
PROCEEDINGS OF THE ZAPUC 2nd INTERNATIONAL CONFERENCE

AVANI Hotel, Livingstone – Zambia

19TH – 21ST OCTOBER 2020



**ORGANIZED BY
ZAMBIA ASSOCIATION OF PUBLIC UNIVERSITIES AND COLLEGES
(ZAPUC)**

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PREFACE

The 2020 ZAPUC International Conference is an annual conference organised by the Zambia Association of Public Universities and Colleges (ZAPUC) who are the collaborations and partnerships in tertiary education.

The conference received a total of 41 research papers and abstracts. Each submission was exposed to blind peer reviewing and was reviewed by a minimum of two experts. The EDAS Conference Management Systems was used to manage the peer reviewing process. Experts were drawn from the Southern and East African Region Universities. A total of 38 abstracts were accepted presented and published in the proceedings. This includes a total number of 26 full papers that were accepted, presented and published in the proceedings.

Dr. Geoffrey Tambulukani
2020 ZAPUC Conference Chair

Prof. Douglas Kunda
2020 ZAPUC Conference Co-Chair

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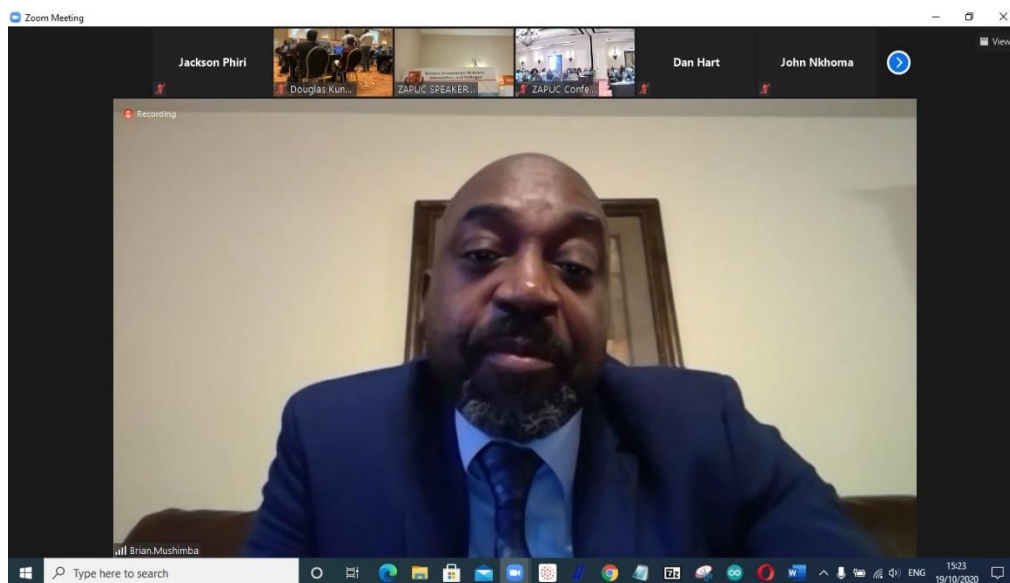
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KEYNOTE SPEECHES

Minister – Ministry of Higher Education: Honourable Dr. Brian Mushimba (MP)

The Conference was officially opened by the Minister of Higher Education Hon. Dr. Brian Mushimba MP.



Honorable Dr. Brian Mushimba MP, presenting his official opening speech

The Director General - Higher Education Authority: Prof. Steven Simukanga



Professor Simukanga, Director General, Higher Education Authority, giving his key note speech.

Vice Chancellor – The University of Zambia: Prof. Luke E. Mumba

Vice Chancellor – The Copperbelt University: Prof. Naison Ngoma

Vice Chancellor – Mulungushi University: Prof. Hellicy C. Ng'ambi

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ABSTRACTS

ENHANCING ACCLIMATIZATION OF RURAL UNIVERSITY ENTRANTS INTO AND THROUGH HIGHER EDUCATION: A ZAMBIAN PERSPECTIVE

Annie Musonda-Mubanga

This paper discusses various strategies universities in Zambia can use to help entrants from rural settings into and through higher education. Higher education institutions are in a position to build a strong transitional bridge for students. In Zambia, majority of schools in the country are located in rural areas where 65% of the population lives, 81.3% of all primary and 60.9% of all secondary schools are located in rural areas while universities are mostly located in the urban areas. This disparity forces rural populations to leave for studies. Rural students believe that university education will provide them with better chances of employability with their counterparts in urban areas. The centrality of rural populations' contribution to national development underlines the importance of a smooth facilitation of new rural entrants into university life. However, the setbacks that stereotype rural students may force them to drop out. For instance, lack of a financial stamina as a result of the socio-economic dynamics between urban and rural students makes life on campus hard for rural university entrants. There are also mundane obstacles such as crosswalks which do not exist in rural areas. Getting lost on campus has a potential to make students report late for class or miss it altogether, which might impede their performance. While universities have been slow to recognise these hurdles, the situation for universities in Zambia is not foreclosed. Academic support, financial assistance, understanding the cultural background and other local barriers, using innovative means to recruit and serve students, forming partnership between schools and workforce are all critical to boosting not just access but completion rates. It can be concluded that reducing cultural shock, and improving the welfare of university entrants from rural set-ups can occur if universities in Zambia employ these strategies

INCORPORATION OF SPECIAL NEEDS STUDENTS IN THE TEACHING INDUSTRY

Rose Chikopela, Georgina Ndopu, Joyce Kunda, Veronika Kalima and Regina Mukuka

The Government of Zambia recognizes that persons with disabilities ought to have the same rights, opportunities, choices and needs as people without disabilities. This paper presents the findings of a study which sought to establish how the students with special needs are incorporated in the teaching industry. Qualitative and quantitative research methods were used. A descriptive survey design was employed on a population which comprised Lecturers, Human Resource Officer at Teaching Service Commission, the registrar at Teaching Council of Zambia and Zambia Institute of Special Education (ZAMISE). Purposive and simple random sampling were employed, and instruments for data collection included interviews and questionnaires. Data was analysed using themes and descriptive statistics. Findings indicate that positive discrimination was used by the college as enrolment criteria in that those with Special needs were accepted based on four 'O' levels instead of the required five. As regards to curriculum delivery, learners are taught inclusively, using interpreters for the hearing impaired. However, the lecturers mentioned that they do not have sufficient teaching and learning material to enable them deliver the curriculum effectively. Findings also showed that 10% of all positions on recruitment are reserved for applicants with disabilities. In addition, Special Education Needs (SEN) teachers in the industry lack modern assistive technology devices to help them deliver the lessons effectively. The study therefore recommends that the college should: Capacity build the lecturers in sign language and braille; Employ the support staff that are required; and Plan for induction programmes. Additionally, Ministry of General Education (MOGE) should provide the necessary teaching aids and assistive technology devices to lecturers with special needs.

APPLYING THE THEORY OF PLANNED BEHAVIOUR (TPB) IN VILLAGE CHICKEN FARMERS' COMMERCIALISATION INTENTION - EVIDENCE FROM NORTH WESTERN ZAMBIA

Moffat Chawala

This paper contributes to the smallholder agriculture commercialisation literature by applying the Theory of Planned Behaviour in a developing country context. The study examines the influence of attitude, subjective norms and perceived behavioural control on the commercialisation Scaling Up intent among smallholder village chicken farmers in North-western Zambia. Furthermore, the mediating role of commercialisation practices intention is examined. Based on a quantitative correlational design, primary sample data were collected using a structured questionnaire from 556 village chicken smallholder farmers from two farming blocks in North-western Zambia. The data were analysed using statistical correlation and regression models. The findings indicate that attitudes, subjective norms, perceived behavioural control as well as commercialisation practices intention have unique positive significant effects on commercialisation practices intention (CPI) and CPI in turn positively influences commercialisation scaling-up intention (CSI). Notwithstanding the research limitations such as the study being cross-sectional and based on one district in Zambia, the findings have important implications. For policy makers and enterprise support institutions, understanding the socio- psychological factors of smallholder farmers are important before introducing any interventions to promote commercialisation of the village chicken. Additionally, for scaling-up to occur, there is need to encourage farmers to adopt commercialisation practices in management, investment and marketing. This would increase chances of transitioning from subsistence to commercial farming. The study is among the first to apply the theory of planned behaviour in the village chicken value chain in the under-researched Zambian context.

DIFFUSION OF E-ASSESSMENT SYSTEMS IN HIGHER EDUCATION: A CASE OF CHALIMBANA UNIVERSITY

Nyondwa Zulu and William Phiri, Geoffrey Tambulukani, Wanga Chakanika and Davies Phiri

This paper uses five (5) tenets of the Diffusion of Innovation theory, by Everett Rogers, to analyse the perceptions of Chalimbana University Deans on the adoption of online assessment modes for distance students. A case study was adopted to generate qualitative data from eight (8) Deans who were selected using extreme case sampling. The study revealed that the adoption of the online assessment system was a welcome move as it has advantages, such as quick feedback, cost-effectiveness, interaction among learners, and improved digital literacy, which is likely to counterbalance the weaknesses of the traditional assessment. The study further revealed that even if some students may not have easy access to technological gadgets and internet services, e-assessment systems were still compatible with the majority of distance students as most of them were active on various social media platforms and already familiar with the correspondence mode of learning. Furthermore, the study unearthed power outages, lack of gadgets, digital literacy, and internet service as some of the reasons that would make this innovation complex. However, these challenges were not perceived to be hindrances to the adoption of this innovation as they could be addressed by documenting lessons during the pilot phase and from other institutions that have already fully adopted the innovation. As such, the study recommends the adoption of an online assessment system for use as a complementary and not a substitute, mode of assessment to the already existing traditional system as both systems have weaknesses that can be offset by the strengths of the other.

YOUTH RELIGIOUS EXPERIENCES IN TERMS OF CONVERSION FROM MAINSTREAM TO PENTECOSTAL CHURCHES IN THE 1960s: A CASE OF SELECTED CHURCHES IN MATERO AND EMASDALE TOWNSHIPS IN LUSAKA DISTRICT

Audrey Phiri Muyuni and Ireen Moonga

The study sought to investigate the reason that led to youth conversion from mainstream to Pentecostal churches in Emmasdale and in the neighbourhood of Matero. The study was guided by Horton's intellectualist theory of conversion in Africa. The method of data collection included semi-structured interviews, focus group discussion and questionnaire. Findings of the study were that, there was automatic conversion taking place among the youths in mainstream churches. Evidence was noted from respondents in Pentecostal churches. Church leaders in mainstream, were aware of youth converting to Pentecostal churches. Further, non-

Pentecostal parents supported and encouraged their children who converted to Pentecostal churches owing to incentives such as; scholarships, employment and supportive programs provided to their children. The study recommended that: sermon presentation should be revised in some mainstream churches. Explaining scriptures should not be exegetical only but linking scriptures to real life struggles of the youth. The church leaders in mainstream churches must formulate programs that are more practical and youth oriented like charismatic prayer service, provision of scholarship, employment and positions of responsibilities through different ministries within the mainstream churches. Non-Pentecostal parents should not be too sceptical about children who associate themselves with Pentecostalism but encourage them to genuinely convert to this brand of Christianity.

The Impact of COVID-19 on Public Universities in Zambia: Opportunities for Public Engagement and Homegrown Partnerships

Brenda Nayame Chisala, Patrick Ezepue and Gladson Chikwa

The relationship between universities and society is symbiotic. Universities benefit societies by acting as engines of knowledge production, innovation and contributing immensely to the production of human capital. They also play a significant role in national progress through harnessing skills, knowledge, and innovation that are critical for both economic development and citizens' well-being. Therefore, the role that higher education will play in addressing the 2030 Agenda for Sustainable Development cannot be overemphasized. In return universities derive their relevance from society through public funding, student fees and research grants. The paper discusses survey results articulating pathways for homegrown partnerships that will enable Zambian universities to succeed in becoming more innovative and cost-effective post-Covid 19. The results indicate that there are various push factors that explain why students choose to go and study abroad. These include the search for good quality education at reputable universities as well as the need for diverse cultural knowledge and good job opportunities. Moreover, it emerged that not all students who study abroad think that they have a good value for their money. The study showed that students are lamenting the exorbitant fees and cost of living they must pay abroad. Interestingly, a considerable majority of students and their parents revealed their interest and willingness to study at local public universities, if good quality programmes are offered. These views are discussed in detail and the paper provides some relevant approaches that Zambian universities can embrace to enhance the teaching quality, in particular, the importance of fostering collaborative partnerships with external universities to facilitate the joint delivery of good quality degree programmes. The role of homegrown solutions such as CGCA is discussed as this can act as a conduit in the establishment of partnerships between Zambian public universities and external universities in China, UK, and other countries.

CONTENT AND THEMATIC ANALYSIS OF MISSION STATEMENTS AND THEIR LINKAGE TO KEY INTERVENTION AREAS IDENTIFIED IN THE EDUCATIONAL POLICY: A CASE OF ZAMBIAN UNIVERSITIES INVOLVED IN TRAINING SCIENCE TEACHERS

Dennis Luchembe

The study used hybrid content and thematic analysis to analyse 23 mission statements from 23 public and private universities that train science teachers in Zambia. Mission statements were analysed to determine the type of information contained in mission statements of the universities. The study identified the themes in mission statements of universities that train science teachers. It also determined the extent to which mission statement from universities that train science teachers parallel the key intervention areas stated in the 2019 national policy document on higher education. Key themes identified in mission statements were compared with the key intervention areas contained in the 2019 national policy document on higher education. Content analysis of mission statement revealed that the emphasises of Zambian universities involved in training science teachers was on equipping students with skills and knowledge and not on issues such as sustainability, consultancy and creativity. Key-themes identified in mission statements through the process of thematic analysis were found not to be broadly diffused in key intervention areas identified by Ministry of Higher Education. For example innovation, and national and global focus was not emphasised in key intervention areas identified by the Ministry of Higher education. This shows an area that needs consultancy between universities and stakeholders to enhance the development of higher education in Zambia. This study has presented an analysis of mission statements from universities that are involved in training science teachers. The study has, therefore, a managerial implication as the findings could be used by Ministry of Higher

Education, university managers, university marketing units and other stakeholders in determine how the key intervention areas could be improved and emphasised on. This is expected to contribute to the enhancement of higher education in Zambia.

Training for Ghosts: The Fluidity of the Labour Market in Zambia

Jive Lubungu

Education has been known to play a pivotal role in turning the wheels of development in any given society as it is a social equalizer. Any iota of compromise or undermining the value of education results in a downward trend in national development. Training Institutions, therefore, take Centre stage in moulding a cadre of experts that drive the economic engines in the world. It means that training institutions should train human resource in response to the Labour market. Curiously, however, Zambia, like many other countries in Africa, has not witnessed a significant increase in job access by graduates from training institutions. This study argues that training institutions in Zambia are merely churning out graduates to Ghosts as they do not know which Labour market is going to employ their products. Drawing from the above argument, the study set out to find out whether university graduates access the Labour market in their area of specialization. Being a qualitative research, data collection was done through face-to-face in-depth interviews while documents such as newspapers were used as a secondary source of data. A total of 15 graduates from 3 public universities were interviewed through face-to-face interaction. The Study revealed that most graduates end up getting jobs they were not trained in. The jobs they get are contrary to their area of specialization as there is no ready market for them. From the findings, the study concludes that training institutions are simply training for Ghosts as their target Labour market is fluid and cannot guarantee the availability of jobs to the graduates.

INTEGRATION OF ZAMBIAN LANGUAGES IN TO THE CURRICULUM OF HEALTH SCIENCE TRAINING INSTITUTIONS: TOWARDS THE ABILITY TO TRANSLATE COVID-19 TERMINOLOGIES INTO ZAMBIAN LANGUAGES

Elliot Machinyise

Communication in the language that is understood by patients and clients is the most crucial factor in the provision of better healthcare services to the public. This study attempted to investigate the integration of Zambian languages in the training programmes of health workers in Zambia. This paper also tried to establish how some COVID-19 common terms are translated to Nyanja and Tonga which are some of the common regional official languages of Zambia. The bulk of the data was elicited through guided interviews from selected participants. To the lesser degree, reviewed literature related to the study was used as well. The study interviewed health workers, students and teachers of Zambian languages from selected districts in Lusaka and Southern provinces where Nyanja and Tonga are regional official languages respectively. It was revealed that higher learning institutions in Zambia where health workers are trained do not offer Zambian languages to their students. This has resulted in most health workers failing to fluently communicate with patients in the language they fluently know. On the other hand it has been revealed that teachers who are trained to teach Zambian languages in schools were able to translate medical terms from English to Zambian languages effectively. The study has also recommended that all colleges offering medical and health study programmes should integrate Zambian languages in their curriculum just like what teachers training do. This is necessary as good communication is considered essential for clinical competence. This paper also referred to relevant theories of second language translation that are the most appropriate and recommended in the field of translation. The communicative translation perspective has been suggested as the most appropriate approach to translation.

CONTEXTUALISATION OF THE LEARNING OF FRENCH IN THE ZAMBIAN SITUATION: A CASE STUDY OF LUANSHYA BOYS SECONDARY SCHOOL IN ZAMBIA

Augustine Lumwanga

The Republic of Zambia is an English-speaking nation and English is the official language. However, at the Addis Ababa Agreement on the Teaching of Foreign Languages a decision was taken for English to be taught in Francophone countries and French to be taught in Anglophone countries. French as a Foreign Language was introduced in a few institutions of learning in Zambia and is now offered as an optional subject in some secondary schools in the country. This paper looks at how Luanshya Boys Secondary School applied or used

this initiative of the Zambia Association of Teachers of French on the contextualisation of teaching/learning French which was made easy to suit the learning of Zambian children and for them to appreciate French as a Foreign Language. Initially, the traditional method of learning French with French names of people, food, places and so on became very difficult for the Zambian learner to understand and appreciate French as a subject. A good number of learners opted out of learning French. Observing the trend, the Zambia Association of Teachers of French posed the question - "Which educational change can be implemented in order to help our French learners understand and appreciate this subject?" The answer was to contextualise or localise the teaching/learning of French with local names of people, food, places and the like. French is now offered at the primary school level in some private schools. French is also offered at tertiary institutions such as the University of Zambia, Lusaka, Zambia Open University, Lusaka, Kwame Nkrumah University, Kabwe, Mulungushi University, Kapiri, Mposhi, David Livingstone College of Education, Livingstone and the Military Training School, Kabwe. (273 words)

THE ROLE OF STREET VENDOR REGISTER IN THE SUSTENANCE OF BUSINESS IN LUNDAZI CENTRAL BUSINESS AREA

Jelice Sakala, Samson Zimba and Ireen Moonga

The purpose of this study was to analyse how street vendor business is sustained through language in Lundazi District Central Business Area. The main aim of the study was to find out if street-vendors register could sustain business from a socio-linguistic point of view. The objectives of the study were to: (i) identify specific register vendors use in their business; (ii) explain the specific influence the register identified had on the vendor-customer relationship; and (iii) state how this type of register affected business. This study was done qualitatively through the descriptive and narrative designs. A study sample size of 100 street vendors was purposively picked; 30 males and 30 females with more than a year of street vending experience and 20 males and 20 females with less than a year of street vending experience. The idea behind attaching an aspect of experience was to see if the more experienced someone was, the wider their vocabulary. Data was collected through Interviews using a guide with unstructured questions. The interviews were recorded for easy reference during the analysis of data. From the findings, it was concluded that the maintenance of business and successes that the central business area recorded were largely as a result of the persuasive, respectful, accommodating and friendly language that the vendors used to facilitate interaction with the customers. This language made possible flexible business negotiations between the vendors and the customer. The study recommended that street vendor register should be embraced by all sectors of society as it is an aid to the growth of street business from which the majority Zambians draw their income for daily livelihood.

THE SEMANTICS OF CHICHEWA PERSONAL NAMES AND NICKNAMES

Nicholas Phiri, Ireen Moonga and Samson Zimba

This study, The Semantics of Chichewa Personal Names and Nicknames was aimed at finding out what the etymological basis and meaning of each one of the Chichewa personal traditional names and nicknames is in Katete District of Eastern Zambia. The descriptive research design was used to provide a clear understanding of the semantics of Chichewa nouns and adjectives. The population for the study was 100 informants. Informants included teachers of Chichewa and native speakers of the language. The purposive sampling technique was used to select participants. Research instruments used included unstructured questionnaires for face to face interviews and open-ended questionnaires to conduct focus group discussions. The referential theory of meaning was used. Richards and Ogden's (1927) theorised that language is used to talk about things outside it and that the meaning of a word is the object it denotes. This theory justified the idea that all linguistic items, including Chewa traditional names, have meaning. The study has indicated that Chichewa has several names. These names can be given socially, culturally and religiously. Others are also given based on the problems, relationships and misunderstandings within the society. Thus, their meanings are to be understood based on such circumstances. The study was in line with the relationship between language and the real world in which the referents exist, as stated by Russell's (1985). According to Russell, nouns represent the relationship between the thought patterns of the speakers and the objects that are referred to in the real world.

THE INITIATION CEREMONY AND JARGON OF THE CHEWA CULTURAL TRADITION FOR GIRLS

Belita Sakala, Ireen Moonga and Audrey Phiri Muyuni

This study aimed at analyzing the sociolinguistic role of the jargon used in girl-child initiation ceremonies in Chipata District of Zambia. It employed a survey design in which face to face and focus group interviews were conducted with 20 initiates and 10 initiators, respectively, who were selected from 10 villages of Chipata District. The qualitative data that was collected was recorded and later transcribed for analysis. Analysis of the data involved coming up with codes and themes which were later presented as descriptions. The study revealed that the jargon was key in transmitting cultural values to the initiates. These values are essential to the girl-child, as she develops into a responsible member of the community. Furthermore, the study revealed that the initiators and initiates had sound relations and that both were comfortable with the register that was used during the initiation process. The study also found out that there was a curriculum that was followed at the ceremony although this curriculum was not written but only passed on verbally by word of mouth. Revisions of the curriculum were done by stakeholders. The study recommended that, the curriculum followed in cinamwali, lessons should include the modern teaching on usage of sanitary towels during menstrual periods in modern Zambian society. The study concluded that the ceremony still plays an important role in inculcating societal values in the initiates and that the jargon used plays an important role in the process. Although the revisions have been made to certain practices in the ceremony, its importance and necessity still holds. The study recommended that the teachings related to hygiene (puberty) be separated from teachings related to running a home (marriage).

THE SEMANTICS AND PRAGMATICS OF NYAU TERMS AS USED IN KATETE DISTRICT OF EASTERN ZAMBIA

Zebron Nyirenda, Samson Zimba and Ireen Moonga

The study sought to provide the semantic and pragmatic meanings of Nyau terms. It further gave an explanation on functions of these terms in the Nyau cult. The target population comprised initiated Nyau dancers whether retired or currently practising. The researcher used Katete district because that is where Nyau dancing tradition is practised. The study sample was picked based on the fact that they were initiated Nyau dancers. The problem of the study was that the uninitiated members of the society did not understand the Nyau terms whenever Nyau initiates communicated with them. Since the uninitiated always faced punishment when they showed ignorance about these terms, it became imperative to provide this set of knowledge which must be known by all people to avoid further unfair punishments. The study used two sampling techniques and these are purposive and random sampling. The instruments used were unstructured questionnaires and a research guide. The qualitative research approach was adopted as it relied on the perceptions of the participants as owners of the Nyau cult. The data was qualitatively analyzed. The study bordered on two theories; the sign theory by Saussure (1966) whose work was published posthumously by his students and referential theory propounded by Lycan (2000). Several terms were identified. These include maliya, liunde, citisa, usakaulule, to mention a few. The study has an educative purpose. Finally, the recommendations were that a study be conducted on the psychological aspect of these terminologies on the public so that judgement could be made as to whether or not they are good. In addition, this research was conducted in Katete district of Eastern Zambia. It is recommended that a similar study be conducted in an area other than Zambia so as to determine whether or not the findings are the same. Keywords: Nyau (Gule wamkulu), initiated 'olowa', uninitiated 'citisa', sacred/secret place for Nyau lessons 'dambwe', semantics (denotative meanings), pragmatics (contextual meanings), identity, term.

THE NEXT GEN SECURITY OPERATION CENTER

Wickramasinghe Wanniarachchige Madhusanka

Due to the evolving Cyber threat landscape, Cybercriminals have found new and ingenious ways of breaching defenses in networks. Due to the sheer destruction these threat actors can cause harm to an organization, most modern-day organizations have focused their attention towards protecting their critical infrastructure and sensitive information through multiple methods. The main defense against both internal and external threats to an organization has been the implementation of the Security Operations Center (SOC) which is responsible for monitoring, analyzing and mitigating incoming threats. At the heart of the Security Operations Center, lies

the Security Information and Event Management system (SIEM) which is utilized by SOC analysts as the centralized point where all security notifications from various security technologies including firewalls, IPS/IDS and Anti-Virus logs are collected and visualized. The effective operation of SOC in an organization is dependent on how well the SIEM filters log events and generates actual alerts. Here lies the major problem faced by SOC analysts in detecting threats. If proper alert correlation is not accomplished, analysts would have to deal with too much alert noise due to a high false positive count. This would ultimately cause analysts to miss critical security incidents, thus causing severe implications to the organization's security. The performance of a SIEM can be enhanced through adding various functionalities such as Threat Hunting, Threat Intelligence and malware identification and prevention in order to reduce false positive alarms threat framework and machine learning which would increase the accuracy and efficiency of the overall Security Operations process of an organization.

DESIGN AND IMPLEMENTATION OF PLAGIARISM SOFTWARE FOR HIGHER EDUCATION

Douglas Kunda and Aaron Zimba

The COVID-19 pandemic has affected over 210 countries worldwide economically and in terms of the way of life. The WHO has recommended measures to help fight against COVID-19 that include regular washing of hands with soap, masking and contact tracing and isolation. Most Government in the world have closed Schools and University and encouraged self-quarantine that has necessitated online learning. Online learning has increased the demand for plagiarism software especially in higher education institutions in order to ensure quality of education. Plagiarism detection or content similarity detection is the process of locating instances of plagiarism and/or copyright infringement within a work or document.

FACTORS INFLUENCING THE UTILISATION OF INFORMATION AND COMMUNICATION TECHNOLOGY IN SCHOOLS: A CASE STUDY OF SELECTED SECONDARY SCHOOLS IN NDOLA

Douglas Kunda and Chanda Mushikwa

The purpose of this study is to investigate factors influencing utilization of information and communications technology in secondary schools in Ndola district, Copperbelt Province. The objectives of the study were: to establish the influence of initial cost of ICT installation and infrastructure on utilization of the ICT in secondary schools, to establish the influence of teachers' competency in ICT on its utilization in secondary schools and to establish the influence of Principals' ICT compliance/ICT supportive school management on utilization of ICT in secondary schools. The researcher used a descriptive research design in this study. The targeted population was all teachers within the five selected public secondary schools in the District. Purposive sampling followed by random sampling was used to select 5 Head teachers, 30 teachers, 5 HODs from the 5 and 60 pupils purposively selected schools because mainly the study targeted schools that had used some computers for either administrative or teaching and learning purposes. Therefore, the key participants in the ICT developments were head teachers HODs and teachers within the selected schools. A structured questionnaire was used to collect data. To establish validity the questionnaire was pretested by means of a pilot study. This was to ensure that there were no double-meanings or ambiguities in the items. The feedback was used by the researcher to correct any anomalies. In data collection process the questionnaire was personally administered by the researcher to the selected teachers and head teachers. Each participant was given sometime around 20-30 minutes to fill in the questionnaire, and then requested to return it to her. Descriptive statistics was used to analyze the data in which percentages and mean values were used. The findings were presented in frequency distribution tables, with narrations of the results as well as implications of the study findings given alongside the tables. The findings were that the initial ICT installation cost had significantly and negatively influenced the ICT utilization in secondary schools in Ndola District. The teachers' ICT competency was needed for them to effectively implement the utilization of the ICT in the secondary schools in the District and the principals' did not adequately comply with ICT neither did they support it, so the school management negatively influenced the ICT utilization in secondary schools in Ndola District. This study recommends that there is need to alleviate the problem of high cost of computers. There is also need for provision of adequate ICT support infrastructure. Teachers need to be competent in utilization of ICT in teaching and learning as well as in the entire school managerial operations and the teachers too need to change their negative attitude towards utilization of ICT. Through government intervention, teachers should be trained on how to use ICT as a pedagogical tool. Some teachers, especially those who joined the service long back are unable to use ICT and some still have the

reluctance to use ICT. They may not welcome these good changes because they don't know the benefits of using ICT

CHALLENGES ASSOCIATED WITH MANUAL TAGGING AND INGESTION OF DIGITAL OBJECTS INTO THE INSTITUTIONAL REPOSITORY

Robert MSendo, Lighton Phiri and Mayumbo Nyirenda

Institutional Repositories (IRs) provide the ability to store, manage and disseminate intellectual product created by an institution. They provide a complementary method to the traditional system of scholarly communication making it easier to demonstrate the scientific, social and financial value of an institute. The potential benefit of an IRs goes beyond the increase of the institution profile. They increase authors' visibility and provide users with easy access to information. Despite the rapid pace at which organisations are creating IRs and all the potential benefits they offer, there has been a problem with manual tagging and ingestion process of digital objects. This, paper looks at the challenges facing institutions that uses manual tagging and ingestion of digital objects into the IR. The study used a case study and purposive sampling was used to select the participants that are involved with tagging and ingestion of digital objects into the IR. The findings of the study revealed that they are two major challenges associated with manual tagging and ingestion of digital objects. Firstly, is that of digital objects having missing or incomplete important metadata elements. Secondly, wrong classification of digital objects into communities and collection. One possible solution to reduce or overcome the challenge of incomplete metadata and misclassification is by automating the process of metadata tagging and classification of digital objects. The paper finally concludes by proposing a multi-facet automatic classification of digital objects into the IR.

AN INVESTIGATION OF THE FACTORS INFLUENCING THE UTILIZATION OF E-WALLETS IN HIGHER LEARNING INSTITUTIONS USING TECHNOLOGY ACCEPTANCE MODEL

Chimuka Moonde and Jackson Phiri

This paper investigated factors influencing the utilization of e-wallets in higher learning institutions in Africa's developing countries. This study proposed an e-wallet acceptance model based on the Technology Acceptance Model. Three factors were considered as possible predictor variables: perceived ease of use, perceived usefulness and gender. This study used the Logistic Regression's Likelihood Ratio Test; the findings established that perceived ease of use and gender significantly influenced students' utilization of e-wallets, whereas perceived usefulness did not. However, perceived usefulness came very close. Therefore, software developers designing e-wallets for students should make them as easy to use as possible. Additionally, e-wallet software developers should consider preferences that appeal differently to each gender, as gender plays a significant role in influencing students' decision to use e-wallets

DIGITAL FINANCIAL SERVICES ADOPTION AMONG SMALL SCALE TRADERS IN ZAMBIA

Mweetwa Momba and Jackson Phiri

The research sought to find out the use and nature of digital financial services among traders in Zambia. To achieve its objectives research used convenient sampling to obtain data from the traders from various parts of Zambia. The instrument used to collect information from the traders was a questionnaire which had both closed and opened questions. To analyze the data collected from the traders, Statistical Package for Social Science (SPSS) software version 16 was used to generate pie charts, bar charts, histograms and cross tabulations and to conduct ANOVA analysis. The findings showed that 93% of the traders interviewed make use of digital financial services while only 7% do not. The ANOVA analysis showed that there is no significant statistical difference between the traders from the four provinces namely Central, Copperbelt Western and Muchinga. The research also revealed that mobile money takes the lions' share when it comes to the type of digital financial services traders make use of. The findings show that the majority of traders make use of digital financial services through mobile money, those are services provided by mobile service providers. This is because of the ease with which they can manage their finances either in respect to banking their money or conducting money transfers. This is also in line with the technology acceptance model, comprises of perceived ease of use (the ability to transact easily) and perceived usefulness (the mobile platforms offer so much more services)

DEVELOPMENT OF ELECTRONIC DOCUMENT MANAGEMENT SYSTEM BASED ON TAM MODEL USING BARCODE AND QUICK RESPONSE (QR) CODE

David Simpemba and Jackson Phiri

Organisations small and big, in third world countries are still using more of manual document management systems by and large. Physically as you move from office to office in most of the higher institutions of learning, you notice mountains of documents on officer's desks, filling cabinets and even floors. This phenomenon cuts across most higher institutions of learning. Locating and retrieving documents can be quite time consuming and a nightmare. This research aim was to examine the development of electronic Document Management Systems in Zambia, by looking at three higher institutions of learning. The main purpose was to identify the levels of adoption and challenges faced in using Electronic Document Management Systems (EDMS) in higher institutions of learning in Zambia. Also to examine incorporation of Barcode and QR Technologies. The methodology used was a deductive quantitative survey in form of questionnaire sent out to the three higher Institutions of learning selected from within a five kilometre radius in Lusaka. These were Evelyn Hone College (EHC), National Institute of Public Administration (NIPA) and Lusaka Business and Technical College (LBTC) with very good response. The research incorporated the Technology Acceptance Model (TAM) to deduce the perceived usefulness and ease of use of (EDMS) in these institutions in order to determine the adoption levels. The study revealed overwhelming evidence in readiness to adopt an EDMS technology by members of staff. Most sample parameter values supporting the adoption direction. While Barcode and QR code technologies have limited capabilities, also internally developed systems are more affordable than proprietary systems.

