the competitive market. Not only has it redefined relationships with the customers, but it has also provided avenues for new distribution channels, payment, and various delivery methods. These companies are always looking for better innovations to upsurge sales and create various opportunities in the marketplace.

The use of technology in business has taken a remarkable upsurge, especially in the history of man. A look at the old times, business processes were run in a very dawdling manner, and this is because of the lack of tools that are efficient for faster business transactions (Mckinsey & Company, 2013). The inventions that came to be in the preceding years are relatively simple, but their ripple effects have transformed the business world into what it is today. Multiple segments of the economy have evolved to enact ICT in their business processes. This shows that coping with change is imperative for one to reap the advantages that come with the use of technology in business.

The growth and development of SME's can be attributed to the escalation of information and technology (ICT). SME's can benefit from the adoption of technology in production, incorporation of different business models, access to new markets and specialization (Kiplangat, Asienga & Shisia 2015). As said earlier, business processes in the earlier days were run erratically due to the lack of tools. Multiple economy segments have evolved to enact ICT in the business process (Mckinsey & Company, 2013). This shows that coping with change is imperative for one to reap the benefits that come with the employment of technology. ICT has completely revolutionized the universal business environment. In 2015 for example, global firms and governments used up about 3.4 trillion dollars on hardware, software, information systems and telecommunications facilities. Besides, they used up an additional 544 billion on commercial together with management consulting and facilities, much of which was directed to reforming the firm's business processes to incorporate the emerging technologies (Gartner, 2016; IDC, 2016; Shumsky, 2016).

Moreover, several of the business significance of the technology's investments comes from the organizational cultural and management variations within the firm (Saunders and Brynjolfson 2016). In simple terms, the technology is at a constant change. Globalization has also aided the advancement of innovative expertise, which means there is an unearthing each day (JoensuuSalo, Sorama,Viljamaa & Varamaki, 2018). ICT is the innovative platform for the establishment of more employment opportunities, with networking locations aiding people to network via innovations (Roztocki & Weistroffer, 2011). ICT innovations bring opportunities while provide foundations for the new business undertakings (Koissai & Pigget, 2014).

According to the World Trade Report (2014), a better infrastructural layer can go a long way in ensuring advanced digital services and admission to local, regional and global resources in an economical manner. With building, electronic devices and machines, the infrastructure stated above makes it conceivable to accommodate extensive variety of electronic services. The use of Internet in Kenya is truncated and this therefore means that E-commerce is still in its primary stage. Different studies have highlighted that there is a snowballing benefit of awareness that stems from E-Commerce. Additional study in Kenya's Capital, Nairobi, discovered that whereas E-commerce was created to make available strategic significance to developers, it became eminent that various SME's had not fully incorporated the expertise. 43% of all the organizations in the survey had no operational websites and 31% of the firms were shown to have static websites.

On average 22% of the companies bore a robust and functional website that provided a cooperative platform (Mutua *et al*, 2013). It was discovered that most administrators were not content in the use of E-commerce applications in companies they managed. Various firms use

E- commerce by employing emails alone. Some of the factors that hinder the complete rollout of Ecommerce include data security, network reliability, citizen's income, and education among others. While the negative factor remains, a gradual process includes sectors such as the banking system and payment. Numerous E-commerce remunerations have been accomplished by establishments in advanced countries, though a lot of cynicism in the significance of Ecommerce and its aids (Odedra-Straub, 2013).

Nielsen Consumer Confidence (2019), states that one in every four consumers in Kenya browse for products and services online. In general, online shopping accounts for 36% of sales in the retail sector. Many e-commerce SMEs have not yet realized how much of a growth spurt they can have by implementing all aspects of online businesses done over the internet. The choices available to these businesses are diligently related to the value of institutions, organizations, and markets available, which establish the business environment. The SMEs lack cues in learning new ways of operating businesses, comparing the competitive characteristics that come into play in this sector. Making the decisions to invest is also a major factor to consider, which includes introducing various innovations into the business strategy.

Many E-commerce SME's have also failed to progress to surpass the business life cycle levels (Amankwa-Amoah, 2018.) Previous studies show that ICT implementation among SME's is slower compared to big corporations (Ntwoku, Negash & Meso, 2017). According to Albar and Hoque (2017), key challenges in ICT implementation comprise of inadequate management backing, resistance to change, innovation deprivation, and deficiency of skilled labor, lack of efficient infrastructure together with an upsurge in the digital divide amongst the still developing and already developed countries (Apillu *et al*., 2011). The studies that concentrate on the effect of IT innovations on SME behavior in the perspective of developing countries is intermittent. The performance of E-commerce SMEs has been majorly affected by various factors, including inadequate ICT infrastructure, poor service delivery, and absence of ICT innovations, follow up of customer trends, and lack of proper marketing preferences. The SME managers have low ICT literacy due to low skill inexperience and lack of enhanced training. Therefore, it is in contrast to this background that this study pursues to determine ICT talent in the E-commerce business enactment. Therefore, this necessitated this study to analyze the effect of ICT agility and the performance of E-commerce SME's in Kiambu County.

METHODOLOGY

This outline allows the researcher to derive solutions to challenges and acts as a guide in the numerous stages of research. Mugenda (2008) describes research design as a strategy, structure or approach of investigation that is comprehended to answer research questions or problems. This study employed a cross-sectional survey research design that acted as a method of gathering

data from the respondents believed to represent the stipulated population. This is essential since it made the study appropriate and helped answer enquiries of the current status while describing the form of existing conditions of the subject being studied. It also employed the use of an instrument composed of an open and closed structured questionnaire. The population of interest was the E-commerce SME's in Kiambu County, Kenya. The delimitation used was the consideration of Kiambu County trading licenses, and only the SME's that have these certifications was captured in this study. Kiambu County has about 55,300 registered SMEs. However, the study targeted 503 E-commerce SMEs.

Purposeful sampling allows individuals with specific attributes to be targeted, resulting in a sample representing the broadest diversity of viewpoints possible (Willis 2016). Only ten per cent of the instances was crucial to the investigation. Therefore the study sample size included 50 respondents. The use of stratified random sampling selected the trial. That way, the results were more accurate, and the sample size was more significant because it came from a more homogeneous group of people. To some extent, stratification helped reduce errors by limiting the amount of variance that could be controlled. The SMEs chosen represented the various socioeconomic classes throughout the community.

Open-ended and closed-ended questions were used to create a structured questionnaire that was used to compile this data. Open sections of the survey allowed respondents to express themselves freely, while limited areas helped researchers collect quantitative data (Mugenda & Mugenda

2008). In using a structured questionnaire, respondents were better able to understand and answer the questions since the questions were clear and well-defined. This relaxed approach made it easier to obtain accurate data.

A pilot test was conducted to determine the validity of the questionnaire. This ensures that the instrument in question is long-lasting, relevant, understandable, and accurate. The respondent aided in deciding if the questions asked were appropriate for gathering accurate data on the subject matter. A trustworthy study should yield essentially the same results when repeated, assuming that the information doesn't change between it and the previous one. Cronbach Coefficient alpha, a measure of internal consistency, was used to establish this in the survey. The majority of the time, this is employed with non-dialectical things like mixed texts. The Coefficient usually is between 0 and 1.

In general, a Cronbach alpha coefficient of 0.6 indicates that an item is more reliable on the scale. A test's internal consistency shows how well all things assess a single idea inside the construct as a whole. It's a well-known fact that (Tavakole & Dennick 2011) Running or supervising the instruments increased the study's dependability. Additionally, the sample questions were

expanded to include topics closely related to each other to improve the overall coherence of the study's findings.

The research instrument's questions were also tailored to the situation being studied. The surveys were entirely under the control of the study's lead investigator. Respondents who couldn't complete the survey right away were given the option of using the "drop and pick up approach." It was also typical to set a deadline for the completion of the surveys. Increased response rates were confirmed by providing respondents with explanations of certain sections of the questionnaire to validate that the questions had been fully understood before responding.

The questionnaire-generated data must be edited, coded, and imported into a social science (SPSS) statistical package to help with data analysis. It was necessary to use descriptive and inferential statistics because the offered work created both qualitative and quantitative data. Frequency distribution tables, central tendency measurements (the mean), and validity measurements are part of the descriptive analysis (standard deviation). The linear regression model was used in the inferential analysis to model the relationship between variables. The following is a multiple linear regression equation:

$$Yi = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \varepsilon$$

Whereby:

Y = Performance of E-commerce SME's) **β_0** = Constant term.

β_1- β_5 = Coefficients of variables. **X_1** = ICT Service delivery, **X_2** =ICT Infrastructure, **X_3** = ICT Innovation, and **X_4** = ICT Literacy, **ε** = error item.

RESULTS

Demographic Characteristics

The study sought to investigate the demographic characteristics of the repondents who participated in the study. According to the statistics on gender, 72% of participants were men, while 28% were women. As a result, this shows that the study was not biased towards either gender. Regarding the age bracket, only 6.5 percent of respondents were under the age of 18, while 17.4 percent were between the ages of 26 and 30, 26.2 percent were between the ages of 31 and 35, 30.4 percent were between the ages of 36 and 40, and 13 percent were between the ages of 41 and 50.

Most of the people who answered the survey were educated, according to the results. None of the people who responded had a grade school education or less. Among those who had completed secondary school, only 4.3 percent were employed. Technical qualifications were held by 19.6% of those polled. 63.4 percent of students had a bachelor's degree, while 13% received a master's or doctoral degree. As a result, the vast majority of survey takers were well-versed in the company's operations. With reference to the duration the firms had been working, 15% of firms have been in operation for less than 5 years, 37% have been in operation for 5-10 years, 30% have been in operation for 10-15 years, and just 19% have been in operation for more than 15 years.

ICT Agility and Performance of E-Commerce Small and Medium-Sized Enterprises

The study sought to establish the effect of ICT agility on performance of SME's e-commerce. In order to identify any statistically significant relationship between ICT agility and performance of SME's e-commerce, regression tests were run considering the following hypothesis:

H1: ICT agility has a significant influence on performance of SME's e-commerce in Kenya.

Table1

Regression Model Summary

Model	R	R-SQUARE	Adjusted R square	Std. error of the Estimate
1	.453[a]	.612	.101	.84086

Source: Research Data, (2021)

The results of the regression analysis showed that 45.3% effect explained by variables under study. 61.2% symbolized the model fitness and therefore it was a good representation of the cause- effect sought in the study. These results were adjusted to 10.1% to higher error margin.

ANOVA

The ANOVA analysis for individual factors affecting ICT agility and Performance of E-commerce SMEs is presented in table 2.

Table 2

ANOVA for individual factors affecting ICT agility and Performance of E- commerce SMEs

Model	Sum of squares	Df	Mean structure	F.	Sig.
1 Regression	15.124	6	3.437	4.218	0.01b
Residual	102.144	263	0.653		
Total	117.268	269			

a. Dependent Variable: Performance of E-Commerce SME's.
b. Predictors: (Constant), ICT Service delivery, ICT infrastructure, ICT infrastructure, ICT innovation, and ICT literacy.

As per the regression model above, ICT agility has significant impact on Performance of E-commerce SMEs in which $p = < 0.01$. The effect of ICT agility reveals that a one unit change in ICT agility results to a 0.653 change in performance. As such, the regression model between ICT agility and Performance of E- commerce SMEs indicates that ICT agility where ($p = 0.01$ and $\beta = 0.653$) significantly influences Performance of E- commerce SMEs

Model	Unstandardized coefficients		Standardized Coefficients,	T	Sig.
	B	Std. Error	Beta		
Constant)	1.261	.465		2.163	0.11
Service delivery	.221	.101	.182	2.323	.021
ICT Infrastructure	.139	.141	.084	.942	.032
ICT Innovation	.256	.113	.213	.236	.024
Literacy	.046	.136	.038	.318	0.01

a. Dependent variable: Performance of E-Commerce SME's.

*Source: Survey
data (2021)*
Therefore

*Performance of E-commerce SME's1 = 1.261 + 0.182 Service Delivery + 0.084 ICT
Infrastructure + 0.213 ICT Innovation + 0.038 ICT Literacy*

The coefficients of the individual factors affecting ICT agility are presented in table 4.8 above. ICT in service delivery (p=0.21), ICT infrastructure (p=0.032), ICT innovation (p=0.024), ICT literacy (p=0.01), Government policy (p=0.000) exhibited that all the predictor variables were significant elements that had an effect on ICT agility and Performance of E-commerce SME's.

DISCUSSION

According to the findings, 0.221 rise in E-commerce SME ICT agility and performance emerges from increasing one unit of service delivery. The p-value of 0.21, which is less than 0.05, shows that service delivery is essential in ICT agility. As a result, this shows how ICT agility is impacted by service delivery. It's in line with research showing increased demands on the quality of service delivery, as well as shrinking timeframes as resources get more and more streamlined. For example, operations automation has to be improved to be more efficient.

The findings also show that an increase in ICT infrastructure by one unit results in a rise in Ecommerce SME ICT agility and performance of 0.139 in Kiambu County. The p-value of.032 indicates that ICT infrastructure is critical to ICT agility. In Kiambu County, there is a strong correlation between ICT infrastructure and e-commerce SME agility and performance. This is also fits with Duncan (2015) who noted that many startups even in already developed nations have had problems with ICT agility because of the high costs of hardware and software resources.

According to the findings, every additional unit of ICT innovation leads to an additional 0.256 increase in ICT agility. In light of this conclusion, ICT innovation is an important factor in determining E-commerce SME ICT agility and performance in Kiambu County, as indicated by the p-value of.024. This demonstrates a strong link. That's in agreement with Greton (2014), who says that a company's use of ICT innovation, such as direct communication with customers and service delivery, provides product-enhancing innovations and leads to productivity increases.ICT literacy increases ICT agility by.046 for every additional unit of ICT literacy. ICT literacy is a strong predictor of ICT agility in response to these findings. According to a study by Ongori and Migiro (2011), an organization's agility increases when its personnel are adept in

ICT operations. They also stated that one of the key obstacles to SME adoption is a lack of practical ICT skills.