THE IMPACT OF COVID19 ON E-LEARNING AT KWAME NKRUMAH UNIVERSITY - KABWE, ZAMBIA: A DISCRIMINATORY OUTLOOK

Pauline Phiri and Oliver Magasu

The main purpose of this study was to assess the impact of e-learning amidst COVID-19 on undergraduate and postgraduate learners at Kwame Nkrumah University. The population for the study involved a total number of 120 students from Kwame Nkrumah University who provided complete information regarding the survey. A physical and an online survey were conducted on different social platforms like student WhatsApp groups and Zoom from 10th May to 8 July 2020 to collect data. To analyze the impact, data was collected from students of Kwame Nkrumah University and then analysed using thematic analysis and simple statistics. The research used a mixed method approach. Interview guide and questionnaires were used to collect data. A structural questionnaire was sent to students' through WhatsApp and physically. A very simple percentage distribution was used to assess the learning status of the study participants. The main findings were that during the quarantine period, around 20% of learners were involved in e-learning. Most of the learners used android mobile for attending e-learning lessons. Further, the study revealed that students were facing various problems relating to depression, anxiety, poor internet connectivity and unfavorable study environment at home. Students from remote areas of Zambia and those with impairment were the most affected in terms of accessibility to the e-learning platform. As a result of the many challenges students were facing during this period, this study recommends to Kwame Nkrumah University management to devise a flexible education system that will be inclusive in terms of accessibility and will enforce the skill for employability and productivity.

DEMYSTIFICATION RESEARCH USING EVERYDAY EXPERIENCES BY EVERYDAY PEOPLE IN CROSS CULTURE SETTINGS

Dennis Banda

The aim of the paper is to demonstrate how everyday knowledge can be incorporated into the classroom practices of institutions of higher learning to inform inclusive outcomes for linguistically and culturally diverse students. Using a metaphor of a marketer's everyday interrogation of market conditions, a postgraduate guide to proposal writing guidebook and the funds of knowledge sociocultural framework, we illustrate how forms of everyday and school knowledge can be used co-concurrently in the construction of socially responsive dialogic pedagogy. We argue for research in the South in which knowledge and theory generation is not a preserve of English only, but more so, of the complex interactions between English and the multiplicity of languages and culture that students bring to the classroom. We conclude that Research in the South needs to be founded on the transfiguration of everyday knowledge and formal academic knowledge to facilitate the production of new and more powerful knowledge in multicultural postcolonial society. This would allow for

inclusive pedagogy that cater for diversity in classrooms, cross culture research and activity-based teaching and learning networking students' experiential, community/home and formal academic knowledge in the construction of new and powerful knowledge.

THE HYBRIDIZATION OF THE AFRICAN INDIGENOUS KNOWLEDGE SYSTEMS WITH THE FORMAL EDUCATION SYSTEMS FOR SUSTAINABLE DEVELOPMENT AND THE WAY OF ENHANCING THE ACHIEVEMENT OF EFA GOALS BEYOND 2015

Dennis Banda

This paper is based on a study that was looking at whether or not "African Indigenous Knowledge Systems (AIKS)" can enhance the achievement of Education for All (EFA) with particular reference to the Chewa people of Zambia. The study raised challenges that many countries have experienced in their effort to achieve EFA and even beyond. Among the Chewa people of Zambia, quality, relevance and credibility of the education are some of the reasons affecting the provision of education to all. This research argued that formal schooling education, in its current form may not be the right vehicle to deliver EFA goals. The research proposed alternative forms of knowledge that could be hybridized with the formal schooling education to address some of the challenges identified. The research tried to re-appropriate some Chewa AIKS to theorize curriculum and pedagogy reforms that could enhance the achievement of the EFA of 2015 and beyond. The study used qualitative research methodology. The respondents in this study were drawn from two areas of community of practice i.e. the Chewa traditional chiefs and elders as perceived custodians of the Chewa AIKS and the educationists, as implementers of education programs and policy and curriculum designers. Key issues identified by this research included the following: that a replacement of the formal schooling education by the AIKS was not an answer to the current challenges facing the provision of meaningful education to all; that through consultations, and co-ordination by all stakeholders and research in AIKS and formal schooling education, either system would shed off elements perceived as barriers to the achievement of EFA goals; and be hybridized to complement each other to enhance the achievement of EFA goals; that the formal schooling education should not be considered to be superior to informal and non-formal education systems, but that all are critical components in this quest. Theories and frameworks of hybridization of forms of knowledge/education were considered in this research. The study argued that hybridizing AIKS with the formal schooling system would only become significant if an economic value was added to the AIKS through some mechanisms put in place. The practical skills embedded in AIKS could foster career building, entrepreneurship and apprenticeship if linked to the money economy of employment and wealth creation. The paper argued that there may be need to establish opportunities for AIKS holders to be accredited within the National Qualification Framework and policy framework on AIKS be enacted to regulate and protect IK, and guide the hybridization process. The study highlighted three main frameworks on the hybridization of the AIKS and the formal schooling curriculum: (1) Mainstreaming/ Incorporation/ Integration/ infusion of the AIKS into the formal school curriculum. (2) Establishing IK as a core subject with a structure similar to those of other core subjects in the curriculum. (3) Teaching AIKS as a component of the seven official Zambian languages that are taught in schools.

RESEARCH AS A CORNERSTONE OF INDUSTRIAL DEVELOPMENT: A CASE OF AGRICULTURAL RESEARCH IN ZAMBIA

Mike Mwala

Research has been often referred to as simply an inquiry to provide solutions and/or answers to identified problems within a defined context. The results from research come in form of technologies broadly covering products, systems/processes/protocol and information: A technology can involve a combination of any of the three. Products of research constitute the substrate upon which industry base its operations, while the systems/processes/protocol support the efficient conversion of the products to commercial outputs for ultimate utilization at societal level. Information as a technology enhances the effectiveness and efficiency of conversion. Industrial development couched here as industrialization, the scaling up and out of technologies for commercial purposes, requires these research outputs for it to be relevant to societal livelihood agenda. Indeed industrialization involves a wider range of players at different levels during the conversion of the technologies. Agricultural Research in Zambia has been ongoing for a long time covering many areas with a number of recorded successes. This paper picks on one the successes in agricultural research to illustrate the contribution that seed technologies from research have made in growing the seed industry and other agro-

industries in Zambia. The seed value chain is examined and key players identified and their role(s) defined. The relative number of players and estimated value of business at each point of the value chain are used to project the level of industrialization (scaling up and out). Fewer players and low level of value is observed during the development of the technologies but this increases significantly as the technologies are passed on towards the utilization end. The importance of the earlier interventions from research is magnified as a cornerstone of not only the seed industry but several industries.

ASSESSING ICT TOOLS AS POTENTIALS FOR DETERRING EXAMINATION MALPRACTICES AT A HIGHER LEARNING INSTITUTE

Lucky Musonda and Lydia Nyondo

The study was an investigation of how ICT tools are utilized at an Institute of higher learning to deter examination malpractices. Examinations in learning institutions remain an integral part of an education system as they provide a measure to a standard of education relevant to society. The study aimed at gaining an understanding of how learners at an institute of higher learning perceive dissuading examination malpractices through use of ICT tools. A descriptive survey design was used involving qualitative and quantitative approaches to collect data with structured and semi structured questionnaires. The study had 41 respondents, 36 being students and 5 employees. Data collected was analyzed using descriptive statistics and in text form to interpret study objectives. The study reviewed that 72 % of the respondents much understood what ICT was and 61% had seen candidates in an examination room use mobile phones to cheat. About 77% agreed that ICT tools were best tools to curb examination malpractices which 77% identified Circuit Close Television (CCTV) as the best ICT tool to dissuade examination malpractices. However, it was further reviewed that with certain examination malpractices being ICT based, the Institute did not have sufficient ICT tools to avert the practice. The study recommended that an investment in ICT tools (CCTVs, online examination) by an Institute to dissuade examination malpractices would be critical as it would have potential to avert the vice.

E-DOCKET SHARING USING BLOCKCHAIN TECHNOLOGY

Mike Phiri and Jackson Phiri

Sharing the Docket of case by the Zambia Police with other stake holders like the courts of law, Legal Aid Board, Correction Service, Senior police officers and the National Prosecutions Authority (NPA) has been a challenging and time-consuming process especially in trying to expedite the justice process. The process has been cumbersome as the current system used is a manual system which involves physically taking the only copy of the docket to all these offices in order for them to peruse and make a comment on the investigations findings before it goes to the court for commencement of trial. This has to some extent jeopardized and compromised the justice system because on the way anything can happen to compromise the content of the docket. As has been the case many times the evidence and exhibits recorded in the docket have gone missing and sometimes the docket itself gone missing. Automating the policing system by using an electronic docket (e-docket) alone is not enough, as convention cloud database storage or common cloud storage has high risks of cyber-attack and tempering with privacy and confidentiality of such vital documents. Blockchain is a new trending technology which uses a distributed ledger of transactions which we believe can solve the current prevailing problem. We propose to use blockchain technology because of its properties, which is a network of immutable and transparent transaction history which forms a ledger of transactions joined together in block and it uses highly secure cryptographic algorithms. Security implementation based on blockchain technologies will curtail the possibility of tempering with the docket. This will in turn enhance and expedite the justice system

PUBLIC AWARENESS OF 5G TECHNOLOGY AND ITS ASSOCIATION TO COVID-19 SYMPTOMS: CASE OF ZAMBIANS WITH ACCESS TO INTERNET

Christopher Chembe, Alick Banda, Josephat Kalezhi and Douglas Kunda

Fifth Generation (5G) mobile cellular networks are envisaged to provide for high data rates and very low delay to support a lot of applications. However, its deployment has been met with a lot of resistance from some members of the public in various countries around the world. This resistance has been exacerbated by the onset of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) named COVID-19. Since the beginning of December 2019, COVID-19 has spread rapidly around the world with increased discussions on the topic across various online platforms. Due to the nature of these online platforms, misinformation is greatly shared and it becomes difficult for policy makers to implement measures that could save lives. Early this year in 2020,

there were conspiracy theories circulating on social media platforms perpetuating that radiation from 5G towers are linked with symptoms associated with COVID-19. This information led to some people burning 5G towers in certain countries. This research highlights general health concerns about 5G technology based on various research conducted. Furthermore, the paper present results from an online survey with a total of 258 respondents. Results show that 67% of respondents are aware of 5G technology and most users get their information from online social media platforms (about 78%). About 62% of respondents have heard the conspiracy theories linking 5G to COVID-19 symptoms, only 14.3% believe the conspiracy. Results shows that there is no link between 5G and COVID-19 as far as health issues are concerned.

THE IMPACT OF COVID-19 ON PUBLIC UNIVERSITIES IN ZAMBIA: OPPORTUNITIES FOR HOMEGROWN PARTNERSHIPS

Brenda Nayame Chisala, Gladson Chikwa and Patrick Ezepue

The relationship between universities and society is symbiotic. Universities benefit societies by acting as engines of knowledge production, innovation and contributing immensely to the production of human capital. They also play a significant role in national progress through harnessing skills, knowledge, and innovation that are critical for both economic development and citizens' well-being. Therefore, the role that higher education will play in addressing the 2030 Agenda for Sustainable Development cannot be overemphasized. In return universities derive their relevance from society through public funding, student fees and research grants. The paper discusses survey results articulating pathways for homegrown partnerships that will enable Zambian universities to succeed in becoming more innovative and cost-effective post-Covid 19. The results indicate that there are various push factors that explain why students choose to go and study abroad. These include the search for good quality education at reputable universities as well as the need for diverse cultural knowledge and good job opportunities. Moreover, it emerged that not all students who study abroad think that they have a good value for their money. The study showed that students are lamenting the exorbitant fees and cost of living they must pay abroad. Interestingly, a considerable majority of students and their parents revealed their interest and willingness to study at local public universities, if good quality programmes are offered. These views are discussed in detail and the paper provides some relevant approaches that Zambian universities can embrace to enhance the teaching quality, in particular, the importance of fostering collaborative partnerships with external universities to facilitate the joint delivery of good quality degree programmes. The role of homegrown solutions such as CGCA is discussed as this can act as a conduit in the establishment of partnerships between Zambian public universities and external universities in China, UK, and other countries.

A CONCEPTUAL FRAMEWORK OF FOOD SECURITY PROJECTPRENEURSHIP TO MITIGATE POVERTY IN RURAL AREAS IN ZAMBIA: THE ROLE OF UNIVERSITIES

Collins Mudenda

Food security is a subject that has attracted the attention of many researchers in the last decade because of the escalating hunger situation world over corroborated with climate change, political instability, widening gap between the rich and poor and now the problems associated with covid-19. The predicament of climate change tends to result in low food production hence rising food prices amidst growing population. As a way of improving the economic situation of individual household, people have been resorting to entrepreneurship but the field of food security entrepreneurship has not been given the attention it deserves. On the contrary, food security entrepreneurship is cardinal in mitigating poverty and securing food for household and government. This predicament has left Africa in general and Zambia in particular with serious food security concerns and have driven many households into a state of poverty especially in rural areas. Therefore, this paper challenges Universities to a paradigm shift in the training approach of entrepreneurship. Instead of the usual entrepreneurial focus of growth maturity and decline to a coupling with project management acumen aimed at increasing the likelihood of entrepreneurial ventures yielding positive results. Thus, the paper constructed a conceptual framework modelled to deliver an overlay of entrepreneurship and project management so that the Universities could deliver training to both university entrants and non-admissible candidates through customised short courses. Further, the Universities have been challenged in this paper to source finance for the trainees using crowd funding which provides benefits to the investors. Therefore, the involvement of universities in training and education through projectpreneurship will be a catalyst to house hold food security

The universities are required to take a leading role in designing short courses aimed at educating both non-university entrants and university entrants in food security entrepreneurship.

ASSESSMENT OF EFFECTIVENESS OF ICT (ONLINE) PLATFORMS USED BY THE TEACHING COUNCIL OF ZAMBIA IN SELECTED SCHOOLS IN KITWE DISTRICT

Lawrence Yamba and William Phiri

This paper bases the concept on transformational service delivery strategies with a concern to foster innovative changes in service delivery by organizations to its clients in particular the relationship between technological innovations. By adopting a quantitative survey approach to examining the effectiveness of the adoption and use of ICT platform by the Teaching Council of Zambia in its service delivery, the study has established the status core of the TCZ-ICT platform in the service delivery. The study has highlight practitioners in selected schools in Kitwe district experiences when using the platforms and has highlighted some suggestions that can be done to improve on the use of the platforms.

FACTORS RESPONSIBLE FOR PREVENTING STUDENTS FROM STUDYING FINE ART IN COLLEGES AND UNIVERSITIES IN ZAMBIA

Christopher Chileshe

This paper is part of the study that was conducted in selected secondary schools and teacher training institutions on the key factors responsible for preventing students from studying fine art at college or University in Zambia. The study sought to establish factors that hinder fine art students in the Northern Province of Zambia from proceeding to college or university to pursue fine art/applied courses and mainly explore opinions of teachers, students and other stakeholders concerning the fine art subjects' progress. A total number of 92 respondents of which 47 were the Grade twelve learners together with 20 teachers as respondents as well as 10 senior lecturers, 5 cultural officers, 5 education planning officers and 5 Senior Education Standards officer (SESOs), in the Northern Province of Zambia. The study adopted a qualitative approach where a descriptive design was engaged and a questionnaire and unstructured interview were used for data collection. The study established that a majority of the school leavers were not aware of many fine/applied arts programs and other matters related to fine art as a profession and also revealed that colleges and universities in Zambia were not provided with necessary facilities and lacked qualified, trained and experienced teachers to offer appropriate, attractive and marketable fine art programs. Therefore the paper recommends that the government as a matter of urgency should get ideas from other countries that are doing better and update the facilities and equipment of fine/applied art, establish more Fine Art schools, colleges/universities and there must be an equal attention to all the categories of all pupils, students and teachers who study fine art or applied art at all levels.

EFFECTIVE MANAGEMENT OF SCHOOL SANITATION AND HYGIENE IN ZAMBIA

Annie Musonda-Mubanga, William Phiri and Geoffrey Tambulukani

To establish effective methods which schools can utilize in the management of sanitation and hygiene. The study utilized a critical review of government reports, legislature, journal articles, books and any published material on school sanitation and hygiene in Zambia. Content analysis was used to analyze the secondary data and isolate themes of interest in management of school sanitation and hygiene. Zambia's school sanitation management is governed by the policy on school, personal and environmental health which recognises that good student health is an essential pre-requisite for effective learning. The Ministry of General Education endorses the critical role of the school in promoting quality school environments. The aspect of school sanitation and hygiene is two-fold; the sanitary conditions and facilities available in and around the school compound, while on the other hand, is the activities aiming to promote conditions at school and practices of school staff and learners that help to prevent water and sanitation-related diseases. The study identified various strategies which can help improve the sanitary conditions in school environment as well as foster hygiene practices. In line with Zambia's Vision2030 and the 6th Sustainable Development Goal, School management can lead in coordinating and involving existing local health facilities and the Ministry of Water Development, Sanitation and Environmental Protection in the promotion of school hygiene and sanitation. School heads can also help spearhead the setting up of school Water, Sanitation and Hygiene (WASH) clubs and committees which can assist with routine surveillance of the state of sanitation facilities and advising the school community in adopting adequate sanitation and hygiene practices. Whereas appropriate, hygiene education during school gatherings and frequent use of hygiene teaching aids can bring about the intention to change. However,

adequate safe water and sanitation facilities are needed to allow people to transform intention into action. Effective management of school sanitation and hygiene is the art of maintaining high levels of cleanliness and hygiene practices even in the face of shocks and stressors such as the 2019 Coronavirus world pandemic. A method which encompass all groups with stakes in school management is ideal to achieving this. Thus, the study proposed the use of the School-Led Total Sanitation (CLTS) approach to management of hygiene and sanitation in all schools

SCHOOLING AMONG YOUNG CHILDREN IN LOW INCOME COMMUNITIES: AN EVALUATION STUDY OF SELECTED COMMUNITIES IN KITWE DISTRICT, ZAMBIA

Grant Mwinsa

Studies have shown vital information on benefits of schooling to young children. However, there is no empirical evidence on how the school social spaces help children to get maximum benefits in schools. The study therefore, delved into the benefits of schooling among young children as they use the school social spaces in Kitwe District. The study was anchored on best practices in qualitative research. The study had 24 participants who were purposefully sampled and data was collected using focus group discussions, interviews, pictures and observations. Data was analysed thematically by transcribing, coding and identifying themes that emerged in the study. Findings show that there is an overall agreement among all participants that schooling is highly beneficial to young children. However, it was discovered that the school social spaces lack important features and equipment that support this beneficial outcome. As such, significance of schooling among young children in low income communities cannot be overemphasized.

AN ECONOMIC PERSPECTIVE REVIEW ON THE DETERMINANTS OF TAX NON-COMPLIANCE AMONG SMALL TAXPAYER IN ZAMBIA USING TAX ONLINE SYSTEMS: A FOCUS ON ZAMBIA REVENUE AUTHORITY, LUSAKA.

William Phiri

The purpose of this paper was to critically review the determinants of Tax non-compliance among small tax payers in Lusaka. Small tax payers' segment was targeted due their vulnerability and limitations in their ability to access tax online services and reduce their non-compliance. Literature revealed the that they are three Types of Tax non-compliance forms and these are : (1) Crude form, (2) Manipulation of Accounts and, (3) Adulterated type. The theoretical framework used was the deterrence theory. The major determinants of Tax non-compliance from an economic perspective and based on the deterrence theory and literature review are; (1), Income levels of tax small tax payers, (2), Levels of Tax Rates, (3) Tax Knowledge and (4) complexity of the income tax system and (5) the probability of being audited by Tax Authority (Zambia Revenue Authority). The literature further revealed that there was more room for further research on the relationship between tax evasion and tax rates given the many gaps in the literature concerning on this topic. It was further revealed that the principle legislation for managing Tax non-compliance is the Income Tax Act cap 323. The Zambia Revenue Authority is the Sole institution mandated by the Zambia Revenue Act to collect taxes on behalf of the government. Based on the findings from the literature review, the paper recommends that non economical variable such as Gender, age and education variables be studied in details in order to understand their influence on Tax non-compliance from a Social perspective.

RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION IN THE ZAMBIA CONTEXT - A LITERATURE REVIEW

Maureen Malesu

The importance of the services sector world over cannot be underestimated. It can be argued that the services sector in Zambia represents a large and growing part of the Zambian economy providing employment and incomes. The growth of the service sector has increased the level of competition resulting in the service sector placing emphasis on service quality and customer satisfaction. Service quality and customer satisfaction has become one the most important factors of successful business competition for the service sector. The subject of service quality and customer satisfaction has received a lot of attention over the years. Several studies have been done on the relationship between service quality and customer satisfaction in developed as well as developing countries. This paper reviewed current literature on the relationship between service quality and customer satisfaction in Zambia. A number of peer reviewed journal publications produced between 2015 and

2020 were identified and reviewed. The time period 2015 to 2020 was considered because the author wanted a review on more recent developments in the subject matter. The peer reviewed journal articles were obtained from databases such as google scholar and science direct. This paper provides an analysis and synthesis of the body of knowledge produced during the stated time period. The findings from the literature review demonstrated that there is a significant relationship between service quality dimensions and customer satisfaction and that SERVQUAL framework was the most common measurement scale for service quality. This paper provides managerial implications and future research directions for scholars.

AVAILABILITY OF ASSISTIVE TECHNOLOGIES FOR SUSTAINABLE EDUCATION AMONG STUDENTS WITH VISUAL IMPAIRMENTS IN COLLEGES OF EDUCATION IN ZAMBIA

Sarah Ndume

Enabling access to assistive technologies and devices is an effective way to integrate people with visual impairments in the education system and a society at large. The purpose of the study was to determine the Availability of Assistive Technologies for Sustainable Education among Students with Visual Impairments in Colleges of Education. Thus, the study provided answers to the following research questions: What are the assistive technologies available for students with visual impairments for sustainable education. Are available assistive technologies utilized by the visually impaired students? What measures should be put in place to enhance the utilization of assistive technologies by the visually impaired students? A case study design was used in this study. The population consisted of all the visually impaired students and specialist lecturers in Colleges of Education that enroll the visually impaired students whilst the sample size was twelve (12) of which eight (8) were visually impaired students and four (4) were specialist lecturers. Semi- structured interviews were used to collect data and thematic analysis was used to analyze data based on the themes that emerged in the study. It was revealed that a very limited number of assistive technology devices were available for the visually impaired learners due to reasons ranging from high-cost of the assistive technology gadgets and scarcity due to difficulty in importation of gadgets from other countries. It was also noted that only a few technologies were being highly utilized and frequently used. Additionally, it was revealed that lecturers have little knowledge about the usage of technologies. To enhance learning sustainability the government and other stake holders should provide assistive technologies. It was also recommended that lecturers should be trained in ICT as this will enhance learning sustainability among the VI students. Key Words: Assistive Technologies, Availability, sustainability, Visual Impairment

STUDENT ENGAGEMENT IN QUALITY ASSURANCE IN HIGHER EDUCATION INSTITUTIONS: A REVIEW

Bupe Getrude Mwanza, Tamala Kambikambi and Fumbani Mphande

Quality assurance (QA) in higher education has become a concern for both the public and private higher education institutions (HEIs). Compared to developed economies, the governments in developing economies are calling for quality education while pushing for sustainable education. Consequently, the drive towards provision of quality education has not ignored the involvement of the key stakeholders in education. The purpose of the research was to review the level of students' engagement in quality assurance processes (QAPs) in HEIs of developed and developing economies. The objectives of the research were to; determine the processes in which students are engaged in QA, identify the types of QA evaluations students are engaged in and recommend strategies for dealing with the existing gaps. The research was conducted by using a systematic review of literature and a total of 100 articles were collected in which 50 articles were classified into the A category of relevance. The criteria of relevance were based on the nature of the abstracts and 30 articles formed the sample size. The results revealed that, most institutions engage students in QA related questionnaires that focus on, student satisfaction and end of semester evaluation surveys. However, students are not widely engaged in committees of QAPs. In some institutions, students are allowed to engage with the external regulators but are not allowed to participate in the writing or reviewing of the reports. Further, feedback from the student surveys is normally unimplemented. From this research, a number of strategies for improving student engagement in QAPs are recommended. The research provides an insight of the extent of student engagement in QAPs from the developed and developing economies perspective. It provides strategies that are relevant to the Ministry of Higher Education, Higher Education Authorities and the HEIs.

2020 ZAPUC INTERNATIONAL CONFERENCE PROCEEDINGS ARTICLES

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THE IMPACT OF COVID-19 ON PUBLIC UNIVERSITIES IN ZAMBIA: *OPPORTUNITIES FOR HOMEGROWN PARTNERSHIPS*

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The relationship between universities and society is symbiotic. Universities benefit societies by acting as engines of knowledge production, innovation and contributing immensely to the production of human capital. They also play a significant role in national progress through harnessing skills, knowledge and innovation that are critical for both economic development and citizens' well-being. Therefore, the role that higher education will play in addressing the 2030 Agenda for Sustainable Development cannot be overemphasized. In return universities derive their relevance from society through public funding, student fees and research grants. This paper discusses survey results articulating pathways for homegrown partnerships that will enable Zambian universities to succeed in becoming more innovative and cost-effective post COVID-19. The results indicate that there are various push factors that explain why students choose to go and study abroad. These include the search for good quality education at reputable universities as well as the need for diverse cultural knowledge and good job opportunities. Moreover, it merged that not all students who study abroad thing that they are getting good value for their money. The study showed that students are lamenting the exorbitant fees and cost of living they must pay abroad. Interestingly, a considerable majority of students and their parents revealed their interest and willingness to study at local public universities, good quality programmes are offered. These views are discussed in detail and the paper provides some relevant approaches that Zambian universities can embrace to enhance the quality of teaching and learning, in particular the importance of fostering collaborative partnerships with external universities to facilitate the joint delivery of good quality degree programmes. The role of home-grown solutions such as CGCA is discussed as his can act as a conduit in the establishment of partnerships between Zambian public universities and external universities in China, UK and other countries.

Keywords — universities, Covid-19, home-grown, partnerships

I. INTRODUCTION

The four core missions of forward-thinking universities are (1) educating graduates that meet global demand for higher level skills through teaching and learning, (2) generating world-class research that transforms lives through research and scholarships, (3) driving innovation that supports local and national economic growth through innovation and entrepreneurship [1] and (4) raising income from a wide range of sources through public engagement and partnerships. With the COVID-19 pandemic impacting

negatively on all aspects of public universities against the backdrop of declining student enrolments, re-thinking how universities can establish homegrown partnership solutions should be a top priority, to address the declining student enrolments. Local universities are currently losing students to markets such as China, Malaysia, Europe, US, Canada and Australia. It will be argued that homegrown partnership solutions should be of increasing strategic importance to strengthen the relevance, responsiveness, and accountability of Zambian universities for these roles, and to build trust in public universities in Zambia, so that prospective students particularly undergraduate students would consider studying locally as their first choice. In addition, this paper argues for the adoption of a partnership model called UK Higher Education Transnational Education (TNE) that some UK universities are developing with universities around the world, including Chinese universities. This model supplements the public funding they receive from the UK government in form of undergraduate fees and research grants.

Additionally, the paper includes some statistics from a survey conducted on students who are currently studying in China and the UK. This is then followed by a discussion on identifying sustainable homegrown partnership solutions. These discussions are framed around the survey results and how public universities can forge partnerships with homegrown academicians such as the Consortium of Global Corporate Academics (CGCA), with a strong passion to make significant contributions towards the development of higher education in Africa, to stem the influx of students to China, UK and other parts of the world. The paper concludes with a summary of a critical review of the benefits, challenges, and opportunities available through organisations such as the CGCA to address the real threats to the stability and the very existence of public universities in Zambia.

II. UNIVERSITIES AND SOCIETY

As foreshadowed above, universities have a symbiotic relationship with society in that when they work really well and in close partnership with government and businesses, they can be a powerful engine for the economic growth of a nation. They do this by producing human capital which

enables countries to harness skills, knowledge, and innovation to grow their economies and improve the well-being of their citizens [2]. One of the objectives in the UN 2030 Agenda for Sustainable Development is the provision of inclusive and equitable education at all levels, including university education [3]. Therefore, the role that higher education and in particular public universities in Zambia will play in addressing the 2030 Agenda for Sustainable Development cannot be overemphasized. What universities get in return from society when they play their true role is their relevance and funding through public funding, student fees, research grants, and other sources. The relevance of public universities in Zambia is at its lowest level for a variety of reasons that cannot be tackled in this paper. This situation has been made worse because of the negative impact that COVID-19 pandemic is having on all aspects of public universities. All this is happening at the backdrop of declining student enrolments. Hence, it will be argued that homegrown partnership solutions should be of increasing strategic importance to strengthen the relevance, responsiveness and accountability and to build trust in public universities in Zambia, so that for Zambian students, particularly undergraduate students, studying locally will become their first choice.

As COVID-19 pandemic began to spread to every part of the continent, the response from almost all governments in the world including Zambia was to go into lock down including shutting down higher education institutions to help minimize the spread of the disease. However, while the western world had the capacity to seamlessly transition from face-to-face teaching to online teaching because they had the capacity, infrastructure and the internet connectivity, many universities in Africa struggled to do that [4]. This left many African students languishing at home not knowing when they would return to universities to continue with their studies. If this problem is not addressed properly, together with other issues that public universities are facing, it will make public universities even more irrelevant and unattractive to young people that should be filling these universities. Consequently, we will continue to see declining student enrolments that threaten the stability, viability, and the very existence of public universities in Africa, including Zambian public universities.

To reiterate the key remits of this paper, it will review a partnership model called UK Higher Education Transnational Education (TNE) that a number of UK universities are growing with universities around the world, including Chinese universities, to supplement the public funding they receive from the UK government in the form of undergraduate fees and research grants. Additionally, the paper includes some statistics of a survey conducted on students and/or parents with children currently studying in China and the UK. This is then followed by a discussion on identifying sustainable homegrown partnership solutions. These discussions are framed around the opportunities that exist through homegrown solutions such as the CGCA for public universities in Zambia to establish partnerships

similar to the UK HE TNE programmes. The members of the consortium have a strong passion to make significant contributions towards the development of higher education in Africa. They seek to facilitate a critical review of the benefits, challenges, and opportunities available through homegrown higher education solutions, to address the real threats to the stability and the very existence of public universities in Zambia.

III. BACKGROUND TO THE RESEARCH

According to [5] the definition of Transnational Education (TNE) is “education delivered in a country other than the country in which the awarding institution in which degree programmes are delivered outside the UK. It is estimated that 84% of UK universities are now delivering TNE to over 700 000 students worldwide” [6]. Therefore, TNE is becoming, in terms of scale and strategic importance, a key component of international growth to UK higher education. Delivery of TNE across all academic areas at all levels include online/distance learning with or without local support (Universities UK 2020b) or branch campuses, distance learning, joint and dual degree programmes, fly-in faculty, or a mix of these [6].

One successful example of UK HE TNE has been a rapid expansion of Chinese-foreign joint programmes and institutions over the last two decades. This has helped to stimulate in-depth collaboration and supported the development of both Chinese host universities and their overseas partners in areas such as teaching, management of students, teacher development, and quality assurance [7]. Reference [7] goes on to say that these joint programmes between UK and China “accounts for more than one fifth of all Chinese-foreign joint programmes and institutions at the bachelor’s degree level and above, as well as more than a fifth of the students on these programmes, making the UK China’s leading partner country in these terms”. The declining student enrolments at Zambia’s public universities, though not verified, could partly be attributed to the number of students that are being lost to Chinese universities. Therefore, this paper argues that there are lessons that Zambia’s public universities can learn from UK HE TNE, so that they can begin to develop these kinds of partnerships with China, UK, and other countries that are taking Zambian students who could have potentially ended up at Zambia’s public universities.

IV. METHODOLOGY

Four sets of questionnaires were designed using google forms. The first two sets were randomly sent to Zambian students studying either in China or UK and the other two sets were randomly sent to parents. The key questions in the questionnaire for students were (1) What encouraged you to go to China or UK for university education? (2) Do you think it is good value for money to do your course in

China and in Chinese language or English language? / Do you think it is good value for money to do your course in the UK and pay such high fees (£13000 to £40000) when local students pay only £9500 regardless of the course of study? (3) If there was a degree similar to what you are doing in China or UK in English in Zambia that meets the UK standards and you had to pay not such high UK international fees, would you be willing to pay and study in Zambia? (4) On a scale of 1 to 5, with 5 being excellent and 1 being the worst, what is your overall China/UK experience?

Similar questions were adapted and sent randomly to parents with children studying in China or the UK. Question 1 had a multiple-choice answer of Yes, No or Maybe choices which were followed by a question for the respondents to explain the choice they had selected. Similarly Question 2 had a multiple-choice answer but this time only the Yes or No choices were given and this again was followed by a question to ask respondents to explain the choice they had selected. The answers from the questionnaires were compiled and presented mostly in pie charts and the explanations to questions 1 and 2 were presented in pivot tables. It is in our view analytically astute to use such simple exploratory data analysis to reveal insights from this qualitative study.

V. RESULTS

In total 34 students and parents responded and the pie chart in Figure 1 shows the total number of respondents as a percentage of the total respondents.

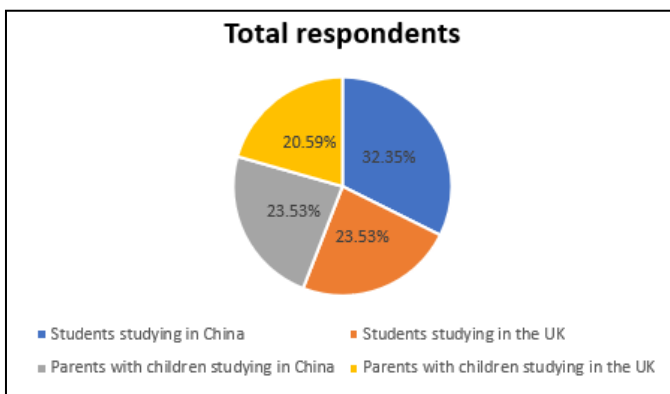


Fig. 1. Total number of respondents as a percentage

The Yes, No or Maybe multiple-choice responses to Questions 2 are shown in the pie chart shown in Figures 2, 3, 4 and 5 below.

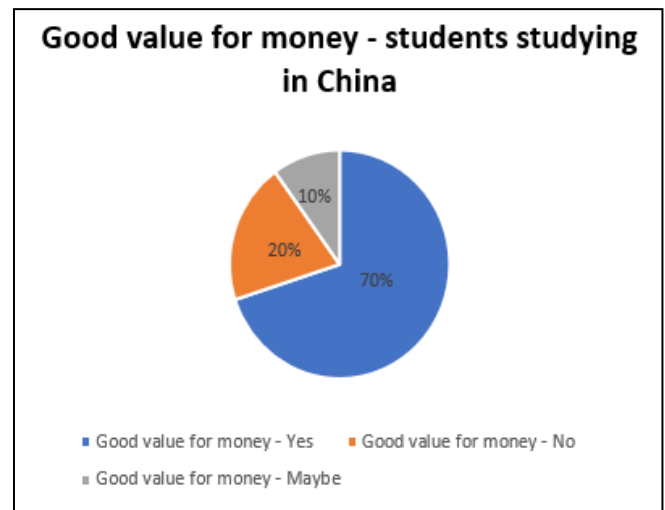


Fig. 2. Responses to question of why students studying in China thought it was good value for money to do their course in China

The key insight here is that when considered against the higher cost of studying in the UK, the students generally agree that studying in China is good value for money, recall £4000 versus £9500, but the trade-offs in quality and other contributing factors to successful education needs to be explored more in-depth. Also, this should be weighed against additional benefits that can be gained if similar qualities obtain in Zambian universities.

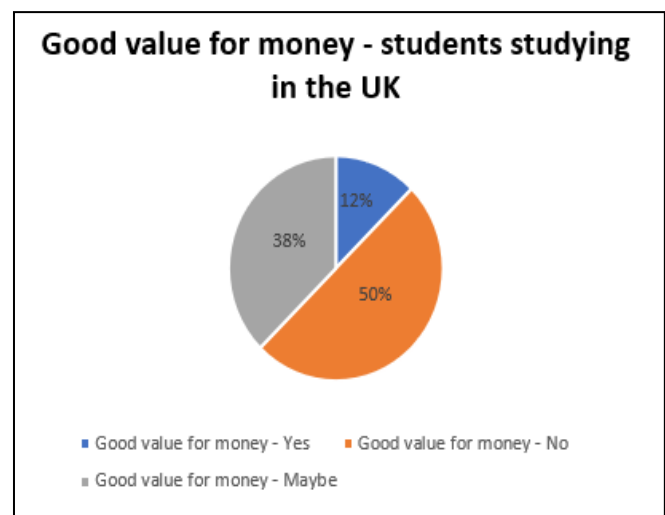


Fig. 3. Responses to question of why students studying in the UK thought it was good value for money to do their course in the UK

Compared to the above insight, the key insight here is that when considered against the UK home fees, about half of the students agree that there is good value for money in studying in the UK, compared to studying in Zambia, even when this comes at a hefty cost. Again, this implies a strong potential for saving Zambian students and their sponsors a lot of money

if the TNE model is based in Zambia, provided that the quality of the education is internationally comparable to the UK universities.

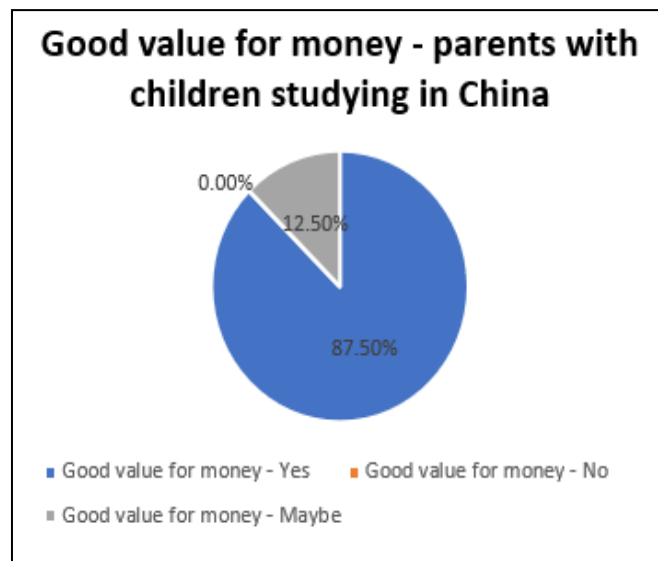


Fig. 4. Responses to question of why parents with children studying in China thought it was good value for money to do their course in China

Here, the parents agree even more than the students that there is good value for money in Zambian students studying in China, compared to Figure 1. Same insights there apply here.

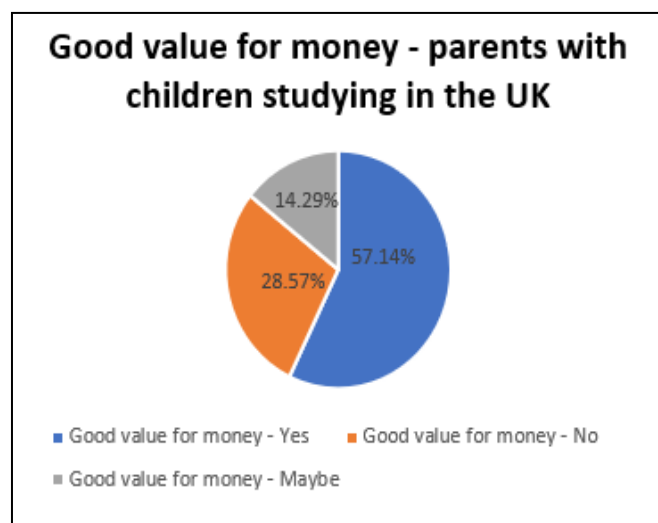


Fig. 5. Responses to question of why parents with children studying in the UK thought it was good value for money to do their course in the UK

Similar insights as in Figure 3 on students' views apply to parents here. 'Again, this implies a strong potential for saving Zambian students and their sponsors a lot of money if the TNE model is based in Zambia, provided that the quality of the education is internationally comparable to the UK universities'.

The summary explanation of the responses to questions 1 and 2 were presented in pivot tables shown in Figures 6, 7, 8 and 9 below.

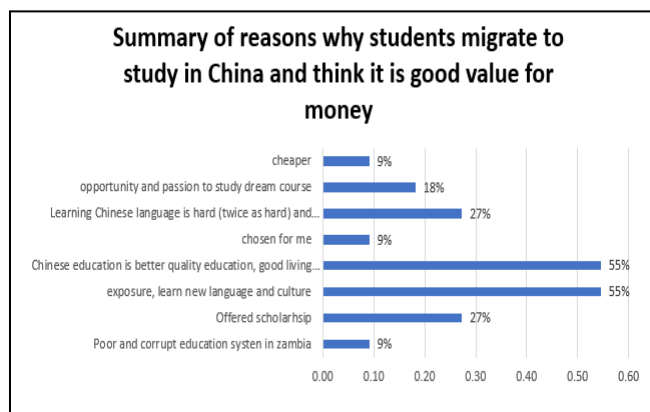


Fig. 6. Responses to explanation of why students migrate to China for education and think it is good value for money.

These reasons provide a dashboard of considerations for improving higher education in Zambia and by extension Africa, as intended in the TNE partnership model which this paper explores. This point equally applies to the reasons in Figures 7-9 below.

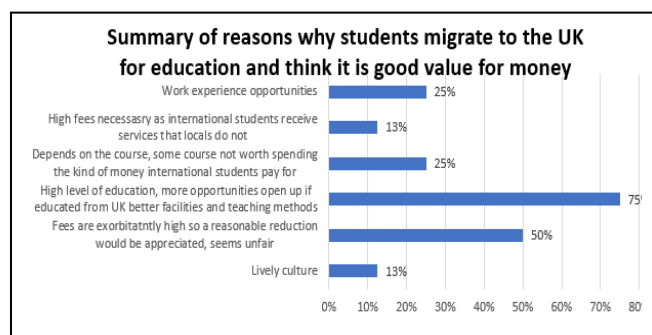


Fig. 7. Responses to explanation of why students migrate to the UK for education and think it is good value for money.

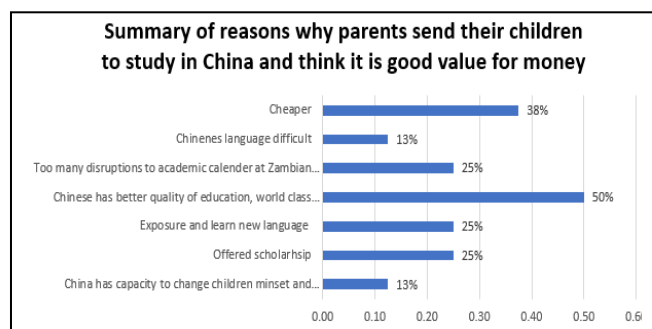


Figure 8: Responses to explanation of why parents with children studying in China send them there for education and think it is good value for money.

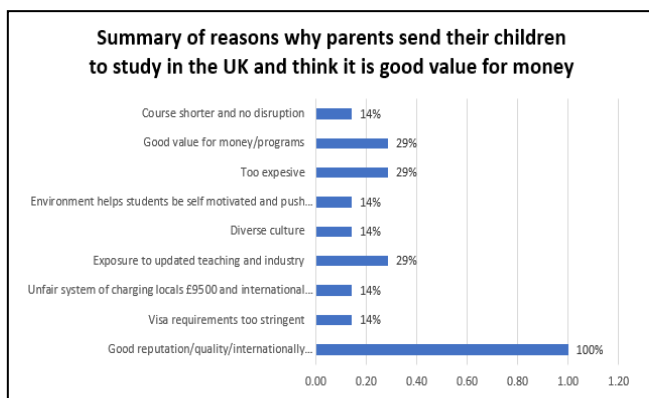


Fig. 9. Responses to explanation of why parents with children studying in the UK send them there for education and think it is good value for money.

The summary of the responses to question 3 to students and parents about whether or not students would be willing to do and pay for such courses if such similar courses were offered in English in Zambia and met the UK standards were presented in pie charts and shown in figures 10 to 13.

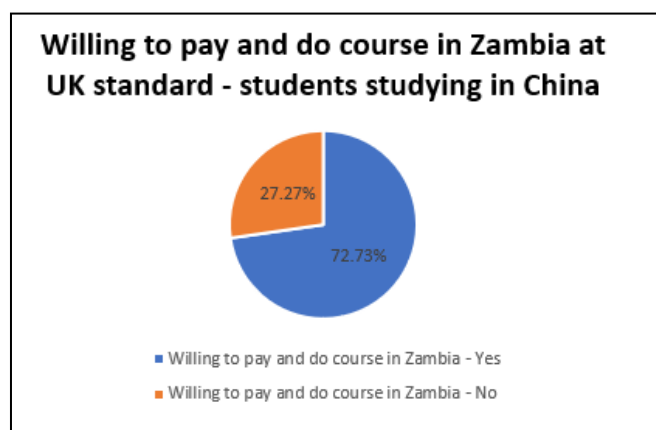


Fig. 10. Responses to willingness to study in Zambia question - students in China

The results show a strong inclination to study in Zambia if the above factors are adequately addressed.

Willing to pay and do course in Zambia at UK standard - students studying in the UK

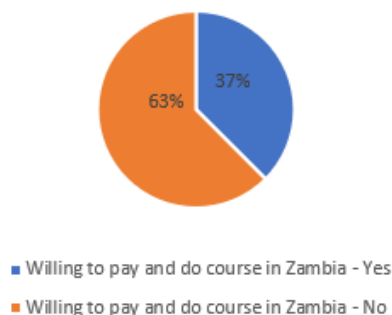


Fig. 11. Responses to willingness to study in Zambia question - students in UK

Here, the UK results are different from the Chinese ones, perhaps due to perceived higher UK quality than in China, a reason for the students studying in China preferring to study in the UK generally, as Zambian and African students. Hence, in the TNE model, benchmarking Zambian higher education standards on the UK experience seems imperative.

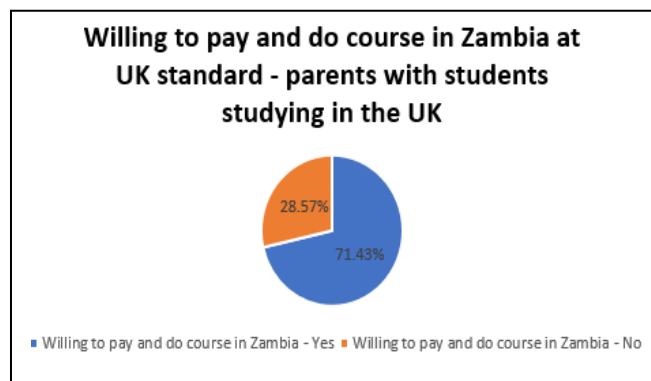


Fig. 12. Responses to willingness to study in Zambia question - parents of students in UK

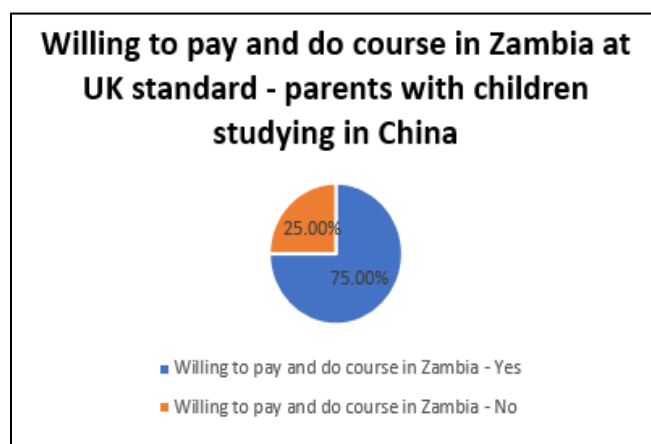


Fig. 13. Responses to willingness to study in Zambia question - parents of students in China

Figures 12 and 13 show that, more than 70% of Zambian parents of students studying both in China and the UK are willing to pay for similar quality of TNE- and CGCA-education in Zambia as in the UK

The last set of results are pie charts about the overall China or UK university experience from both the point of view of students and parents. These are presented in figures 14 to 17.

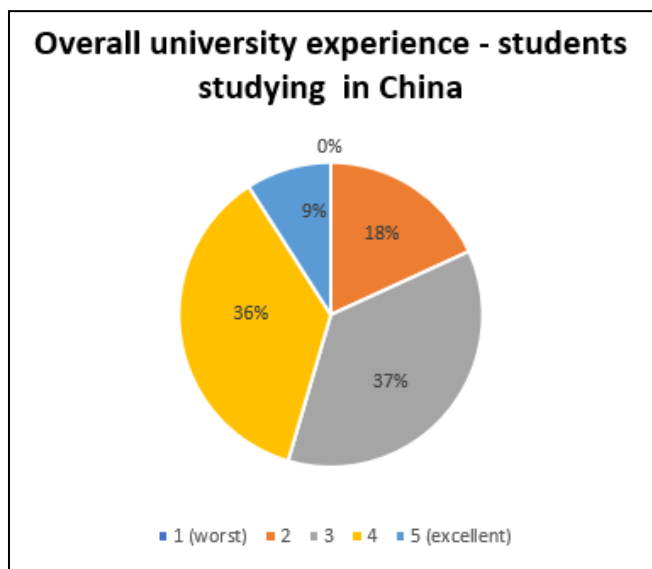


Fig. 14. Responses to question 4 on the overall university experience for students studying in China

Here, students' experience of studying in China is low with only 37% high rating. Given the high fees paid by the sponsors, this reinforces the potential for successfully adopting the TNE model in Zambia.

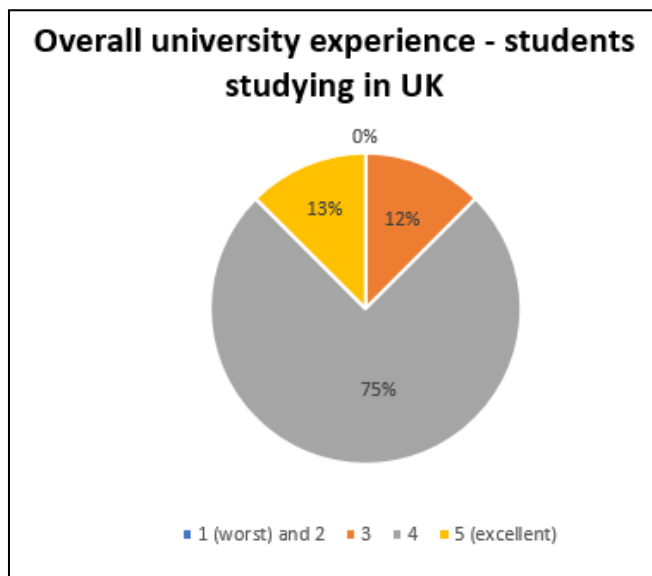


Fig. 15. Responses to question 4 on the overall university experience for students studying in the UK

In contrast to the overall experience of students studying in China, as in the foregoing insights, students' experience of studying in the UK is very high, with 75% high rating. Again, given the high fees paid by the sponsors, this reinforces the potential for successfully adopting the TNE model in Zambia if the UK standards are met.

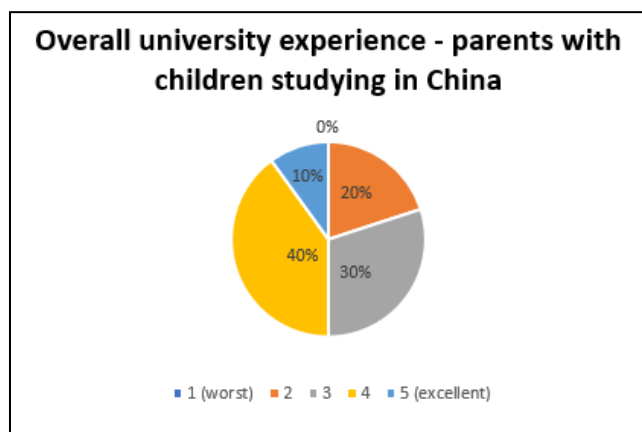


Fig. 16. Responses to question 4 on the overall university experience for parents with students studying in China

Compared to figure 14 results, parents' experience with children studying in China is slightly higher with about 50% high rating versus only 37% high rating by students. Again, given the high fees paid by the sponsors, this reinforces the potential for successfully adopting the TNE model in Zambia.

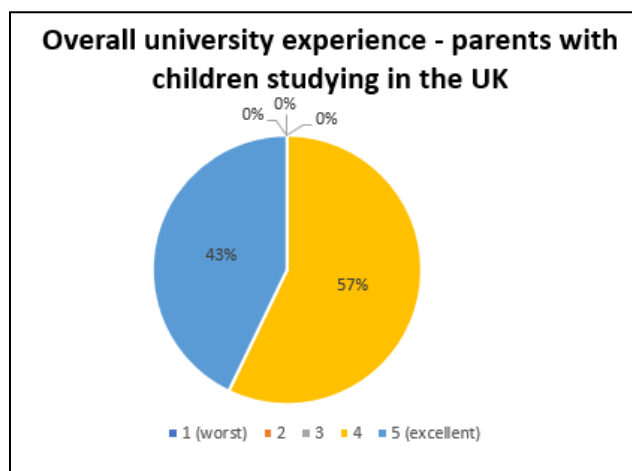


Fig. 17. Responses to question 4 on the overall university experience for parents with students studying in the UK

In contrast to the students' experience in figure 15, parents' overall experience with children studying in the UK was relatively lower, with only 57% good rating of 4 and no excellent rating. Again, given the high fees paid by the parents, this reinforces a) the fact that when parents consider the finances involved, there is a stronger potential and willingness to have their children study in Zambia. Hence for successfully adopting a resemblance of the TNE model in Zambia has great potential of addressing the declining student enrolments at public universities in Zambia. However, successfully adopting the TNE model in Zambia, by extension Africa, requires a close attention to delivering specific stakeholder gains to students, parents and sponsors, the universities, Zambian government, and collaborating with partners, say the CGCA. These insights need to be covered in

the nature of memoranda of understanding (MoUs) that are developed to drive the TNE collaborations.

VI. DISCUSSION AND CONCLUSION

The survey results presented in figures 1-17 above show that Zambian students decide to go and study abroad because of a plethora of factors, including the search for good quality higher education which they do not feel can be accessed at the local public and private universities. It also emerged that students are keen to expand their cultural experiences by studying abroad and optimizing their opportunities to get a job upon graduation. One other important factor highlighted by students is the access of funding scholarships, especially in China. The parents also choose to send their children to study abroad in search of good quality and world-class degree programmes. There is also a sense of frustration with the way local universities operate as a significant majority of the parents also cited that they opted to send their children abroad where there are no interruptions to their children's learning.

However, both students and parents highlighted some concerns with studying abroad which include high tuition fees, especially for those studying in the UK, and cultural differences including language barrier for those students studying in China. It is quite evident from the results of the survey that students do not always think they are getting good value for their money for some of the programmes they study abroad. Surely, these results are thought provoking and should inspire local public universities to explore ways of addressing their challenges to address the declining enrolments and maximise the recruitment of Zambian students. A considerable majority of both students and parents indicated that they are willing to study at local universities if good quality programmes are offered. This is an excellent impetus for the local universities to consider establishing partnerships with external universities to offer good quality programmes. For instance, working with the CGCA it is possible to establish partnerships such as the UK HE TNE programmes.

In summary, as argued above, 'successfully adopting the TNE model in Zambia, by extension Africa, requires a close attention to delivering specific stakeholder gains to students, parents and sponsors, the universities, Zambian government, and collaborating partners such as the CGCA.

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REFERENCES

- [1] Universities UK, "University funding explained", 2016a, <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/2016/university-funding-explained.pdf>. Accessed on 5th October 2020
- [2] M, Ndulo, "The crisis of University Education in Zambia, 2019,
- [3] Diggers news article", October 2020. <https://diggers.news/guest-diggers/2019/07/21/the-crisis-of-university-education-in-zambia/#:~:text=Office%20and%20classroom%20facilities%20are%20dilapidated%2C%20overcrowded%20and%20badly%20maintained.&text=The%20University%20of%20Zambia%20challenges,have%20further%20exacerbated%20the%20situation>. Accessed on 4th October 2020.
- [4] UN, "Transforming our world: the 2030 Agenda for Sustainable Development", 2015, <https://sdgs.un.org/2030agenda>. Accessed on 5th October 2020.
- [5] AllAfrica, "Africa: Impact of COVID-19 on Higher Education in Africa – the Transition to Online Teaching and Learning", 2020, The Ghanaian Times news article. <https://allafrica.com/stories/202006220650.html>. Accessed on 4th October 2020..
- [6] Universities UK, "What is UK TNE", 2016b, <https://www.universitiesuk.ac.uk/International/heglobal/Pages/what-is-transnational-education.aspx>. Accessed on 5th October 2020.
- [7] Universities UK International, "Transnational Education: Global Locations, Local Innovations", 2020, <https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Documents/UUKi%20TNE%20WECD%20report%20final.pdf>. Accessed on 5th October 2020.
- [8] British Council, "Research on Current UK-China Transnational Education: From the Perspective of Administrators and Students, 2017, British Council research report. <https://education-services.britishcouncil.org/sites/siem/files/field/file/new/s/2017%20BC-CEAIE%20Joint%20Research%20Report%20of%20UK-China%20TNE.pdf>. Accessed on 6th October 2020.

AN INVESTIGATION OF THE FACTORS INFLUENCING THE UTILIZATION OF E-WALLETS IN HIGHER LEARNING INSTITUTIONS IN ZAMBIA USING TECHNOLOGY ACCEPTANCE MODEL

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Abstract—This paper investigated factors influencing the utilization of e-wallets in higher learning institutions in Zambia. This study proposed an e-wallet acceptance model based on the Technology Acceptance Model. Five factors were considered as possible predictor variables: perceived ease of use, perceived usefulness, gender, perceived cost and perceived risk. This study used the Logistic Regression's Likelihood Ratio Test; the findings established that perceived ease of use and gender significantly influenced students' utilization of e-wallets, whereas perceived usefulness, perceived cost and perceived risk did not. However, perceived usefulness came very close. Therefore, software developers designing e-wallets for students should make them as easy to use as possible. Additionally, e-wallet software developers should consider preferences that appeal differently to each gender, as gender plays a significant role in influencing students' decision to use e-wallets.

Keywords—Perceived Ease of Use, Perceived Usefulness, Gender and Likelihood Ratio Test

I. INTRODUCTION

The widespread use of mobile phones and other mobile communication devices worldwide has had a huge social and economic impact, and it is likely to continue to do so for many years to come [1]. One field of mobile operations that has recently become a priority is the use of electronic wallet (e-wallets) to make payments. According to [2] an e-wallet is a form of technology development in the finance field which allows its users to save money, buy products and services from persons as well as stores, whereas [3] defines an e-wallet as the consumer device designed to store and manage electronic cash. In addition, e-wallets can be used to send money to other e-wallet users, make online purchases and pay bills. E-wallets are typically compatible with e-commerce websites, making transactions easier [2].

Mobile payments refer to a variety of mobile device-initiated financial transactions [1]. This may range from a remittance sent to a person some distance from the sender using only the mobile network operator infrastructure, to a credit card transaction made at a retail store using a mobile phone [4]. Mobile payments should not be regarded as a single type of payment; the term includes a variety of different classes and subclasses of payments, each providing an entirely different set of benefits.

Globally, the mobile money industry has witnessed a significant growth over the last decade. This can be seen from having 30 million estimated active mobile money

accounts globally in 2012 [5], to having 1.04 billion globally registered and active mobile money accounts in 2019, with \$1.9 billion worth of transactions being processed daily [6]. Naghavi further states that Sub-Saharan Africa is the enduring epicentre of mobile money, adding over 50 million registered accounts in 2019. This was driven by strong growth in Western Africa (21 million new accounts) and Central Africa (six million new accounts), as well as steady growth in Eastern Africa (22 million new accounts).

Mobile money has many benefits, especially for the low-income and rural customers. Mobile money services typically offer safe storage, deposit, lower withdraw and transfer cost, convenient and faster than banks; and facilitate the following services - remittances (domestic and/or international) at a lower cost, bill payment, salary disbursement, retail payments, money savings, credit and insurance [7]. Zeinab further states that e-wallet services offer methods for turning physical cash into electronic money (e-money) in a customer's mobile account and vice versa such as agents, branches, card less ATMs, transfer from the bank account to mobile account. Also, in the advent of Covid-19 pandemic, mobile money services (e-wallets) are being used to reduce the physical exchange of currency so as to minimize the spread of the Covid-19 [8].

Due to the rise in the number of students studying in higher learning institutions, frustrating queues and overcrowding in most financial institutions have characterized the payment of student fees. Furthermore, after depositing the funds, a student is required to submit the stamped deposit slip obtained from the financial institution to the higher institution of learning to confirm that he or she has paid. In the higher learning institution, the delivery of stamped deposit slips is also characterized by long, unbearable queues and overcrowding. Most higher learning institutions have made little to no concerted efforts to address the emerging problem faced by students, particularly when registering and paying student fees. In order to introduce a blockchain-based e-wallet for easier payment of student fees, this paper sought to investigate the factors that influence the utilization of e-wallets by students in higher learning institutions.

II. LITERATURE REVIEW

For this study, Technology Acceptance Model (TAM) was considered. This model is primarily used to predict the acceptance of information systems by users and to understand the motives and probable problems that the

system users face. It is a model that combines the Reasoned Action Theory (TRA) and Planned Behaviour Theory (TPB) through the development of a generalized framework [9].

The TAM is seen as a model that describes the purpose of use better than others [10]. According to Davis [9], preceding research suggests two determinants that are particularly important among the many variables that can influence system usage. The first is whether or not users have the intention to use the technology. This variable is called perceived usefulness. That is the degree to which a person believes his or her job performance would be enhanced by using a particular system [9]. This implies that mobile payment systems need a competitive advantage for accepting them. Secondly, while potential users think a given software is useful, they may simultaneously believe the system is too difficult to use and the performance benefits are outweighed by the application's effort to use it. This attribute is called perceived ease of use. That is, the degree to which a person believes it would be effortless to use a particular system [9]. It means that the less effort is needed to use a mobile payment system, the greater the probability is that it would be accepted by users. Although the initial intention of TAM for the workplace, many researchers [11], [12] and [13] applied the TAM to different information systems and technologies. Chandra et al conducted a study where they compared bank-based e-wallets to telecommunication-based e-wallets. The authors used TAM as the basis of conclusion for their findings [2]. In addition, Nag and Gilitwala in their study, used the constructs of TAM to investigate the factors affecting the intention to use e-wallets in Bangkok, Thailand [27].

Although the TAM has many benefits, such as excellent measuring properties, conciseness, and common consumer and methodological soundness [14], the downside of this model, according to [15], is that it offers general, user-friendly information and has also been criticized for its parsimony by several researchers.

Perceived usefulness (PU) was one of the two dimensions of the TAM originating from [9]. [13] further argued that the performance of a system can be assessed by the system's user acceptance, calculated by three factors: perceived usefulness (PU), perceived ease of use (PEOU), and system attitude. If the program is not user friendly, then it should not be deemed useful [9] and [16]. This is in line with the original concept of PU and PEOU as the degree to which a person believes that using a specific system will enhance his or her job performance and the degree to which the consumer believes that using a particular system would be effort-free, respectively [9]. A system high in perceived usefulness, in turn, is arguably one for which a user believes in the relationship between positive use and performance [9].

A system perceived to be easier to use than another is more likely to be accepted by users [9]. Many of the studies found PU and PEOU to be important [17], [18], [19], [14], [20], [21], [22], [13] and [23].

With the constructs drawn from TAM, this study proposed a conceptual framework as illustrated in Figure 1.

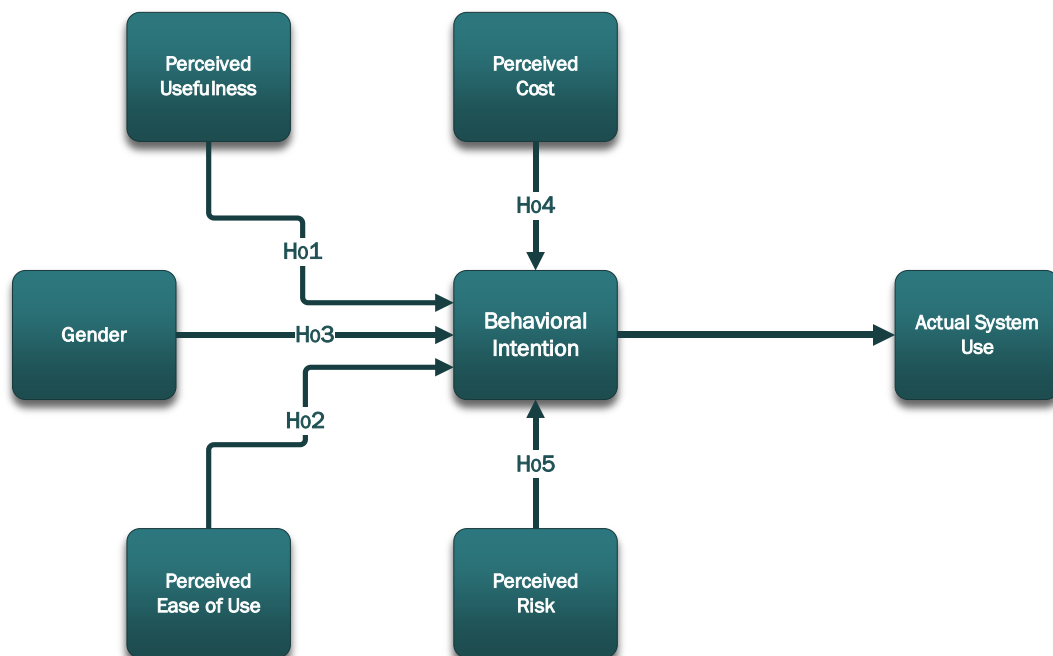


Figure 1. Conceptual Framework

The following are the hypotheses used in this study;

- 1) H₀₁: Perceived usefulness does not influence the usage of e-wallets by students in higher learning institutions.

- 2) H₀₂: Perceived ease of use does not influence the usage of e-wallets by students in higher learning institutions.
- 3) H₀₃: Gender influences the usage of e-wallets by students in higher learning institutions.
- 4) H₀₄: Perceived cost does not influence the usage of e-wallets by students in higher learning institutions.
- 5) H₀₅: Perceived risk does not influence the usage of e-wallets by students in higher learning institutions.

III. METHODOLOGY

A. Study Design

In this study, the cross-sectional design method (quantitative approach) was used. According to [24], a cross-sectional design involves the study of a particular phenomenon (or phenomena) in a population at one specific point in time. Where the phenomenon being investigated in this study was the utilization of e-wallets among students in higher learning institutions. A cross-sectional study allowed the researcher to collect a great deal of information at a particular time. In addition, the researcher was able to collect data inexpensively using questionnaires.

B. Variables

In this study, the dependent variable was the utilization of e-wallets, while the independent variables were: perceived usefulness, perceived ease of use, gender perceived cost and perceived risk.

C. Study Site and Population

This study's participants were sampled from four higher learning institutions offering accommodation facilities for students. These institutions are the University of Zambia's great east campus, National Institute of Public Administration (NIPA), Evelyn Hone College and Mulungushi University. The four institutions were considered for this study because the target population constituted of students who could easily be sampled from the campuses' hostels and who used e-wallets.

The inclusion criteria were students studying at the sampled higher learning institutions and were accommodated in the institutions' accommodation facilities while the exclusion criteria were students studying at the sampled higher learning institution but were not accommodated in the institutions' accommodation facilities.