Service delivery was found to be a significant influence on the ICT agility and performance of Kiambu County's E-Commerce SME's, with an increase in Service Delivery increasing ICT agility. ICT agility may be improved by implementing more efficient solutions like process automation. Some of the service delivery variables that would be most useful to E-commerce SMEs if used efficiently include Internet advertising and just-in-time inventory.

Another major determinant of E-commerce SME ICT agility is the organization's information and communications technology (ICT) infrastructure. According to the findings, there was a strong correlation between improved ICT infrastructure and higher levels of agility. Several research projects support this. While pricey, ICT investments are critical to the study's findings of company agility in the age of ICT. E-Commerce SMEs' ICT agility and performance were found to be influenced by ICT innovation discoveries. According to the results of the research, as ICT innovation increases, so does agility. In addition, this was in line with several previous studies in this field. It is only through industry innovations that network economies can spill over and result in overall productivity increases.

ICT agility was found to be significantly influenced by one's level of ICT literacy. According to the findings, this element benefited E-Commerce SME's. As a result, it was evident that an increase in E-commerce SME ICT literacy led to ICT agility. As a result, individuals who focus on honing their skills in a particular subject have a greater chance of progressing in information and communications technology (ICT). Finally, the government's influence on E-commerce SME ICT agility was significant. The government's decision to increase policy units had a good effect.

To put it another way, this shows that policies that benefit business owners will positively impact the economy. Tax and policy regulation must be geared toward the interests of enterprises. Owners and managers will be able to work together more effectively, and it will also lead to more job opportunities in the industry.

CONCLUSION

The study established the significant effect of ICT agility. Both Empirical and statistical evidence proved this variable to be imperative. Therefore, this study has demonstrated that for ICT agility to be quick-paced, service delivery must be enhanced, better ICT infrastructure, More advanced ICT innovation and finally enhanced government support. According to the study's findings, the

government should assist small and medium-sized enterprises (SMEs). ICT infrastructure was also a strong indicator of an organization's ability to adapt quickly to new technologies. The growth in linked infrastructure would lead to greater ICT agility, in conclusion. This demonstrates the link between ICT infrastructure and ICT agility. As a result, infrastructure must be a top priority for SMEs in the ICT industry to advance and achieve their goals.

Also, ICT agility was shown to be a strong predictor of ICT innovation. An increase in invention per unit would boost agility, as demonstrated. These included management support, finances, and government assistance, just a few of the many influences. A modern corporate climate relies heavily on innovation, and ICT literacy greatly influenced the agility of small and medium-sized enterprises (SMEs). Literacy increases agility by one unit. This demonstrates how critical it is to have the right set of talents when working in this industry. Managers and staff must be familiar with the hardware and software operations to do their jobs effectively. As a result, education promotion in the sector is needed to help E-Commerce SME's expand and progress.

Regulating sector fees and taxes is one way to accomplish this. The government must specify policies and legislation governing this industry before they can be implemented. The provision of network infrastructure and other forms of ICT infrastructure is also required. As a result, a plan for attracting E-Commerce SMEs will be developed. To put it another way, the county and the country's GDP will benefit from its presence. Skills' training is essential to ensure that employees have the necessary know-how to run the company. Because technology changes so rapidly, it's imperative that refresher training be offered. Innovation and the development of new company concepts and strategies must also be facilitated.

As a result, organizations will be able to flourish and discover new methods of doing business. Businesses will have a competitive advantage as a result of this. E-Commerce SME's profitability and potential impact on the community should be examined. However, in this study, this was not done thoroughly, and it is critical to look into the viability of these companies. This study likewise only made use of primary data. Research from other fields can be used to confirm or refute the current findings. This study incorporated descriptive, correlational, and aggression analytic techniques. Other methods of analysis, such as cluster and discriminate analysis, can be integrated into future studies.

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Reshaping Education in the Post COVID-19 Pandemic in Africa

Authors: [1]Mahona Paschal and [2]Titus Pacho

[1] Department of Educational Foundation
St. Augustine University of Tanzania
P.O.BOX 307. Mwanza,
Author email: Email: pajo.toronto@gmail.com

[2] School of Education and Human Resource Development
Kisii University, Kenya

ABSTRACT

The emergence of the coronavirus diseases (COVID-19) pandemic has upended the daily lives of people around the world. The COVID-19 pandemic is among the big disasters which in turn caused several changes personally and professionally in human life across the globe. Among of these changes, the education sector has been confronted to continue with face to face teaching and learning which has seemed to be unsafe for educators and students in a physical classroom. Consequently, the imposition of several mitigation measures based on social distancing and lockdown have led to the application of distance learning as a possible way for the learners to continue learning. Nevertheless, as schools reopen for face to face learning, these changes may have no value to education and may vanish. To ensure responsive education, the continuing need for education improvement must be proactive and critical in a way that prepares education to address issues and challenges in the society. This theoretical paper discusses how the COVID-19 pandemic has shaped a unique opportunity for educational changes. These changes may have been intended to happen even before the onset of the COVID-19 pandemic but received little attention of practice. Furthermore, this paper highlights the major changes that education should make to positively influence teaching and learning in the age of post COVID-19. These changes include a curriculum that is developmental, effective and personalized; leadership, policy, and pedagogy that is learner- cantered, reliable, purposeful, inquiry-based, and experiential; and delivery of education that take advantage on the strength of both asynchronous and synchronous learning.

Keywords: *Innovative education, curriculum development, pedagogy, COVID-19, online learning, Reshaping Education, Post COVID-19 Pandemic, Educational Leadership*

INTRODUCTION

Education has been understood for many thousands of years as a tool which prepare a person for life. Until these days, education remains to be a field of concern on the planet. Several professionals from different learning institutions across the world have been tirelessly trying to improve

education in the way that prepare learners to solve issues and challenges facing the society. From this standing point, there have been significant changes in the teaching and learning process in the twenty-first century. The old methods have been receiving little attention and the new pedagogies of teaching and learning are being implemented to enable learners and their instructors attain the intended goal of education in the time of globalization.

Education is viewed as the practice of freedom by which women and men deal critically and creatively with reality and discovers how to participate in the transformation of the world (Freire, 1993; Pacho, 2013). This demonstrates the value of education in today"s world and the need for change and development. Freire, 1993, advocates for a problem-solving approach to education and a progressive teaching and learning that give emphasis to new discoveries as possible ways for acquiring knowledges for solving problems that exist on this ever changing world. The growing variety of literature clearly point out that the field of education has not remained firm and static, it has been adopting several changes from time to time. The changes have been triggered by the advancement in innovation, research, social changes, and adversities that have affected human life in many ways. The COVID-19 pandemic is among the big catastrophes which in turn brought several challenges in human life across the world (WHO, 2020; United Nations, 2020). This pandemic has forced several countries across the globe to close learning institutions ranging from lower schools to higher learning institutions (Paschal and Mkulu, 2020; Batty, 2020). In his era of COVID-19, both developed and developing countries must respond creatively and quickly to alleviate the negative effects caused by adapting to remote education. The remote education has been practiced asynchronously and synchronously through radio, television, Zoom, WhatsApp, Email correspondences, and YouTube channels (Armstrong, Lugano, and Hawi, 2020). Similarly, many learning institutions adapted online methods of delivering education through zoom meeting, skype, google classroom, online YouTube videos among other online tool (Paschal and Mkulu, 2020; George, 2020). Even though remote education has faced several challenges, several literatures for example the study conducted by have shown that the pedagogies of distance learning have had a great support in teaching and learning process(Paschal and Mkulu 2020; Sun and Chen, 2016; Tagoe, 2012).

However, the several educational changes that followed in the early time as the result of the onset of the COVID-19 are not indispensable changes that education desires to make in the world of post COVID-19 pandemic. The changes were invented as a way forward to help students thrive during the COVID-19 crisis. One of the key proactive measures to the spread of the COVID-19 were closure of educational institutions, lockdowns and social distancing in many countries like Italy, Germany, Canada, United States of America, India, Kenya, Uganda, Rwanda, South Africa, Rwanda (Paschal, and Mkulu, 2020). This led to the rise of online teaching and learning to help students continue learning while at home. In this regard, the changes that took place during the pandemic were meant to respond quickly to the need for the educators and learners" continual

teaching and learning rather than to rethink education. Similarly, some of the innovation to teaching and learning were intended for a short-term purpose rather than long-term.

It is important to note that changes always exist, but the pandemic has just accelerated it. The COVID-19 has not only brought negative effects to the education sector but also has stimulated possibilities and desire for the real educational changes. The COVID-19 hit many industries across the world, and it affected many learning institutions resulting to the suspension of face to face learning by closing of schools. From this notable point, the effects of the pandemic have provided the irreplaceable opportunities for policy makers, educators, and learners come together to rethink education by planning to develop evolving education needed to meet the need of the society in the time of post COVID-19 rather than continuing with the fixed and old-fashioned model of teaching and learning that countries across the globe have been deriving.

Different professionals across the globe have revealed that there is a need of coming together to improve education by reviewing of the curriculum and teaching methodologies that allow global connectedness and fast changes in course contents, methods of delivery, and assessment in addressing issues and challenges in the society. Like any other education systems across the globe, African systems of education have been largely affected by the COVID-19 pandemic which has increased the disparities in the way education has been delivered (United Nations, 2020. In the effort to reduce the spread of the pandemic, many African governments decided to close learning institutions and teaching and learning process shifted to remote education (Kamga, 2020). The remote education was practiced in asynchronous and synchronous ways via radio, television, Zoom, WhatsApp, Email correspondences, and YouTube channels (Armstrong, Lugano, and Hawi, 2020). However, the teaching and learning using these methods faced several challenges due to the lack of planning an effective preparations. The traditional ways, rules and regulations that governed learning institutions have been slightly implemented, the examinations and tests were concealed.

Educational systems in different parts of the world have been and are different in organization and in content (Pacho, 2013). They are different partly because the societies providing the education are different, and because education, whether it be formal or informal, has a purpose. That purpose is to transmit from one generation to the next the accumulated wisdom and knowledge of the society, and to prepare the young people for their future membership of the society and their active participation in its maintenance or development (Nyerere, 1967; Pacho, 2018). To fulfil the purpose of education in the post COVID-19 pandemic, policy makers, researchers, and educators in Africa must implement more innovative ways to education. This theoretical paper discusses how the COVID-19 pandemic has shaped a unique opportunity for educational changes.

RESHAPING EDUCATION IN THE POST COVID-19 PANDEMIC IN AFRICA

This section provides a brief description of education reforms in the post covid 19 pandemic in Africa based on the following sub-sections: Educational leadership and administration, Curriculum, Pedagogy and the Learning environment

Educational Leadership and Administration

Implementing radical changes within a particular society requires a bold leadership which possess effective approaches and mind-sets to shape the future and encourage development globally (Tenuto, 2021). To enhance progression and growth of an institution and its members, the role of a leader is crucial; leadership in general is considered as one of the steppingstones for development (Rehman, Khan and Waheed, 2019). Effective leadership encompasses several managerial roles and leaders must have effective capacity of knowledge and skills to achieve the intended goals (Lopez and Ensari, 2014). Sadly, the impact of the COVID-19 pandemic has been made worse by the absence of global coordination which has raised important questions about how to ensure the health and wellbeing of people across the world. To respond to these impact and uncertainty, the role of leaders and every citizen have a unique chance to change course and put the world on track by finding proven steps to defeat the effect of the virus.

In the school contexts, most of educational leaders in Africa have been applying transformational leadership style as a way to attract and bring changes in their learning institutions. Being committed as an ethical leader brings about positive academic excellence in schools. In some learning institutions such as schools and universities, educational leaders find it difficult, challenging and even stressing to bring or adapt changes they want in their learning contexts. Effective changes in schools and bold leadership styles are interrelated. The school leaders, policy makers, and other stakeholders in education have the responsibility to employ leadership styles which act as a catalyst for innovation and social development. This is due to the following roles that leaders play to influence changes: Leaders such as educational administrators and faculty possess a distinctive position to effectively influence teaching and learning both in physical or distance learning; Leaders act as role models for planning, guiding, managing and offering support to education institutions to influence learning and positive changes; Leaders seek to evaluate and prioritize the curriculum and contents which meet the demands for effective learning and teaching; and Its leadership which enforce the application of new technologies and conducting an applicable assessment to encourage adoption of innovative practices for learning and teaching process

In this paper, we propose that African leaders need to instil and implement integrated leadership styles which has been considered as a vital innovative factor for teaching and learning. For

example, Mulford, (2008) as cited in Rehman, Khan and Waheed, (20019) noted that each single leadership style such as transformational, distributed and instructional leadership styles have their own advantages and disadvantages when compared. However, a flexible kind of leadership style, like situational leadership, partaking elements of each leadership style would be most suitable and appropriate. Comparable to that, Hallinger (2003) argued that the effectiveness of instructional leadership and transformational leadership styles are a vital force for school development. In recent times, Bahadur, Amir, Waheed and Nasir, (2017) argue that the best practices in learning institutions in Malaysia resulted by selection of the best flexible leadership styles which were adaptive and multiple in nature. The result of these flexible leadership styles indicated that the leaders were not only focusing on managerial and task practices, but also were found vital in giving valuable change , ethics and relations. Hence, the review of the literature shows that integrated leadership styles which is instructional, transformational, and moral would contribute greatly to teaching and learning success rather than using a rigid and single style.

On the other hand, as Nelson Mandela has ever said "one of the challenges of our time is to reinstil in the realisation of our people that sense of human solidarity of being in the world for one another and of and through others" (Mandela, 2006). In relation to that, there is an Ethiopian Proverb that encourage solidarity among the people. This proverbs states that „when spider webs unite, they can tie down a lion". The COVID-19 pandemic has strengthened these messages and ideas more strongly than ever, hence it is time to take bold steps by belonging to each other and standing together in solving existing world and societal problems. From that standpoint, leadership is crucial because their decision will either propel action forward or be setback for sustainability. Therefore, in this paper, we encourage leaders from every country in Africa and across the world to uphold intergenerational unity and to be realistic, idealist and visionary to make sure there is a way that build meaningful life and make positive impact on the lives of people by finding innovative ways to overcome the issue and challenges facing the society now and in the future.