D. Sampling

Stratified random sampling was used for selecting the hostels at the higher learning institutions whose occupants were then selected for participation in this study. Stratified random sampling is where the population is broken down into strata (or subgroups) and from each subgroup a random sample is taken [25]. A subgroup is a natural set of items. The rationale for using stratified random sampling in this study was because subgroups in the form of hostels had been established which fulfilled the condition for using stratified random sampling technique.

E. Sample Size

The following formula derived from [25] was used for calculating the sample size.

$$n = \frac{Z^2 p(100 - p)}{E^2} \quad (1)$$

Where

- **n** is sample size
- **Z** is the value corresponding to level of confidence required at 95%= 1.96 confidence level
- **P** is the percentage occurrence of a state or condition which is 0.5
- **E** is the percentage maximum error required which is 0.05

As a result, the minimum sample size was 210, and 23 of these were rejected due to incomplete questionnaire responses, leaving a survey population of 187 respondents.

F. Data Collection

The study documented quantitative data on the utilization of e-wallets by students in the sampled higher learning institutions. A total of 187 semi-structured questionnaires were used to collect quantitative data. The questionnaires were personally distributed by the researcher.

G. Data Management and Analysis

The quantitative data were entered into a computer and analyzed statistically using SPSS v25 software so as to generate tables of frequencies and associations. The Multinomial Logistic Regression's Likelihood Ratio Test was used for determining the significance of the associations between the dependent and independent categorical variables, at a 5% level of significance.

IV. RESULTS

It can be seen from Table 1 that the study involved 187 students from the sampled higher learning institutions, and, out of these, 162 (86.6%) were active users of e-wallets, 8 (4.3%) were not frequent users of the same, 9 (4.8%) had never used e-wallets before and remaining respondents (n=8,4.3 %) did not provide responses with regards to their utilization of e-wallets.

TABLE I. MULTINOMIAL LOGISTIC REGRESSION'S LIKELIHOOD RATIO TEST RESULTS

Factors influencing e-wallet utilization	Active user of e-wallets n=162 (86.6%)	Not a frequent user of e-wallets n=8 (4.3%)	Never used e-wallets before n=9 (4.8%)	Missing Responses n=8 (4.3%)
Gender 1. Male 2. Female 3. Missing Responses	79 (48.8%) 83 (51.2%)	6 (75%) 2 (25%)	5 (55.7%) 4 (44.4%)	3 (37.5%) 5 (62.5%)
Perceived to be Useful 1. Agree 2. Neutral 3. Disagree 4. Missing Responses	143 (88.3%) 16 (9.9%) 1 (0.6%) 2 (1.2%)	8 (100%)	6 (66.7%) 3 (33.3%)	2 (25%) 6 (75%)
Perceived to be Easy to Use 1. Agree 2. Neutral 3. Disagree 4. Missing Responses	138 (85.2%) 18 (11.1%) 5 (3.1%) 1 (0.6%)	6 (75.0%) 1 (12.5%) 1 (12.5%)	5 (55.6%) 4 (44.4%)	3 (37.5%) 5 (62.5%)
Perceived to be Costly 1. Agree 2. Neutral 3. Disagree 4. Missing Responses	95 (58.6%) 50 (30.8%) 16 (9.9%) 1 (0.6%)	7 (87.5%) 1 (12.5%)	5 (55.6%) 2 (22.2%) 2 (22.2%)	3 (37.5%) 5 (62.5%)
Perceived to be Risky 1. Agree 2. Neutral 3. Disagree 4. Missing Responses	89 (54.9%) 36 (22.2%) 33 (20.4%) 4 (2.5%)	6 (75%) 1 (12.5%) 1 (12.5%)	3 (33.3%) 6 (66.7%)	1 (12.5%) 7 (87.5%)

TABLE II. UPTAKE OF MOBILE WALLETS

Dependent Variable: Utilization of mobile e-wallets by respondents				
Method: Multinomial Logistic Regression's Likelihood Ratio Tests				
Sample Size: 187 Respondents				
Independent Variables:				
Mobile wallets are useful (perceived usefulness)				
Easy to carry out transactions using mobile wallets (perceived ease of use)				
Gender of respondent				
Transaction costs on mobile wallets are fair (perceived cost)				
Risk of abuse or theft of user's information when using e-wallets (perceived risk)				
Effect	Model Fitting Criteria – 2 Log Likelihood of Reduced Model	Likelihood Ratio Tests		
		Chi-Square	df	Sig.
Intercept	124.262	.000	0	.
Perceived usefulness (Mobile wallets are useful)	132.325	8.062	4	0.089
Perceived Ease of Use (Easy to carry out transactions using mobile wallets)	134.417	10.155	4	0.038
Gender of Respondent	137.770	13.508	4	0.009
Perceived Cost (Transaction costs incurred from mobile wallet usage are fair)	129.295	5.032	4	0.284
Perceived Risk (Risk of abuse or theft of user's information when using mobile wallets)	127.597	3.335	4	0.503

It can further be stated that among the 162 respondents who actively used e-wallets for their day-to-day transactions, 143 (88.3%) who were the majority agreed to using e-wallets because they found them useful. Also, of the 162 e-wallet users, 138 (85.2%), who too were the majority, used e-wallets because they perceived them as being easy to use. However, when asked whether they perceived the e-wallets as being costly or not, 95 (58.2%) out of 162 users were of the view that e-wallets were costly, in spite of them using them. In addition, when asked whether there were any associated risks when using e-wallets, 89 (54.9%) out of 162 agreed to finding the use of e-wallets risky.

The results in the Table 2 show that at a 5% level of significance, perceived ease of use ($p\text{-value} = 0.038 < 0.05$) and the gender of the user ($p\text{-value} = 0.009 < 0.05$) significantly influenced the utilization of e-wallets by the students. However, the variables perceived usefulness ($p\text{-value} = 0.089 > 0.05$), perceived cost ($p\text{-value} = 0.284 > 0.05$) and perceived risk ($p\text{-value} = 0.503 > 0.05$) did not have a significant influence on the utilization of e-wallets. The stability of the parameters of the Multinomial Regression Model above was examined using the Deviance and Pearson chi-square Goodness of Fit tests, which are useful for determining whether a model exhibits fit to the data or not. Non-significant test results are indicators that the model fits the data.

The results of both the Pearson and Deviance chi-square stability tests in Table 3 indicate that the model fits the data well. This is because the $p\text{-values}$ for both Pearson Chi-Square test (1.00) and the Deviance Chi-Square test (1.00)

were greater than 0.05, thus indicating non-significant results, at a 5% level of significance.

TABLE I. MODEL STABILITY TEST

Goodness-of-Fit			
	Chi-Square	Df	Sig.
Pearson	139.793	284	1.000
Deviance	95.587	284	1.000

II. DISCUSSION

A. Effect of Gender on Users' Utilization of E-Wallets

It was observed from the study findings that the gender distribution of the sampled respondents was almost even, with a slight difference of 2%, where the females, who made up the majority, represented a total of 51.9% (92 out of 187), while the males made up a total of 48.1% (90 out of 187). The distribution of gender in this study reduced gender bias, thus making the inferences more reliable due to the fact that no sex had an unfair representation over the other.

The findings of the statistical inference further established that, at a 5% level of significance, gender significantly influenced the utilization of e-wallets. This finding suggests that it was imperative for software developers of mobile e-wallets to take into consideration the various concerns arising from the differences in gender, as this strongly influences the users' decision to either use a

certain e-wallet or not. This finding is not surprising, as even in corporate institutions such as banks, certain products they offer are specifically designed to satisfy the interests of a particular gender over the other. This also highlights the need for e-wallet software developers to incorporate features in e-wallets that are intended to meet the specific needs of consumers with respect to their gender. The finding indicating that gender has a significant influence on the users' utilization differs from [26] finding, who used an extended UTAUT model, but established that gender did not significantly influence the users' choice of adopting the usage of technology.

B. Perceived Usefulness and Utilization of E-Wallets

When questioned on whether respondents found the utilization of mobile wallets useful or not, most of the respondents represented by 51.9% (97 out of 187) strongly agreed to finding the utilization of mobile wallets useful to them, with the other 33.2% (62 out of 187) agreeing to the same. Hence, on average, about 85% (159 out of 187) respondents found e-wallets useful for their day-to-day activities. The researcher thus concluded that one of the reasons the respondents used some of the available e-wallets on the market was due to their perceived usefulness.

When a statistical inference was made between the variable utilization of e-wallets and perceived usefulness, at a 5% level of significance, the findings showed an insignificant relationship between the two variables. However, in spite of rejecting that a significant relationship existed between the two stated variables, statistics still shows that the relationship between the two variables was quite strong, such that if it was to be tested at a 10% level of significance, the relationship could have been significant.

Thus, the researcher submits that it is imperative for anyone considering to develop a mobile e-wallet to ensure the wallet incorporates features that make it useful to users, if the e-wallet is to penetrate the market and be utilized. This submission stems from the fact that some studies conducted by other scholars, such as those by [17], [22] and [19] all indicated a significant association between perceived usefulness and usage of payment systems, at a 5% level of significance.

C. Perceived Ease of Use and Utilization of E-Wallets

Under the factor ease of use, there were several variables that were considered: ease of facilitating transactions when using e-wallets, ease of registration for an e-wallet, steps required when carrying out transactions, ease of error reversal when using mobile wallets, and respondents' take on how clear and understandable the instructions were involving the mobile wallets' operations.

When the respondents were questioned on which of the factors stated above would be best associated with the ease of use of e-wallets, most of the respondents represented by 78.1% (146 out of 187) were of the view that few steps required when carrying out transactions using e-wallets best described the ease of use that respondents experienced when utilizing e-wallets. This was seconded by the ease of facilitating transactions using e-wallets and also the ease of

registration for a mobile wallet account, both represented, by 42.2% (79 out of 187). Therefore, from these findings, it can be observed that most of the respondents found an e-wallet easy to use when it required few steps to carry out a transaction.

When a statistical inference was made between the variable utilization of e-wallets and easy-to-carry-out transactions using mobile e-wallets, at a 5% level of significance, the findings showed a significant relationship between the two variables. This finding proposes that when an e-wallet is easy to use or user-friendly, the likelihood of it being accepted by users is high. This is because complex e-wallets tend to consume more time and effort for users as they try to figure out how to go about carrying out transactions. This decreases the user's willingness to use a certain e-wallet again in the future, when easy-to-use solutions are readily available that can serve a similar function and facilitate payments in a less complicated manner. These findings are similar to those established by [27], [14] and [21], where they also established a significant relationship between the ease of use of technology and the usage of the technology by its users.

V. CONCLUSION

The goal of this study was to explore the factors influencing the use of e-wallets among students in institutions of higher learning. The study made use of a proposed conceptual model that derived its constructs from TAM in order to establish the possible determinant factors of e-wallet utilization. Three factors were considered as potential determinants of e-wallet utilization among students in higher learning institutions.

Using the Multinomial Logistic Regression's Likelihood Ratio Tests, the findings of the study have shown that at a 5% level of significance, two variables significantly influenced the students' utilization of e-wallets. These variables are the perceived ease of use and the gender of the user. It was also observed that perceived usefulness came very close in being a significant determinant of e-wallet utilization; this is because, at a 10% level of significance, it would have produced a statistically significant result.

Based on the findings of this study, it has therefore been recommended that developers of e-wallets for use by students should always endeavour to make them as easy to use as possible because complex applications are not appreciated by users in this market. Additionally, it is also imperative for developers of mobile e-wallets to take into consideration the various preferences that appeal differently to each gender of the product's users as they develop e-wallets, as gender plays a significant role in influencing the users' decision as to either use an e-wallet or not.

VI. LIMITATION AND RECOMMENDATION

This study had a relatively smaller sample size of 187, as such generalization of the findings may to some extent not present the actual picture of the factors influencing utilization of e-wallets in all higher learning institutions in Zambia. This study, however, remains valuable because it provides relevant information on factors influencing the use of e-wallets in higher learning institutions in developing

countries and therefore suggests that other scholars consider undertaking a similar study, but must consider having a comparatively larger sample size. Furthermore, concerning the perceived cost and perceived risk, the results of the study showed that the existence of neutral responses was very high, therefore, this finding opens the way for further analysis of cost and risk as factors that need greater scrutiny.

REFERENCES

- D. Flood, T. West, and Wheadon, "Trends in Mobile Payments in Developing and Advanced Economies," *Bulleting for the 3rd Quarter*. Sydney: Reserve Bank of Australia, 2013. Retrieved from <https://www.rba.gov.au/publications/bulletin/2013/mar/pdf/bu-0313-8.pdf> on 8/9/2020.
- Y. U. Chandra, Emawaty, and Suryanto "Bank vs telecommunication E-Wallet: System analysis, purchase, and payment method of GO-mobile CIMB Niaga and T-Cash Telkomsel," *International Conference on Information Management and Technology (ICIMTech)*, 2017.
- E. Sakalauskas, J. Muleravicius, and I. Timofejeva, "Computational Resources for Mobile E-wallet System with Observers," *Electronics*, 2017. doi:10.1109/electronics.2017.7995226.
- M. Awad, "Vodacom Tanzania's M-Pesa Hits 4.4 Million Users. IT News Africa," 2012, Retrieved from <http://www.itnewsafrika.com/2012/11/vodacom-tanzanias-m-pesa-hits-4-4-million-users/> on 3/9/2020.
- C. Pénicaud, "State of the Industry: Results from the 2012 Global Mobile Money Adoption Survey," GSMA, 2013. Available at http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2013/02/MMU_State_of_industry.pdf.
- M. Naghavi, "State of the Industry Report on Mobile Money 2019," GSMA, 2020. Retrieved from <https://www.gsma.com/sotir/wp-content/uploads/2020/03/GSMA-State-of-the-Industry-Report-on-Mobile-Money-2019-Full-Report.pdf> on 8/9/2020.
- M. Zeinab, "Determinants of Mobile Money Adoption: Europe - Middle East - North African," *Regional Conference of the International Telecommunications Society (ITS): "Leveraging Technologies for Growth"*, Aswan, Egypt, International Telecommunications Society (ITS), Calgary, 2019.
- J. Bright, "Kenya turns to M-Pesa mobile-money to stem the spread of COVID-19," *TechCrunch*, 2020. Retrieved from <https://techcrunch.com/2020/03/16/kenya-turns-to-its-mobile-money-dominance-to-stem-the-spread-of-covid-19/> on 29 July 2020
- F. D. Davis, "Perceived usefulness, perceived ease of use, and user acceptance of information technology," *MIS quarterly*, vol. no. 3, pp. 319-340, 1989.
- C. Kim, M. Mirusmonov, and I. Lee, "An empirical examination of factors influencing the intention to use mobile payment," *Computers in Human Behavior*, vol. 26, no. 3, pp. 310-322, 2010.
- D. Gefen, E. Karahanna, and D. W. Straub, "Trust and TAM in online shopping: an integrated model," *MIS Quarterly*, vol. 27, no. 1, pp. 51-90, 2003.
- J. W. Moon, and Y. G. Kim, "Extending the TAM for a world-wide-web context," *Information & Management*, vol. 38, pp. 217-230, 2001.
- V. Venkatesh, and F. D. Davis, "A theoretical extension of the technology acceptance model: Four longitudinal field studies," *Management Science*, vol. 46, no. 2, pp. 186-204, 2000.
- P. G. Schierz, O. Schilke, and B. W. Wirtz, "Understanding consumer acceptance of mobile payment services: An empirical analysis," *Electronic Commerce Research and Applications*, vol.9, no. 3, pp. 209-216, 2010.
- S. Assegaff, "A Literature Review: Acceptance Models for e-learning Implementation in Higher Institution" *International Conference on Advances in Education Technology (ICAET-14)*. Atlantis Press, 2015.
- R. H. Shroff, C. C. Deneen, and E. M. W. Ng, "Analysis of the technology acceptance model in examining students' behavioural intention to use an e-portfolio system," *Australasian Journal of Educational Technology*, vol. 27, no. 4, pp. 600-618, 2011, <https://doi.org/10.14742/ajet.940>
- U. Akturan, and N. Tezcan, "Mobile banking adoption of the youth market: Perceptions and intentions," 2012. Retrieved from <https://www.researchgate.net/publication/235316497> on 22/12/2019.
- J. H. Cheong, M. C. Park, and J. H. Hwang, "Mobile payment adoption in Korea: Switching from credit card," In *ITS 15th Biennial Conference*, Berlin, Germany, pp. 4-7, 2004.
- N. Mallat, M. Rossi, V. K. Tuunainen, and A. Öörni, "The impact of use context on mobile services acceptance: The case of mobile ticketing," *Information & Management*, vol. 46, no. 3, pp. 190-195, 2009.
- D. H. Shin, "Modeling the interaction of users and mobile payment system: Conceptual framework," *International Journal of Human-Computer Interaction*, vol. 26, no. 10, pp. 917-940, 2010.
- J. Sripalawat, M. Thongmak, and A. Ngramyarn, "M-banking in metropolitan Bangkok and a comparison with other countries," *The Journal of Computer Information Systems*, vol. 51, no. 3, pp. 67-76, 2011.
- C. Phonthanakitithaworn, "User Intentions to Adopt Mobile Payment Services: A Study of Early Adopters in Thailand," *Journal of internet Banking and Commerce*, vol. 20, no. 1, 2015. Retrieved from https://www.researchgate.net/publication/282741683_User_Intentions_to_Adopt_Mobile_Payment_Services_A_Study_of_Early_Adopters_in_Thailand on 6/9/2020.
- V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, "User acceptance of information technology: Toward a unified view," *MIS Quarterly*, vol. 27, pp.425-478, 2003.
- M. Saunders, P. Lewis, and A. Thornhill, "Research Methods for Business," Harlow: Pearson, 2016.
- H. Taherdoost, "Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research," *International Journal of Academic Research in Management (IJARM)*, vol. 5, no. 2, pp. 18-27, 2016.
- V. Venkatesh, J. Y. Thong, and X.. Xu, "Consumer acceptance and use of information technology: Extending the unified theory of acceptance and use of technology," *MIS Quarterly*, vol. 36, no. 1, pp. 157-178, 2012.
- A. K. Nag, and B. Gilitwala, "E-wallet- Factors Affecting Its Intention to Use," *International Journal of Recent Technology and Engineering (IJRTE)*, vol. 8, no. 4, 2019.

ASSESSING ICT TOOLS AS POTENTIALS FOR DETERRING EXAMINATION MALPRACTICES AT A HIGHER LEARNING INSTITUTE

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The study was an investigation of how ICT tools are utilized at an Institute of higher learning to deter examination malpractices. Examinations in learning institutions remain an integral part of an education system as they provide a measure to a standard of education relevant to society. The study aimed at gaining an understanding of how learners at an institute of higher learning perceive dissuading examination malpractices through use of ICT tools. A descriptive survey design was used involving qualitative and quantitative approaches to collect data with structured and semi structured questionnaires. The study had 41 respondents, 36 being students and 5 member's staff. Data collected was analysed using descriptive statistics and in text form to interpret study objectives. The study reviewed that 72 % of the respondents much understood what ICT was and 61% had seen candidates in an examination room use mobile phones to cheat. About 77% agreed that ICT tools were best tools to curb examination malpractices which 77% identified Circuit Close Television (CCTV) as the best ICT tool to dissuade examination malpractices. However, it was further reviewed that with certain examination malpractices being ICT based, the Institute did not have sufficient ICT tools to avert the practice.

The study recommended that an investment in ICT tools (CCTVs, online examination) by an Institute to dissuade examination malpractices would be critical as it would have potential to avert the vice.

Key words: **Examination malpractices, Examination, dissuade, ICT, CCTV**

I. INTRODUCTION

Examination malpractices are forms of misconduct that examination candidates engage in when sitting for examinable course subjects. These examinations are meant to assess student's competences in understanding theoretical or practical concepts disseminated to them in various forms of learning. Examination malpractices are also referred to as practices of academic dishonesty or cheating that may occur at any stage of student assessments by the teacher or lecturer [1]. These assessments are in form of tests; assignments; practical; research reports and proposals and final term or semester examinations.

Any forms of examination malpractices are spelled out in most Institutes of Learning's Examination Regulations and guidelines when conducting examinations. Such regulations in regard to examination malpractices have included practices such as: electronic devices (programmable calculators, wrist mobile telephones; handheld mobile telephones; microscopic hardcopy training modules); unauthorized materials (such as writings on a piece of tissue paper, paper and handkerchiefs), frequent visits to the toilet (unless prior declaration of a medical condition) and whispering to a fellow candidate during examinations [2].

Examinations in academic spheres aim to assess students at any level of their learning to ensure such learners are competent by attaining a threshold of an acceptable grade mark. Assessment of students by an examination also aims to show that learners being examined or tested provide evidence that their learning had been successful and are equipped with knowledge and skills for use in their day-to-day living [3]

Therefore, examinations in most Institutions of Learning have been systems or processes that learners undertake. Examinations have been in existence since the introduction of an educational curriculum worldwide. They have been part of an educational system for many years or decades and are an integral part of society. They have been a necessity as they provide a standard to measure education attainment to benefit society in many ways [4].

Consequently, for examination processes to remain relevant and useful, most academic examination Boards if not all, take to length which ever possible means or ways to safeguard such a purpose. Therefore, unending examination malpractices have led societies to severe consequences that have watered an educational system which believes education was an enabler. Consequences of examination malpractices have also been experienced in most societies and in many fields of knowledge application or the labour Industry [4]. The labour force unfortunately has to deal with some levels of incompetence in relation to underperforming and un-trainable staff that attained their education by dishonest conduct through involvement in examination malpractices [5]. Further, consequences of examination malpractices create mistrust and lack of credibility in the education system of a society [6]. To ensure that the purpose of examinations was attained, conducting examinations at an Institute of Learning, regulated by law, requires that such a designated venue for delivering examination observe guidelines with regard to how the whole process would be transparent. This ensures that all candidates attempting or sitting for such examinations conduct themselves in a manner appropriate to examination guidelines. However, the advent of Information Communication Technologies (ICTs) has made whistle blowers' role very effective in that if they suspect transmission of examinations leaked questions on any form of social media, they easily surrender such softcopy information to the Examination Body of the institute to take quick measures. In such cases, if examination questions are leaked on a social media platform, measures are usually to cancel examination and replacement are made with new set of questions. The cancellation of examinations is inexpensive for an Institute of Learning that has a smaller population or services only few students. However, it becomes a huge cost or expensive if such a cancellation involves a national examination [7]. One factor with Social Media is that it

accelerates transfer of information to the public instantly. The advent of ICT in this regard became useful in alerting the Examination Council of Zambia of leaked examination papers [7]. The cost was too high to re-print the cancelled examinations of leaked examination papers, however it unearthed much of what surrounds the issue of how much the fight to end examination malpractice is and who are the perpetrators [8].

Many efforts to curb examination malpractices have been put up in almost all examination bodies around the world. Nevertheless, the advent of ICT has either helped or worsened the fight to end examination malpractices because forms of examination malpractices have evolved with the introduction of ICT tools. In this ICT age, the level of examination malpractices spreads so quickly that Examination Bodies need to be aware of how much their ICT capacity is to dissuade examination malpractices. In this age of ICTs many Examination Bodies and Academic Institutes are progressing towards converting traditional methods of administering examination to E-examinations [9]. The costs implied are so huge but they outweigh advantages to an educational system that has suffered high levels of examination malpractices that keep advancing. The objectives of this paper was to establish learner understanding of ICT tools in mitigating examination malpractices and an Institute of learning's position on ICT tools for mitigating examination malpractices.

II. LITERATURE REVIEW

Examination malpractices (EM) are generally similar in nature from one education institution to another. This depends with what forms of EM tend to be consistent in those learning facilities. It is worth noting that all forms of EM amount to academic dishonesty or cheating. When EM are identified in several educational institutes, research continues to be conducted to understand underlying factors to students and many players' involved in such practices. [10] put forward on its cross sectional study conducted among 355 students that, fear to failure of an examination was the main reason leading to them cheating. The fear of students rises many questions to the learning they obtain during the course period that leads them to fear an examination meant to access them. [11] did present findings that there was a negative correlation between, *"instructional design quality and cheating, and lecture quality and cheating"*. The findings did indicate that a lecture did affect the students' behaviour to cheat during an examination. The level of the quality of the learning process during the course will have impact to the student's behaviour during examination to either cheat or not. In as much as EM is viewed as academic dishonesty and cheating to portray students as being the main actors, the education system is partly involved in the process due to its weaknesses.

It is true that EM are widespread and have become a global problem in that studies conducted being have now become dimensional in nature in order to uphold the values of an educational system as desired [12]. The absorbing of ICTs in society and digitalizing it is another form that has transformed the educational system and that has not left behind EM. The Education system has been transforming

from traditional methods to ICT based in order to improve its quality which among those has been to deter EM. In assessing students through online examination, an institute of learning has many advantages to it. Since students have a choice over a venue of examination, an institute saves costs in managing classrooms, purchase of print papers and the Human Resource. [13], asserts that online assessment may have advantages to an education system but it has its own disadvantages with regards student cheating. Students when taking online examinations have misconduct, *"such as misrepresentation (e.g., taking a test for someone else), sharing information between testing sessions, or inappropriate access of online resources during the test."*

Detection of online EM has seen emerging software to curb such. Proctoring online examination utilize a remote proctoring in form of ICT devices such as webcams. [14] asserts in its study that remote proctoring of online examination is an approach that replaces the absence of a physical examination invigilator by use of a remote proctoring service which monitors the student during the examination period with an electronic device. The study also indicated that when students are aware that they had a remote proctor, their examination score grades became low and this was similar to that of a physical proctor. The results had achieved the intended purpose of building integrity in the students and the education system to deter EM. Plagiarism has also been another form of EM common in higher learning institutions. Students in higher learning institutions are required to author their own work without copying from another. The widespread of plagiarism had been detected from many students with the introduction of software that indicate whether has authorship to the work. [15] findings of a study assert that a good number of undergraduate students in a Malaysian higher learning institute had engaged into plagiarism. The information was helpful as the study had essential information of what led to cheating by students when writing academic papers. The study indicated that.

"factors contributing to plagiarism include lack of awareness, lack of understanding, lack of competence, and personal attitudes. No evidence was found to support the suggestion that either pressure or the availability of internet facilities had increased the incidence of plagiarism."

As students become aware of implications of plagiarism, there is the likelihood of reduction of this form of EM. Educating perpetrators of plagiarism was also indicated as one factor important to improve the quality of education.

The vast levels of EM have mostly been witnessed in examination classrooms that have seen stringent measures being put in place to curb such. [16] proposed a model that introduced biometrics and CCTV electronic devices as tools that might be used to deter EM in a physical examination classroom. In its proposal, the result in chi square showed a degree of freedom of 4 all significant at 1 percent level that suggested electronic devices contributes to deterring EM in a learning institution.

The literature has shown the depth of what EM may require to be eradicated in an education system though it appears with dynamism with the emerging of ICTs. The

current study did offer another added view of how ICT tools are helping in deterring EM once they are implemented in

the case of an assessment conducted at a higher learning institute among students.

Conceptual model (ICT tools deterring examination Malpractices)

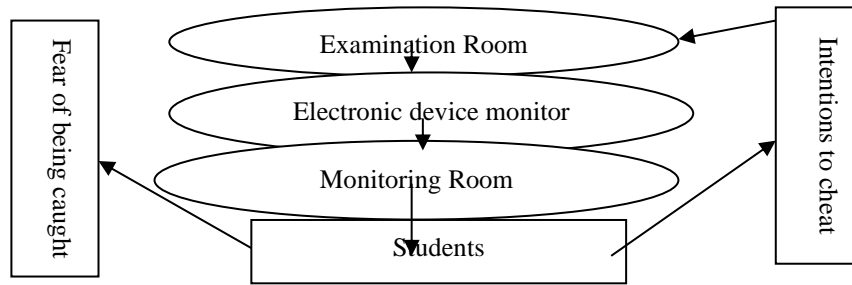


Fig.1: conceptual model

The model in *fig.1*, relates how ICT may contribute to deterring examination malpractices once students who may have intentions to cheat are informed of the presence of electronic devices monitoring the and a monitoring room present. The students will have fear instilled in them and not at all wanting to be caught on camera cheating.

III. METHODS

The study used a descriptive design which used a mixed approach method. The study had 41 respondents. The 36 were students within age group of 19-45 years constituting Learners in a Higher Learning Institute who gave independent response. It also included 5 employees from the Institute. A sample of 36 students was chosen by a stratified random sampling by cohort of student.

The instruments used in this study were primary technique for collecting the quantitative and qualitative data. These were a self-administered questionnaire and an interview guide. The self-administered questionnaire was a 13 item of different formats: multiple choices, asking either for one option or all that applied to issues regarding examination malpractices and ICT.

The primary technique was conducting 5 in-depth interviews with representatives from the higher learning institute; the Interview Protocol included six open-ended

questions.

The Statistical tools used in this study were frequency and percentage which was to determine the demographic profile of students' respondents. The frequency and percentage were also used to ascertain perception of the spread of examination malpractices and how ICT tools would be positioned to minimize such. The frequencies and percentages were obtained from SPSS which was used to analyze data to aid coming with appropriate results.

IV. RESULTS

The 36 respondents of students 47% were female and 53% were male. The age groupings of the respondents represented had the highest of 39% of those aged between 20-25 years old and lowest of 11% aged 41-45 years old. The respondents represented students pursuing four-year undergraduate courses. Those in the second year were at 64%, 22%, third years and 13%, 1st years. The second years were highest in number which reflected sufficient feedback from questionnaire responses and that they have written examinations more than once. The students' responses were further consolidated by interviews conducted to 5 key informants that hold different portfolios at the Institute.

Table I: Knowledge of ICT

Knowledge	Frequency	Percentage
Internet	1	3%
Computer resources	3	8%
ICT resources	5	14%
Technology that enhances communication	26	72%
Other	1	2%

Table II: ICT tools familiar with students in the Institute

Tools	Frequency	Percentage
SRMS (Students Records Management System)	5	13.9%
CCTV (Circuit cable television)	27	75%
Other	4	11.1%

The 72% of respondents indicated that they understood what ICT was which they identified as technology that enhances communication. The 3% respondents indicated that it was IT resources and 8% said computer software. The 75% of respondents said they had seen CCTV as a form of ICT tool

used by the Learning Institute during examination period. The 13.9% said Students Records System (SRM) and 11.1% didn't not disclose. The study did face to face interviews with to the five (5) key Informants (KIs) one KI revealed and said that, "we have not completely installed all examination rooms with

CCTVs”. This had implications in that when students observed that other rooms didn’t have CCTVs installed, likelihood of cheating was high under such circumstances. The Students Records Management System (SRMS) is an ICT facility the Institute uses for various functions and one of them is for entry and dissemination of examination results. A second KI interviewed referred to this system as one that had a likelihood

of being used by some of the Institution personnel to alter student’s results which was identified as another form of examination malpractice. Table III, indicates a cross tabulation to show the relationship of the variables in the study. The 20 respondents indicated to have understanding of ICT and related CCTV cameras as ICT tools the institute uses to curb EM

Table III: What is ICT* ICT tools Institute Uses to Curb EM cross tabulation

Count	ICT TOOLS INSTITUTE USES			Total
	Students’ records management system	CCTV	Other	
What is ICT? Internet	0	1	0	1
Computer software	0	3	0	3
ICT resources	1	3	1	5
Technology that enhances communication	3	20	3	26
Other	1	0	0	1
Total	5	27	4	36

V. DISCUSSION

Students’ level of cheating using mobile phones overlooks the high risk of forfeiting an entire examination and costs. Facing such risks is aligned to students’ fears of failing an examination and would do anything to avoid it [17]. However, the presence of electronic devices such as CCTV in examination classrooms come out to defeat students’ intentions to cheat and have contributed to reduction of EM when students are fully aware of the consequences. It is also vital that examination candidates are knowledgeable of ICT tools which lead them to prepare adequately to avoid failure.

ICT tools in education have become vital that the future without these tools might affect quality of education [18]. Though it has its own disadvantages, advantages are greater benefits to an education system in many forms.

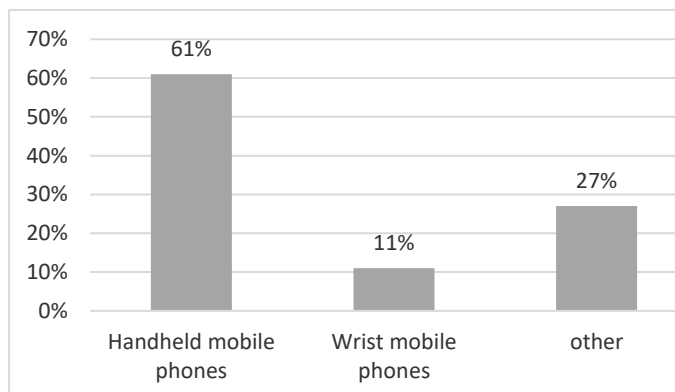
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REFERENCES

- [1] Nora and Zhang, (2010), *Motives of cheating among secondary students: the role of self-efficacy and peer influence* Asia Pacific Education Review Volume 11, Issue 4, pp 573–584
- [2] National Institute of Public Administration (NIPA), *Academic regulations* 2017
- [3] Jabbarifar, (2009) *The Importance of Classroom Assessment and Evaluation in Educational System*, Proceedings of the 2nd International Conference of Teaching and Learning (ICTL 2009) INTI University College, Malaysia
- [4] Ifijeh el tal (2015), *Emergence of Hi-tech examination malpractices in Nigeria: issues and implications* International journal of education and research vol. 3 no. 3, pp 113-122
- [5] Bruno, U., & Obidigbo, G. (2012). *The counseling implications of examination malpractices among university undergraduates*. Research Journal of Organizational Psychology and Educational Studies, 1(2), 199 – 202.
- [6] Cizek, G. J. (2003). *Experts in assessment. Detecting and preventing classroom cheating: Promoting integrity in assessment*. Thousand Oaks, CA, US: Corwin Press.
- [7] Ministry of General Education, Press Statement, (2018) <https://www.exams-council.org.zm/?s=cancellation+of+examination> 2018
- [8] Chileshe M. (2010) *culture of-leakages-in-Zambia*, www.zambian-economist.com/2010/08/ html. 27.06.2019

Fig 2: ICT tools used for Examination Malpractices



When committing EM, fig.2, indicate that 61% respondents said that examination candidates used mobile phones that they were sneaked in the examination rooms. The 27% said they had not seen any and 11% said candidates used wrist mobile phones. At the time of interviews with key informants (KI), one KI expressed concern on challenges they had to deal with in conducting physical examination were candidates sneak mobile phones in the examination rooms despite been screened physically before entry.

About 78% answered “yes” that ICT tools were the best to end EM against 22% who said, “No”. For those that said, “No”, gave reasons among those that said, “the management of ICT at the Institute is not properly done”. The those who said, “yes” among the reasons given included, “if we are aware of the presence of a CCTV, it instills fear in us and becomes impossible to cheat”. and a reduction on committing EM and would not have human interference.

- [9] Rout G and Patnaik S, (2011), *A Case Study on E-Examination in Universities of Odisha* International Journal of Internet Computing (IJIC), ISSN No: 2231 – 6965, Volume-1, Issue-2
- [10] Mensah, C. and Azila-Gbetteh, E.M. (2018), "Religiosity and students' examination cheating: evidence from Ghana", *International Journal of Educational Management*, Vol. 32 No. 6, pp. 1156-1172. <https://doi.org/10.1108/IJEM-07-2017-0165> Download as .RIS Emerald Publishing Limited
- [11] Rugina, A.N. (1988), "The Theory of the Cheating of the Masses in Modern Times: The Institutional Roots of Social Immorality under Capitalism and Socialism", *International Journal of Social Economics*, Vol. 15 No. 8, pp. 3-44. <https://doi.org/10.1108/eb014115> Download as .RIS MCB UP Ltd
- [12] Chapman, K.J. and Lupton, R.A. (2004), "Academic dishonesty in a global educational market: a comparison of Hong Kong and American university business students", *International Journal of Educational Management*, Vol. 18 No. 7, pp. 425-435. <https://doi.org/10.1108/09513540410563130>
- [13] Mays, M. (2012), "Chapter 12 Misbehavior in Online Testing", Wankel, L.A. and Wankel, C. (Ed.) *Misbehavior Online in Higher Education (Cutting-Edge Technologies in Higher Education, Vol. 5)*, Emerald Group Publishing Limited, Bingley, pp. 243-260. [https://doi.org/10.1108/S2044-9968\(2012\)0000005014](https://doi.org/10.1108/S2044-9968(2012)0000005014); Emerald Group Publishing Limited
- [14] Davis, A.B., Rand, R. and Seay, R. (2016), "Remote Proctoring: The Effect of Proctoring on Grades", *Advances in Accounting Education: Teaching and Curriculum Innovations (Advances in Accounting Education, Vol. 18)*, Emerald Group Publishing Limited, pp. 23-50. <https://doi.org/10.1108/S1085-462220160000018002>; Download as .RIS Emerald Group Publishing Limited
- [15] Smith, M., Ghazali, N. and Fatimah Noor Minhad, S. (2007), "Attitudes towards plagiarism among undergraduate accounting students: Malaysian evidence", *Asian Review of Accounting*, Vol. 15 No. 2, pp. 122-146. <https://doi.org/10.1108/13217340710823350> Download as .RIS Emerald Group Publishing Limited
- [16] Fayomi, O.O. Amodu L, Ayo C.K, Idowu O.R., Iyoha F.O, 2015, "E-invigilation; Panacea to examination malpractices in Nigeria: Proceedings of ICERI2015 Conference, 16th -18th November, 2015, Seville, Spain: ISBN:978-84-608-2657-6
- [17] Adeyemi T.O. (2010), *Examination Malpractices among Secondary Schools Students in Ondo State, Nigeria*, American Eurasian Journal of Scientific Research 5 (1): 67-75, 2010
- [18] Coren, A. 2012, "The Theory of Planned Behaviour: Will Faculty Confront Students Who Cheat?". *J Acad Ethics* 10, 171–184 (2012). <https://doi.org/10.1007/s10805-012-9162-7>

ASSESSMENT OF EFFECTIVENESS OF ICT (ONLINE) PLATFORMS USED BY THE TEACHING COUNCIL OF ZAMBIA IN SELECTED SCHOOLS IN KITWE DISTRICT

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This paper bases the concept on transformational service delivery strategies with a concern to foster innovative changes in service delivery by organizations to its clients in particular the relationship between technological innovations. By adopting a quantitative survey approach to examining the effectiveness of the adoption and use of ICT platform by the Teaching Council of Zambia in its service delivery, the study has established the status core of the TCZ-ICT platform in the service delivery. The study has highlight practitioners in selected schools in Kitwe district experiences when using the platforms and has highlighted some suggestions that can be done to improve on the use of the platforms.

Keywords: TCZ-ICT Platforms, Adoption and Use, Effectiveness of ICT Platforms, Innovative, Service delivery, Efficiency

I. INTRODUCTION

The Teaching Council of Zambia is a recently established statutory body pursuant to the teaching professional Act No. 5 of 2013. The mandate of the Council is to provide for the regulation of teachers, their practice and professional conduct; provide for the accreditation and regulation of colleges of education; and provide for matters connected with, or incidental to, the forgoing (TCZ 2018-2021 strategic Plan).

According to the TCZ strategic themes, it had set for itself among other themes the need for Service Excellence and produce results for the satisfied clients.

It is worth noting that since its inception when the secretariat was operationalized by attachment of secretariat officers on the 9th February, 2015, TCZ is on record to have registered over hundred thousand practitioners and has managed to register and accredit over hundred colleges of education and had been conducting yearly college inspections for the purpose of accreditation and that all these activities has been achieved within the space of 5 years. TCZ is also has been on record to have been conducting practitioners' inspection for compliance purposes.

The performance of TCZ thus far has been a bicorn of admiration in both the sub region and Africa as a continent. Its success however can be attributed to among the factors the objectives set for itself as reflected in the 2018-201 strategic plan where service excellence is a strategic theme of focus for satisfied clients. To achieve this objective, the Council has also set to itself a strategic theme of operational efficiency to which the adoption and use of the ICT online platforms would be seen to be the key driving factor the recorded achievements by the Council thus far. However, to what extent these platforms are used and contribute to the effective operation was what this paper was set to investigate in Kitwe district.

II. LITERATURE REVIEW

The approval of the 2030 Agenda and the 17 Sustainable Development Goals (SDGs) not only represents an international agreement on desirable goals, but also supposes profound and far-reaching global transformations to the world of today. The 2030

The Agenda deems that ICT play a facilitative and supportive role, universal public access to information involves distinct issues related to internet connectivity, availability of relevant information (which supposes that it is generated, made public and actively publicized by all the actors, in addition to being socially and economically relevant), accessibility (understood as the possibility of all people to access, without difficulty, the resources and services available on the Internet, regardless of language, culture, geographic location, skills of users, (UNESCO 2019).

On the other hand, Wong, Li, Choi, & Lee, (2008) note that unprecedented growth of Information and Communication Technology (ICT), coupled with the globalization of economies, has created a huge challenge for effective service delivery by many institutions. Service offering institutions need therefore to innovate highly and invest more in technology.

Further, Olatokun, (2009) observes that modern ICTs are newcomers and their application is still in the early stage, although rapidly increasing. Within half a century, they have changed the world and affected millions of lives in ways that no one could have ever foreseen or imagined. They have also changed the nature of work we do, the range of occupations and skills requirements.

In a similar case, Bhatnagar, (2014) has also noted that large number of case studies have been published by different multilateral organizations, suggesting that ICT can be used in diverse applications to accelerate information dissemination, improve efficiency of public services, increase the transparency and accountability of government administration, to reduce corruption, and facilitate citizen participation in local governance

Nonetheless, Motah, (2008) observes that survey of works carried out in several countries has revealed that things are not that bright and beautiful as one would expect. It is underlined that the use of the web as an information channel based on electronic forums and mailing lists is considered promising but the number of users remains rather limited.

In Zambia, a survey conducted by ZICTA on factors affecting the utilization of ICT facilities in various aspect of the Zambian economy has raised a number of issues that suggest that the removal of customs duties on mobile computing gadgets by the government is likely to support the uptake and utilization of ICT services in the country. This is evidenced by the that Government was committed to continuing to invest in ICT infrastructure aimed at extending coverage and enhancing reliability of ICT services across the country with the target of installing up to 1009 communication towers across the country by the year 2020 (www.zicta.zm 2018).

Owing to these developments, the Zambia Revenue Authority like many other institutions in the country is on record on taping of the benefits ICT offers in the service delivery. It is noted that the ZRA has already established an online interface of pre-approval information of good. It public relations officer Mr. Sikalinda has even confirmed that this is one of the perfect ways to manage risks and utilize resources prudently and that the idea was to improve service delivery to customers (Daily Nation (17-06-2020 pg.6).

Learning from other sister institutions that existed way before, TCZ also has adopted and implement the use of a number of ICT platform in its service delivery. Among these are the use of web based, Facebook, WhatsApp and alike. It must be noted that innovations such as these cannot be said to effectively surviving the intended purpose unless its intention is well received and appreciated by the end users.

It is against this background that it became highly relevant to conduct a survey in order to establish how well TCZ was using The survey was aimed at assessing the effectiveness of the adoption and implementation of the ICT platforms and establish how these technological innovations can add value to the institution's efficiency and prudent in resource utilization.

IV. METHODOLOGY

A quantitative research design was employed in conducting this research by using a descriptive survey research method to collecting data respondents. The research was guided by the following general objective:

General Objective

To assess the effectiveness of the adoption and use of the ICTs by the TCZ.

The specific objectives:

1. Establish how clients use TCZ-ICT (online) platform
2. Assess the accessibility of the TCZ-ICT (online) platforms
3. Assess the effectiveness of the TCZ-ICT (online) platform

The research questions

1. How do clients use the TCZ-ICT (online) platform?
2. Are the TCT-ICT (online) Platforms easily accessible by clients?
3. How effective are the TCZ-ICT (Online) platforms?

Target population and sample size

The target population was 4500 certified practitioners in Kitwe district with about 90 schools of an average of 50 practitioners each.

Sampling and Instrument distribution

Fourteen (14) schools in Kitwe urban were randomly selected using excel randomization function and respondents in these schools were conveniently selected to participate in the survey. This method was appropriate due to the Covid 19. Practitioners were only reporting for work according to the time table schedules.

Sample size

This survey used a sample size of 196 respondents from a population of 700 certified practitioners in the 14 selected schools in Kitwe district. The figure was determined by using a sample size table that uses the combinations of precision, confidence level and population percentage or variability of 50% Source (Gill et al., 2010).

Data Analysis

Data was analyzed using the IBM SPSS Statistics version 26 software with descriptive tabulation and correlation tools and presented in tables.

III. RESULTS

The following are results as analyzed and presented in tables as bellow. The aim was to establish how effective the ICT platforms used by TCZ were and to what extent the clients were accessing and using the same in reaching out for services as a means of cheap way to deal with the service provider.

A guiding null hypothesis for the study, stated that the TCZ-ICT platforms were effective in service delivery and to establish fact, the following were the main variables used in assessing the ICT platforms:

- Age of the respondents; it was hypothesized that age of the respondent would determine the level of ICT skills possessed by the respondents. The younger the age the more competent the client would be to use to use the platform and be able to evaluate the platform objectively.

ICT skills of respondents; it was hypothesized that the level of ICT skills respondents' clients possessed would also influence how the objective assessment of the platforms.

Usability of the platform; the hypothesis was that the more one uses the platforms, the higher the chance of being able to evaluate the system objectively. Other variables include sensitizations of clients on the use of the platform as being determinant of how one evaluates the platforms.

Table 1a. Age Range of Respondents * Levels of ICT Skills of Respondents Cross tabulation							
% within Age Range of Respondents							
		% of the Categories	Levels of ICT Skills of Respondents				Total
			Did not possess ICT Skills	Those with ICT Skills Below Average	Those with ICT Skills at Average Level	Those with ICT Skills Above Average	
Age Range of Respondents	18-30	11.0%	27.8%	11.1%	55.6%	5.6%	100.0%
	31-40	39.9%	13.8%	30.8%	35.4%	20.0%	100.0%
	41-50	38.0%	25.8%	9.7%	40.3%	24.2%	100.0%
	51 & Above	11.0%	55.6%	11.1%	27.8%	5.6%	100.0%
Total		100.0%	100.0%	18.4%	38.7%	18.4%	100.0%

Results indicate that respondents aged between 18 and 30 years, 27.8% did not possess ICT Skills, 11.1% had ICT skills below average, 55.6% had skills in ICT at an average level and 5.6% had skills above average level. Respondents aged between 31 and 40 years, 13.8% did not possess ICT Skills, 30.8% had ICT skills below average, 35.4% had skills in ICT at an average level and 20.0% had skills above average level. Respondents aged between 41 and 50 years, 25.8% did not possess ICT Skills, 9.7% had ICT skills below average, 40.3% had skills in ICT at an average level and 24.2% had skills above average level and finally respondents aged 51 years and above, 55.6% did not possess ICT Skills, 11.1% had ICT skills below average, 27.8% had skills in ICT at an average level and 5.6% had skills above average level.

Table 1b. Correlations				
		Age Range of Respondents		Levels of ICT Skills of Respondents
Kendall's tau_b	Age Range of Respondents	Correlation Coefficient	1.000	-.065
		Sig. (2-tailed)	.	.338
		N	163	163
	Levels of ICT Skills of Respondents	Correlation Coefficient	-.065	1.000
		Sig. (2-tailed)	.338	.
		N	163	163

Table 1b presents correlation results of age and ICT skills of respondents. It shows a negative relationship with $P=0.338$. $<.05$

Table 2a. Frequency of Using ICT Platforms * Assessment User friendliness of Online Platform when Accessing Services Cross tabulation				
% within Frequency of Using ICT Platforms				
		Assessment User friendliness of Online Platform when Accessing Services		Total
		Was Difficult to Use and Access Services using the Platform	Was Ease to Use and Access Services using the Platform	
Frequency of Using ICT Platforms	Used Less Times	86.5%	13.5%	100.0%
	Used Most Times	66.7%	33.3%	100.0%
Total		71.2%	28.8%	100.0%

Table 3a presents results of respondents' frequency of using the online platform. 86.5% represents respondents who did not frequently use the online platform when accessing services, and these had difficulties accessing the intended services while 13.5% were able to use the online platform without difficulties accessing the intended services. In a related circumstance, 66.7% of those who frequently used the online platform had difficulties accessing services while 33.3% did not face difficulties accessing services from the same platform.

Table 2b. Correlations				
		Frequency of Using ICT Platforms		Assessment User friendliness of Online Platform when Accessing Services
Kendall's tau_b	Frequency of Using ICT Platforms	Correlation Coefficient	1.000	.183*
		Sig. (2-tailed)	.	.020
		N	163	163
	Assessment User friendliness of Online Platform when Accessing Services	Correlation Coefficient	.183*	1.000
		Sig. (2-tailed)	.020	.
		N	163	163

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

Table 2b. presents the relationship between the two variables whose P value is 0.02 which is $P < 0.05$

Table 3a. Levels of ICT Skills of Respondents * Method used to Apply for Practicing Certificate Cross tabulation				
% within Levels of ICT Skills of Respondents				
		Method used to Apply for Practicing Certificate		Total
		Manual Method	Online Method	
Levels of ICT Skills of Respondents	No ICT Skills	95.0%	5.0%	100.0%
	Below Average	93.3%	6.7%	100.0%
	Average Level	76.2%	23.8%	100.0%
	Above Average	56.7%	43.3%	100.0%
Total		80.4%	19.6%	100.0%

Table 3a presents cross tabulated results between variables levels of ICT Skills and Method used to apply for practicing certificate. 95% of respondents without ICT skills used manual application and only 5% used online application. 93.3% of respondents with below average ICT skills used manual application method while 6.7% used online application platform. 76.2% of respondents with average ICT skills used manual application method while 23.8% used online application platform. 56.7% of ICT skills above average used manual method of applying for practicing certificates and 43.3% used online application platform.

Table 3b. Correlations				
			Levels of ICT Skills of Respondents	Method used to Apply for Practicing Certificate
Kendall's tau_b	Levels of ICT Skills of Respondents	Correlation Coefficient	1.000	.312**
		Sig. (2-tailed)	.	.000
		N	163	163
	Method used to Apply for Practicing Certificate	Correlation Coefficient	.312**	1.000
		Sig. (2-tailed)	.000	.
		N	163	163

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

Table 3b. presents the relationship between the two variables whose P value is 0.01 which is $P < 0.05$

Table 4a. Frequency of Using ICT Platforms * Assessment of Effectiveness of Online Platform Cross tabulation				
% within Frequency of Using ICT Platforms				
		Assessment of Effectiveness of Online Platform		Total
		Platform was Not Effective	Platform was Effective	
Frequency of Using ICT Platforms	Used Less Times	89.2%	10.8%	100.0%
	Used Most Times	71.4%	28.6%	100.0%
Total		75.5%	24.5%	100.0%

Table 4a present cross tabulated results between the frequency of using the online platform and the assessment of effectiveness of the platform. The 89.2% of the least frequent users of the platform rated the platform as not effective and 10.8% rated the platform as effective while 71.4% of most frequent users of the platform rated it as not effective and 28.6% rated it as effective.

Table 4b. Correlations				
			Frequency of Using ICT Platforms	Assessment of Effectiveness of Online Platform
Kendall's tau_b	Frequency of Using ICT Platforms	Correlation Coefficient	1.000	.173*
		Sig. (2-tailed)	.	.028
		N	163	163
	Assessment of Effectiveness of Online Platform	Correlation Coefficient	.173*	1.000
		Sig. (2-tailed)	.028	.
		N	163	163

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

Table 4b. presents the relationship between the two variables whose P value is 0.028 which is $P < 0.05$

Table 5a. Frequency of Using ICT Platforms * Level of Clients' Satisfaction with Services Provided Through Online Platform Cross tabulation
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% within Frequency of Using ICT Platforms					
		Level of Clients' Satisfaction with Services Provided Through Online Platform			Total
		Below Average	Average	Above Average	
Frequency of Using ICT Platforms	Used Less Times	89.2%	10.8%		100.0%
	Used Most Times	70.6%	19.8%	9.5%	100.0%
Total		74.8%	17.8%	7.4%	100.0%

Table 5a. results show that 89.2% of the respondents who used the platforms less times than those who used it most times were not satisfied with the services offered through the online platform at below average and 10.8% were satisfied at an average level. While 70.6% of those who used the platform most time than those who used it less times were satisfied below average and 19.8% were satisfied at an average level and 9.5% were satisfied at above average level.

Table 5b Correlations				
			Frequency of Using ICT Platforms	Level of Clients' Satisfaction with Services Provided through Online Platform
Kendall's tau_b	Frequency of Using ICT Platforms	Correlation Coefficient	1.000	.183*
		Sig. (2-tailed)	.	.017
		N	163	163
	Level of Clients' Satisfaction with Services provided through Online Platform	Correlation Coefficient	.183*	1.000
		Sig. (2-tailed)	.017	.
		N	163	163
*. Correlation is significant at the 0.05 level (2-tailed).				

Table 5b. presents the relationship between the two variables whose *P* value is 0.017 which is $P < 0.05$

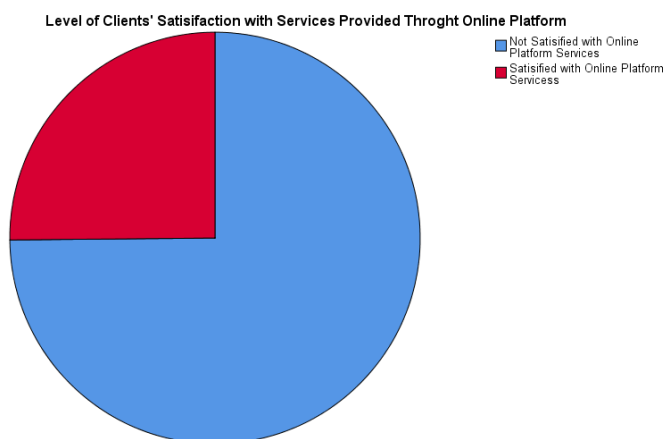


Fig 1: Level of Client Satisfaction

Figure 1 presents an outlook of respondents' appreciation of the services provided by the Teaching Council of Zambia through an online platform. $\frac{3}{4}$ were not satisfied with the services.

Table 6a. Rating on Sensitization Conducted for Using Online Platforms * Responses on the Need to Sensitise Clients on Using Online Platform Cross tabulation					
% within Rating on Sensitization Conducted for Using Online Platforms					
		Responses on the Need to Sensitise Clients on Using Online Platform			Total
		There is no Need to Sensitise clients (It has been adequately done)	there is Need to Sensitise Clients (Not Much has Been done)	There is More Need to sensitizing Clients (Nothing has been done)	
Rated categories on conducted Sensitization on Using Online Platforms	Above Average	21.2%	21.2%	57.6%	100.0%
	Average	3.0%	9.1%	87.9%	100.0%
	Below Average		16.7%	83.3%	100.0%
Total		16.0%	18.4%	65.6%	100.0%

Table 6a. presents tabulated results between ratings on sensitization variable and the need for sensitization variable. 21.2% of those who rated above average indicated that there is no need to do sensitization the exercise was already adequately done. 21.2% indicated that not much was done hence the need to conduct sensitization and 57.6% indicated that nothing was done and needed more sensitization exercises to be done. 3% of those who rated average indicated that there is no need to do sensitization the exercise was already adequately done. 9.1% indicated that not much was done hence the need to conduct sensitization and 83.9% indicated that nothing was done and needed more sensitization exercises to be done. 16.7% of those who rated below average indicated that not much was done hence the need to conduct sensitization and 83.36% indicated that nothing was done and needed more sensitization exercises to be done

Table 6b. Correlations				
			Rating on Sensitization Conducted for Using Online Platforms	Responses on the Need to Sensitise Clients on Using Online Platform
Kendall's tau_b	Rating on Sensitization Conducted for Using Online Platforms	Correlation Coefficient	1.000	.262**
		Sig. (2-tailed)	.	.000
		N	163	163
	Responses on the Need to Sensitise Clients on Using Online Platform	Correlation Coefficient	.262**	1.000
		Sig. (2-tailed)	.000	.
		N	163	163
**. Correlation is significant at the 0.01 level (2-tailed).				

Table 6b. presents the relationship between the two variables whose P value is 0.001 which is $P < 0.05$

V. DISCUSSION OF RESULTS

UNESCO (2019) The approval of the 2030 Agenda and the 17 Sustainable Development Goals (SDGs) not only represents an international agreement on desirable goals, but also supposes profound and far-reaching global transformations to the world of today. The 2030 Agenda declaration confirms the importance of ICT to opening up major possibilities for the acceleration of human progress. The Agenda deems that ICT play a facilitative and supportive role, universal public access to information involves distinct issues related to internet connectivity, availability of relevant information (which supposes that it is generated, made public and actively publicized by all the actors, in addition to being socially and economically relevant), accessibility (understood as the possibility of all people to access, without difficulty, the resources and services available on the Internet, regardless of language, culture, geographic location, skills of users, (UNESCO 2019).

It was against this background that this study was conducted to ascertain the viability and effectiveness of the online ICT platform TCZ was using to deliver services to clients in Kitwe district. As it was established early in this paper, TCZ was observed to have made remarkable progress since its inception in 2015 by the teaching professional act no. 5 of 2013 and some of its progress could have been attributed to the use of ICT platform. And so it become imperative to investigate the viability and effectiveness of the ICT platform TCZ was using. In achieving this objective, there were a number of variables that were set to assess the platform which include among them the age of respondents, frequency of using the platform, levels of ICT skills possessed by users, effectiveness of the platform, satisfaction of using the platform and the need to sensitise clients. The H_0 hypothesis was that age would a bearing on skills possessed by users of the ICT platforms. The younger the user in age the more likely that they would be more competent with ICT platforms. Results shown in Table 1a and Table 1b depicts the opposite.

The relationship between age range of respondents and the level of ICT skills respondents possessed showed a weak negative relationship with a $P=0.338 < 0.5$ confidence level. This outcome was not statistically significant. In simple terms, age of the respondents did not influence the distribution of ICT skills possessed by respondents who participated in this study. Both the younger and elder had fair distribution of the ICT skills. It is therefore expected that responses from either younger or elderly respondents on the effectiveness of the ICT platform under study would be considered valid. Table 2a presents results meant to assess the user friendliness of the TCZ implemented online platform. For the online platform to be useful, it must have attributes of user-friendliness, it must be easy to be used by the clients. It doesn't matter how perfect the system is developed and implemented if it poses challenges to the user it becomes irrelevant. As Derbyshire, (2000) observes in his study titled *User-Friendliness of Computerized Information System*. He found out that users of the IT systems found it to be more troublesome and problematic than manufacturers, software developers and IT advocates could appreciate. He then concluded that, as the demand for the use of IT systems increases, it would be expected that IT becomes facilitative rather than hindering force. It is however worthy noting that results from this survey reviewed that the TCZ adopted online platform did not meet this criterion as Table 2b show that results testing the ease of use of the platform were statistically significant proving that the platform was not user-friendly as noted by the P value being 0.02 less than the standard P value of 0.05 of 95% confidence level. The variable presented in tables 3a and 3b were meant to identify the usability of the online platform for which its main purpose was developed and implemented. Results are statistically significant that there were more users using manual application platform to apply for practicing certificate that using the online platform. The reason to this development are statistically significant presented in table 2a and 2b. Further, results of variables presented in tables 4a and 4b statistically significant presents that the platform was not effective in providing services to clients. In this outcome $P=0.028$ less than recommended $P=0.05$ at 95% confidence level.

There is need there that the Institution looks into the weakness within their implementation strategies to try and remedy this unfortunate situation to avoid allocating resources on strategies that do not serve the intended purpose. *Tables 5a and 5b* have presented satisfaction levels of user of the platform. The results were statistically significant with the $P=0.017$ less than $P=0.05$ recommended at 95% confidence level that users were not satisfied with online provided services hence the need to evaluate the system and its performance. There is need to integrate causes of these low satisfaction level in users of the online platform. This is in line with observation made by Wong, et al (2008) who notes that unprecedented growth of Information and Communication Technology, has created a huge challenge for effective service delivery by many institutions. Service offering institutions need therefore to innovate highly and invest more in technology. Going by the Council's strategic plan of 2018-2021 page 14, it acknowledged and committed itself to taking advantage of developments that was taking place in the field of ICT in the country to improve on its service delivery. Midway of the implementation of the strategic plan, the use of ICTs is proving a challenge on the part of clients as reviewed in this study. Results shown in figure 1 indicate that only a ¼ of users accessed and used the online platform satisfactorily. While efforts were being made to implement the use of ICT platforms in service delivery few users were actually accessing and using the platform a situation which need to be followed up and addressed. In fact, elsewhere the use of ICT platform has been observed to be not impressive. Motah, (2008) confirms this observation when he noted that survey of works carried out in several countries about the use of ICT facilities has revealed that things are not that bright and beautiful as one would expect, the number of users remains rather limited. This picture can be turned upside down if efforts on identifying underlying causes are identified by the TCZ. Sensitisation is one key element that facilitates user to embrace to system and use however, in this study it was found that this critical ingredient was not well handled as *tables 6a and 6b present*. Commenting on the role sensitization plays in facilitating for the effective management of systems, Jalaludeen et al. (2018) in their study about loan defaulting. They concluded that with adequate sensitization to the clients, the issue of loan repayment default could be reduced to an appreciable level to help improve the developmental impact and the overall performance of the microfinance institutions. Similarly, it would be significantly important for the Teaching Council of Zambia to consider embarking on clients' sensitization campaign as statistically reviewed in this study if the efficacy of the online platform implemented is to realize its full potential results. It must however be pointed out here that the study did not delve into finding out what strategies must be employed or rather what strategy TCZ would employ in sensitizing clients. Through its IT section TCZ must develop strategies that would engage the clients particularly in Kitwe district to sensitise them on the procedure and processes involved in using the ICT platform for its effective use.

Summary

TCZ is in the right direction in line with international recommendations on the need for service providers to adopt the use of ICT platforms in service delivery and make their information and services accessible by all without any hindrance. Secondly, clients are ready to adapt to the use of new innovations such as applying ICT platforms in the effort to access services from service providers.

Thirdly, though, is that the services the Teaching Council of Zambia is offering through the Online platform are not well appreciated due to difficulties posed by the system in accessing the services. The study has clearly and statistically significantly established that the ICT system adopted and used by the TCZ are not effective and pose challenges when being used by clients hence the need to revisit strategies being employed in the implementation of these platforms.

Limitations

The study was limited by meeting statistically recommended sample size for the target population due to failure to collect all the distributed research questionnaires. Nonetheless, the number collected formed 83% of expected sample size. With this sample size, analyzed results forms a basis for generalizing outcome with a fair confidence level.

Recommendations

The Teaching Council of Zambia is a fast-growing institution in the country as evidenced by its ability to be fully operationalized within five (5) years since its inception. The challenge the institution has is that it is operating in the ICT era and for it to be relevant now and in future, it has no option but to enhance the capacity of its ICT operations and make itself relevant to the needs of the current global trends in service provisions. To achieve this, the following recommendations will be helpful:

1. Continue investing in ICT tools and enhancing the capacity of its employees to be able to handle emergent needs in addressing clients' needs through effective service provision powered by ICT.
2. Ensure that the online platforms have self, step by step clients' tailored (consideration of clients' ICT competences) trouble shooting features.
3. Develop and conduct clients' tailored sensitization programmes on how to use the online systems.
4. Conduct regular surveys to establish areas of need and areas of strength to avoid straining efforts on what does work with clients.

REFERENCES

- Bhatnagar, S. 2014. *Public Service Delivery: Role of Information and Communication Technology in Improving Governance and Development Impact*. © Asian Development Bank. <http://hdl.handle.net/11540/4206>. License: CC BY 3.0 IGO. Bumba C., Daily Nation, Wednesday 17th June 2020 Vol.6, issue 2626 ZRA Establishes Pre-Arrival Interface p.6.
- Darbyshire, Philip. (2000). User-friendliness of computerized information systems. *Computers in nursing*. 18. 93-9.
- Gill, J., Johnson, P. & Clerk, M. (2010). *Research Methods for Managers*, SAGE Publications.
- Jalaludeen, S., Che, F. and Jalal-Eddeen, F. (2018) Targeted Sensitization as a Strategy to Reducing Loan Default in Microfinance Bank Operations in Yola, Adamawa State, Nigeria. *Open Access Library Journal*, 5: e4275. <https://doi.org/10.4236/oalib.1104275>
- Motah, M. (2008) Issues in Informing Science & Information Technology; The Social Cost of the Integration of Information and Communication Technologies, Information, Education and Communication, on the Young of the Republic of Mauritius
- Olatokun, W. M. (2009) Issues in Informing Science & Information Technology Strategic Plan 2018-2021; The Teaching Council of Zambia
- UNESCO (2019) ICT for Sustainable Development Recommendations for Public Policies that Guarantee Rights Policy Papers UNESCO www.unesco.org/open-access/terms-use-ccbysa-en.
- Wong, Emily M. L., Li, Sandy S. C., Choi, Tat-heung, Lee, Tsz-ngong, (2008) Educational Technology & Society Insights into Innovative Classroom Practices with ICT: Identifying the Impetus for Change
- www.zicta.zm/2018_Zambia_Information_and_Communications_Technology_Authority_Survey_preliminary_Report.pdf: accessed 22:05-02/06/2020

FACTORS RESPONSIBLE FOR PREVENTING STUDENTS FROM STUDYING FINE ART IN COLLEGES AND UNIVERSITIES IN ZAMBIA

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This paper is part of the study that was conducted in selected secondary schools and teacher training institutions on the key factors responsible for preventing students from studying fine art at college or University in Zambia. The study sought to establish factors that hinder fine art students in the Northern Province of Zambia from proceeding to college or university to pursue fine art/applied courses and mainly explore opinions of teachers, students and other stakeholders concerning the fine art subjects' progress. A total number of 92 respondents of which 47 were the Grade twelve learners together with 20 teachers as respondents as well as 10 senior lecturers, 5 cultural officers, 5 education planning officers and 5 Senior Education Standards officer (SESOs), in the Northern Province of Zambia. The study adopted a qualitative approach where a descriptive design was engaged and a questionnaire and unstructured interview were used for data collection. The study established that a majority of the school leavers were not aware of many fine/applied arts programs and other matters related to fine art as a profession and also revealed that colleges and universities in Zambia were not provided with necessary facilities and lacked qualified, trained and experienced teachers to offer appropriate, attractive and marketable fine art programs. Therefore, the paper recommends that the government as a matter of urgency should get ideas from other countries that are doing better and update the facilities and equipment of fine/applied art, establish more Fine Art schools, colleges/universities and there must be an equal attention to all the categories of all pupils, students and teachers who study fine art or applied art at all levels.

KEYWORDS: Fine Arts, Applied arts, Expressive Arts

I. INTRODUCTION

Zambia is undergoing rapid socio-economic development and the education sector is no exception. Education is an agent of change. While education has always been perceived as a social sector, it is also an economic tool for development (The Zambia Curriculum Framework, 2012) the secondary school learners are adequately prepared for tertiary education (Ministry of Education, 2012). One of the policies of the government of the republic of Zambia is to equip learners at all levels of education with vital knowledge, skills, positive

attitudes and values that are necessary for the achievement of the vision 2030 (The Zambia education curriculum framework, 2012). However, the fine/applied arts courses that are currently offered in higher institutions of learning in Zambia are not enough to attract and absorb the larger number of students that are well prepared in secondary schools of Zambia. Brendan (1999) says that students in secondary schools often struggle to balance different set goals, which may be academic, social or physical. Consequently most of the school leavers do not know what they want to become in future or what they want to do after secondary school, consequently

Most secondary school pupils do very well in the Fine Art subject (Phiri, 2014, Kaingu, 2015) However, majority cannot be admitted into college or university to do a Fine Art course. A good number of school leavers generally in Zambia do not proceed to college/university (Phiri, 2014). Fine Art school leavers for this matter cannot prosper in their career because of various reasons.