Curriculum Development

Currently, millions of people across the globe seeks knowledge of, and way forwards to the countless challenges and issue facing the education sector because of COVID-19 pandemic (Tenuto, 2021; Gul and Khilji 2020). As the world changes so quickly, traditional skills, and knowledge become outdated, and an innovative set of knowledge and skills becomes more essential (Ullah 2020). In the dynamic world, its crucial to note that even career and employability skills needs to change with time. The way people do business, teach, learn and live will not be the same due partly to advancement in technologies which has exposed a new set of knowledge and demands new set of skills. These set of innovative knowledge and skills includes critical thinking, creativity, entrepreneurship, growth of mind-sets, communication, collaboration, and global competence (Duckworth and Yeager, 2015). Therefore, it is also vital for learning institutions to

reform their curriculum to respond to the issues and changes to enhance learning that liberate every individual and prepare them for the better future and for the competitive world.

As in other countries across the globe, education in African countries have been negatively affected by the so called COVID-19 pandemic (Paschal and Mkulu 2020; Armstrong, Lugano, and Hawi, (2020). As the proactive ways for education, distance teaching and learning has been initiated and practiced by many learning institutions both in African and beyond. However, the teaching and learning resources and technologies in general are limited and most of learning institutions in Africa have failed to implement distance or online education. With these challenges, COVID-19 pandemic is the stimulus for curriculum to be more proactive and responsive than it was before to ensure development of integrated curricular to permit flexibility in course contents and methods of delivery to respond to the changing and unpredictable future that the world may face. In this article, we propose for the new and responsive curriculum that will respond to the uncertainty or pandemic during the post COVID-19. Additionally, the curriculum should integrate the essentials skills of the twenty-first century to enable learners to live and work effectively in the globalised world. A twenty-first century curriculum should integrate thinking and innovation skills, information and digital literacy, and life and career skills in context across all subjects in an interdisciplinary way (Pacho, 2020). The Partnership for the 21st Century Learning (P21) has identified four essential skills (the 4Cs) for the twenty-first century: creativity, critical thinking, communication, and collaboration (Partnership for 21st Century Skills, 2008; Pacho 2020).

For human to thrive in the post COVID-19, the responsive curriculum must be prepared with the following characteristics. First, it must be proactive to influence competence to learners (Duckworth and Yeager, 2015; Wagner, 2012). A competency-based approach to curriculum development puts emphasis on the learning outcomes and less on content and its mere acquisition (Pacho 2020). Comparable to that, Ullah (2020) notes that to influence learning in this fast changing world, education should help students develop creativity, global competence and entrepreneurship skills. Moreover, the curriculum need to develop learners earn skills that will be internationally connected instead of getting a certificates. Although learning institutions can no longer utilize the traditional knowledge as a way forward to issues and challenges facing the society, the content of basic skills and its practise is still of value in human development of the African societies, but it needs to be integrated into competency-based curriculum. This will enable the curriculum to adopt a transactional or transformational approach to education and help students move from being passive recipients to active partners and participants in the teaching and learning process (Miller and Seller, 1990). Additionally, Moore (2015, p. 164-165) recommends the following features to be considered for a new and responsive curriculum:

Active and forward looking: This means that the curriculum should be focused on the present while valuing the past.

Responsive: The curriculum should respond to the changes that may occur in society and be responsible in promotion of courage to learners who wish to be change agents to solve issues and challenges

Relevance: The curriculum must promote relevant education to leaners and to the society around.

It should equip the learning institutions with stability that educators and learners need.

It also should allow individual development by instilling happiness and creativity

Generally, the study suggests that a responsive curriculum should allow learners to make their own choices of learning and sharing what they plan, innovate, develop or the results of what they have carried out as they examine the contents of the topic. However, the study suggests that the curriculum should identify the need of the learners, goals and objectives during the learning process to enable the teachers and students to select the contents based on the need of the learners. The study further proposes that during the preparation of the curriculum the education stakeholders should consider the mode of delivering contents, evaluating and assessing the learning process. From that standpoint, we adopt the following steps that must be taken in order to develop a proactive and responsive curriculum that may respond to the effect of uncertainty in the post pandemic. Figure 1 shows the processes to be undertaken in curriculum transformation.
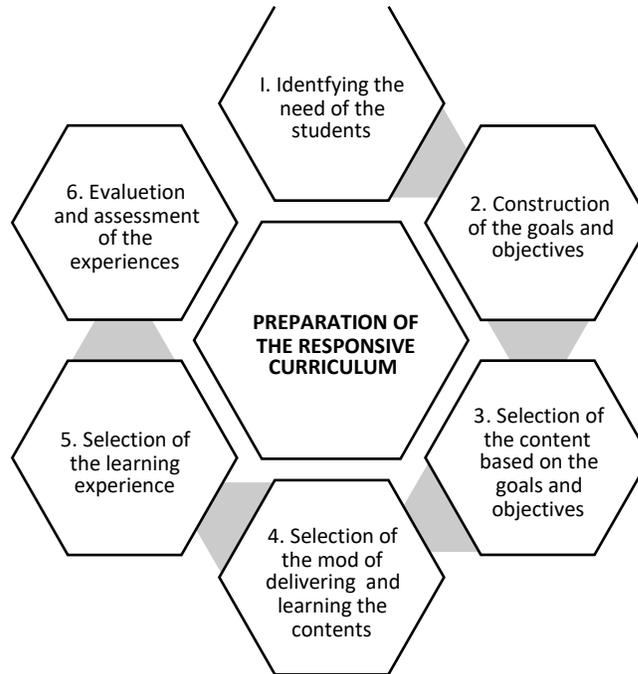
Figure 1 Processes to be undertaken in curriculum transformation

Source: Modified from Gul and Khilji 2020).

Pedagogy

Dewey (1916, in Pacho, 2018: 12) declares that education is not an affair of „telling" and being told, but an active and constructive process. Dewey insists that students must always be involved in the learning process. From the standing point of this quote, it must be illustrious that the secret of bringing attainable change in education during crisis and post crisis time is to set efforts on inventing new teaching and learning pedagogies that help in developing knowledge for solving problems and inspiring development. Therefore, the pedagogical approaches to be promoted should be implemented in such a way that passivity in learners is replaced by inspiration to embark on constructive action to transform situations, based on open experience and careful reflection (Pacho, 2013).

Literature has shown that, to enhance social, political and economic changes in the society, the need for learning institutions to improve teaching and learning pedagogies in the world is indispensable. So far, learners are convinced to involve more actively in personalized learning. Sadly enough, teaching and learning in many African countries have been practiced under traditional teaching pedagogies which is theoretical, and examination oriented in nature. This

teaching approach is dominated by traditional teaching which includes memorization, and repetition of contents being taught by a teacher (Sharma, 2018, Pacho, 2013). Besides, Damodharan and Rengarajan (2013) insists that traditional methods of teaching discourage the effectiveness of learning since it fails to meet the need of the students in the learning environment and in the society in general. The traditional and conservative approaches to education in Africa must be transformed by pedagogies which can equip learners with relevant knowledge, skills, values and attitudes to respond appropriately to the everyday realities of the changing world (Pacho, 2013). However, it important to note that no one method is appropriate in the teaching and learning process in all contexts. Therefore, a variety of pedagogies should be applied interchangeably in varied degrees to promote creativity and development of learners (Pacho, 2013).

The ineffectiveness of traditional methods of teaching and learning has amplified the call for educators and all education stakeholders to help and encourage learners be more involved in personalized learning rather than applying banking or lecture method of learning (Kallio and Halverson, 2020). There are reasons for learners to involve in personalized learning because they come from different contexts and have different passions, interests as well as level of learning. Hence, for learners to become more active in learning, they need to learn according to their interests, passions and abilities. During the learning process students need to decide what is necessary for them to learn while a teacher will be there as a facilitator rather than a dominator of the learning process. The Confucius saying „I hear, and I forget; I see and I believe; I do and I understand‟ can inspire our choices of pedagogy for enhanced retention of knowledge and application of skills. From this standpoint, learners need to learn by themselves to be creative and critical thinkers rather than gaining all the knowledge and skills from the teacher. The role of the teachers will change as well from being instructors to being facilitators of learning and coordinators of the learning resources. Teacher education needs to be more active in enabling teachers to learn more on how to care their learners as they serve as facilitators of learning and coordinators of the learning resources.

To promote the effective development of an individual, social and political economy, Pacho (2013) maintains that a good education is the one that is effective and well-organized to shape an individual‟s mind both spiritually and intellectually. Moreover, John Dewey (1916) also notes that „If we teach today as we taught yesterday, we robe our children of tomorrow‟. Similarly, Paolo Freire (1993) warns that when use obsolete passive pedagogical approaches to education, we run the risk of preaching in the desert.

Therefore, to improve the quality of education in African nations in the post COVID-19 pandemic, teacher-centred learning approach must be eliminated by developing learner-centred innovative approaches of learning. The innovative approaches must be relevant and emphasize innovation and active acquisition of knowledge for solving societal issues and problems to enhance social,

economic and political development. According to Kapur (2016), new learning methods should focus on personalized learning as well as learner-centred learning. Furthermore, the norms of teaching and learning need to be more authentic, inquiry-based as well as purposeful with the aim of instilling desirable knowledges, skills, values and positive attitude to enable learners to be more active in solving both existing and unknown problems. For instance, the models of teaching should be used based on the environment and need of the learners. They should be used interchangeably in variety of formats such as online mode of delivery, recorded lectures, social media, Massive Open Online Courses (MOOCs) as well as voice over PowerPoint. However, during the teaching and learning process learners and other education stakeholders must note that the effectiveness of the teaching and learning pedagogies come from the way they are applied and not from the approaches themselves as Pacho (2013). How to do it in terms of pedagogical approaches to enable learners to acquire the desirable knowledge, skills, values, and positive attitude is the most important in the teaching and learning process.

Learning Environment

The social environments in which teaching and learning take place generally have an influence on how learning takes place (Pacho, 2013). Learning context plays a significance role in learning. It can hinder or influence effective teaching and learning. Boa (2014) in her study of

"determinants of high academic performance in secondary schools" established that highperforming learners in secondary schools had conducive learning environment and sufficient qualified teachers who influence constructive teaching and learning to their learners. The teaching and learning environment coupled with qualified teachers in the field of education are vital in producing qualified learners who later will use their knowledge and skills to raise innovation and productivity in their country. Additionally, Montessori (2013) adds that a learning environment which is well equipped with teaching and learning resources, democracy, and constructive pedagogies is vital in helping learners acquire knowledge. Unfortunately, many countries in Africa continents are still facing a variety of challenges in offering effective and innovative education because of the poor learning contexts which is characterised with inadequate democracy, traditional teaching and learning pedagogies as well as inadequate material and human resources. For instance, in many learning institutions in developing countries in Africa failed to continue teaching and learning as a result of the COVID-19 pandemic which led to the closure of learning institutions because of lack of innovation which could help the continuation of learning. As the world tries to return to normal life, this normality will not be simply realized because of uncertainty and catastrophes which are the effects of various changes in our surroundings. Therefore, embracing and strengthening online education is vital because it can help students learn by retrieving learning resources through technology. Teaching and learning in the online mode are significant because it helps learning to take place at anytime, anywhere depending on learner"s decisions. The emergency of the COVID-19 pandemic and the experience that the world has witnessed has paved the way for education to be offered in the blended mode. To continue teaching

and learning in African countries uninterrupted in the post COVID-19 pandemic, blended mode of delivery should be effectively implemented in the education.

CONCLUSION

The outbreak of COVID-19 pandemic has made a huge impact on education globally. COVID19 has posed serious challenges to education due to COVID-19 related school closures and its disruption to traditional face to face learner and teacher interaction. However, COVID-19 pandemic may provide unprecedented potentials for the education sector in areas such as integration of technology in education, and for distance and online learning. Teaching and learning approaches will continue to take various forms and shapes depending on the context and circumstances in the ever changing innovations. The changes on how education is offered will basically include the transformations on curriculum, pedagogy, and educational policies. Majority of learners will effectively learn for global connection and to get skills and be competent to solving various global challenges as they arise in the dynamic world. Teaching and learning will be conducted anywhere, anytime. However, one may note that students have different learning abilities, by this means, we may say that innovation in learning is not the same. Hence, it is vital to rethink education by finding innovative and possible ways which will make the education be constructive, reasonable, critical and creative toward solving the fast changing world in the post COVID-19 pandemic society. To effectively address the educational challenges brought about by the COVID-19 and prepare for the future, education stakeholders must prepare for the future before the future itself keeps on developing. This means that education stakeholders must embrace integrated leadership styles, educational technology, online education, conducive learning environment, learner-centred pedagogies, and a responsive curriculum that addresses the changing needs of learners in different contexts. African countries must note that everyone has an idea but only few turn their ideas into actions. Let African nations be among of the few who do that by creating new innovative ideas, new environment, new tasks and new cooperation which should be applied to enhance an effective teaching and learning for the better future of the people of Africa and other countries globally.

Due to the study findings, it was therefore recommended that: In order to continue teaching and learning in African countries, blended mode of delivery should be effectively implemented in the education during the COVID-19 pandemic and in the post COVID-19 pandemic. Learning methods should focus on personalized learning as well as learner-centred learning. Furthermore, the norms of teaching and learning need to be more authentic, inquiry-based as well as purposeful with the aim of instilling desirable knowledges, skills, values and positive attitude to enable learners to be more active in solving both existing and unknown problems.

The government in African countries should put an effective effort on education which will include financing the development of technology, training teaching staff and students, strengthening the technological infrastructures which will help the development of education during the post crisis times.

The study recommends that Higher learning institutions in African countries should increase the efforts towards the preparedness for blended learning by improving, curriculum, revising educational policy, developing e-learning systems that could enhance learning in the post COVID-19 pandemic. Furthermore, the study recommends that further proposals can be developed focusing on other level of education such as nursery, primary and secondary schools.

LETTER TO *SCHOLARS, EDUCATORS, STUDENTS AND POLICY MAKERS IN AFRICA,*
October 23, 2021

Dear Scholars, Educators, Students and Policy makers,
Let me begin by thanking you for your time. I know every one of you is busy, and I am grateful for taking your lovely precious time to read this article. Since the onset of the coronavirus pandemic, scholars are tirelessly trying to find useful solutions to the impacts resulted by this pandemic which came up with introduction of social distancing and lockdown globally. In African countries, educators, students as well as policy makers have felt these impacts acutely as they attempt to find the appropriate mechanisms that will prepare education to positively influence teaching and learning in the age of post COVID-19. As Dr. Pacho and I discuss in this article, it is vital to acknowledge that African nations like many other in the world are not in the so called 'new normal' and there will be no new normal in the future but the world will witness lots of radical changes in the education sector as well as in other industries. Therefore, in order to thrive in teaching and learning, the pandemic has given us the opportunity to rewrite, restructure and reinvent the teaching and learning methods, system of education, and to embrace the transformational that will help educators cultivate an effective responsive teaching and learning. In this article, Dr. Pacho and I have proposed for educational changes and provided a framework that I hope it's an affirming and actionable framework for the moment of constant changes in the field of Education. I hope this proposed framework will help educators, policymakers and universities to reshape the education that will positively influence teaching and learning in the age of post COVID-19. For those of us ready for reshaping education, this article is a call for a paradigm changes in reshaping education that will positively influence teaching and learning in the age of post COVID-19. I hope this framework is useful not only in reshaping education in Africa but also in other countries globally because it is a call that prepare for the future before the future it keeps on developing. Thank you and I hope that you are well and safe.

With critical hope and best wishes,
Mahona J. Paschal. "Master of Education Management and Planning' St. Augustine University of Tanzania.

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Effect of Income Diversification on Financial Sustainability of Church Related Organizations in Kenya

Author: Bright Mawudor

Protestant University Wupperttal/Bethel, Germany
Email: mawudor@aacc-ceta.org

ABSTRACT

The purpose of this study was to examine the effect of income diversification on financial sustainability of church related organizations in Kenya. The study employed cross-sectional survey design. Target population consisted of 298 respondents including members of the governing bodies in the selected CROs, development/donor partners, general secretaries and Church leaders in addition to past and executive/program staff. Stratified proportionate random sampling technique was used to select the sample of 168 respondents. Questionnaire was the data collection instrument used by the study. Questionnaire was used to collect data from the members of the governing bodies, general secretaries, past and present executive/program staff. The collected data was analyzed quantitatively. The quantitative method involved both descriptive and inferential analysis. Descriptive analysis entailed summarizing the coded data in frequencies and percentages and presenting in tables and figures. This was achieved with an aid of SPSS version 17. The study findings revealed that income diversification strategies are effective in tapping international funding streams to a moderate extent, expansion of fundraising activities directed at the general public to a moderate extent and in tapping new corporate donors for monetary and in-kind support to a moderate extent. Income diversification strategies are effective in social entrepreneurship to a little extent, redesigning program implementation strategies to include cost-recovery components to a little extent, holding onetime events to a little extent and in owning and managing, businesses such as restaurants, tour companies, banks and clinics to a little extent. The study therefore recommended that the CROs should establish various social enterprises that serve as a strategy to diversify their funding base, decrease reliance on donors, and recover or subsidize program costs. Leaders play an important role in shaping the necessary change processes related to diversity and the Church Related Organisations need to reinforce awareness around the range of activities they undertake and the added value they create for society, helping potential partners to evaluate funding options as well as tapping international funding streams.

Keywords: Income Diversification, Financial Sustainability, Church Related Organizations

INTRODUCTION

Financial sustainability of NGOs has become a global concern in the wake of global financial crisis which has reduced donor funds from developed economies to developing countries. Financial institutions generate increased portion of their income from non-intermediation

activities and this could be associated to financial liberalization policies (Ebenezer, Musah & Ahmed, 2020).

In church related organizations (CROs), the issue of income diversification and financial sustainability is not new. CROs, especially in developing countries, continue to face numerous financial crises due to declining financial support from their traditional funders. The net worth of most of these organisations is shrinking, a factor accompanied by chronic unmanageable budget deficits. The reduced funding has been attributed to the world-wide economic recession, to changing domestic and international priorities in the north which in turn have affected the volume and nature of available aid. Even CROs that had established successful local fundraising strategies can no longer be complacent due to the pressing demands of poverty and the need for local fundraisers to attend to social needs.

Church and its related organizations at national and continental levels in leadership development and stewardship of resources, he has always been troubled by the fact that African Churches depend heavily on external funding for any semblance of sustainability. This dependency has more or less reduced Bishops and other leaders to the status of ecumenical beggars. During visits to Churches across the continent, incidents of funding cuts were observed, resulting in pain and introduction of 19 despondencies followed by the loss of jobs in projects supported by donors.

In response to these challenges, some Churches in Kenya, like Churches in other African countries, are turning to new sources of income generation, giving importance to their social ministry and economic development among the faithful; in the absence of such initiatives, it will be difficult to proclaim Christ to people who are daily becoming poorer (The Economy of Kenya, Pastoral Letter of Kenya Episcopal Conference, 1999). Already, Churches like the Anglican Church of Kenya and the Methodist Church of Kenya are embarking on social entrepreneurship initiatives like real estate developments, and guest houses. Christian managers of small enterprises see participation in business as opportunity to "incarnate" Christian values into business aspects (Evans, 2010).

For financial sustainability to succeed, effective financial management including funds flow control systems, financial planning, budgeting systems, asset management systems, accounting policies and procedures, internal and external auditing systems, reporting and monitoring systems, information systems, financial analysis and plan implementation, are required. Gunderson confirmed that the goal should be to manage revenues as carefully as expenditures, and to foster financial stewardship as well as cost containment (Gunderson, 2008). Most studies have been conducted on income diversity and financial sustainability in different fields. Such studies have failed to provide adequate information on income diversification in CROs. This study therefore intended to examine the effect of income diversification on financial sustainability of church related organizations in Kenya.

METHODOLOGY

The study adopted cross-sectional survey design. The selection of this design was deemed to the fact that the study focused on attaining information from a wide range of church related

organizations. According to (Wanjohi, 2014) cross-sectional survey aims at describing the characteristics of a large population, makes use of large samples, thus making the results statistically significant even when analyzing multiple variables.

The target population of this study comprised 200 members of the governing bodies in the selected CROs, 32 development/donor partners, 36 general secretaries and Church leaders in addition to past and 30 present executive/program staff. The entire target population consisted of 298 respondents from different church related organizations in Kenya.

Stratified proportionate random sampling technique was used to select the sample of 168 respondents. The study grouped the population into four strata, that is: members of the governing bodies in the selected CROs, development/donor partners, general secretaries and Church leaders, in addition to past and present executive/program staff. From each stratum, the study used simple random sampling procedure to select one hundred and six eight (n=168). Stratified random sampling technique was used since population of interest was not homogeneous and could be subdivided into groups or strata to obtain a representative sample.

The statistical method for sample size determination was used to obtain a study

sample Sample Size Calculator is Survey System (2010): Sample Size for Infinite

Population

$$ SS = \frac{Z^2 \times (p) \times (1 - p)}{C^2} $$

Source: Godden,   2004
Where:
Z = Z value (e.g. 1.96 for 95% confidence level) p
= percentage picking a choice, expressed as decimal
(.4 (40%) was used as the percentage of the targeted members of CROs in Kenya)
c = confidence interval, expressed as decimal
(.04 = ±4)

$$ SS = \frac{3.8416 \times .4 \times .4}{.0016} $$

$$ = 384 $$

Determination of Sample Size for Finite Population

$$New\ SS = \frac{SS}{(1 + (\frac{SS - 1}{Pop}))}$$

Source: Godden, 2004
Where: pop = population

$$\frac{384}{(1 + (384-1))}$$
$$298$$

Ss = 168

This study made use of a number of data collection methods. These included questionnaire and structured interview methods. A questionnaire was used to collect data from the members of the governing bodies, general secretaries, past and present executive/programme staff. Interview guides were used to collect qualitative data from the development partners.

The collected data was analyzed using both quantitative and qualitative data analysis methods. The quantitative method involved both descriptive and inferential analysis. Descriptive analysis such as frequencies and percentages were used to present quantitative data in the form of tables . Data from the questionnaires was coded and entered into the computer with the help of a statistical application known as the Statistical Package for Social Science (SPSS Version 17.0). Closed ended items were coded in order to run simple descriptive analyses to obtain reports on data status. Descriptive statistics involved the use of absolute and relative (percentages), frequencies, measures of central tendency and dispersion (mean and standard deviation respectively).

RESULTS

Demographic characteristics of the respondents

Only16.8% of the respondents indicated that they had an experience of 5- 7.5 years, another 16.8% of the respondents had an experience of 7.5-10 years, as well as 16.8% of those who indicated that they had an experience of 10-12.5 years and 16.8% of the respondents who indicated that they had an experience of 15-17.5 years. 13.7% of the respondents had an experience of 12.5-15 years, 9.2% of the respondents indicated that they had an experience of

17.5-20 years, 3.8% of the respondents indicated that they had an experience of 20 years and above, while 3.1% of the respondents indicated that they had an experience of 0-2.5 years and 2.5-5 years in each case. This shows that 93% of the respondents had worked in their respective organizations for a period of over five years which means that they had the necessary knowledge with regard to the operations of their respective CROs and were able to assess the performance.

Effects of Income Diversification on Financial Sustainability of CROs

The study sought to establish the respondents' level of agreement with various statements that relate to the effect of income diversification on the financial sustainability of the CROs. The distribution of responses is shown by Table 1

Table 1

Effect of income diversification on the financial sustainability of the CROs

Statement	SA	A	M	D	SD	Mean	Std. Dev.
High fragmentation of donor funding exacerbates this issue, with different donors often having complex and different rules and requirements	6	45	63	13	5	0.3053	.88486
Diversification of funding sources increase the sustainability of church Related organizations income streams	29	62	18	12	7	0.6031	1.02791
With the funding challenge the church Related organization respond with entrepreneurial spirit, good planning and hard work that has brought success in the core activities	18	39	41	26	4	0.5038	.95574
The CRO have various social enterprises that serve as a strategy to diversify their funding base, decrease reliance on donors, and recover or subsidize program costs	23	48	41	15	1	0.6565	.87505
Social enterprise offers a means to reduce program deficits and employ resources more efficiently in the CRO	18	54	34	20	2	0.5496	.99393
The church leadership project a vision and build the case for diversification activities, as well as engage the broader church community in the process	31	38	39	17	3	0.5191	.98724
leaders play an important role in shaping the necessary change processes related to diversification	20	56	26	21	5	0.6641	.89107

	SA	A	M	D	SD	Mean	SD
Church Related organizations need to reinforce awareness around the range of activities they undertake and the added value they create for society, helping potential partners to evaluate funding options	27	34	49	1	7	0.6718	.86329

Key: SA - Strongly Agree; A - Agree; M - Moderate; D– Disagree; SD – Strongly Disagree

According to the findings of the study, a majority of respondents agreed with statement that CROs could ensure financial sustainability by diversification of income and other resources. A majority of the respondents, with a mean score of 0.67 indicated that there was need to reinforce awareness around the range of activities CROs undertook and the added value they create for society, helping potential partners to evaluate funding options. The proposition that diversification of funding sources increases the sustainability of CROs income streams had a mean score of 0.6031.

Other high mean scores were recorded with reference to the following statements: the CRO have various social enterprises that serve as a strategy to diversify their funding base, decrease reliance on donors, and recover or subsidize program costs as shown by a mean score of 0.6565, leaders play an important role in shaping the necessary change processes related to diversification as shown by a mean score of 0.6641 and CROs need to reinforce awareness around the range of activities they undertake and the added value they create for society, helping potential partners to evaluate funding options as shown by a mean score of 0.6718.

3.3 Correlation between income diversification and financial sustainability of CROs
Further, a correlation was done between income diversification and financial sustainability of CROs. Table 2 shows the summary of the results.

Table 2

Correlation between income diversification and financial sustainability of CROs

Pearson Correlation		Financial Sustainability
	Financial Sustainability	1.00
Income Diversification	Reducing the impact of exchange rate fluctuations on income in local currency	.33
	Being able to make choice on how to generate and spend financial resources without restrictions	.29
	Expanding fund-raising activities directed at the general public	.32
	Tapping new corporate donors for monetary and in-kind support	.26
	Owning and managing businesses or social enterprises	.30

Engaging broader community in the process of resource diversification	.26

Source: Survey data (2012)

The study established some level of association between income diversification and the sustainability of CROs in Kenya. The association for various attributes of income diversification rated variedly: An organization being able to reduce the impact of exchange rate fluctuations on income in local currency (.33), make choice on how to generate and spend financial resources without restrictions (.29), expand fund-raising activities directed at the general public (.32), tap new corporate donors for monetary and in-kind support (.26) and own and manage businesses or social enterprises (.30). Although there was some level of correlation between various attributes of income diversification and the sustainability of CROs, the association was weak.

Further, the R model summary revealed the adjusted R squared to be .284. This shows that income diversification only explain 28% of sustainability of CROs. This shows that 72% is left unexplained and therefore can be attributed by other factors which are not income diversification. To some extent influences the variability of financial sustainability. Thus, various income diversification attributes can be used to predict financial sustainability of CROs in Kenya.