Therefore, this study investigated the factors that prevent Fine Art students from proceeding to college/university.

A. Statement of the Problem

Fine Art subjects/courses in Zambia are mainly offered in preschools, primary, secondary schools in all teacher training colleges, Evelyn Hone College specifically and recently started at Chalimbana University and in the school of education at the University of Zambia. The current situation in Zambia is that most secondary school pupils do very well in the Fine Art subject in the national final examinations but the majority of them cannot proceed to college/university to do a Fine Art course. Fine Art school leavers need to prosper in their career and pursue inspiring fine art/applied art courses in tertiary institutions that can compete favourably in the current labour market demand. Therefore, the study intended to uncover the factors that hinder Fine art students from proceeding to college/university in Zambia.

D. Specific Objectives

- i) To explore and uncover factors that hinder fine art students in the Northern Province of Zambia from proceeding to college or university to pursue fine art/applied courses.
- ii) To examine attitudes that hinder positive thinking in secondary schools and how they influence enrollment of fine art students in colleges/universities in the Northern Province of Zambia.

- iii) To explore opinions of teachers, students and other stakeholders concerning the fine art subjects' progress in the Northern Province of Zambia.

E. Research Questions

- i) What are the factors that hinder fine art students in the Northern Province of Zambia from proceeding to college or university to pursue fine art/applied courses?
- ii) What are the attitudes that hinder positive thinking in secondary school students and how do such factors influence enrollment of fine art students in colleges/universities in the Northern Province of Zambia?
- iii) What opinions do teachers, students and other stakeholders have concerning fine art subjects' progress in the Northern Province of Zambia?

F. Significance of the Study

The continued fine art students' failure to proceed to college or university may lead to inadequately educated society and increased poverty levels in the community. The study was conducted successfully and its results could help education stakeholders to know what hinders fine art students from proceeding to college or university. The recommendations drawn from the study would lead to better planning by government to produce sound policies against students failing to proceed to college or university. The study will poke Zambian policy makers and other stakeholders of secondary schools in Zambia to think about making deliberate moves on how to motivate students to proceed to tertiary level. Such a transformation would benefit Fine Art students' college and university intakes which is also presently not encouraging.

G. Conceptual Framework

This study adopts Omari's (1995) quality assurance model which suggests major dimensions related to aspects of good academic performance in secondary schools. These dimensions are basic inputs, various interactions, enabling conditions, school climate, teaching and learning process and intended outcome (Omari, 1995). Lilian Musa (2015) used Omari's conceptual framework for quality assurance (1995) and also integrated it with the theory of "X" and "Y" assumptions providing the basic school and extra-school inputs to reveal connectedness in bringing out influence of school academic performance. Additionally, the Open University of Tanzania, department of education also published Omari's model in 2013 emphasizing its application in setting up standards for effective delivery of distance education

The model suggests the major dimensions related to aspects of good academic performance in secondary schools which are more formally defined as follows:

H. School Inputs

Managers, head teachers and parents in secondary schools are assumed to pay the highest level of attention to the availability of basic inputs that include teachers, learning and teaching materials (Omari, 1995). This model is essential as it involves

stakeholders like managers and teachers who in one way or another impact the enrolment of students. Managers, in this case are the administrative staff, and are responsible for planning the criteria for enrolment.

I. Various Interactions

Various interactions include strong guidance and encouragement from teachers' support, effective support from the education system and in-school relations. These interactions among experienced and beginner artists produce and lead to good exposure. However, Sam (2010) argues that negative attitude towards a particular thing can possibly impact the interactions which in the end produce negative results. The aspect of various interactions is brought in to explore how negative attitude towards the fine art subject influences enrolment of students in college/university.

J. Enabling Conditions

School management, the guidance teachers, teachers and parents are assumed by Omari (1995) to be sensitive to factors that prevent learners from doing well academically. In the same way, affective-cognitive consistency theory by Simomson and Maushak (2001) suggests that the effective component of the attitude system may be changed by providing new information via a persuasive message. In this case, the Omari model is employed to explore whether or not teachers of fine art, school leadership and education stakeholders create an environment for society and learners to value the fine art course by providing students of fine art with correct and useful information concerning the course.

School Climate

School climate includes the provision of incentives and motivating the learner and the teacher. (Omari 1995) says that good performing schools create conducive teaching and learning environment by maintaining good discipline and give rewards to deserving teachers and students. In addition, social learning theory suggests that learners learn better and with all efforts when they are motivated (McDolnad and kielsmeier, 1970). The Omari model is going to be of help when exploring the treatment which fine art students receive in secondary schools and how motivation impacts their career choice.

K. Quality and Experience of Human Resources

On the quality of human resources, (Okumbe, 1998) argues that human resources in the context of the school include workers and students. Any discussion on the quality of human resources in relation to schools' academic performance one must take into account teachers' qualifications and the recruitment of teachers on one hand and students' selection and admission requirements, on the other. Ndabi and Waane, (1993) maintain that quality education can only be given in a context where teachers are well trained and competent. Teachers' competency involves their manner of presentation as well as clarity in teaching procedures and materials, as well as enthusiasm in presentation as indicated by gestures and voice inflections. Njabili, (1999) adds that overall maintenance of high performance in any educational programme is highly dependent upon the quality of individual lecturers/teachers. They are the engine for change in the classroom.

II. LITERATURE REVIEW

National Arts Council in Zambia and one of its functions is to “assist, financially or otherwise, in conjunction with the Government, any citizen of Zambia, any artistic activity in obtaining relevant training within or outside Zambia” (The National Arts Council of Zambia Act 1994). While boys and girls in Zambia are guaranteed the right to education, it is sad to note that we have a number of them failing to proceed to college/university (Kambilima, 2015). While Chitotela, (2020) says Artists are Zambians like any other and have the right to benefit from the national cake including the available natural resources like precious minerals. And also says government would ensure that Artists are empowered through various ventures including mining, to enable them actualise their dreams.

A. *The National Arts Council of Zambia*

The National Arts Council of Zambia is a statutory body established under Act no. 31 of 1994 of the Laws of Zambia. It became operational in 1996. Its overall objective was to advise the Government on policy towards visual, performing, media and literary arts in the country. Its aim was to encourage artistic excellence on both amateur and professional levels in the country and to promote the arts as an integral part of the lives of people in Zambia. This law made a lot of associations to be formed in connection with art. The National Arts Council comprises nine arts associations representing performing, literary, media and fine arts: the National Theatre Arts Association of Zambia; the National Media Arts Association; the Zambia Folk Dance and Music Society; the Zambia Women Writers' Association; the Zambia Popular Theatre Alliance; the Zambia Association of Musicians; the Zambia Adjudicators' Panel; the Zambia National Visual Arts Council (VAC); the Association of Theatre for Children and Young People in Zambia.

B. *Tanzania Cultural Heritage Policy of 2008*

In reference to the Tanzanian Cultural Heritage Policy of 2008, in promotion of Promoter of Arts and Crafts (fine art, carving and sculpture, weaving, embroidery, miscellaneous handicrafts) Tanzania drafted the cultural heritage policy. In Tanzania Artistic activities as a whole can be divided into two major categories- traditional and contemporary. Contemporary artistic activities have drawn considerable strength of artistic forms, which can be observed in the nervous energy and creative spirit radiating from the contemporary arts in the United Republic of Tanzania in music, the fine arts, theatre, drama and literature. Cultural workers from the Ministry of National Education as well as related organizations have the task of instilling national values, creating a suitable atmosphere for the growth of new talents and the consolidation of old ones through exhibitions, publicity, education and encouragement. The United Republic of Tanzania has today some of the most well-known sculptors and painters in Africa, and in recent years artists have emerged in other fields as well (URT-NCP 2008).

C. *The Cultural Policy of Ghana*

The Cultural Policy of Ghana (2004) highlights, the National Commission on Culture which talks about steps to preserve Ghanaian Antiquities in wood, fabric, stone, metal, bone, clay, as well as those on rocks, walls and in sacred shrines, and enacts appropriate legislation to protect them from theft, illegal commercial exploitation or destruction arising from ignorance and hostility. Also emphasises that modern and contemporary visual arts shall be vigorously promoted through the provision of grants and other kinds of support to creative artists. The National Commission on Culture collaborates with the relevant Agencies and Associations to give recognition to the works of contemporary artists and to support and promote art forms and institutions. The State purchases and retains in Ghana works adjudged to be of exceptional aesthetic value and, as such, heritage assets, for future generations. The State establishes a National Art Gallery to encourage District Assemblies and private interest groups to establish urban and rural community art galleries to enhance cultural life in the whole country.

III. FACTORS HINDERING STUDENTS FROM PROCEEDING TO COLLEGE/UNIVERSITY

Kantrowtz, (2009) maintained that here are several reasons why students do not proceed to college/university that may include teachers' attitude, students' attitude, economic hardships, loss of the parents or guardians, indiscipline or domestic problems and failure to meet entry requirements among others. Tambo, (2014) says that a secondary school is a very important place for students because this is a base which decides a person's life. However, it is disheartening to note that some students in secondary schools do not know why their parents or guardians send them to school. Most students have been acting in norms contrary to the expectations of the society. The strange happenings which most students do include: engaging themselves in activities such as heavy alcohol drinking, cigarette smoking and abusing of drugs, this put them into serious conflicts with teachers. However, Phiri (2014) and Kaingu (2015) evidenced that fine art subject is one of the subjects that students enjoy and pass very well. Brendan (1999) says that students in secondary schools often struggle to balance different set goals, which may be academic, social or physical. Most of the students do not know what they want to become in future or what they want to do after secondary school, consequently some students become more biased in the time management, they allocate more time on the subjects they enjoy most while neglecting others which they have to pass as well. The attitude of failing to balance in putting a fair effort on all subjects by most learners makes them not to do well and has not left out fine art students. Finally, family related factors can play a critical role in a students' academic performance for instance, when parents do not care about their children's performance, the child can lose the academic focus (Brendan 1999). Furthermore living in poverty can also distract a child from academic because survival becomes a more immediate and pressing priority. Both of these examples include situations in which the parents are not intentionally harming a child's education, but such cases still can impact the problem.

IV. METHODOLOGY

A. Sample Size

Research was conducted in only four secondary schools, two colleges, and four districts and one education provincial headquarters within the Northern Province of Zambia. A total number of 92 respondents of which 47 were the Grade twelve learners together with 20 teachers as respondents as well as 10 senior lecturers, 5 cultural officers, 5 education planning officers and 5 Senior Education Standards officer (SESOs), in the Northern Province of Zambia.

B. Sampling Procedures

The study used deliberate sampling, snowball sampling and stratified sampling techniques in the selection of the respondents. 92 respondents were interviewed.

C. Data Collection Procedure

In this study, unstructured interview, focus group discussion and semi-structured questionnaires were used as the technique to obtain primary data.

D. Instruments for Data Collection

In order to get reliable information from various groups of respondents, different instruments for data collection were used. These instruments included unstructured interviews (key questions formulated in advance), semi-structured questionnaires

E. Validity and Reliability of the Research Instruments

In ensuring the validity and reliability of the research instruments, the researchers prepared the research instruments as a group of fine art lecturers who read, made suggestions and then approved them.

F. Data Analysis Plan

In the analysis of data, tables, figures, with clear, concise and adequate titles have been used. The discursive analysis procedure has been employed in order to generate answers for the research questions to satisfy the research objectives.

G. Ethical Considerations

As far as research ethics are concerned, all official procedures of seeking permission were followed and participants were offered an opportunity to remain anonymous if they wished to do so to ensure confidentiality.

V. FINDINGS AND INTERPRETATION

This unity presents the research findings of the study. The respondents' sex profile is presented in Table 1.

Table 1: Respondents' Distribution by Sex

Respondents	Sex	Frequency	Percentage
Fine Art Pupils	Male	28	60
	Female	19	40
	Total	47	100
Teachers	Male	13	65
	Female	7	35
	Total	20	100

Senior Lecturers	Male	7	70
	Female	3	30
	Total	10	100
Cultural Officers	Male	4	80
	Female	1	20
	Total	5	100
Education Planning Officers	Male	2	40
	Female	3	60
	Total	5	100
Senior Education Standard Officers	Male	3	60
	Female	2	40
	Total	5	100

The information in the table 1 implies that the sample of this study was gender balanced as both genders were included to give their opinions.

A. Exploration and Uncovering of Factors that Hinder Fine Art Students from Proceeding to College or University to Pursue Fine Art Courses

This was the first objective of the study that aimed at exploring and uncovering of factors that hindered fine art students in Zambia from proceeding to college or university to pursue fine art or applied art courses.

B. Rate of Liking Fine Art

The first question intended to find out whether fine art students liked to learn fine art. Out of 47 pupils 18(38%) liked training in fine art teaching, 16(34%) liked sculpture, crafts and designing related courses, 13(28%) liked courses not related to Fine Art. These responses are presented in Figure 1.

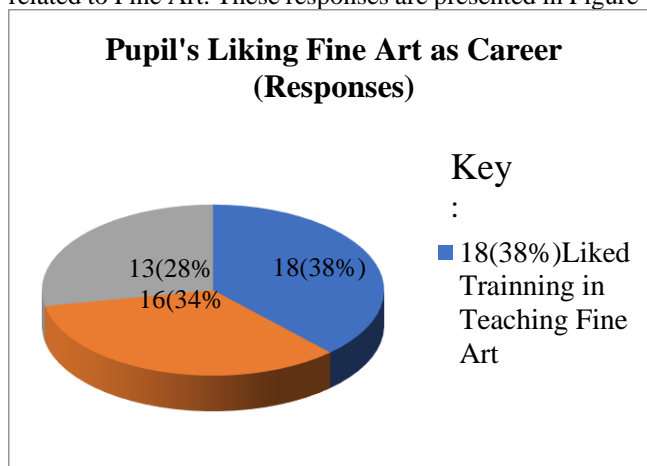


FIGURE 1: RESPONDENTS OPINIONS ON THEIR LIKING OF FINE ART AS A CAREER

Source: Present Study Field Data by Chileshe, Phiri and Chibwe 2020

This data in figure 1 implies that the majority 34(72%) of fine art pupils in the study area liked fine art related courses. The findings of this study are consistency with that of Galabawa (2001) who maintained that motivation to study fine art is strong when employees and management support and influence one another in a positive way. In support of this view Marvin, (2008) further says fine Art is an efficient way to motivate students to follow their self-learning instincts to creatively self-construct knowledge. This means liking fine

art is in the learners' mind and interest because Fine Art offers a self-mechanism to like things.

C. Awareness of the Existence of Fine Art Learning Institutions in Zambia

The study intended to find out whether pupils were aware of the Fine Art course's existence in learning institutions. The third question on the pupils' questionnaire aimed at finding out whether pupils were aware of the presence of higher learning institutions that offered Fine Art or applied art courses in Zambia. Out of 47 pupils, a majority of 45(95%) of the respondents mentioned only Evelyn Hone and Mufurila College of Education as among higher learning institutions offering fine art courses in Zambia. In addition, question 10 on the pupils' questionnaire directed students to elaborate their contentions by mentioning the type of art forms they knew. Majority 25(53%) of the students contented that there were five main fine art forms and the most mentioned were crafts, painting, drawing, sculpture and fashion and Graphic design. This implied that many other fine art and applied art forms were not known by the students.

D. Ranking Fine Art final examination results in the Northern Province of Zambia

The study intended to find out how students had been performing in the fine art final examinations in the Northern Province of Zambia. Respondents were required to rank the final examination results using Poor, Fair, Good and Very Good. The past 5 years' trend is presented below.

The guidance teachers were asked to comment and rank the past 5 years fine art grade 12 final examinations results in the Northern Province of Zambia. Out of 8 guidance teachers, no respondents ranked the past 5 years final examination results to be Poor, 1(12%) ranked results to be Good, 2 (25%) ranked results to be fair and 5(63%) respondents ranked the past 5 years final examination results to be very good. In combining groups the respondents who rated the performance with a very good and good response reached 75%. Thus, majority of the respondents ranked the Fine art final examination results for the past 5 years to be very good. The responses are presented in Figure 4.

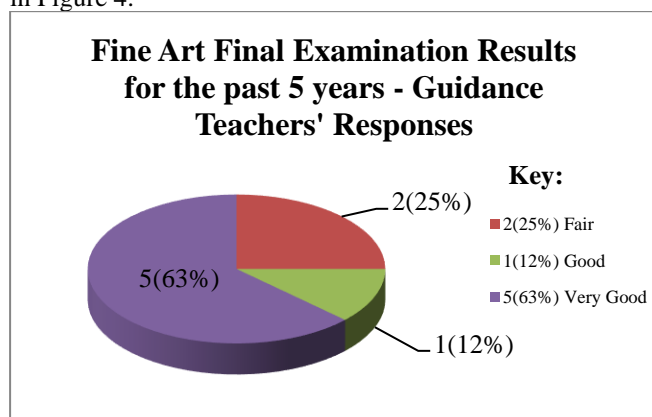


Figure 2: Respondents Ranking for Final Examination Results in the past 5 years

Source: Present Study Field Data by Chileshe, Phiri and Chibwe 2020

The responses shown in figure 2 of respondents reveal a positive trend in the Fine Art final examination performance

of final examination results for the past 5 years. The findings of this study are supported by the studies of (Phiri 2014) and (Kaingu 2015) who stated that most secondary school pupils did very well in the Fine Art subject but the majority could not be admitted into college or university to do a Fine Art course especially if they had failed compulsory subjects such as English. Furthermore, a student always performed well in Fine Art subjects even when he/she failed in other compulsory subjects. The information available in the Grade 12 final national examination results analysis, subject by subject at the schools visited, showed that in 2013 and 2014 pupils had not performed well in the compulsory subjects except Fine Art and food and Nutrition that scored 100 per cent average pass in both years (Kaingu, 2015).

In summary, Respondents mentioned the following factors: lack of guidance; inadequate information; lack of sponsorship; poor quality of instructional materials; poor academic performance and to a higher extent lack of interest by some learners themselves. Other factors were lack of trained (qualified) Fine Art and applied art teachers; lack of enough higher learning institutions and their instructional facilities that could attract and absorb school leavers. This implies a disheartening situation as this would decrease the enrolment of candidates for Fine Art subject in learning institutions. Supporting this argument (Ndabi and Waane 1993) point out that the absence of good infrastructure in an educational institution may greatly affect the performance; even the absence of water in a school may affect performance because students would spend an inordinate amount of study time drawing water.

On the other hand, both the senior lecturers' and guidance teachers suggested the need to increase fine art colleges or institutions in the country; imparting awareness to parents and guardians about the professionalism of fine art; incentives to teachers to increase artistic knowledge and passion; providing scholarships for fine art pupils; providing fine art career development skills and make fine art and other neglected applied arts an official profession rather than an individual business. There were several reasons given as to why students did not proceed to college or university. The reasons included teachers' attitude, students' attitude, economic hardships, loss of the parents or guardians, indiscipline or domestic problems and failure to meet entry requirements among others (Kantrowtz, 2009). The study of (Tembo 2014) maintains that students whose parents or guardians are unable to provide vital school requirements or due to inadequate financial assistance from their families, usually fail to proceed to higher education even when their academic performance is good.

E. Students-Teachers Consultation

The study intended also to find out how often pupils consulted their teachers on where they could further do a fine art course. Out of 47 Fine Art pupils, 26(55%) sometimes consulted their teachers or parents, 10(21%) always consulted their teachers or pupils, 7(15%) had often consulted their teacher and 4(9%) had never consulted their teachers. The summary of the respondents is presented in Figure 4.11.

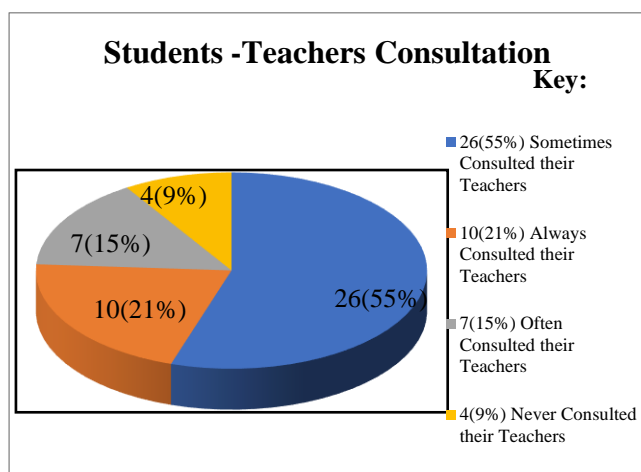


Figure 3: Respondents Opinion on Students -Teachers Consultations

Source: Present Study Field Data by Chileshe, Phiri and Chibwe 2020

In combining groups of responses, the group of those who consulted their teachers was 43(91%). This implied that a majority of pupils consulted their parents or teachers on whether and where they can further do Fine Art courses. The same question part (ii) required respondents to provide additional views regarding the issue of consultation or rather advice on the future of their fine art knowledge for further studies. Majority 43(91%) of respondents mentioned teachers as their best source of information option regarding fine art courses. Teachers always explained to them the importance of fine art as a profession and also fine art as passion to an artist and to the whole population thus it is not a tiresome thing to do, as a result people enjoy themselves while doing it. The respondents commented that fine art was not a complicated profession as it was done out of passion and talents and it only needed the basics as an addition to ones' talents.

F. What should be done to Help Fine Art Students Change the Attitude That Hinders Positive Thinking in Secondary Schools?

This was the second objective and the study intended to find out what should be done to help Fine Art Students Change the attitude that hinders positive thinking in secondary schools in the Northern Province of Zambia. In combining responses, 10(100%) of the lecturers' suggestions included: schools needed to hold career talks on the subject; warning teachers who discouraged pupils of Fine Art; Fine Art teachers had to be good role models so that they could motivate the students and introduce fine art or applied arts in many schools. While the 10(62%) fine art teachers provided a summary of the following responses: by exposing students to various Fine or applied arts galleries or museums and practicing artists that had excelled and 6(38%) fine art teachers mentioned putting in place art policies that could attract pursuance of fine art or applied arts; and enlighten them on the importance of fine/applied arts and encourage learners to see the part of self-reliance in the subject. The findings of this study are similar with that of (Bandura 1969) who maintains that no child comes to school intending to hate studies. Rather most

children come to school with high enthusiasm. Attitude can be defined as a receptively enduring organization of beliefs around an object, person, ideas or events, predisposing one to respond to some preferential manner, which could be either negative or positive.

In addition, the respondents were required to provide the factors that hindered fine art students from proceeding to college or university to pursue Fine Art or other applied art programs. Out of the 26 respondents, 10(38%) senior lecturers' points were combined and are as follows: the presence of alternative professions; lack of sponsorship and the stigma or wrong perception of parents and guardians on fine art that brought about inferiority complex to the subject. While the summary of the 16(61%) fine art teachers' points were as follows: limited enrolment in fine art college or university; failure in examinations which led to failure in meeting the minimum college/university entry requirements; lack of interest in fine/applied art by some school levers and inadequate information regarding fine/applied art programs. In addition, 14(54%) of the respondents mentioned that literary there were very few colleges and universities that offered fine or applied art courses in Zambia.

G. Teachers Qualifications

The study aimed at finding out the highest qualifications of these teachers of Fine Art. Respondents were required to put a tick corresponding to the appropriate level of their qualification. Out of 16 respondents, 14(87%) Fine Art teachers had a diploma qualification; 0(0%) respondents had a certificate qualification, 2(13%) Fine Art teachers had a degree qualification and 0(0%) respondents had a Master's Degree. The summary of these responses is presented in Figure 4.15.

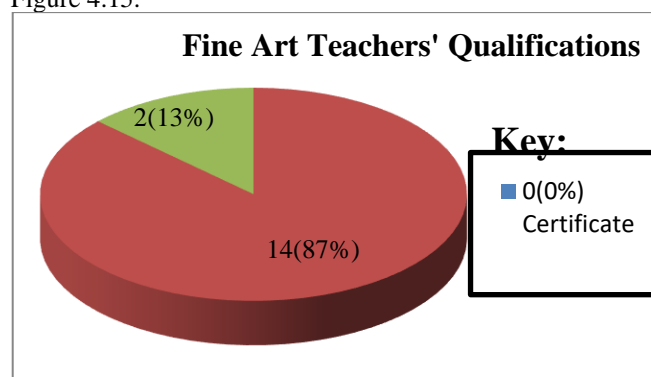


Figure 4: Responses Regarding Fine Art Teachers' Qualifications

Source: Present Study Field Data by Chileshe, Phiri and Chibwe 2020

The field data in figure 4. showed a majority 14(87%) of teachers had a diploma qualification in fine art which implies that the level of education for fine art teachers was still too low in the study area because the minimum qualification for a secondary school teacher to teach senior classes (Grade 10 – 12) is the first Degree (The Zambia curriculum Framework 2012).

H. Government Role in Fine Art and Design Development – Teacher's Opinion

Question 7 on the teachers' questionnaire requested fine art teachers to provide opinion on what they thought the government should have done to put fine art or other applied art (design) programs to their full usefulness. The respondents of the study who were the 16(100%) fine art teachers saw the roles of the government in helping advancement of fine art and design to be essentially useful. In summary, the responses from the 16 fine art teachers included: the development of policy framework to guide Fine Art related matters including the introduction of art work galleries to all institutions; making Fine Art a compulsory subject from grade one to grade twelve; the development of fine art schools or establishment of colleges or universities with a wide range of Fine Art programs; provision of scholarship for Fine Art students or pupils; the inclusion of practical works/portfolio as criteria for selecting students and recruiting more Fine Art professionals in fine art institutions; introducing fast tracking programs to teachers and provision of adequate materials to schools. Moreover, the government had to motivate teachers of Fine Art other than salary; there had to be provision of allowances, training more teachers by creating more universalities or colleges

I. Students' Fine Art or Applied Art Related Career Awareness

A total number of 60 students were verbally asked during the focus group discussion to state whether they were aware of any other fine art/applied art (design) career/occupations that could have been as well paying as any other prestigious job. Out of 48(80%) students who responded, 10(17%) mentioned graphics designing, 2(3%) textiles designing and technology, 4(7%) traditional pottery, 6(10%) ceramics, 2(3%) printmaking, 19(32%) painting, 5(8%) sculpture making and 12(20%) did not say anything. This implied that, it was worthy to say that there were many opportunities in the profession of art, as there were diversities in art and design specializations. The students showed that they were aware of many occupations that fine art or applied art students could do. The findings of this study are consistent with that of Amenukeet al (1999) who outline Fine Art related career opportunities such as Textiles Designing, Graphic Designing, Sculpture, Painting, Art Directing, Craft, Fine Art and Multimedia Art and Ceramics.

J. Factors Hindering Grade 12 Pupils from Proceeding to College or Universities

The study aimed at identifying the factors that hindered grade 12 students from proceeding to college or universities. Out of the 47 Fine Art students who responded to the question mentioned the following points: 3(6%) less encouragement from parents and society; 6(13%) limited places in tertiary institutions; 5(11%) in some cases Fine Art was not offered as a separate subject but with other courses like Music, physical education and English; 5(11%) lack of information on where students could do Fine Art; 3(6%) low awareness on the benefits of Fine Art; 2(4%) lack of financial support; 4(9%) scarcity of profession official job chances in Fine Art; 5(11%) many people in the society thought Fine Art was not a rewarding career and it was opted by students or pupils with

low academic performance and 14(30%) absence of sponsorship to Fine Art students. This is supported by the findings of (Tembo 2014) who maintains that students whose parents or guardians are unable to provide vital school requirements or due to inadequate financial assistance from their families, usually fail to proceed to higher education even when their academic performance is good.

K. Ways to Improve Fine Art Program

The 92 respondents provided opinions on what they thought could be done to help Grade 12 pupils proceed to college or university to pursue a Fine Art or other applied art (design) programs? The study's intention was to know the ways that might be used as mechanism to improve fine art programs. However, 40(44%) respondents never responded to the question. In combining groups of most common responses 52(56%) respondents provided the following responses: 7(8%) mentioned the need for more inter-stakeholders communication in order to exchange experiences among learners of fine art at all levels through participation in fine art programs; 6(7%) said that fine art needed further initial and reinforcement training; 13(14%) responded that fine art educators had to make ongoing follow-up support and supervision; while 16(17%) said that fine art programs had to provide continued incentives and motivation to students and fine art educators; and 10(11%) mentioned that fine art programs had to be structured to make pupils or students become responsible professionals.

In summary, 16 fine art teachers to provided opinions on what measures they thought had to be taken to help fine art students change the attitude that hinders positive thinking about taking up fine art or other applied art (design) as a career. The study intended to bring out fine art teachers' suggestions on measures that had to be taken to help fine art students change the attitude that hindered positive thinking about taking up fine art or other applied art (design) as a career. In combining responses, 2(10%) did not respond, yet majority 14(90%) respondents provided the following responses: 2(13%) pointed out that there had to be a change of attitude about the professionalism of fine art; 3(19%) said that there was a need to change the stigma which was around the fine art subject by creating awareness to non-fine art teachers and students who had to be made to think positively about the fine art profession through provision of encouragement and motivation programs. 7(44%) mentioned that not only educating society through media and showing pupils the positive side of fine art had to be made important but also offering to students proper guidance from all Fine Art stakeholders and the provision of scholarship and reward to best primers to encourage students. Additionally, 2(13%) pointed out that expansion and establishment of old and new fine art learning institutions with flexible entry requirements and promotion of fine art products in terms of assured market and intensifying more institutions that offered Fine Art had to be put into consideration. In addition, stakeholders have to encourage students to start considering Fine Art as important as any other compulsory subjects and explain to them the benefits of fine art. The findings of this study are similar to that of (Bandura 1969) who maintains that no child comes to school intending to hate

studies. Rather most children come to school with high enthusiasm.

VI. CONCLUSIONS AND RECOMENDATIONS

A. Conclusion

The study findings concluded the following;

School inputs for fine art offering schools were discouraging, inadequate qualified teachers, lack of proper practical lessons and fine art books. Unavailability of the teaching aids such as computers for practical purpose. The study also revealed no encouragement from government and parents on the teaching and practice of Fine Art in tertiary schools of Zambia

This study found out that a majority of the respondents were not aware of many fine/applied art programs and other matters related to fine art as a profession. Fine art learning and teaching enabling conditions were not favourable. The findings of the study also revealed that schools were not provided with necessary facilities and lacked in-services training. In general, the quality of experienced fine art teachers was good and encouraging. However, the quantity was not reconciling with the needs. The school climate for fine art students was not purely friendly as it had been revealed by the study that there were unpalatable sentiments from non fine art teachers and students and the thinking that fine art studies was a waste of time. The study maintains that low enrolment of fine art students in Colleges/universities was partially due to lack of serious advertisements, proper career counselling. The results for the stakeholder's general opinions on the progress of the fine art stressed that it was important for all stakeholders of fine art like pupils and students themselves, parents, guardians and relatives, governmental and non-governmental organizations to take concrete measures in motivating students to opt for fine/applied art courses for further studies. The study's responses showed that consultations with students and parents had imparted students with knowledge and awareness on fine art, but most importantly, recruiting more fine art professionals; putting up more colleges and universities was as well seen to be more helpful.

B. Recommendations

The study proposes the following recommendations:

The government of Zambia through fine art departments and fine art professionals should clearly promulgate policies and guidelines aimed to help fine art learners. Policies should also devise the qualities of fine art teachers and create a system or an authority that will monitor and look after their matters including good pay and bonuses as well as periodic training. Educators and other stakeholders should increase the level of people's awareness of fine art and its importance to youths. Fine Art educators should make follow-ups and support to all pupils and students who are in need of Fine Art knowledge and especially to those who need to further studies in Fine/applied arts.

The National Arts Council of Zambia should advise government to ensure that more qualified and trained Fine Art teachers are recruited and there must be the provision of seminars and workshops for teachers together with increasing such teachers' allowances, overtime payment and gifts. The

government as a matter of urgency should establish more Fine Art schools, colleges/universities or rather programs together with monitoring the continuation of fine/applied arts programs and products. Fine Art graduates should be given entrepreneurship skills and loans or scholarships to enable them be self-reliant and live like any other Zambian who would pursue any other prestigious course. Students should be sent to different Fine/Applied Art training schools even outside Zambia in order to beef up the few under qualified trained manpower. The Government should get ideas from other countries that are doing better and update the facilities and equipment of fine/applied art. If anything the government should hire qualified man power to help upgrade the level of education for the fine art teachers teaching in Zambian secondary schools just like it has done for other prestigious subjects.

There must be an equal attention to all the categories of all pupils, students and teachers who study fine art or applied art at all levels. School administration should provide all necessary infrastructure and equipment for effective students' practical training. This should include practical and standard Art studios together with workable modern computers.

More careers counselling at primary and secondary school levels could assist in making career discoveries that might benefit youths to choose an art career pathway that would enable them acquire a creative cultural workforce.

Educational institutions with fine/applied art courses or rather programs should organize excursions and field trips to museums, art exhibitions and Art galleries for interaction with artists and their works. School administrators must effectively monitor their fine art teachers to ensure the provision of knowledge and skills required by giving them surprise visits in class (MBWA- monitoring by walking around).

Experienced fine art teachers should teach side by side with teachers on teaching practice or ensure that fine art trainee teachers teach their respective specialized subjects correctly so that their students understand what they are being taught. Also teachers should be encouraged to take practical components of the subject seriously and use teaching methods that will make fine art lessons enjoyable. Fine Art teachers should demonstrate practical lessons step by step in front of students when teaching and practice their art to encourage their students to be confident in and with their profession to help them develop the drive to achieve and believe that achievement is possible for them.