DISCUSSION

The findings of the study showed that majority of the respondents were positive on the effect of resource diversification on financial sustainability of CROs. Majority felt that diversification of funding sources increased the sustainability of income streams of CROs. Further, they felt that CROs should have social enterprises to reduce program deficit and employ resource more efficiently, should also decrease reliance on donors, and recover or subsidize program costs. They also indicated that that leaders should play an important role in shaping the necessary change processes related to diversification for financial sustainability of CROs.

The study found that income diversification is moderately important in increasing the longerterm reliability of the income stream as shown by a mean score of 0.2824, mitigation of negative consequences of a sudden drop in income as shown by a mean score of -0.3969, fueling further growth of the church's activities as shown by a mean score of -0.4046, being able to decide how to generate and spend financial resources without restrictions as shown by a mean score of 0.4122 and reducing the impact of economic downturns as shown by a mean score of 0.4275.

The study further established that income diversification strategies are effective in tapping international funding streams to a moderate extent, expansion of fund-raising activities directed at the general public to a moderate extent and in tapping new corporate donors for monetary and in-kind support to a moderate extent. Income diversification strategies are effective in social entrepreneurship to a little extent, redesigning program implementation strategies to include costrecovery components to a little extent, holding one-time events to a little extent and in owning and managing, businesses such as restaurants, tour companies, banks and clinics to a

little extent. The study findings appear to be in line with Abubakar (2017) whose study revealed that income diversification is a costly affair for commercial banks since it has a negative impact on financial performance. Abubakar also observed that the size of capital adequacy had a positive impact on performance while liquidity had a negative effect.

CONCLUSION

Income diversification strategies is being less important in being able to fund projects according to your priorities as shown by a mean score of -0.5038, risk management as shown by a mean score of 0.6412, being able to say no to some sources of income because they do not fit in the organization's values as shown by a mean score of 0.6565, gaining more flexibility in their internal financial management as shown by a mean score of 0.6718, reducing the impact of exchange rate fluctuations on income in local currency as shown by a mean score of -0.7939 and reducing the danger that a withdrawal of funding forces the organization to close down as shown by a mean score of 0.8321.

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Post COVID-19 Preparedness of Higher Learning Institutions on the Use of E-learning Technology in Mbeya City, Tanzania

Authors: Maurus Clement Mponela and Demetria Gerold Mkulu

Department of Educational Foundation St. Augustine University of Tanzania

P. O. BOX 307 Mwanza.

Author e-mail: maurusmponela@gmail.com

ABSTRACT

Over some time, the provision of education in HLIs almost worldwide remained traditional, that is face to face learning. Upon breakout of COVID-19 pandemic in 2020, HLIs are adopting contemporary approaches to learning, namely the application of e-learning. However, the extent to which these institutions are prepared remains shaky. Thus, this study sought to examine the post-covid-19 preparedness of HLIs on the use of e-learning technology in Mbeya city, Tanzania. The study adopted an explanatory sequential mixed research design. The study targeted lecturers, second-and third-year students and administrators in HLIs. Probability and nonprobability sampling procedures were used to get a sample size of 180 participants where 104 were students, 72 were lectures and 4 were administrators in HLIs. The instruments employed in gathering data were questionnaires, interviews, and observation methods. Quantifiable data were scrutinized statistically with the aid of Statistical Package for Social Science (SPSS) version 20 and qualitative data were organized and evaluated with help of the word clouds program to obtain the main themes. The results exhibited that majority of HLIs are not prepared for the use of e-learning in the post-covid-19 pandemic. The study recommended that HLIs in Tanzania should revise their institutional policy, strategies, and curriculum to accept the use of e-learning in the post coronavirus, training and retraining of students and lecturers. The government should formulate e-learning policy and strategies to facilitate the use of e-learning in HLIs

Keyword: *Covid-19 preparedness, coronavirus, higher learning institutions, e-learning institutions, e-learning technology.*

1. INTRODUCTION

Learning in higher institution is the education that reorients the learners at all levels to have people who think critically, creatively and behave in a way that provides a more productive world. Higher learning institutions play a specific role in generating and transferring knowledge to society for their entry into the employment market, outreach and service, sustainable research and curricula (Mkulu and Paschal, 2020). From this standing point, higher learning is crucial as it prepares the learners to be problem solvers and creative in the community. Worldwide HLIs trace their origin as early as the 3rd century before Christ (Mkulu and Paschal, 2020). The commencement of HLIs in East African countries goes back to Makerere University which was inaugurated in 1921, and it was offering divergent subjects leading to a general degree from the

University of London. Nevertheless, the university was split into three independent HLIs that the

University of Dare Salaam in Tanzania, the University of Nairobi in Kenya and Makerere

University (Istoroyekti and Hum, 2016). As the demand for higher education expanded, more HLIs were established in Tanzania such as Mzumbe as a training institute in 1972, the Sokoine University of Agriculture in 1984 and others (Maduekwe, 2015). Private HLIs was inaugurated after the deregulation of the education sector in 1995 (Istoroyekti and Hum, 2016).

Over a period of time, the provision of education in HLIs almost worldwide remained traditional that is face-to-face learning (Mapesos, 2017). Nevertheless, in 2019 a deadly sickness erupted which is known as corona whereby on 30 January 2020 the World Health Organization (WHO) acknowledged it as a worldwide terror (Zanke, et al., 2020). The emergence of coronavirus interrupted the traditional face-to-face method of learning in HLIs and other learning institutions were closed down due to covid-19 (Paschal and Mkulu, 2020). The existence of coronavirus threatened the growth of the education sector and the way towards the realization of Sustainable Development Goal 4 (SDG 4) as about 91% of students all over the world were affected by the closure of the face to face way of learning (UNESCO, 2020).

The globe has been experiencing radical changes in every organization including HLIs. The traditional way of teaching was needed to be replaced by the online method of learning like Zoom, Google classroom, Video conferencing, YouTube, Moodle, WhatsApp, Skype, Google meet and Microsoft teams (Paschal and Mkulu, 2020). For instance, in USA, HLIs like Harvard University have been successful to apply online learning to a greater extent for the reason that, elearning was considered one of the means of teaching and learning before covid-19 (Adeoye, Adanikin and Adanikin, 2020). In Spain the use of online education during school lockdown witnessed high achievement mostly because of high investment in digital instruction and incorporation of technical skills to teaching professionals however, some students lacked access to e-learning largely due to poor economic conditions which increased the gap of learning inequalities (OECD, 2020). Similar, online learning in China was active before coronavirus because of effective robust network connectivity and the introduction of national internet centres classroom and free online classes. However, during the corona pandemic, China faced the problem of internet connectivity, poor supervision of students, lack of skills among students and parents leading to ineffective implementation of the platforms (UN, 2020).

Africa is not an exception from the other continents that has experiencing the radical changes brought by the covid 19 pandemic. In Nigeria for example, most HLIs were unsuccessful to adopt e-learning due to the absence of e-learning devices and inadequate skills among students and educators (Yekini, Adigun, Ojo, and Akinwole, 2020). Likewise, in Uganda, the execution of online learning experienced difficulties like students' negative responses which hindered online learning (Olum et al. 2020).

In the case of Tanzania, Paschal and Mkulu (2020) recommended that digital instructions in most HLIs in Tanzania has been unsuccessful as several students failed to access e-education for the period of corona lockdown. This indicated that the majority of HLIs in Tanzania were not greatly prepared for online learning mostly for the period of emergency cases like the covid-19 disaster.

The use of e-learning ensures the continuation of learning even during the emergence like covid19 (Mkwizu and Ngaruko, 2020). Though, the government through the Tanzania Commission of Universities (TCU) (2019) revealed e-learning to be an essential method of enlarging access to higher education and a useful method for HLIs to compete in the provision of education in the world. In 2010 the government made effort to ensure HLIs in Tanzania utilize ICT facilities in the teaching and learning process though, the results are still low (United Republic of Tanzania (URT, 2018). Alike, the government encourages HLIs to opt for e-learning to enhance the provision of education and increase the enrolment of students in higher education (URT, 1999; URT, 2003: 2016). The study consequently intended to look after covid-19 lockdown what happened in HLIs in Tanzania particularly in Mbeya city. Were they ready for e-learning transformation or they were laid-back again?

2. METHODOLOGY

The study used an explanatory sequential mixed-method research design since it considered the nature of the study that required factual information. The design adopted by the study adopted a combined paradigm approach that is a quantitative and qualitative in nature. This approach provided a researcher with a variety of ways of looking at a research problem and being able to provide an in-depth analysis of facts. For qualitative data, phenomenology design was used because it assisted the researcher to understand the phenomenon and the lived experiences of participants in the study area (Creswell, 2014). For quantitative data on the other hand, crosssectional survey design was employed.

The sample size comprised of 180 participants where 104 were students, 72 were lectures and 4 were administrators in HLIs. Lecturers and students were randomly selected since the technique granted room for the researcher to select a reasonable number of participants who were representative of the targeted population (Mugenda, 2008). While administrators were purposively included in the study because the focus was to get only informants with relevant indepth information preparedness for digital classes.

The study utilized questionnaires, interviews and observation methods to gather information from participants. A set of structured and unstructured inquiries were administered to students and lecturers to collect abundant information from a large group of informants within a short period (Mugenda and Mugenda, 2003). The face-to-face semi-structured conversation was used to extract in-depth information from administrators (Taylor, et al., 2016). Moreover, nonparticipant observation involved observing and recording the existing situation of preparedness for the use of e-learning technology in the post-covid-19 pandemic.

Content and face validity were checked to prove appropriate of the instrument to the study aim and content area by subjecting the instruments to the research experts (Mugenda, 2008; Taherdoost, 2016). Cronbach's alpha of 0.83 indicated the reliability of research instruments. The trustworthiness of qualitative tools observed credibility, transferability, conformability and dependability.

Data were collected into two phases. The first phase involved the collection of quantitative data from students and lecturers. The completed questions were scrutinized statistically with the aid of Statistical Package for Social Science (SPSS) version 20 and the findings were exhibited in percentile, numbers, tabulation and figures. The second phase involved gathering of qualitative data from administrators in HLIs. Recoded data from interview was organized and evaluated with the support of the word clouds program to obtain the main themes.

3. RESULTS

3.1 Demographic Information of Participants

The study anchored demographic information of students and lectures. The gender of students was equivalent at 50%. The distribution of students by age indicated that most of the students 56.7% were aged 25 years and below, followed by 26-30 years with 27.9% and the last 31 years and above carried 15.4%.

The distribution of students by year of study showed that second-year students were higher by 52.9% than the third-year students with 47.1%. About the course of the specialization, students perusing the course of education they were many at 41.3% compared to Business at 5.8%, Law at 2.7%, ICT at 12.5% and other courses at 37.5%. Alike, the gender of lecturers was comparable at 50%.

The age of lectures showed that lecturers at 47.2% were aged between 36-45 years while 37.5% were aged between 26-35 and 15.3% had 46 years and above. Regarding the level of education, lecturers with a master degree were the most dominant by 59.7%, bachelor degree at 22.2% and the least were PhD holders presented by 18.1%. Moreover, the distribution of lectures by work experience demonstrated that majority of lecturers 52.8% had experience between 11-20 years, whilst 22.2% of lecturers had experience of 21-30 years, 19.6% had experience of 10 years and below and 5.6% of lecturers showed had the experience of 31years and above. Finally, the distribution of lecturers by course of specialization indicated that lecturers from other courses were higher at 40.3% followed by education by 37.5%, ICT by 9.7%, Business by 6.9% and law by 5.6%.

3.2 Post Covid-19 Preparedness of Higher Learning Institutions on the Use of E-learning Technology

This section covers post covid-19 preparedness of higher learning institutions. The section is organized based on the following sub-sections: indicators of preparedness for the use of elearning, preparedness of HLIs on the use of e-learning, the perception of teachers and students on the use of e-learning in the post-covid-19 disaster

3.2.1 Indicators of E-learning

The study intended to look at the indicators of preparedness for the use of e-learning. Participants from students and lecturers were asked whether HLIs are preparing for the use of e-learning in the post-covid-19 pandemic. Table 1 shows the distribution of the respondents by indicators for the use of e-learning.

Table 1

Indicators for the Use of E-learning

Students			Lecturers		
Indicators			**Indicators**		
	Frequency	Percentage		Frequency	Percentage
E-learning devices	7	6.7	Teaching devices	3	4.2
E-learning platform	4	3.8	E-learning platform	4	5.6
Strong wireless local network	9	8.7	Wireless internet	5	6.9
Experts	6	5.8	Strategic planning	2	2.8
			Training lecturers	4	5.6
Total	**26**	**25**	**Total**	**18**	**25**

Source: Field Data, (2021)

Table 1 presents the indicators that show the preparedness of HLIs for the use of e-learning. The findings indicate that only 25% out of 100% of both students and lecturers were able to explain the indicators of preparedness for the use of e-learning. This implies that the majority of participants 75% were not aware of online learning. Thus, the creation of awareness is highly needed for HLIs to understand the potential of e-learning particularly in emergency issues like the covid-19 pandemic.

Table 2

Preparedness of HLIs on the Use of E-learning

	Students		**Lecturer**	
	Frequency	Percentage	Frequency	Percentage
Yes	26	25	18	25
No	78	75	54	75
Total	**104**	**100**	**72**	**100**

Source: Field Data (2021)

The findings in table 2 indicate that majority of student's and lectures 75% showed that HLIs do not prepare for the use of e-learning while 25% agreed that HLIs are preparing. Concerning the sightings that the majority of HLIs are not preparing for the use of e-learning in the post-covid19 pandemic, 75% of the teachers agreed with the statement. The same percentage of the students also agreed with the statement.

3.2 Perception of Students HLIs on the Use of E-learning

The study sought to determine the perception of HLIs on the use of e-learning in the post-covid19 disaster. The results in table 4 and 5 indicate the responses from students and lectures.

Table 4

Students Perception on the Use of E-learning

	Students Disagree	**Moderate**	**Agree**
It encourages students to learn	28(26.9)	30(28.8)	46(44.3)
Students want to learn by using online	15(14.5)	26(25)	63(60.5)
It assures permanent learning	13(12.5)	27(26)	64(61.5)
It is difficult to control learners	10(9.6)	46(44.2)	48(46.2)
It facilitates laziness	58(55.7)	32(30.8)	14(13.5)
It improves students' ICT skills	15(14.4)	40(38.5)	49(47.1)
It reduces the cost of learning	54(51.9)	29(27.9)	21(20.1)
Use of both face to face and e-learning methods	-	34(32.7)	70(67.3)
It expands the access of acquiring education	19(18.3)	37(35.5)	48(46.2)
E-learning is not achievable in our environment	57(54.8)	32(30.8)	15(14.4)

Source: Field
Data, (2021)

Table 5

Lecturers Perception on the Use of E-learning

	Lecturer Disagree	**Moderate**	**Agree**
Lecturers are attracted to use online classes	-	34(47.2)	38(52.8)
E-learning ensures permanent teaching	5(7)	28(38.9)	39(54.1)
E-learning is less expensive	43(59.7)	21(29.2)	8(11.1)
E-learning is difficult to control learners	34(47.2)	26(36.1)	12(16.7)
E-learning facilitate laziness	56(77.7)	11(15.4)	5(6.9)
It improves lectures ICT skills	-	9(12.5)	63(87.5)
E-learning encourage lecturers to teach	3(4.2)	24(33.3)	45(62.5)
Use of both face to face and e-learning methods	-	1(1.4)	71(98.6)
It improves the access of acquiring education	7(9.7)	27(37.5)	38(52.8)
E-learning is not achievable in our environment	44(61.1)	20(27.8)	8(11.1)

Source: Field
Data, (2021)

Table 4 and 5 indicates the perception of HLIs on the use of e-learning in the post-covid-19 disaster. The results show that HLIs positively appreciate the use of e-learning in the provision of higher education. For instance, students by 67.3% and lecturers 98.6% agreed with HLIs to employ both face-to-face and e-learning methods. Also, participants from students at 54.8% and lecturers at 61.1% disagreed with the statement that e-learning cannot be implemented in our context.

Table 6

Challenges in the preparedness on the use of e-learning

	Students			**Lecturers**	
Items	**Frequency**	**Percentage**	**Items**	**Frequency**	**Percentage**
Insufficient of digital learning devices	24	23.1	Financial limitation	12	16.7
Lack of awareness	16	15.4	Shortage of competent staff	18	25
High cost of internet package	19	18.3	Internet service instability	11	15.3

Geographical obstacles	11	10.6	Attitude	9	12.5
Financial problem	21	20.1	Inadequate of elearning facilities	15	20.8
Unstable power supply	13	12.5	Unstable power supply	7	9.7
Total	**104**	**100.0**	**Total**	**72**	**100.0**

Source: Field Data (2021)

Table 6 presents the challenges encountered the preparedness for the use of e-learning in HLIs.

Participants from both students and lecturers pointed out lack of digital learning facilities by 23.1% for students and 20.8% for lecturers, financial limitation 20.1% for students and 16.7% for lecturers, internet service 18.3 for students and 15.3% for lecturers and power supply presented by 12.5% for students and 9.7% for lecturers appeared to be the most challenging issues in the preparedness for e-learning.

3.3 Measures for Successful Online Learning in HLIs

The study attempted to find out possible measures to be taken by HLIs and the government for the successful execution of online learning in HLIs in the post corona pandemic. Table 7 and 8 present the results from participants.

Table 7

Measures to be taken by HLIs

Items	**Students Frequency**	**Percentage**	**Items**	**Lectures Frequency**	**Percentage**
Improve e-learning infrastructure	27	26	Improve e-learning infrastructure	18	25
Provision of education	21	20.2	Strategic plan	11	15.2
Training enough experts	25	24	Establishing e-learning centres	13	18.1
Build capacity to students	16	15.4	Build capacity to lecturers	21	29.2
Allocation of enough budget	15	14.4	Cooperation with other stakeholders	9	12.5
Total	**104**	**100.0**	**Total**	**72**	**100.0**

Source: Field Data (2021)

The findings in table 7 demonstrate that participants suggested improving e-learning infrastructure by 26% from students and 25% from lecturers, building e-learning capacity to students and lecturers by 15.4% from students and 29.2% from lectures as the key measures for the use of e-learning in HLIs. However, other factors were important to students like provision of education 20.2%, training enough experts 24% and allocation of enough budget 14.4%. Similar, to lecturers the issue of strategic planning was presented by 15.2%, establishing e-learning centres 18.1% and cooperation with other education stakeholders 12.5%.

Table 8

Measures to be taken by the Government

Items	Student Frequency	Percentage	Items	Lecturers Frequency	Percentage
Subsidize internet packages	23	22	Subsidize internet service to HLIs	14	19.4
Investment in ICT	14	14	Build capacity to students	16	22.2
Framing e-learning policy	19	18	Formulate e-learning policy	22	30.6
Subsidize e-learning facilities	20	19	Facilitate e-learning facilities to the HLIs	11	15.3
Financial support	17	16	Encourage HLIs to opt for e-learning	9	12.5
Facilitate accessibility of strong internet in remote areas	11	11			
Total	**104**	**100.0**	**Total**	**72**	**100.0**

Source: Field Data (2021)

Table 8 show that participants proposed the government subsidize internet connectivity by 22% from students and 19.4% from lecturers, formulation of e-learning policy 18% from students and 30.6%, facilitating e-learning facilities to HLIs 19% from students and 15.3% from lectures. Likewise, students by 14% proposed the government invest in ICT, provide financial support 16%, and facilitate the accessibility of strong internet in remote areas by 11%. Likely, lecturers,

22.2% proposed the government build e-learning capacity for students and encourage HLIs to opt for e-learning by 12.5%.

4. DISCUSSION

The study goal was to examine the post-covid-19 preparedness of HLIs on the use of e-learning technology. The findings from the field demonstrated the majority of HLIs do not prepare for employing e-learning in the future. One of the interviewees narrated that; "after opening the faceto-face learning due to temporary closure due to coronavirus, we have not started preparing for online learning, as the issue of online learning, in general, is too complicated and it is difficult to start preparing for it quickly". This is supported by Parkes, Reading and Stein (2019) who found that most of HLIs in Australia do not employ e-learning as one of the methods of teaching and learning as the majority of students were not aware of the operation of e-learning. Online learning is a new culture in our environment, it needs ample time for HLIs to learn and get involved in it. The findings showed that e-learning infrastructures and equipping students and lecturers with e-learning skills are signs for the enactment of online learning. Furthermore, a study by Ansong, Boateng and Boateng (2017) indicated that e-learning infrastructures such as internet connectivity and power supply play an important for the execution of e-learning.

The findings confirmed that HLIs positively appreciate the use of e-learning in the post-covid-19 pandemic. According to Kunene and Barnes (2017), HLIs in South Africa accepted the use of elearning in the provision of higher education. HLIs has noted the conceivable of e-learning mostly in the emergency cases like covid-19 diseases. For instance, the report from USAID (2020) indicated that e-learning is the only usable method in the world that can prolong learning predominantly in the emergency time like political fights, covid-19 pandemic, Ebola and other natural disasters that can hamper face-to-face learning. Also, e-learning showed to improve the access to higher education. Ali, Hossain, and Ahamed (2016); Chola, Kisimba, George and Rajan (2020) and USAID (2020), found that e-learning offers flexibility in learning, increase the accessibility of education and easier the accessibility of learning resources. So, HLIs have to inaugurate the use of e-learning to certify learning continuity. During the interview, one of the interviewees described that; we cannot run away from using technology in educating at the present, online learning is a good method especially in the emergency cases like covid-19. For instance, Open University has been using the method for some time and even during the closure of face-to-face learning they managed to continue with learning because was already prepared, so e-learning is realizable in our context. Therefore, HLIs need to make preparations to facilitate the provision of higher education online. Despite the determination, HLIs encounters challenges that drawback the preparedness for the use of e-learning lack of awareness, high cost of internet package, financial limitations, unstable power supply, shortage of competent staff, internet instability, negative attitude and geographical obstacles weaken the efforts towards the implementation of e-learning in the post-covid-19 pandemic (Olum, et al. 2020).

The findings showed that the improvement of e-learning infrastructure in HLIs is a measure for the implementation of e-learning. This is supported by Aboderin (2015) and UNICEF (2020) that HLIs should be refining e-learning facilities by investing in modern e-learning technologies, upto-date digital gadgets, powerful internet bandwidth as well as software's may offer successful elearning in HLIs in the post-covid-19 pandemic. Furthermore, looking at

building e-learning capacity for students and lecturers Tarus et al. (2018) and UNICEF (2020) initiate that HLIs should prepare e-learning users with knowledge and skills to realize digital education in the postcovid-19 disaster. This means that for successful online learning in HLIs both students and lecturers must have knowledge and skills on the operation of the method. Likewise, during the interview one of the interviewees raised that; HLIs should revise their policies, strategies and curriculum of providing higher education to suit the use of e-learning. This means that most of HLIs policies, curriculum and strategies are based on face-to-face learning. The finding linked with the study by Paschal and Mkulu (2020) who found that policies in most African HLIs were incompetent to assist online instruction. Thus, for productive e-learning in the post-covid-19 emergency, HLIs should review the institution policy, strategy and curriculum to include both elearning.

The findings have a relationship with other former researches on measures for productive digital learning in future. For example, the result concerning facilitating e-learning facilities was supported by Adeoye et al. (2020); Mhlanga and Moloi (2020) and O'Dohert et al. (2021) commended provision of support and enabling an attractive environment for accessibility for digital learning facilities can lower the cost of e-learning. Hence, the majority of HLIs can be capable to utilize digital classes. Concentrating on Subsidizing internet connectivity, Mukosa and Mweemba (2019), revealed that the government should create a conducive environment to attract investors to invest in ICT and the use of e-learning in general. Government can promote internet providers to offer internet service in HLIs at low cost by reducing tax, this can help the majority of HLIs to afford the cost of the internet which is crucial for the successful operation of elearning. E-learning policy is crucial for the implementation of digital learning. Siron et al. (2020) commended that e-learning policy is crucial to direct the execution of digital instruction in HLIs.

Furthermore, reviewing the policy and curriculum for the provision of higher education can assist to achieve the goal of digital education. Moreover, facilitating strong internet connectivity in remote areas is important for the successful implementation of e-learning. Since most of the rural areas are not connected with strong internet to allow the implementation of online learning. One of the interviewees narrated that; government should strive to facilitate the accessibility of strong internet service in rural areas where most of our students come from". This corresponds with the study by Mhlanga and Moloi (2020) commended that the efforts towards the use of elearning drove out many students mostly from rural areas where online resources like the internet are not well connected. Thus, facilitating the accessibility of internet service in remote areas could draw attention to many students and HLIs to implement online learning. Moreover, financial support is a measure for the successful adoption of e-learning in HLIs. The result supports with one of the interviewees that; "students and HLIs should be financially empowered for effectively and efficiently online education". Likewise, Adeoye et al. (2020) advocated that government should attempt to allocate enough funds in the education sector to finance the usage of digital instruction in HLIs.

5. CONCLUSIONS

Grounded on the results of the study, the preparedness for the use of e-learning is crucial for future enriching the provision of higher education in Tanzania, particularly in emergency cases. Thus, it is recommended that HLIs in Tanzania should invest efforts and money towards the preparedness for the use of e-learning by training students and lecturers, investing in e-learning infrastructure, revising institutional policy, strategies and curriculum to fit the use of e-learning in the post-covid-19 pandemic. The government should formulate e-learning policy, strategies and mechanisms to guide and support the acquisition of digital learning gadgets in HLIs.

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Contribution of Head Teachers Supervision in the Implementation of Educational Quality Improvement Program in Public Primary Schools in Musoma Municipal Council

Authors: Baseki Beatrice Thomas and Demetria Gerold Mkulu

Department of Educational Foundation ST. Augustine University of Tanzania

P. O. BOX 307 Mwanza.

Email: basekithomas442@gmail.com

ABSTRACT

This study aimed at exploring the contribution of head teachers' supervision role in the implementation of educational quality improvement program in public primary schools in Musoma Municipal Council. This study guided by three objectives namely: the techniques used by head teachers in supervising, the outcomes of head teachers' supervision and the challenges that head teachers face when implementing EQUIP-T activities. The study employed transformational leadership theory and instructional leadership theory. This current study employed mixed research approach and a convergent parallel design. 104 sample sizes of the respondents were used. Data were collected through interviews and questionnaires instruments. The face and content validity was employed in testing research instruments while split-half method was used to test the reliability. Statistical Package for Social Science (SPSS) Version 20 was used to help in analyze quantitative data, while qualitative data was analyzed thematically. The findings revealed that majority head teachers employed clinical and portfolio supervision techniques. The findings indicated that most head teachers involve other stakeholders in decision making and communicating vision and mission of their schools. Moreover, the findings indicated that majority of the head teachers neither failed to plan and manage effectively the In-Service training (INSET) and majority head teachers are neither creative nor supervising well the Income Generating Activities (IGA). The study also revealed that, head teachers supervision are hindered by various factors such as some demoted head teachers and some promoted teachers to remain at the current schools, shortage of resources and negative attitude of teachers towards INSET. The study recommended that, head teachers should give training on how to employ differentiated supervision techniques as every school and individuals are unique. And the INSET does not only focus on literacy, numeracy and inclusion, but also enhances teachers' attitudinal and functional development to grow professionally.