Lastly, the study recommends that it is important for fine art professionals to impart knowledge on alternative ways given the fact that employment is hard to get and unemployment is the main source of youth engaging in risk behaviour. Youths are encouraged to use all those alternatives for their personal development. This will increase the number of pupils who will like and engage in fine art for further studies.

Zambia has a lot to learn from Ghanaian government which directs purchase and take custodian of best Ghanaian visual art products as well as Tanzania that does good when it comes to management and popularization of its cultural assets as it has a number of uniquely art forms such as Tingatinga paintings and monuments and that was due to the enactment of special laws on the monument ordinance of 1979 and the establishment of antiquities department which had the mandate to oversee all cultural and heritage matters. Zambia

should not only top at drafting cultural policy and establishing shadow organs rather the regulatory organs but must be given special authority, budget and mandate to oversee cultural matters.

REFERENCES

- Amanda, R..S. (2015). *Writing a thesis or Dissertation Scholarship*. Retrieved December, 09, 2015. Scholarship.com/writing-thesis-or-dissertation/
- Baffoe, A. (1991). *General Knowledge in Art*. London: Evans Brothers Ltd.
- Bandura, A. (1969). *Principles of Behaviour Modification*. New York: Holt Rinehart and Winston
- Brendan, C. (1999). *Education in Zambia Cantuslic perspective*. Book world Publishers. Lusaka.
- Bryman A, (1988), *Quantity and Quality in Social Research*; Unwin Hyman Ltd, New York and London
- Cohen, D., & Crabtree, B. (2006). "*Qualitative Research Guidelines Project*." Retrieved on 16.12.15 from <http://www.qualres.org/HimeSemi-36>
- Cohen, L., Manon, L and Marrison, K. (2000) *Research methods in education* London: reotledgeFalme.
- Creswell, J. (2002). *Educational Research: Planning, Conducting and Evaluating Quantitative and Qualitative research*, Edwards Brothers, Inc. Boston.
- David, J. (1989) "Synthesis of Research on School-based management education leadership, February no. 3:14-20.
- David, S. (2014 Ferbruary). *Zambia 2013 Grade 12 Examination Results: why they are Poor*. The Global Education Conference Network.485, 1-3. Retrieved April, 17.2015.
- www.globaleducationconference.com/profiles/blogs/
- Don, E. (2015). *Theory of Performance (Mechanical Engineering University of Idoho)* Retrieved December, 09, 2015. www.pcrest2.com/fol/1-2-1htr
- Ernest, A.I.E. (2001). *Basic rudiments of art for schools and colleges*, Benin City: Favorite
- Mbit, D. M. (1989). *Foundationsof school administration*. Nairobi oxford university press
- Mbughuni L. A (1974). *The cultural policy of the United Republic of Tanzania*, The UNESCO Press Paris
- Michael, O. (2015). "*Theories of attitude formation and change*." Introduction to emerging Perspective on learning, teaching and technology. Boundless, Retrieved from <http://www.boundless.com/>
- Miles A and Huberman.M (1994), *Qualitative Data Analysis*, SAGE Publication, Inc, New York.
- Ministry of education. (2012). *The Zambia curriculum framework*: published by curriculum Development centre. Lusaka. Zambia.
- Ministry of education.(2013). *Art and design grade 10 to 12 syllabus*. Curriculum development Centre. Lusaka. Zambia.
- Musa L. (2015). *The role of school discipline on students' accademic performance in Dar es Salam, Tanzania*.
- National Commission on Culture. (2004). *The Cultural Policy of Ghana*
- Ndagire, A (2014). *Factors Affecting Students' Performance in Art and Crafts at "O" Level in Secondary Schools in Lubaga South Division, Kampala District: A dissertation submitted in partial fulfillment of the requirements for the award of the Degree of Master of Education (Fine Art) of Makerere University*
- Ndambi, D. M and Waane, S. A. c (1993). *School quality and performance*. Paper prepared for TADREG, workshop on quality and equity issues in Tanzania education and practice insight from resent research Dar es Salaam, December 15-16.
- Okumbe, J. A (1998). *Educational Management: Theory and Practice*. Nairobi University press.
- Omari, I. M. (1995). "Conceptualizing quality in primary education in Tanzania," *papers in Education and development*, No. 16:25-48.
- Omari, I. M. and Mosha, H. J (2010) *secondary education development programme SEDPI "formative Review of Strengths, weaknesses, and emerging challenges"* Dar es Salaam July, 2010.
- Osariyekemwen, D (2010). *Examining Factors Militating Against the Teaching and Performance of Fine Art in Secondary Schools in Edo State: The Nigerian Journal of Research and Production Volume 17 No 1, November, 2010*
- Patton, M. Q. (1990). *Qualitative evaluation and research methods* (2nd ed.). Newbury Park, CA: Sage.
- Rajasekhara, P. (2015). *Semi-Structured and Unstructured Questionnaire* Retrieved on 16.12.15 From <https://www.researchgate.net/post/what-do-we-mean-by-structured-Semi-structured-unstructured-questionnaire>
- Sam, G. (2010). *Negative attitude at work theory*. Retrieved on Jan 26.2016 from <https://suite.io>
- Sifuna, d. N (1999) *Basic Education Renewal: the Konyan Experience*. In Galabawa, J. C. J (1999). *Basic education renewal research for poverty alleviation, dare s salaam: KAD associats/TFC*.
- Sylvester, M. (2015 April). *Probe Poor Grade 12 Results*. The Times of Zambia (Ndola). 1-4. Retrieved April, 17. <http://Africa.com/stories/201502280279.html>.
- The National Arts Council of Zambia Act.(1994). Chapter 170 of the Laws of Zambia.
- The Open University of Tanzania .(2013). *Journal of issues and practice in education*. 5 No 1, June 2013 ISSN 18215548.
- Thomas, K. S.,& David, M. C., (1991). *Education Psychology*. Window in Teaching. Mbrown and Benchmark publishers.

SCHOOLING AMONG YOUNG CHILDREN IN LOW INCOME COMMUNITIES: AN EVALUATION STUDY OF SELECTED COMMUNITIES IN KITWE DISTRICT, ZAMBIA

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Studies have shown vital information on benefits of schooling to young children. However, there is no empirical evidence on how the school social spaces help children to get maximum benefits in schools. The study therefore, delved into the benefits of schooling among young children as they use the school social spaces in Kitwe District. The study was anchored on best practices in qualitative research. The study had 24 participants who were purposefully sampled and data was collected using focus group discussions, interviews, pictures and observations. Data was analysed thematically by transcribing, coding and identifying themes that emerged in the study. Findings show that there is an overall agreement among all participants that schooling is highly beneficial to young children. However, it was discovered that the school social spaces lack important features and equipment that support this beneficial outcome. As such, significance of schooling among young children in low-income communities cannot be overemphasized.

Key words: *Schooling, children, social spaces*

I. INTRODUCTION

Studies have shown vital information on benefits of schooling to young children. Ansell (2002) posits that young boys and girls in Zimbabwe and Lesotho made a lot of effort to get to school each day. The said children walked round trips of up to 20 kilometres each day to get to school and back home. A similar situation was found in East Africa by Nieuwenhuys (2003) where young school going children walked long distances to school (Katz, 2004). In Zambia, scholarly work has revealed horrendous situations for children going to school in low-income communities. Mumba (2002) postulates that girls especially are the most affected as they meet dangerous situations along the way to school. This is even more serious in rural and peri-urban areas of the country. In addition to distance, the social spaces they find at school leave much to be desired.

According to the Nelson Mandela Foundation (2005), the school spaces lack even the very basics of an ordinary school for children. This argument is in line with what Abebe (2008) found in Southern Ethiopia where school social spaces were better only in adult spaces (i.e. offices and staff toilets) than the classrooms and play spaces for children. Even though studies from other countries reveal enormous information on

this subject matter, Kitwe district might and Zambia at large might have a unique situation. This unique situation might provide insightful data on how the school social spaces can be a motivating factor to school going children for them to derive maximum benefit from schooling (Kelly, 1997; Mumba, 2002).

However, there is no empirical evidence on how the school social spaces help children to get maximum benefits in schools. Studies have shown schools with inadequate classroom space, desks, eroded chalk boards, lack of teaching and learning materials among others (Kelly, 1996; Carmody, 2004; Ansell, 2005 & Abebe, 2008). Evidence of the impact of school social spaces on children's schooling is hardly available. Most scholars in Zambia have written on the inside of a classroom than on the outdoor space (Lungwangwa et al, 1999). The outdoor space is often times not seen as an important space for a beneficial schooling programme (Mwinsa, 2013). It is only seen as space for play without any benefit for children.

This study therefore, delved into the benefits of schooling among young children as they use the school social spaces in low-income communities. It was cardinal as it brought out insights from a Zambian perspective on school social spaces and the benefits therein (Mwinsa et al, 2019). A number of studies that have been done in Zambia have focussed on street children, child labour and academic performance of children through classroom activities (Kelly, 1996; Mumba, 2002; Ansell, 2002; Punch et al, 2007; Corsaro, 2011). This prompted for a need to conduct a study on social spaces in schools and how these are used to enhance learning among children. The study also sought to encourage school providers, education authorities and proprietors to prioritise learning through play at all levels of learning in schools. The findings are very useful for improving children's cognitive development as well as other developmental domains.

II. METHODS

A. Study design

This study was anchored on best practices in qualitative research to investigate the significance of schooling in low-income communities by using school social spaces (Hammersley & Atkinson, 2007; Abebe, 2009; Kvale & Brinkmann, 2009).

B. Sampling procedure and setting

The study was conducted in Kitwe District, Zambia from two primary schools in a mining community. The participants were drawn from nearby villages to the schools. The sample included 5 parents, 18 school going children and 1 school manager who were purposefully and randomly selected. The parents were chosen as they were parents of the children and only 5 were willing to take part in the study. The children were chosen purposefully as they were from low-income communities surrounding the schools where they attend school.

C. Data collection and analysis

Interview guide was used to collect data from parents as it was a challenge to bring them together in one place considering that they were working parents in different sectors of the economy. Focus group discussions and interviews were conducted with children; a school manager was also interviewed while the researchers made observations as they participated in various activities. Children were also given cameras to take pictures of areas of interest which showed spaces that they liked or wanted to have in their school environment. Data was analysed thematically by transcribing the interviews and discussions. The data was then coded and then the emerging themes were identified.

III. RESULTS

The study shows that there is an overall agreement among all participants that schooling is highly beneficial to young children. This is evidenced in what one participant said:

I go to school to ensure that when I grow up, I should have a good job that will sustain me, my wife and children. I will be able to buy a car and live in a good and beautiful house.

However, it was discovered that the school social spaces lack important features and equipment that support this beneficial outcome. Some of the identified features are play park, football ground and other social features. These features are cardinal in providing an enabling environment for learners to play and enjoy their stay in school.

IV. DISCUSSION

The significance of schooling in low-income communities among young children remain a cardinal subject for discussion. The findings in this study reveal that children from low income communities equally require social spaces that stimulate learning as opposed to classroom activities only. This seems to suggest a different way if thinking than that of other scholars who have emphasised on teaching and learning materials that are only useful in the classroom (Kelly, 1996; Lungwangwa et al, 1999; Carmody, 2004). The children were found to be more interested in outdoor activities than indoors classroom-based activities. Play and creativity seemed to attract more children than conventional learning in a structured environment. Findings show that whenever activities that involved play were organised in school, even children who used to dodge classes stayed in school whole day in order to take part in such events. One such event was a show that was called 'talent yapa Kitwe' which was organised by pupils to promote creativity among children. The study further shows that children from low income communities require

same or similar school social spaces as those enjoyed by children from middle- or high-income communities. This means that schooling for future benefits can only be achieved if the environment where it takes place is socially acceptable and enjoyable.

Recommendations

The study recommends a more phased teaching approached that gives opportunity to learners and teachers to use more outdoor spaces than classrooms. It further advises that learners play be a key element of teaching and learning in Zambian schools.

V. CONCLUSION

The aim of this study was to evaluate benefits of schooling among young children in low-income communities on the Copperbelt province of Zambia. At the core of this study were the negotiations of children's school social spaces that of interest to learners than conventional classroom spaces. Since children are expected to be in schooling during their 'girlhood' or 'boyhood', it is expected that the learning environment or spaces be that which stimulate learning through playful activities. The study therefore, argues that learning that does not involved play lacks merit that children require of a particular school system. The emphasis herein is that all learning in Zambian schools must include more playful activities for enhanced learning among young children.

REFERENCES

- Abebe, T. (2008a). *Ethiopian Childhoods: A case of the study of the lives of orphans and working children*. Trondheim: Norwegian University of Science and Technology.
- Abebe, T. (2009). Multiple methods, complex dilemmas: negotiating socio-ethical spaces in participatory research with disadvantaged children. In: *Children's Geographies* 7(4), pp. 451-465.
- Ansell, N. (2002). Secondary Education Reform in Lesotho and Zimbabwe and the Needs of Rural Girls: Pronouncements, Policy and Practice. In: *Comparative Education* 38(1), pp. 91-112.
- Ansell, N. (2005). *Children, Youth and Development*. Routledge: London.
- Carmody, B. (2004). *The Evolution of Education in Zambia*. Lusaka: Bookworld.
- Corsaro, W.A. (2011). *The Sociology of Childhood*. Thousand Oaks, US: Sage (3rd ed.), ch. 4, pp. 67-89, Historical views of childhood and children.
- Hammersley, M. & Atkinson, P. (2007). *Ethnography: principles in practices* third edition. London: Routledge.
- Katz, C. (2004). *Growing Up Global: Economic Restructuring and Children's Everyday Lives*. Minnesota/London: University of Minnesota Press.
- Kelly, M.J. (1996). (ed.) *The Origins and Development of Education in Zambia - from Pre-colonial times to 1996: A Book of notes and readings*. Lusaka: Image Publishers.
- Kelly, M.J. (1997). *A Situational Analysis of Girl Child Education in Zambia: An update of "Below the Poverty Line in Education"* Paper presented at the National Symposium on Girls' Education held 13-15 September, 1997.

- Kvale, S. & Brinkmann, S. (2009). Learning the craft of qualitative research interviewing. Los Angeles/London: Sage Publications Ltd.
- Lungwangwa G, Kelly M J, Sililo, G.N. (1999). *Basic Education for Some: Factors Affecting Primary School Attendance in Zambia*. Lusaka: Study Fund on Social Recovery Project.
- Mason, J. (2002). Qualitative Researching. 2nd ed. Los Angeles/London: Sage Publications Ltd.
- Mumba, C.E. (2002). Education for All: *Increasing Access to Education for Girls in Zambia*. Paper presented at the 2nd Pan-Commonwealth Forum on Open Learning 29th July – 2nd August, 2002, Durban South Africa.
- Mwinsa, G.M. (2013). Exploring Children's Lived School Experiences: *Negotiating School Social Spaces*. Published Master's Thesis Submitted to The Norwegian University of Science and Technology, Trondheim, Norway.
- Mwinsa, G.M., Moono, M., Chavwanga, V., Banda, A. & Chishipula, J. (2019). Child Labour and its Effect on Children's Wellbeing: An Analysis of Global Debates. *International Journal of Multidisciplinary Research and Development*. 6(8), 147 – 152.
- Nelson Mandela Foundation. (2005). Emerging voices: A report on education in South Africa rural communities. Cape Town: HSRC Press.
- Nieuwenhuys, O. (2003). Growing up between places of work and non-places of childhood: the uneasy relationship. ch. 5, pp. 99-118 In: Olwig, Fog Karen & Gullov, Eva. eds. *Children's Places: Cross-Cultural Perspectives*. London/New York: Routledge.
- Punch, S., Bell, S., Costello, L. & Panelli, R. (2007). Power and place for rural young people. pp. 205-218, ch. 16. In: Panelli, R., Punch, S. & Robson, E. eds. *Global Perspectives on Rural Childhood and Youth. Young Rural Lives*. New York/Oxon: Routledge.

DIFFUSION OF E-ASSESSMENT SYSTEMS IN HIGHER EDUCATION: A CASE OF CHALIMBANA UNIVERSITY

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This paper uses five (5) tenets of the Diffusion of Innovation theory, by Everett Rogers, to analyse the attitudes and perceptions of Chalimbana University Deans on the adoption of online assessment modes for distance students. A case study was adopted to generate qualitative data from nine (8) purposively selected Deans. The study revealed that adoption of the online assessment system was a welcome move as its advantages, such as quick feedback, cost effectiveness, interaction among learners and improved digital literacy, are likely to counterbalance the weaknesses of the traditional assessment mode. The study further revealed that even if some students may have no easy access to technological gadgets and internet services, e-assessment systems were still compatible with majority distance students as most of them were active on various social media and already familiar with correspondence mode of learning. Furthermore, the study unearthed power outages, lack of gadgets, digital literacy and internet service as some of the reasons that would make this innovation complex. However, these challenges were not perceived to be hindrances to the adoption of this innovation as they could be addressed by documenting lessons during the pilot phase and from other institutions who have already fully adopted the innovation. As such, the study recommends adoption of an online assessment system for use as a complimentary, and not a substitute, mode of assessment to the already existing traditional system as both systems have weaknesses that can be offset by the strengths of the other.

Key words: Online Assessment, Innovation

I. INTRODUCTION

Towards the end of 2019, a virus was discovered that caused death among many who were in China. This virus later spread to various parts of the world, leaving certain governments with no choice but to lock down their countries in order to contain the spread. This meant that organisations had to come up with strategies on how they would continue providing products and services to their customers. Universities were not exempted from strategizing on how they would continue to offer services to the students amidst the pandemic.

In Zambia, in response to this global public health pandemic and as mandated by the Public Health Act Cap 295 of the Laws of Zambia and as guided by two Statutory Instruments, SI 21 and SI 22, both issued on 14th March, 2020, the Government of the Republic of Zambia through the Minister of Health, on 17th March 2020, solemnly issued a pre-mature closure notice of all schools, colleges and universities in Zambia with effect from Friday, 20th March 2020 as a measure to curb the supersonic spread of COVID-19 (Hapompwe, Kukano, Siwale 2020: 647)

After recording the first cases of Covid 19, the government came up with measures to curtail the spread of the virus. One of the measures that was put in place was the closure of learning institutions. This act saw the abandonment of traditional teaching practices in higher learning institutions. The result of this was the birth of online teaching and assessment which was a far fetched thought for certain institutions before the pandemic.

Chalimbana University is one of the highest public learning institutions in Zambia. Programmes are offered on a full time basis and via distance. Traditional methods of teaching and assessments were used. In order to continue catering to the needs of the student populace, lecturers had to undergo training that would provide them with necessary skills to teach students online. This therefore entails that assessments would also have to be conducted online. With all this in mind, one wonders how higher learning institutions in Zambia are adjusting or planning to adjust to such changes. The study therefore explored the perceptions and attitudes of Deans at Chalimbana University towards diffusion of online assessment systems.

II. THEORETICAL UNDERPINNINGS AND LITERATURE REVIEW

A. Theoretical framework

This study adopted the Diffusion of Innovation Theory by Everett Rogers. Diffusion is “the process by which an innovation is communicated through certain channels over time among the members of a social system” (Rogers, 2003: 11). “An *innovation* is an idea, practice, or object that is perceived as new by an individual or other unit of adoption” (Rodgers, 2003 : 12). The term new is subject to one’s interpretation (Kee, Omar and Mohamed, 2012). The introduction of Online learning which will also involve online assessment entails that this practice is new to Chalimbana University though knowledge on the existence of online assessment may already exist.

Rogers theory of innovation of diffusions provides five characteristics that affect the adoption of an innovation. These characteristics are Relative advantage, Compatibility, Complexity, Trial ability and Observability (Rodgers, 1983). *Relative advantage* means that the implementers as well as recipients of an innovation must consider the new idea as being better than the old way of doing things. “The degree to which an innovation is perceived as being better than the idea it supersedes” (Rogers, 2003: 229). If anything, the innovation

must not be inferior to the old practice or practises (Bennet and Bennet, 2003).

Compatibility is “the degree to which to which an innovation is perceived as consistent with the existing values, past experiences and needs of potential adopters” (Rogers 2003: 240). Implementers as well as recipients of an innovation need to consider the innovation as being compatible with their needs if it is to be embraced otherwise it will not be adopted fast (Duan et al., 2010). “To increase the rate of adopting innovations and to make relative advantage more effective, direct or indirect financial payment incentives may be used to support the individuals of a social system in adopting an innovation. Incentives are part of support and motivation factors” (Sahin 2006: 18).

Complexity deals with the challenges that may be encountered either by those that are implementing the innovation or the recipients of the innovation. “The degree to which an innovation is perceived as relatively difficult to understand and use” (Rogers, 2003: 257). In order to measure complexity Lee and Kim (2007) cited by (Kee, Omar and Mohamed, 2012 : 8) state that to “measure complexity by examining the extent and depth of the knowledge needed to understand an innovation or its uses”.

Trialability is “the degree to which an innovation may be experimented with on a limited basis” (Rogers, 2003: 258). When an adoption is tried many times, it increases the chances of it being adopted by the intended users. This act also gives a chance to the implementers of an adoption to make adjustments to the innovation thereby increasing the chances of adoption (Sahin, 2006)

Observability is “the degree to which the results of an innovation are visible to others” (Rogers 2003: 258). An innovation that people can see being put in use is easier to adopt due to the fact that the benefits of the adoption are directly visible (Atkinson, 2007)

Conclusively, If an innovation is to be adopted it needs to have relative advantage, compatibility, complexity, trial ability and observability failure to which the chances of it not being adopted are high.

B. Related Studies

A number of studies have been conducted around online assessment which has been in existence for sometime in certain higher learning institutions. O'Reilly, Bennett and Keppell (2005) conducted a study on cases studies of online assessment. In order to conduct this study two case studies were used from Australian Universities. The aim of this research was to provide evidence on online assessment strategies that have been applied in higher learning institutions and were successful. Establishing online assessment principles was also another aim of the study. The results of the study indicate 8 assessment strategies that are considered to have been successfully implemented and these are accessing and critically evaluating information, online quizzes, Graduate discussion forum, Online multiple-choice tests, online role play, research groups and conference teams, teamwork and visual design gallery space. The results of this study further indicate that with online assessment rapid feedback is provided to the students. Students also get to benefit from the expertise of various individuals through the feedback that is given from different people. Collaboration

and teamwork among students is heightened through the role play and teamwork strategies. Lastly authentic learning takes place due to the fact that online learning incorporates or has the ability to incorporate experts, it also encourages teamwork as well as research.

Özden, Ertürk and Sanli (2004) conducted a study on Students' Perceptions of Online Assessment: A Case Study. The aim of this study was to establish the view of students in the usage of online assessment and to establish how feedback would be used to validate assessment. The study established that online assessment provided feedback immediately and it was preferred over the traditional assessment.

Baleni (2015) undertook a study that was aimed at establishing the merits and demerits of online formative assessment based on the views of lecturers and students. The study revealed that the benefits of online assessment are: it's not restricted to location and time, feedback does not take long, the time spent on marking assessments is reduced greatly and it is cost effective.

Khan and Khan (2019) conducted a study on the perspectives on online assessment by students. It was hoped that this study would provide possible challenges and factors that would enhance acceptance of online assessment. The study revealed that the students did not see the need to have assessments taken online. Digital illiteracy on the part of the students and lecturer. Furthermore the study revealed that assessment for certain courses would not be conducted well such as science courses. The students also expressed the need for feedback to be individualised and given on time.

The lunca in the studies that have been reviewed is the above findings do not give the views of Deans who have the mandate to manage the 8 schools at Chalimbana University

III. METHODOLOGY

This study adopted a case study design and relied on qualitative methods to explore the perceptions and attitudes of eight (8) Deans at Chalimbana University who were purposefully selected as key informants and potential implementers of this innovation at school level. These participants responded to open ended questions in an unstructured self-administered questionnaire. The ideal data collection procedure would have been face-to-face interviews but all participants preferred a questionnaire as data was collected during the period of the COVID-19 pandemic in which social distancing had to be observed. Data transcripts were subjected to a constant comparative analysis to identify common themes under each tenet of the Diffusion of Innovation theory and these were used to arrive at major findings on each tenet.

IV. FINDINGS AND DISCUSSION

In this section, we use the five (5) tenets of the Diffusion of Innovation theory to analyse and discuss the perceptions of Deans on the adoption of online assessment system mode at Chalimbana university. These include relative advantage, compatibility, complexity, trialability and observability

A. Relative Advantage

The findings of the study indicate that the Deans do not perceive online assessment as an inferior innovation to the traditional way of assessing students. This according to Rodgers (2003) is important because an innovation can only be adopted if it is not considered to be inferior to the one it is likely to succeed or to complement. In any case, as Bennet and Bennet (2003), argue that for as long as an innovation is deemed as better than the old practice it shall be adopted.

The reasons given by the participants were that it would be cost effective on the part of the institution because they would not need to pay for venues as well as invigilators. The students are also at liberty to take assessments in any location of their choice and the feedback would be quicker. The interaction between students as well as students and lecturers is improved. It is easy to keep track on who did and did not submit tasks. The stress of making assessments on the part of lecturers is also reduced. Lastly, they will be an improvement in digital literacy not only on the part of distance learners but also lecturers. The advantages mentioned by the respondents are similar to the findings that were established in studies that were conducted by O'Reilly, Bennett and Keppell (2005) where feedback was mentioned as one of the benefits of online assessment. Özden Ertürk and Sanli (2004) concluded that feedback was one of the benefits of online assessment and it was considered to be better than the traditional way of assessing. Baleni (2015) also found that online assessment had benefits such as flexibility in location, efficiency in marking and feedback as well as being cost effective.

The implication of the findings above are an indicator that there is a possibility of adopting this innovation because the respondents perceive it to have advantages when compared to the traditional way of assessment. This according to Rodgers (2003) is very important if an innovation is to be adopted.

B. Compatibility

While some of the participants did express concern over the compatibility of online assessments for those students that live in far flung places, others were of the view that online assessment would be compatible for those students who had access to the internet. The reason being that students who have internet access are on various social media platforms which is an indicator of digital literacy. Rodgers (2003) stipulates that for an innovation to be adopted it has to be in line with the needs of the recipients. In support Duan et al., (2010) postulates that for an innovation to be adopted the implementers and the users need to view an innovation as being compatible, failure to which an adoption may be slow. Sahin (2006) suggests the usage of incentives as a way of expediting the adoption process.

It was also revealed that some students were just not interested in participating in online activities. This finding is similar to what Khan and Khan (2019) established in their study where the students did not see the need to participate in online assessments.

The implication of the findings above are that the online innovation does stand a chance of being adopted by distance students who have access to the internet considering that the Deans viewed online assessment as being compatible with some of their distance students. Since there are students who

do not have access to the internet online assessment must be used as a complimentary tool

C. Complexity

The study revealed a number of challenges that may be faced in the adoption of online assessment. The challenges that were mentioned are as follows. Access to the internet would be a challenge because some students come from very remote areas where even mobile networks are not available. The power outages that are being experienced in certain parts of the country including at the institution itself would act as a hindrance. Some lecturers as well as students lack digital literacy hence making it difficult to have assessments online. Ensuring that no malpractice takes place during the tasks would also be difficult to ensure. The institution has inadequate staff to deal with the technical challenges that may result in the process of online assessment. Some lecturers as well as students lack the necessary gadgets to conduct as well as take the online assessments. Internet instability is experienced sometimes. Lastly, it is costly on the part of students to purchase bundles in order to take the assessments. In reference to Rogers (2003) complexity/ simplicity looks at how difficult or easy it's going to be for those that are going to be implementing an innovation as well as making use of an innovation.

The respondents did however indicate what they thought needed to be done in order to mitigate the challenges that have been highlighted above. The following views were given. Lecturers and students need training on how to undertake online assessments after which orientations should be conducted once in a while until everyone is conversant. Companies that are in the business of selling gadgets should be engaged so that an agreement is drawn that would enable the students and lecturers purchase the necessary gadgets. The lecturers offices should be connected to the genset so that the online assessments are not interrupted by the power outages experienced at the institution sometimes. The institution's internet service provider must improve their service. The number of IT personnel must be increased in order for technical challenges that may be faced by students and lecturers to be resolved at a quicker pace.

The implication of the above findings suggested that online assessment as an innovation can still be adopted despite having students that have geographical and economical challenges. The reason is that the Deans did provide solutions to the challenges so once implemented the innovation will be favorable for all making it compatible.

D. Trialability

While two participants did indicate that they had not yet started piloting online assessment, one of them did state that they did plan on piloting online assessments with the lecturers in the department. The remaining respondents stated that they had started piloting online assessment using moodle, zoom and whatsapp. Trial ability for Rogers (2003) implies the extent to which an innovation can be piloted before usage of which he recommends must be done.

The study further revealed that for the Deans that had been piloting online assessment they were some stakeholders that participated. These stakeholders were lecturers who are incharge of designing students assessments. The ICT

Department because its mandate is to resolve any technical challenges that may be faced by the lecturer or students during the trial. Zynle technologies are the providers of the moodle that is used for online assessments and therefore needed to be present. Lastly the Chalimbana University management participated because they are the ones responsible for providing financial support. The reason for piloting the study was that it was going to assist all the stakeholders know what challenges may be faced as the online assessment is rolled out to all the students. The results would help them find solutions to the problems encountered. This reason is supported by Sahin (2006) argues that when an innovation is tested on several occasions the chances of it being adopted keeps increasing because it provides an opportunity to notice the flaws thereby making improvements.

The implication of these findings in view of what Rogers (2003) says about trail ability of an innovation shows that the chances of this innovation being adopted is high because some respondents have plans to pilot the innovation while others are already piloting the innovation.

E. Observability

The participants were all in agreement that it was necessary to observe other institutions that were already implementing online assessment. The reason being that it would give them a chance to see what is working for other institutions as well as what is not working. According to Rogers (2003) observability is the extent to which people are able to see the outcomes of an innovation that has been implemented. Rodgers (1995) and Atkinson (2007) both say that if people are able to see an innovation being implemented, it increases the chances of an innovation being adopted because the benefits will not be hearsay but instead it would be something that they would have seen first-hand.

The implication of this finding is that if there are chances of adopting online assessment innovation if the Deans, lectures as well as the students are accorded with an opportunity to physically see how other institutions that have been implementing both online assessments.

V. CONCLUSION AND RECOMMENDATIONS

The study concludes that online assessment is more likely to be diffused into the teaching and learning system at Chalimbana University and be adopted for use as a complimentary tool to the traditional assessment method that the institution has been using for distance students. This is due to the fact that most Deans perceived this innovation to not be superior or inferior to traditional assessment methods and have already tried it. They further suggested training for students and members of staff to avoid the complexity that is likely to come with adoption of this innovation. While concerns were raised on the compatibility of this innovation to economically disadvantaged and geographically challenged students, Deans still felt that this innovation was compatible with the assessments needs of majority students they deal with as most of them are active on social media (an indication of digital literacy) and are already familiar with correspondence mode of learning. The study recommends that:

1. Chalimbana University Management must venture into partnerships with some willing electronic and telecommunications firms and pursue MoUs that would

see students buy electronic gadgets at an affordable price and flexible payment modes.

2. Chalimbana University must have deliberate and continuous updating and upgrading ICT training for Lecturers and Students on emerging online assessments tools.
3. Chalimbana University must increase the number of IT technical staff in order to have technical problems resolved quickly.
4. Chalimbana Deans and responsible Lecturers must be circulating their online assessment schedule just when the academic year starts to allow technologically challenged students prepare for online assessments way in advance.
5. Chalimbana University must make arrangements with other higher learning institutions that have been assessing their students online.