Keywords: Head Teachers *supervision, Head Teachers contribution, Educational Quality, Educational Quality Improvement Program, mentoring supervision, portfolio supervision, differentiated supervision*

1. INTRODUCTION

Supervision is an educational process dealing with provision of guidance to teachers, to make sure that they have good environments for teaching and learning. To ensure that educational leaders supervise school activities effectively, head teachers must be accountable to meeting the expected goals and objectives of the schools. Carrol (1994) observed that the ideas of school supervision activities spread to other countries from France and the growth of school supervision can be traced in three stages. The earliest stage was around the 1920s when small groups of leaders gathered to discuss how workers performed their duties. The second stage emerged in the 1950s when the leaders at work place would meet with the workers for counseling and the third stage was in the 1970s when supervision activities became an educational process. Even though education supervision originated from France, it has spread and reached different countries at different times, with differing approaches from one country to another, based on the context and needs of the society. In their study, Brown et al. (2016) asserts that in 1980, the government of North America decentralized the education system. In this attempt, heads of schools were made chief executive officers to promote the quality of teaching and learning processes in schools.

Educational Quality Improvement Program (EQUIP) is an educational program funded by the United Kingdom and managed by Cambridge Education to improve pupils' learning by removing constraints at various levels of education system in some of the African countries. Improving school quality and enhancing pupil learning, needs to be a continuous and sustainable process. This is why the program worked closely with some governments in Africa to ensure that education systems enhance performance. The program targets some of the most African governments that perform poorly in education such as Sudan, Uganda, Zambia, and Tanzania (Pettersson et al., 2015).

In the United Kingdom, Ireland and the Netherland, Marzano et al. (2011) concurred that, the school supervision system began in the 19[th]Century whereby supervisors were required to follow the rules and regulations set by the government for decades. To strengthen the growth of school supervision, the government found it is better to equip school supervision departments to cope with the global economic competition. In the Republic of Czech, Hungary, Sweden and New Zealand, competent school heads are vital for achieving quality education through teaching and learning activities (Fitzgerald, 2014). In these countries school heads influence the quality of education through promoting professional growth and maintaining students' discipline. In some African countries such as Uganda and Tanzania, the establishment of school supervision services expanded after independence. For instance in Uganda, Bagaya et al. (2020) argued that Uganda crossed several transformations due to the changes in economic, political and social aspects that influence Uganda's education system. As a result of these efforts, the country has initiated good strategies in which the supervision process operates

The Tanzanian government collaborated with donors between 2014 and 2019 to establish a program known as EQUIP-T to support nine regions that were performing inadequately in the

PSLE. The regions were Simiyu, Katavi, Lindi, Tabora, Shinyanga, Mara, Singida, Kigoma and Dodoma. The program introduced different activities in schools. It first initiated In-Service teachers' Training (INSET), and then established the Student Readiness Program (SRP) to provide quality pre-primary education. It later enhanced the Parent-teacher Partnership (PTP) and introduced the Income Generating Activities (IGA). Finally, the program trained school committees and head teachers on leadership and management. The government believed that introduction of these activities would help in improving teaching and learning activities (Rawle et al., 2017).

Musoma Municipality, in Mara region, is among councils running this program. The program identified challenges that led to the Municipal's discouraging performance and established the activities that could reduce the constraints on pupils' learning. The main activities under the program were to improve teachers' performance, improving schools' leadership and management and strengthening community participation and accountability (Pettersson et al., 2015). For three consecutive years after the EQUIP-T was launched, Primary School Leaving

Examinations Results (PSLE) were ineffectively, as indicated in (NECTA, 2017, 2018 and 2019). Since the program ended in 2019, very little is known as to what extent the head-teachers as school quality assurance officers had improved in their supervision role on the implementation of the program in public primary schools within the area.

The government of Tanzania made different efforts to improve the performance of public primary schools. To fulfill the targets of Education For All (EFA) and Millennium Development Goals (MDGs) the government introduced Primary Education Program (PEDP) for the purpose of improving the academic excellence of the pupils (URT, 2014). Additionally, despite the government efforts to improve the pupils' performance, the primary school leaving examinations results in Musoma Municipality were still discouraging as revealed in the performance of PSLE in the years 2017, 2018 and 2019 (NECTA, 2017, 2018, 2019)). Based on the same observation the government sought to find donors who established and introduced educational quality improvement program dated 2014 to 2019, purposely to improve the quality of public primary education (EQUIP-T, 2017). The program established different activities aimed at improving teaching and learning activities. It was centered on training of head teachers on how to effectively supervise the teaching and learning processes in schools.

Head teachers were equipped with a variety of trainings on managing the various activities initiated to improve school performances. These activities included supervising In-service Training (INSET), Income Generating Activities (IGA); strengthen Parents-Teachers Partnership (PTP) and supervising teaching and learning activities. The program enabled head teachers to do their work effectively, motivate, advise and encourage teachers in different aspects (EQUIP-T, 2017). Sequentially to that, the program intended to oversee different activities surrounding the school environment. Despite the existence of this program (ended in 2019), little was known as to what extent the head teachers had implemented whatever was

learnt and to what extent their supervision roles had improved. Based on this fact, the researcher sought to find out the contribution of head teachers supervision to the implementation of the educational quality improvement program in public primary schools in Musoma Municipal Council.

2. METHODOLOGY

This study used a convergent parallel design. Convergent parallel design is a type of design in which qualitative and quantitative data are collected concurrently, analyzed separately, and then combined at the end of the study (Cresswell, 2014). The use of this design helped the researcher to explore the problem more; hence adequate information was collected to answer the research questions effectively. Moreover, the use of convergent parallel design required one to be knowledgeable especially on how to combine the qualitative and quantitative data to strike equal balance (Cresswell and Clark, 2011).

The study included all primary teachers, all head teachers; all ward educational officers, Municipal primary educational officer and District chief school quality assurance officer. School head teachers are the main supervisors in managing and controlling the EQUIP-T in schools, hence they will be able to provide needed data.

Taherdoost (2016) explained that sample size is the exact number of items selected from the population to constitute a sample. The study involved ten public primary schools that had a total of 88 teachers. The Yamane formula was used to get the sample size of teachers who were involved in data collection. Therefore, the sample size of this study was 104 respondents including 88 teachers, 10 head teachers, 4 ward educational officers, 1 Municipal educational officer and 1 District chief school quality assurance officer. The researcher used these participants because they had important information about the program, hence they would be able to give the needed information.

The sampling technique is the procedure the researcher uses to gather information in the study. Both probability and non-probability sampling techniques were involved in this study. Under probability sampling, stratified sampling and simple random sampling were included, where every respondent has an equal chance of inclusion or exclusion in the study (Taherdoost, 2016). Stratified random sampling and simple random sampling were used to select public primary schools and teachers. Under non-probability sampling, the study used purposive sampling technique. In this sampling technique, Municipal primary education officer, District chief school quality assurance, ward education officers and head teachers from public primary schools were selected. Participants were selected based on their potentials such as authority, power and work experience. The researcher selected respondents who were expected to give in-depth information on the program.

This study employed questionnaire and interview guide instruments. Questionnaire instruments, This is an instrument of data collection that is given to respondents in written form. This study used open-ended and closed-ended questionnaires as a method of collected quantitative data. The study employed this instrument because it is one of the most affordable instruments to gather quantitative data. It reduces bias because it involves a large sample, thus allowing gathering of information from a larger number of respondents as explained by (Etikan and Bala, 2017). This method of data collection involved a total of 88 teachers from ten schools. . Questionnaires were selected as the best instrument for data collection because it helps to collect information in a very short time within a group of people. Bryman (2012) asserts that a questionnaire instrument is the best method of collecting data because even if the researcher is absent still the respondents continue to fill it. The researcher used teachers to fill in the questionnaire because they had important information about the implementation of the educational quality improvement program; hence they were able to give the needed information. This study also used semistructured interview. Mathers et al. (1998) defines semi- structured interview as a type of interview that involve a series of open-ended questions based on the subject areas the researcher needs to face. This type of interview provides opportunities for both interviewer and interviewee to talk in-depth about the study (Young et al., 2018). In this method the researcher used interview guide questions as a tool of data collection that involved 4 WEOs, MPEO, DCSQAO and 10 head teachers from 10 schools of Musoma Municipal Council.

Based on Kothari (2004), data analysis is the procedure that involves "sorting, editing, coding and classifying the information collected from the field". The data were analyzed thematically through identifying themes, and the themes were grouped into sub topics according to the specific objectives of the study. The recorded data was analyzed in different ways as qualitative information was analyzed thematically. Thematic analysis is the process of identifying and grouping themes within qualitative information (Maguire and Delahunt, 2017). The technique helped a researcher to organize, sort and group the qualitative data into the same themes during the interview. In thematic analysis, familiarization with respondents, searching for themes, reviewing themes and defining themes finally, producing the report are the stages to follow in thematic analysis (Braun and Clarke, 2006).

Furthermore, the thematic analysis involved summarizing the information obtained by writing what the respondents answered; then, the researcher coded the themes ready for process. The results from the findings were presented using explanations and quotations to validate the information obtained. On the other hand, the researcher analyzed quantitative data by using descriptive statistics with the help of SPSS version 20. This helped the researcher to identify and evaluate data presented in percentages, frequencies, tables and figures according to descriptive variables. In qualitative data, the researcher involves explanation and direct quotations from the participants.

3. RESULTS AND DISCUSSION

3.1 Demographic Characteristics of the Respondents

Regarding the gender of the respondents, slightly more than a half (51.1%) of the respondents was female. Only 48.9% of them were male.

With reference to the age bracket of the respondents, slightly more than a third (36.7%) of the respondents was in the age bracket of 31-40 years. 29.5% of them ranged in the age bracket 41-

50 years. Only 15.8% of the respondents ranged in the bracket of 30 years and below

About the education qualification of the respondents, an overwhelming majority (81%) of the respondents had certificate. Only 5 % were degree honors.

Regarding the work experience of the respondents, slightly more than a half (51.1%) of the respondents had a range of 11-20 years of experience. Only 48.9% of them had 10 years and below.

With reference to the duration of teaching at school, 36.7% of the respondents had 6-10 years of experience in their current school. Only 29.5% of them had 16 years and above.

3.2 Contribution of Head Teachers Supervision in Implementation of Education

Quality Improvement Program

The study sought to investigate the Contribution of Head Teachers supervision in implementation of education. Table 1 shows the distribution of the respondents by Techniques that Head Teachers used in supervision to provide quality improvement program.

Table 1

Techniques that Head Teachers used in supervision to provide quality improvement program

Techniques	SD F P	D F P	MO F P	A F P	SA F P	Total
Clinical technique	4(4.5)	7(8.0)	13(14.8)	44(50.0)	20(22.7)	88
Portfolio technique	19(21.6)	27(30.7)	16(18.2)	12(13.6)	14(15.9)	88
Mentoring	4 (4.5)	35(39.8)	12(13.6)	31(35.2)	6(6.8)	88
Peer	9(10.2)	19(21.6)	22(25.0)	33(37.5)	5(5.7)	88
coaching	7(8.0)	13(14.8)	6(6.8)	34(38.6)	28(31.8)	88
Differentiated						

Source: Field Data (2021)

4.1 Techniques that Head Teachers used in Supervision

Table 1 shows that 72.7 percent of teachers agreed that head teachers used the clinical supervision technique. While 12 percent of teachers disagreed that head teachers did not use the clinical supervision technique in their supervisory activities. The findings imply that head teachers in the study area are guiding teachers to improve classroom instruction. The findings show that this approach encouraged head teachers to collaborate with teachers and mentor them. Furthermore, the transformative leadership theory that guides this study helps the head teachers to instruct the teachers according to the mission, vision and goals of their respective schools. Also, the transformational theory helps head teachers to be effective listeners to their subordinates (Arokiasamy, Abdullah and Zohir, 2016). This means that school leadership is a two way traffic communication between the head teacher and other educational stakeholders.

The leader should therefore be attentive at meeting the needs of others in the school. Furthermore, during the interview, the respondents claimed:

> I often provide guidance to help junior teachers grow professionally as they need someone to advise them. I encourage and motivate them to feel comfortable and make the school a better place to reside. Since we need changes in implementing the educational improvement program, everybody should have a chance to make contributions towards improved teaching and learning activities in a bid to achieve the goals and objectives of the organization (Interviewee Y, 10th August 2021).

This implies that head teachers have been guiding the teachers so that they could develop professional and be effective in teaching and meeting the intended school objectives. Head teachers need to maintain high morale amongst teachers in order to implement the program. The result is supported by Kayikci et al. (2017) who conducted a study in Turkey observed that for the school to have good academic progress; the clinical supervision technique is advised.

When employed in schools effectively, the technique enhances students' understanding, since teachers are motivated to improve their performance in a bid to attain the goals of their respective schools. However, head teachers are encouraged to do close monitoring, reduce some duties, generate a mutual relationship and conduct an action research on the supervisees who after a long time do not seem to improve professionally.

Table 1 illustrates that 29.5 percent of the participants claimed that head teachers did not only use portfolio technique for supervisory activities while 52.3 percent of the respondents stated that head teachers used only portfolio in their supervisory activities. Thus, this finding reveals that majority of the head teachers in public primary schools in Musoma Municipality used only the portfolio documents techniques in their supervisory activities. These documents include the lesson plan, schemes of work; lesson notes class journals, subject log book and pupils' exercise books. The study is in line with Petterson et al. (2015) who support that to bring the effectiveness of portfolio supervision technique, head teachers insisted on encouraging teachers to prepare their documents well before entering the class and they should teach relevant subjects. The head teachers are advised to do close follow up in their supervisory processes because some teachers teach differently from what they planned and prepared on. Each teacher is unique; head teachers are encouraged to train teachers on how to prepare and implement their documentation effectively to meet the intended use.

4.2 The Outcomes of Head Teachers Supervision Role

Table 2 stipulates that 14.8 percent of respondents argued that head teachers had planned and managed well the in-service training.

Table 2

The Outcomes of Head Teachers Supervision Role

Outcomes	SD F P	D F P	MO F P	A F P	SA F P	Total
Plan and manage well INSET	3(3.4)	45(51.1)	27(30.7)	11(12.5)	2(2.3)	88
Encourage motivation	7(8.0)	18(20.5)	24(27.3)	24(27.2)	15(17.0)	88
Communicate vision mission and objectives	5(5.7)	7(8.0)	13(14.8)	34(38.6)	29(33.0)	88
Teachers performed duties as scheduled	3(3.4)	15(17.0)	10(11.4)	39(44.3)	21(23.9)	88
	16(18.2)	37(42.0)	21(23.9)	3(3.4)	11(12.5)	88
Creating and supervising IGA Ensuring PTP	6(6.8)	7(8.0)	10(11.4)	49(55.7)	16(18.2)	88
Engage stakeholders in decision making	10(11.4)	9(10.2)	11(12.5)	36(40.9)	22(25.0)	88
Enhance teachers growth	10(11.4)	23(26.1)	28(31.8)	13(14.8)	14(15.9)	88
Ensure effective teaching/ learning	12(13.6)	11(12.5)	5(5.7)	44(50.0)	16(18.2)	88
Ensure discipline is maintained	9(10.2)	8(9.1)	4(4.5)	51(58.0)	16(18.2)	88

Source: Field Data (2021)

While 54.5 percent of participants claimed that head teachers did not plan and manage the INSET effectively. Therefore, the findings imply that majority of head teachers in public primary schools in Musoma municipal council did not plan and manage well the in-service teachers training. Hence, during the interview, the participant explained, "In-service training at school I supervise took place when the program was at work (2014-2019). Originally, the program was monitored at the district and ward levels. Then after the program phased out, the training in schools disappeared (Interviewee X, 16th August 2021)". The quotation implies that the inservice training to teachers is possible and can be done. A researcher encourages education leaders to motivate the head teachers continue to supervise and monitor teachers to ensure that the in-service training is carried out effectively in all municipality schools as initiated with the program. During interview respondent displayed:

> There is lack of equality amongst schools in the course of the training because the approaches varied from one school to another. While some head teachers used tea break after regular classes, some head teachers provided lunch to the teachers during the in-service training to motivate them. Some head teachers were unable to afford the training because they lacked creativity, seriousness and commitment (Respondent J, 19th August 2021).

If the teachers participate well in-service training, they will keep growing academically and improve school performance. This idea is supported by Charles et al. (2019) who conducted a study in Kenya and argue that head teachers should ensure that teachers receive on-job training in order to be effective in the overall issues of improving the quality of education. Head teachers are therefore encouraged to be creative, taking note that professional growth for teachers does not only mean to know the strategies of teaching but also improving their accountability, transparent and commitment to work and seeing to it that pupils are successful in solving challenges around them. With the current advancement in science and technology, head teachers are advised to ensure teachers are equipped with different trainings to enhance growth in ethical and moral issues.

Secondly, the finding in table 2 indicates that 15.9 percent of the respondents claimed that head teachers in the municipal create and supervise well the Income Generating Activities (IGA). But 60.2 percent of teachers argued that head teachers are neither creative nor supervising well the IGA in Musoma Municipal Council. The educational quality improvement program supplied funds to some schools to enable them create IGA with the aim of increasing funds to run various activities in schools (Petterson et al., 2015). The income generated from these activities could reduce some financial constraints which the schools had encountered. In one of the interview sessions, a participant stated:

> My school got 1,500,000/= from EQUIP-T to start a project that could generate funds to run various activities in the school. The project did not perform well due to various operational challenges. Those

challenges included lack of skilled manpower, unsupportive staff and parents (Interviewee U, 18ᵗʰ August 2021).

It can be learned from the above quotation that some schools got financial support to start income generating activities, but its implementation was very difficult to some of the schools.

Likewise, when the researcher interviewed one of the respondents, he proved:
> Most of the project documents were theoretical rather than realistic. For example, there were some schools that set up restaurants project based on the assumption that the pupils would be their customers. What incomes do school children have to contribute to the running of a restaurant? Still some schools introduced fish pond projects with no reliable water sources. How could you allow them to start garden projects? (Respondent WW, 20th August 2021)

The findings suggest that to have effective and reproductive income generating activities, head teachers are advised to be creative at the planning and implementation of the IGA. Successful and effective projects helped to alleviate some of the challenges head teachers face, especially in the process of teaching and learning. Head teachers are also advised to seek advice from experts on how to conduct different projects. The noted above factors for failure of the project support could be resolved if the head teachers could consult experts on income projects and get educated on how to run income-generating activities.

4.3 Challenges Faced by Head Teachers in their Supervision Activities

The study sought to examine the challenges faced by head teachers in their supervision activities. Figure 1 shows the distribution of the respondents by head teachers' challenges in activities supervision
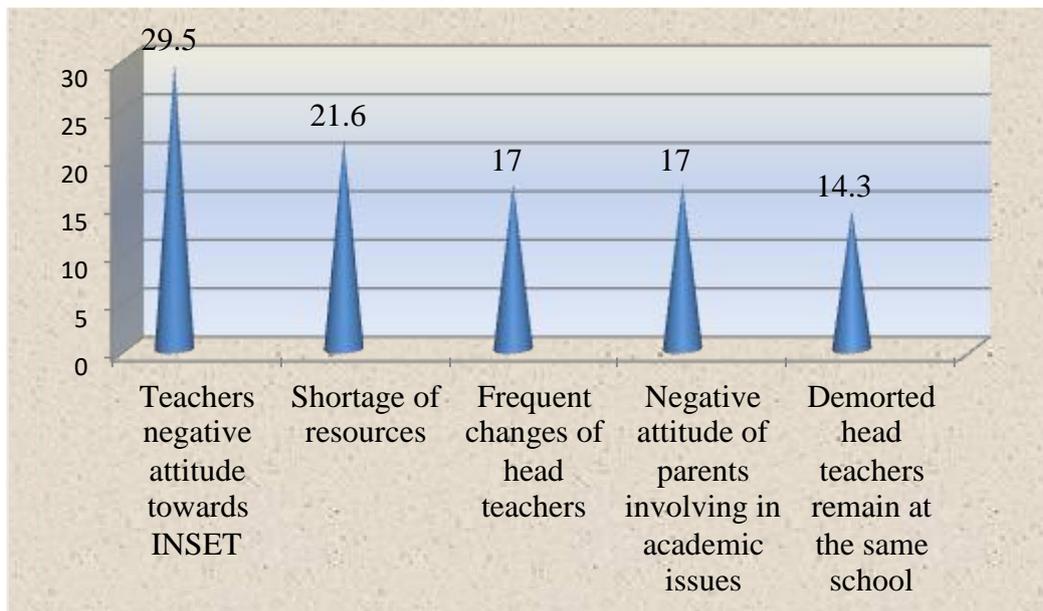
Source: Field Data (2021)

Figure 1 Distribution of the respondents by head teachers' challenges in activities supervision

Teachers are the major implementers of curriculum activities in the school context. When their perception is negative, the expected outcome is failure. This challenge was also reported during interview with some respondents one of whom argued, "Supervision of in- service training in this school is complicated by the fact that some of the teachers required training allowances, which is impossible (Participant W, 13th August 2021)". Head teachers are encouraged to make sure that they look for different techniques to deal with this challenge in order to bring efficiency in improving performance in schools. Another interviewee claimed, "In this school, due to the heavy workload, some of the teachers claimed that they were too busy, hence they dislike attending in-service training (Respondent Y, 10th August 2021)". Similar results were also reported by Day and Sammon (2016) from Cambodia observed that negative attitude from teachers cause ineffective supervision that lead to poor performance in schools. Similarly, Dewodi et al. (2017) who conducted the study from Ghana argued that teachers' negative attitude made them perceive supervision activities as the process that interfered with their work. In these studies, the negative attitudes that teachers have are in the supervision process in their schools. However, in this current study the challenge lies is the negative attitude that teachers had in participating the in-service training that was initiated by the EQUIP-T

Furthermore, the findings in figure 3.1 displayed also that 17 percent of the teachers' shows that the frequent changes of head teachers are one of the challenges that makes head teachers fail to perform their duties effectively. These changes made the program activities less effective. For example, when the program was launched in 2014, the majority head teachers who participated in different trainings received demotions. But the majorities were not transferred; those who

were appointed to take their positions did not receive the training on how to conduct different activities within the EQUIP-T.

During the interview, the participant claimed, "Majority head teachers who have received various training in the program are not the ones who are continuing with school supervision. Many of the current head teachers did not receive training in the supervision of different activities in the program (Participant, ZZ, 12th August 2021)". The quotation implies that, making changes in leadership is inevitable. Leaders are encouraged to participate with their subordinates to create changes that can help the schools to grow. The top leaders are advised that whenever they want to make leadership changes in schools, they must prepare strategies on solving problems first. For example, they could develop a strategy to train the new appointed head teachers to enable them do the supervision. The findings are similar to the transformational leadership theory which encourages leaders that the changes brought in the institution are from unsatisfactory situations to better situations (Susilo, 2019).

The findings in figure 1 illustrates that 17.0 percent of teachers that were involved in the current study explained that negative attitude of some parents and communities towards involve in school development is the challenge facing head teachers in Musoma Municipality. During the interview, one of the participants reported,

> Generally speaking, there is poor response from parents and the community with regards to involvement in school development activities. The cooperation among parent-teacher partnership that was established before in schools does not exist. The situation causes the school leadership to do some extra work that was meant to be the parents' responsibility. (Interviewee J, 19th August 2021).

The program was also to enable the parents to closely monitor students' academic progress in collaboration with the class teachers and the school leadership. For example, in each class, the parents choose one female and male parent who would work closely with the class teacher on various matters affecting the children in their respective classes, but due to less cooperation the union cannot work as expected. This explanation is supported by Pettersson et al. (2015) who argued that communities should be empowered in order to accountably engage in school development. Lack of awareness on what roles the parents can play in school development can create some obstacles among parents towards the improvement or enhancement of academic development in schools.

Lekule (2014) who conducted a study in Singida observed that in majority public schools, many parents do not fulfill their responsibilities to their kids instead they are left to teachers to deal with some of their kids' needs such as learning materials. When an individual parent fails to respond to their kid's needs, the teaching and learning activity in one way becomes ineffective. For the schools to achieve the set goals, the head teachers are encouraged to educate parents to keep in check the academic progress of their kids.

The findings in figure 3.1 displayed that 21.6 percent of the teachers involved in the study indicated that the demoted head teachers and retained in the same schools was among the challenge that faced the new head teachers in the implementation of educational quality improvement program. During the interview, the participant said:

Some of the demoted head teachers were among those who hindered the efforts of the new head teachers in implementing various activities in schools. For example, for those whom their schools were performing poorly, they had failed to provide good cooperation to the current head teachers. Improvement in performance would imply poor supervision in the past. (Respondent UU, 18th August 2021).

This findings means that, head teachers encountered difficult situations when running different activities due to the stated quotation above. The program to be effective and efficiency the educational leaders are encouraged to solve the named factor by making transfers to the head teachers who get demotion rather than remain in their current schools. The demoted head teachers had influence on the teaching staff, greatly affected co-operation between the new head teacher and teachers. Therefore, basing on this reality, it could not be very easy for the new head

teachers to implement and achieve their pre-determined goals effectively
Yet during the interview, the participant concluded:

This school is my first working station. When I was employed, some teachers taught me different activities. Then I was promoted to be the head teacher in this school. I found it difficult to manage various activities because majority of the teachers who work with me take things for granted. I was forced to use authoritarian leadership style. However, I failed because many educational improvement program activities required participation (Participant Z, 11th August 2021).

This narration means that, the new head teachers attempt to control the teachers instead of cultivating their collaborations. Head teachers as transformative leaders are encouraged to work as a team and in harmony (Korejan and Shahbaz, 2016). Hence, head teachers are encouraged to create an environment which teachers feel respected and incorporated to change the old situation into a new culture. However, leaders should realize that a change of leadership style without consistent accountability is ineffective. The findings of the study agrees with Sango et al. (2017) from Zimbabwe revealed that when heads of schools lack collegial relationship in supervision processes, they resulted in use of authoritative and bureaucratic approaches when supervising different activities.

5 CONCLUSION

In objective number one this study shows that most of the head teachers in Musoma Municipal Council employed clinical and portfolio supervision techniques in implementing EQUIP-T activities. Head teachers should give training on how to employ differentiated supervision techniques as every school and individuals are unique. In objective two, this study revealed that most of the head teachers failed to plan and manage the INSET well**.** The study also discovered that only few head teachers succeeded in creating and supervising Income Generating Activities (IGA) effectively. Also most of the head teachers did not success to strengthen the ParentsTeachers Partnership. The co-ordination of in-service training does not only focus on literacy, numeracy and inclusion, but also enhances teachers' attitudinal and functional development. Head teachers are encouraged to apply different techniques in school supervision. They are encouraged to seek advice from different expertise on how to plan, manage and run the income generating activities before starting the project. Head teachers should advise local government leaders to enact by-laws that require parents to compulsory attend to school when needed. Nevertheless in objective three, this study found that teachers' negative attitude towards INSET, shortage of resources, frequent changes of head teachers, negative attitude of parents towards academic matters and the demoted head teachers remaining in the current schools hinder the implementation of EQUIP-T in Musoma Municipal Council.

To bring efficiency in raising the performance in schools, there should be transfers of teachers who have worked in one school for a longer time and have become ineffective. Demoted head teachers and teachers who are promoted to be head teachers could be considered for transfers to maintain their dignity and freedom to perform their duties. The new head teachers should be given training for their new positions and on the supervision of different activities within the program. Head teachers should involve the alumni of the school who are well-off to support the school with fund to run other academic activities. Generally, head teachers should be critical and have the zeal of learning the success of other head teachers. For instance, during the data collection process, it was noticed that there is an achievement of parent-teacher partnership, IGA and INSET, in some schools, for this reason, head teachers should build interact and learn from other successful head teachers. On the other side, head teachers can organize a study tour for oneself and the team, to go outside the district and learn how others implemented the educational quality improvement program activities. Therefore, this study concluded that, the various activities that initiated by the EQUIP-T with the aim of raising the quality of education in schools in Musoma Municipality have not been implemented effectively as expected.

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