REFERENCES

- [1] Atkinson, N. L. (2007). Developing a Questionnaire to Measure Perceived Attributes of eHealth Innovations. *Am J Health Behavior* 31(6):612-621
- [2] Baleni, Z. (2015). Online formative assessment in higher education: Its pros and cons. *The Electronic Journal of e-Learning*.13 (4): 228-236)
- [3] Bennett, J. and L. Bennett. 2003. A review of factors that influence the diffusion of innovation when structuring a faculty training program. *The Internet and Higher Education* 6 (1): 53–63.
- [4] Duan, Y., Q. Feng, H. E., Li, D and Fu, Z. (2010). A study on e-learning take-up intention from an innovation adoption perspective: A case in China. *Computers & Education* 55(1): 237–246.
- [5] Hapompwe,C.C., Kukan, and Siwale, J. (2020). Impact of Covid-19 on Zambia's 2020 General Education Examination Candidates' Academic Performance in Lusaka: E-Learning Issues. *International Journal of Scientific and Research Publications*, 10, (5): 647-654
- [6] Kee, N., Omar, B. and Mohamed, R. (2012). Towards Student-Centred Learning: Factors Contributing to the Adoption of E-Learn@USM. *Malaysian Journal of Distance Education* 14(2), 1–24
- [7] Khan, I and Khan, R. A. (2019). Online assessments: Exploring perspectives of university students. *Education and Information Technologies*. 24:661–677
- [8] Lee, S. and Kim, K. (2007). Factors affecting the implementation success of Internet based information systems. *Computers in Human Behavior* 23(4): 1853–1880.
- [9] Lumano-Mulenga, P. (2020). Impact of COVID–19 On DSD In Zambia. In *Differentiated Service Delivery and COVID-19 Updates on policy and practice adaptations from Sierra Leone and Zambia*. Retrieved from https://cquin.icap.columbia.edu/wp-content/uploads/2020/05/Zambia-and-Sierra-Leone_Differentiated-Service-Delivery-and-COVID-19_Master_low-res_English.pdf on 22nd July 2020 22:52hrs
- [10] O'Reilly, M. Bennett, S. and Keppell, M. (2005). Case studies of online assessment. Retrieved from https://www.researchgate.net/publication/47379631_Ase_studies_of_online_assessment/stats on 22nd July 23: 30hrs
- [11] Özden, M.Y., Ertürk, I. and Sanli, R. (2004). Students' Perceptions of Online Assessment: A Case Study. *Journal Of Distance Education Revue De L'éducation À Distance Spring/Printemps* 19 (2): 77-92
- [12] Rodgers, E. (1983). *Diffusion of Innovations* 3rd Ed. New York: The Free Press

- [13] Rogers, E. M. 2003. *Diffusion of innovations* 5th ed. New York: Free Press. based on Rogers' theory. The Turkish Online Journal of Educational Technology 5 (2) pp 14-23
- [14] Sahin, I. (2006). Detailed review of Rogers' diffusion of innovations theory and educational technology-related studies

RELATIONSHIP BETWEEN SERVICE QUALITY AND CUSTOMER SATISFACTION IN THE ZAMBIA CONTEXT- A LITERATURE REVIEW

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The importance of the services sector world over cannot be underestimated. It can be argued that the services sector in Zambia represents a large and growing part of the Zambian economy providing employment and incomes. The growth of the service sector has increased the level of competition resulting in the service sector placing emphasis on service quality and customer satisfaction. Service quality and customer satisfaction has become one the most important factors of successful business competition for the service sector. The subject of service quality and customer satisfaction has received a lot of attention over the years. Several studies have been done on the relationship between service quality and customer satisfaction in developed as well as developing countries. This paper reviewed current literature on the relationship between service quality and customer satisfaction in Zambia. A number of peer reviewed journal publications produced between 2015 and 2020 were identified and reviewed. The time period 2015 to 2020 was considered because the author wanted a review on more recent developments in the subject matter. The peer reviewed journal articles were obtained from databases such as google scholar and science direct. This paper provides an analysis and synthesis of the body of knowledge produced during the stated time period. The findings from the literature review demonstrated that there is a significant relationship between service quality dimensions and customer satisfaction and that SERVQUAL framework was the most common measurement scale for service quality. This paper provides managerial implications and future research directions for scholars.

Key Words: Service Quality, Customer satisfaction, SERVQUAL, Zambia.

I. INTRODUCTION

The importance of the service sector in countries has long been recognised by researchers (Fuchs, 1965; Ghobadia et al 1994) citing a number of contributions that the sector brings about such as employment and contributing to a country's Gross Domestic Product. In Zambia the service sector represents a large and growing part of the Zambian economy. The service sector has become the most prominent sector in the Zambian economy providing jobs and incomes (Ndulo and Chanda 2016). The service sector represents a number of services such as, finance, real estate, health, Transportation, education to mention but just a few. Kotler and Armstrong,

2010 define a service as any activity or benefit that one party can offer to another that is essentially intangible and does not result in the ownership of anything. In today's competitive business environment, service quality has become one of the most important ways to attract and retain customers. Service quality is recognized as a major factor responsible for gaining competitive advantage and maintaining satisfactory relationships with customers (Zeithaml and Bitner, 2000). The neglect of service quality leads to high churn rates, loss of revenue, negative brand reputation and loss of market share (Musonda and Phiri, 2018).

Ueltschy *et al.* (2004) defined service quality as the consumer's judgment about the overall excellence or superiority of the service. For service industry, the concept of Service quality is important as not only is service quality a means of differentiation but as it relates to customer satisfaction. Customer satisfaction has potential to contribute to the growth and sustainability an organisation (Musonda and Phiri, 2018). The relationship between service quality and customer satisfaction has received tremendous academic attention in the past few years in both developed and developing countries. In the Zambian context a number of studies have also been done on the relationship between service quality and customer satisfaction. This paper will provide an analysis and synthesis of the body of knowledge produced in the subject area for the past five years and, as such, it has important implications for marketing professionals and scholars. The aim of the paper is to examine the state of the art of recent research on the topic of service quality and customer satisfaction in Zambia and, thereby, develop suggestions for future research.

A. Service Quality

Definitions of service quality in the literature mainly focus on meeting customers' needs and requirements and how well the delivered service meets customers' expectations. Chingang and Lukong (2010) defined service quality as the overall assessment of a service by the customers. When it comes to measurement of service quality, there are several frameworks that have been put forward by researchers. However SERVQUAL and SERVPERF constitute two major service quality measurement frameworks. Parasuraman *et al.*, (1988) conceptualized a five-dimensional model of service quality, SERVQUAL. The five dimensions in the SERVQUAL consists of tangibility, reliability, responsiveness, assurance, and empathy. The authors explained the five dimensions as follows:

- a) Reliability: The ability of a company to provide a service which was promised accurately and dependably.
- b) Assurance: The ability for a staff to convey competence, politeness, knowledge trust and confidence to a customer.
- c) Tangibility: The physical appearance, equipment and facilities.
- d) Empathy: The degree for a service provider to care and give individual attention to a customer.
- e) Responsiveness: The willingness, desire and ability of a service provider to assist a customer promptly

The universality of the five dimensions of the SERVQUAL model has come under attack by several researchers arguing that the five dimensions are industry specific and may not be applicable to other service industries (Culliberg, 2010; Cronin and Taylor, 1992 and Buttle, 2000). Despite its limitations the SERVQUAL is a still widely accepted standard for the measurement of service quality. SERVPERF was developed to overcome the limitations of the SERVQUAL. Researchers argue that the SERVPERF model is more suitable when it comes to determining causal relationships for service quality dimensions (Dabholkaret al, 1996).

B. Customer Satisfaction

Kotler et al., 1996 defined customer satisfaction as the level of a person's state resulting from comparing a product's perceived performance. Customer satisfaction is an important in both marketing thought and practice because it is associated with repeat sales, positive word-of-mouth, and consumer loyalty (Marinkovic and Kalinic, 2017). Customer satisfaction is the result of post-purchase evaluation, namely, if in the customer's opinion the performance of the product or service is better than expected, a high level of satisfaction results, and vice versa (Yeh and Li, 2009).

C. Service Quality and Customer satisfaction

Previous studies have made a number of contributions on the relationship between service quality and customer satisfaction. For example, Choi *et al.* (2004) found that service quality emerged as an important determinant of customer satisfaction, and service quality had a significant impact on behavioural intentions of customers. Also, Gonzalez *et al.* (2007) demonstrated the influence of service quality and customer satisfaction on customer behavioural intentions.

II. METHODOLOGY

A literature review search was performed to identify relevant articles published in databases for the period 2015 to 2020. The time period 2015 to 2020 was considered because the author wanted a review on more recent developments in the subject matter. Peer reviewed articles were searched on the databases in google scholar, Directory of Open Access Journals and science direct. A number of key words were identified to search for articles. In line with the topic of the paper the key words used during the search were service quality, customer satisfaction and Zambia. This search resulted in a number of papers published in peer-reviewed journals which were filtered by analysing the titles of the articles and then, analysing the abstracts. Furthermore, the

articles that were not in line with the objective of the paper were excluded and this resulted in a total of 9 relevant articles to be included in the literature review. All the 9 articles address the topic of discussion under review which is service quality and customer satisfaction in Zambia. A single research paper was considered as the unit of analysis.

III. LITERATURE REVIEW

D. Service quality and customer satisfaction in Zambian Context

In the Zambia context there are a number of studies that have focused on the relationship between service quality and customer satisfaction and these studies have been done in different service industry segments. The literature review looked at peer reviewed articles from 2015 to 2020. The review will present the findings in a chronological order from the oldest to the most recent study.

Hancock *et al.* (2015) carried out a study to evaluate customers' perception of service quality at public clinics in Lusaka. The customers in this case were the clinic's clients receiving family planning services. The authors' goal was to determine quality of contraception services using a standardized method. They used quick Investigation Quality tool, a cross sectional survey for data collection. They used observation of the client-provider service delivery and exit interviews of the client's receiving family planning at the clinic. This study revealed that service quality has an effect on customer satisfaction as the clients perceived the service received as high and were therefore satisfied with the service received. While the method of observation used in the study is simple and straightforward, observation may affect the accuracy of the results as people under study tend to be aware they are being observed and may behave differently from usual. This study neither used the SERVQUAL nor SERVPERF model to assess service quality.

Machayi and Ahmed (2016) carried out a study to assess Finance Banks retail customers' perception of service quality using a modified SERVQUAL framework. The findings of the study have revealed that most of the respondents rated all service dimensions namely-tangibility, responsiveness, empathy, assurance, image, convenience reliability, access and ATM effectiveness as important. The authors carried out statistical tests which found that - customer's perception of service quality is dependent on tangibility, responsiveness, empathy, assurance, image, convenience, reliability, and access and ATM effectiveness. The authors used SERVQUAL framework to assess service quality but modified it by adding other elements such as image, ATM effectiveness, and access. In this study the authors did not link service quality to customer satisfaction but rather just assessed service quality of the bank using the modified SERVQUAL.

Mwiya *et al.* (2017) conducted a study to examine the influence of each service quality dimension on overall service satisfaction and behavioural intentions of students at a public university. The authors carried out a quantitative study involving students at a public university using the SERVPERF model to assess service quality. Their findings indicate that service quality performance dimensions (tangibility, reliability, responsiveness, empathy and assurance) are each significantly positively related to overall

customer satisfaction (students). The results further revealed that satisfied students are more likely to engage in positive word of mouth communication and also encourage employers to employ graduates from their former universities.

Sichinsambwe and Sikombe (2017) carried out a comparative study of Service Quality and Customer Satisfaction in Zambian Banks by looking at foreign and local banks. The study used quantitative design method where 120 questionnaires were administered to customers. SERVQUAL framework was used to assess service quality. The study revealed that customers of foreign bank perceived high level of service quality whereas customers of local bank perceived low level of service quality from the bank. Unlike in previous studies (Mwiya at el, (2017; Hancock at el; 2015) where high service quality has led to customer satisfaction, this study reveals a contradiction where customers of a foreign bank were not satisfied with the services received despite perceiving the service quality as high.

Interesting another study was carried out by Promkaew and Tembo(2017) who conducted a study on perceptions of employees on service quality at Examination Council of Zambia. The study was qualitative and used SERVQUAL framework to measure service quality. In measuring service quality, the authors propose an extended SERVQUAL framework by adding five other new dimensions. This argument is consistent with (Culliberg, 2010; cronim and Taylor, 1992 and Buttle, 2000) who contend that SERVQUAL framework requires modification depending on the nature of the industry. The authors looked at service quality and employees. Even though the study did not link service quality to customer satisfaction, the authors provided an interesting and different context from other researchers who have focused only on external customers and not internal customers (employees). This is an area that can be explored for future research.

More studies have continued to flow on this topic as Musonda and Phiri (2018) carried out a similar study on service quality and customer satisfaction on Multi choice. The authors used a case study design involving both qualitative and quantitative methods. They administered 150 questionnaires to multi choice customers, 10 Multichoice managers and 18 accredited agents. The researchers in this study used SERVQUAL framework to assess service quality. The authors modified the SERVQUAL model to include price, customer service and convenience. Their results found a relationship between the service quality dimensions and customer satisfaction and showed that there was a significant relationship between service quality and customer satisfaction thus agreeing with other previous studies (Mwiya at el, (2017; Hancock at el; 2015).

From the literature search, three most recent studies done in 2019 were found. Mulenga and Lusaya(2019) looked at service quality and customer satisfaction using a case study of Tanzania Zambia Railway Authority Passenger Train in Zambia, they distributed 200 questionnaires to customers using simple random sampling. They used SERVQUAL model to measure service quality. Their results agreed with previous research that there was a relationship between service quality and customer satisfaction. They found that Personal interaction of customers with service staff, reliability of the railway, assurance, empathy, responsiveness, tangibles,

management reaction towards accident clearance and ticket refund as aspects of service quality greatly influence customer satisfaction. Mwiya at el (2019) did a study on the university students investigating the different study mode differences in perceptions of university education service quality in Zambia. The authors' main findings revealed that each of the five dimensions of service quality (tangibility, reliability, responsiveness, empathy and assurance) are significantly and positively related to overall customer satisfaction. These findings are in agreement with previous studies done in Zambia (Mulenga and Lusaya,2019; Musonda and Phiri ,2018) Furthermore the findings revealed that distance and evening students are more satisfied and reported higher perceptions of service quality dimensions than full-time students.

Tayali(2019) researched on the Relevance of Contact Centre Service Quality to Customer Satisfaction in Business using a Case Study of ZESCO Limited. The study used a mixed method approach involving questionnaires administered to customers and interviews with employees. The study used the SERVQUAL framework to assess service quality. The results revealed that a significant relationship between Contact Centre service quality and customer satisfaction existed.

IV. CONCLUSION AND FUTURE DIRECTION

The aim of the study was to examine the state of the art of recent research on the topic of service quality and customer satisfaction in Zambia and, thereby, develop suggestions for future research.

The literature review showed that studies on service quality and customer satisfaction in Zambia have looked at different segments of the service industry and have included transport sector, health sector, education sector, entertainment sector and banking sector. The findings have revealed that there is a relationship between service quality and customer satisfaction (Mulenga and Lusaya, 2019; Musonda and Phiri, 2018; Promkaew and Tembo, 2017; Mwiya at el, 2017; Mwiya at el, 2019, Tayali 2019).

The SERVQUAL framework was seen to be the most popular framework for assessing service quality as 5 out of the 9 studies used the framework (Machayi and Ahmed ,2016; Mulenga and Lusaya,2019; Zondiwe and William ,2018; Promkaew and Tembo,2017; Sichinsambwe and Sokombe 2017, Tayali Musonda). The SERVQUAL framework was not used in its original form as some studies modified the framework to suit the type of service industry (Machayi and Ahmed, 2016; Zondiwe and William 2018). Only one study used the SERVPERF framework (Mwiya at el (2019). Furthermore 5 of the research studies used quantitative research design, 2 used qualitative design and 2 used mixed method design. The Literature review in the Zambian context demonstrates that there is generally a significant relationship between service quality and customer satisfaction in the studies conducted even though different methodologies may have been used. The implication to marketing professionals is that to increase customer satisfaction and improve the performance of service organisations, organisations must pay attention to service quality dimensions. The different service dimensions can be used as measures to improve service quality as the service dimensions significantly affect customer satisfaction. In addition, service organisations must identify

specific service quality dimensions that speak to their organisations as studies have shown that service quality dimensions cannot be generalised.

In terms of future direction, the author suggests that future studies should employ the use of SERVPERF framework as this framework has been underutilized in Zambia to measure service quality. Other service industry segments can also be looked at such as real estate, insurance, communication hospitality and professional services and the SERVQUAL or SERVPERF model applied.

REFERENCES

- [1] Afthanorhan, A., Awang, Z., Rashid, N., Foziah, H., & Ghazali, P. (2019). Assessing the effects of service quality on customer satisfaction. *Management Science Letters*, 9(1), 13-24.
- [2] Buttle, F. (1996). SERVQUAL: Review, Critique, Research Agenda. *European Journal of Marketing*, 30, 8-32.
- [3] Choi, K. S., Cho, W. H., Lee, S., Lee, H., & Kim, C. (2004). The relationships among quality, value, satisfaction and behavioral intention in health care provider choice: A South Korean study. *Journal of Business Research*, 57(8), 913-921.
- [4] Cronin Jr, J. J., & Taylor, S. A. (1992). Measuring service quality: a reexamination and extension. *The Journal of Marketing*, 56(3), 55-68.
- [5] Chingang, N. D. & Lukong, P. B. (2010). Using the SERVQUAL Model to assess Service Quality and Customer Satisfaction
- [6] Chishimba, K., & Sikombe, S. A Comparative Study of Service Quality and Customer Satisfaction in Zambian Banks.
- [7] Culliberg, B. (2010). Identifying service quality dimensions as antecedents to customer satisfaction in retail banking. *Econ. Bus*, 12(3), 151-166.
- [8] Fuchs, V. R. (1965). The growing importance of the service industries. *The Journal of Business*, 38(4), 344-373.
- [9] Dabholkar, P. A., Shepherd, C. D., & Thorpe, D. I. (2000). A Comprehensive Framework for Service Quality: An Investigation of Critical Conceptual and Measurement Issues
- [10] Through a Longitudinal Study. *Journal of Retailing*, 76, 139-173.
- [11] Ghobadian, A., Speller, S., & Jones, M. (1994). Service quality. *International journal of quality & reliability management*.
- [12] González, M. E. A., Comesaña, L. R., & Brea, J. A. F. (2007). Assessing tourist behavioral intentions through perceived service quality and customer satisfaction. *Journal of business research*, 60(2), 153-160.
- [13] Hancock, N. L., Vwalika, B., Sitali, E. S., Mbwili-Muleya, C., Chi, B. H., & Stuart, G. S. (2015). Evaluation of service quality in family planning clinics in Lusaka, Zambia. *Contraception*, 92(4), 345-349.
- [14] Kotler, P., Ang, S. H., & Tan, C. T. (1996). *Marketing and Management: An Asian Perspective*. Lincoln, Y. S. (2002). Insights into library services and users from qualitative research. *Library & Information Science Research*, 24(1), 3-16.
- [15] Machayi, J., & Ahmed, E. M. (2016). Finance Bank Zambia Plc Retail Customers' Perceptions of Service Quality. *J Bus Fin Aff*, 5(206), 2167-0234
- [16] Marinkovic, V., & Kalinic, Z. (2017). Antecedents of customer satisfaction in mobile commerce. *Online Information Review*.
- [17] Musonda, Z. A., & Phiri, W. (2018). Service quality and customer satisfaction in the pay TV industry: A case study of Multichoice Zambia Limited.
- [18] Mulenga, C. C., & Lusaka, Z. (2019). An Assessment of Service Quality and Customer Satisfaction levels in Railway Industries: A Case Study of Tanzania Zambia Railway Authority (Tazara) Passenger Train in Zambia.
- [19] Mwiya, B., Bwalya, J., Siachinji, B., Sikombe, S., Chanda, H. and Chawala, M. (2017). Higher Education Quality and Student Satisfaction Nexus: Evidence from Zambia. *Creative Education*, 8, 1044-1068. doi: [10.4236/ce.2017.87076](https://doi.org/10.4236/ce.2017.87076)
- [20] Mwiya, B., Siachinji, B., Bwalya, J., Sikombe, S., Chawala, M., Chanda, H., & Kaulungombe, B. (2019). Are there study mode differences in perceptions of university education service quality? Evidence from Zambia. *Cogent Business & Management*, 6(1), 1579414
- [21] Ndulo, M., & Chanda, J. (2016). Services and Sustainable Growth in Zambia.
- [22] Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988), "SERVQUAL: a multi-item scale for measuring customer perceptions of service quality", *Journal of Retailing*, Vol. 64 No. 1, pp. 12-40.
- [23] Promkaew, P., & Tembo, R. M. (2017). An Exploratory Study of Employees' Perceptions on Service Quality in the Examinations Council of Zambia.
- [24] Salum, R. (2018). *Service quality and customer satisfaction at the point of sale: a comparison of superdoll Tanzania and superdoll Zambia Ltd* (Doctoral dissertation, University of Dar es Salaam).
- [25] Tayali, E. M. (2019). *The Relevance of Contact Centre Service Quality to Customer Satisfaction in Business: A Case Study of ZESCO Limited* (Doctoral dissertation, ZCAS University).
- [26] Ueltschy, L.C., Laroche, M., Tamilia, R.D. and Yannopoulos, P. (2004). "Cross-cultural invariance of measures of satisfaction and service quality", *Journal of Business Research*, Vol. 57, pp. 901-912.
- [27] Yeh, Y.S. and Li, Y.-M. (2009), "Building trust in m-commerce: contributions from quality and satisfaction", *Online Information Review*, Vol. 33 No. 6, pp. 1066-1086.
- [28] Zeithaml, V.A. and Bitner, M.J. (2000). *Services Marketing: Integrating Customer Focus Across the Firm*, 2nd ed., Irwin/McGraw-Hill, Boston, MA.

AVAILABILITY OF ASSISTIVE TECHNOLOGIES FOR SUSTAINABLE EDUCATION AMONG STUDENTS WITH VISUAL IMPAIRMENTS IN COLLEGES OF EDUCATION IN ZAMBIA

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Enabling access to assistive technologies and devices is an effective way to integrate people with visual impairments in the education system and a society at large. The purpose of the study was to determine the Availability of Assistive Technologies for Sustainable Education among Students with Visual Impairments in Colleges of Education. Thus, the study provided answers to the following research questions: What are the assistive technologies available for students with visual impairments for sustainable education. Are available assistive technologies utilized by the visually impaired students? What measures should be put in place to enhance the utilization of assistive technologies by the visually impaired students? A case study design was used in this study. The population consisted of all the visually impaired students and specialist lecturers in Colleges of Education that enroll the visually impaired students whilst the sample size was twelve (12) of which eight (8) were visually impaired students and four (4) were specialist lecturers. Semi- structured interviews were used to collect data and thematic analysis was used to analyze data based on the themes that emerged in the study. It was revealed that a very limited number of assistive technology devices were available for the visually impaired learners due to reasons ranging from high-cost of the assistive technology gadgets and scarcity due to difficulty in importation of gadgets from other countries. It was also noted that only a few technologies were being highly utilized and frequently used. Additionally, it was revealed that lecturers have little knowledge about the usage of technologies. To enhance learning sustainability the government and other stake holders should provide assistive technologies. It was also recommended that lecturers should be trained in ICT as this will enhance learning sustainability among the VI students.

Key Words: Assistive Technologies, Availability, sustainability, Visual Impairment

I. INTRODUCTION

Educating students with visual loss poses a great challenge unlike sighted children who can learn easily so many things by observing and imitating (Wolters, 2019). However, education is an indispensable for every citizen, irrespective of health condition or disability. According to the Universal Declaration of Human Rights, Article 26 United Nation;

Everyone has the right to education and technical and professional education shall be available to all

Therefore, the visually impaired students need to use special aids and assistive technologies to be able to accomplish various educational activities while learning. In addition, supporting the learning of students with visual impairments can enhance their academic and functional performance in their education.

Assistive Technologies can be applied as adaptive technologies for persons with visual impairments through the use of screen readers, Braille and Braille embossers, desktop video magnifiers, screen magnification software, large-print and tactile keyboards, navigation assistance (Barrue, 2012). Using technology can help students with disabilities to enhance and improve their independence in academic tasks, their participation in classroom discussions, along with helping them to accomplish some difficult academic tasks.

Article 24 of the CRPD, provides that;

All member states to the CRPD should provide reasonable accommodation in order to ensure that all learners access education with less difficulty.

For example, Learners with visual impairments should use either braille or large print which is adapted from the writings in ink using assistive technologies. For most people, technology makes things easier; for people with disabilities, technology makes things possible (Radabaugh, 2014). Assistive technology, being of high importance for learning of the visually impaired, overtime, cannot be overestimated in terms of its educational benefits to learners with disabilities as it has proved to be of help in increasing, maintaining or improving their functional capabilities. Today's technologies have the ability to dramatically change the lives of students with disabilities, enabling them to access the curriculum, participate in learning activities alongside their peers, personalize their learning, and achieve their full potential (Wolters, 2019).

The principal reason for providing assistive technology in colleges is to enable students to meet the instructional goals set forth for them. In addition, for assistive technology to support reading and learning depends on the student's level of visual functioning and their literacy level as well as the environment and task demands. School personnel should look at tasks that each student needs to accomplish, the difficulties the student is having, and the ways that various devices might help the student better accomplish those tasks to maintain sustainability (Massachusetts Department

of Elementary and Secondary Education, 2012). Hence, the study sought to determine the Availability of Assistive Technologies for Sustainable Education among Students with Visual Impairments in Colleges of Education in Zambia.

A. Statement of a problem

Students with visual impairments in colleges face many challenges in learning effectively using ordinary learning instructions and materials. This challenge can be mitigated by the use of assistive technology. Without assistive technologies, people with visual impairments may be unable to access the teaching and learning materials (WHO & UNICEF, 2015). The students face a lot of challenges ranging from unavailability of adequate assistive technologies and ignorance in operation of assistive technological gadgets. It is therefore, the responsibility of respective Colleges to provide these facilities to enhance sustainable learning. What is not known is whether assistive technologies are available and fully utilised in the colleges of Education in Zambia to enhance sustainable education.

B. The purpose of the study

The purpose of this study was to investigate the availability of assistive technologies for the visually impaired students in the Colleges of Education in Zambia.

C. Objectives of the study

The study was guided by the following objectives;

1. To examine assistive technologies available for the visually impaired students.
2. To determine the utilization of assistive technologies by the visually impaired students for sustainable development.
3. To come up with measures that should be put in place to enhance the utilization of assistive technologies by the visually impaired students for sustainable education.

D. Research questions

The study was guided by the following research questions;

1. What are the assistive technologies available for the visually impaired students?
2. Are the assistive technologies utilized by the visually impaired students?
3. What measures should be put in place to enhance the utilization of assistive technologies by the visually impaired students?

E. Significance of the study

An understanding of assistive technologies and there accessibility will help the Colleges of Education to consider Assistive devices and technologies as sustainable development priorities. This in turn will empower students with visual impairments with skills to improve their functioning and independence to facilitate participation in education. Better still, this knowledge will help the colleges to develop educational environments and programs that can meet the needs of all students, regardless of whether they have disabilities.

II. METHODOLOGY

F. Research Design

A research design is a method of collecting information by interviewing or administering a questionnaire to a sample of individuals Kombo and Tromp (2006). A case study research design using the qualitative approach was used to allow the researcher to interact with the research participants in order to collect in-depth data.

G. Population

The target population for this study was made up of all students with visual impairments and lecturers in all Colleges of Education that enrol students with visual impairments.

Sample Size

In this study, the sample comprised of 10 respondents of which six (6) were students, four (4) were senior lecturers handling the visually impaired students, and two (2) were administrators at the colleges.

H. Sampling Techniques

The study employed purposive sampling procedure to select all the respondents in this study. The selection of a sample was based on the judgement of a researcher regarding the characteristics of a representative sample.

I. Data Collection Instruments

In this study, only one instrument was used in the collection of data from twelve (12) respondents. This was semi-structured interview guides. The researcher used these instruments in the data collection because of the several advantages it was capable of bringing to this kind of study. Such ranged from explanatory powers, representativeness, appropriateness to ability to ensure reliability and validity in the data generated to support this kind of study (Cohen et al., 2000).

J. Data Collection Procedure

Before commencing the exercise of data collection in the field, permission was sought from the Research Ethics Committee from the Malcolm Moffat College of Education. Finally, before conducting the interviews, the researcher also asked all participants to fill in the consent form.

K. Data Analysis and Procedures

Thematic analysis was used to analyse the data in this study. Thematic analysis helps to summarise several data collected about the research questions (Sidhu, 2014). Qualitative data collected from semi-structured interview guide was analysed through thematic analysis by coding, grouping and meaningfully interpreting emerging themes reflecting both the specific research questions and objectives of the study. In this study, groups of questions that were interconnected and related were identified as themes for the purpose of analysing the views of the respondents on the availability of assistive technologies for the visually impaired students for sustainable education in the Colleges of Education in Zambia.

L. Ethical Consideration

According to Creswell (2009) and Kombo and Tromp (2006) it is a mandatory that research participants get informed before they are approached for data collection. To comply with this, the researcher ensured that consent was obtained from the respondents and thoroughly explained the purpose of the research to ensure that the respondents participated voluntarily. Therefore, the names of the participants in the entire study were kept anonymous. Confidentially for all the information gathered was highly safeguarded.

III. FINDINGS AND DISCUSSION

The first objective was to examine the assistive technologies available for the visually impaired students. The findings of the study revealed that Assistive Technology devices available for the visually impaired in the Colleges of Education include computers which are available in a small quantity. Also available are technologies such as writing frames, Braille and Braille embossers. It was also revealed that the unavailability of some assistive technology devices could be due to reasons ranging from high cost of assistive technology devices to inaccessibility or scarcity from the need to import these devices from other countries. Similarly, Stodden, *Et al.*, (2003) found that complex and expensive devices (for instance, high-tech devices) have been used less and appeal to a smaller percentage of students compared to low tech devices. Borg (2011) attributes this lack with the import duties and taxes on the costs of assistive technologies required by visually impaired students. Furthermore, poor access to assistive technological devices can hinder the maximum learning of the visually-impaired students, hence deprive them of an opportunity of realizing their full potential.

The second objective was to determine the utilization of assistive technologies by the visually impaired students for sustainable development. The study revealed that of the available assistive technology devices in the Colleges of Education, only a few were being highly utilized and frequently used. Assistive Technologies such as computers are not utilized and others like embossers are only utilized during the end of term and examination period. In addition, it was also revealed that Assistive technologies such as writing frames, braille embossers, and stylus are fully utilized and devices such as Perkins brailers are slightly utilized by the students. The use of assistive technology is "time consuming and highly technical to operate. There is a critical shortage of teachers in regular education that affects the availability of qualified teachers trained to handle technologies in the education of students with disabilities (Yakubu, 2009).

It was revealed that out of a few available technologies available, Lecturers have little knowledge about the usage of some technologies. Borg J. (2011) supports this view that lecturers are not able to help students by training them to use assistive technologies especially in developed countries which decreases their chances of maximizing

their degree of achievement and independence in education.

Hence, lecturers are not able to help students by training them to use portable and cheap tools that, in most cases, could make students live and behave more independently when they leave college which will decrease their chances of maximizing their degree of achievement and independence (Blackorby & Wagner, 1996).

The third objective was to come up with measures that should be put in place to enhance the utilization of assistive technologies by the visually impaired students for sustainable education. It was suggested that lecturers should have knowledge of the available technologies that could support students in their academic tasks. Alnahdi (2014) argued that teachers who do not realize and have not been exposed to the usefulness and applications of technology in education in general, and special education specifically, will be more reluctant to use them. It is therefore important that technology is included in preparation programs for special education teachers; in these programs, technology should be used as part of the preparatory

program for teachers and cover technical applications at the classroom level. In this way, Specialist Lecturers will have the knowledge and experience in using technology that will contribute to the widespread of the use of technology in the colleges thereby bringing about sustainability in learning.

IV. CONCLUSION

In conclusion, technology has changed and continues to change the way people manage things in their lives, both in private and in practical life, so the natural extension of that is to see the impact and the integration of technology in education for students with disabilities in the same way it has been in other areas of life. Using technology can help students with disabilities to enhance and improve their independence in academic and employment tasks and their participation in classroom discussions, along with helping them to accomplish some difficult academic tasks thereby ensuring sustainability.

The research examined the availability and utilization of assistive technology for the visually impaired students in the Colleges of Education. It was further revealed that only a few of the assistive technologies available are being utilized by the visually impaired students. In addition, it was also revealed that very few are being frequently used for the teaching and learning of the students. It was also revealed that out of a few available technologies, lecturers have little knowledge about the usage of technologies. It was also suggested that lecturers should be trained in ICT as this will enhance learning sustainability among the students with visual impairments.

Recommendations

Based on the findings and conclusions of this study, the following recommendations were suggested;

1. To enhance learning sustainability the government and other stake holders should provide assistive technologies such as magnifiers, thermoform and other related gadgets.

2. It was also recommended that lecturers should be trained in ICT as this will enhance learning sustainability among the students with visual impairments.
3. Government should provide adequate funding to improve availability and affordability of assistive technology for children with disabilities;
4. The Ministry of Education should put in place, seminars, workshops, conferences and trainings for special education teachers and experts in the field of assistive technology and educational technology to ensure collaboration among several colleges and the development of basics skills in the design and production as well as utilization of assistive technology devices from readily available materials to reduce the cost incurred from importing them from other countries

REFERENCES

- [1] Barrue, C. (2012). Personalization and shared autonomy in Assistive Technologies. Ph. D Thesis. Universitat Politècnica de Catalunya
- [2] Borg, J. (2011). Assistive technology in developing countries: national and international responsibilities to implement the convention rights of persons with disabilities". Accessed 2 June 2016 from: <http://www.thelancetglobalhealthnetwork>.
- [3] Cohen, L. Marion, L. and Morrison, K. (2000). Research Methods in Education. London: Routledge Falmer
- [4] Eligi, I., (2017). ICT accessibility and usability to support learning of visually-impaired students in Tanzania. International Journal of Education and Development using Information and Communication Technology. Vol. 13, Issue 2, pp. 87-102
- [5] Gronlund, A., Lim, N. & Larsson, H. (2010). "Effective use of assistive technologies for inclusive education in developing countries: issues and challenges from two case studies". International Journal of Education and Development Using Information and Communication Technology (IJEDICT), 6 (4), 5-26.
- [6] Kombo, D.K. and Tromp, L. A.D. (2006). Proposal and Thesis Writing: An Introduction. Nairobi: Pauline Publications Africa
- [7] Massachusetts Department of Elementary and Secondary Education. (2012). Access to Learning: Assistive Technology and Instructional Materials. Massachusetts: MDESE
- [8] Radabaugh, M. (2014). Assistive Technology: Independent Living Centre NSW Retrieved from: http://www.ilcnsw.asn.au/home/assistive_technology/assistive
- [9] Sidhu, K.S. (2014). Methodology of Research in Education. New Delhi: Sterling Publishers Ltd
- [10] United Nations, (2019). Universal Declaration of Human Rights. UN Geneva
- [11] United Nations, (2007). Convention on the Rights of Persons with Disabilities. UN Geneva
- [12] Wolters, Kluwer-Medknow (2019). Assistive technology for students with visual disability: classification matters- Journals of pathology
- [13] WHO & UNICEF. (2015). Assistive Technology for Children with Disabilities: Creating Opportunities for Education, Inclusion and Participation. Geneva: World Health Organization
- [14] Wolters, K. (2019). Improving access to assistive technologies: challenges and solutions in low- and middle-income countries. Journal of Public Health: South-East Asia

STUDENT ENGAGEMENT IN QUALITY ASSURANCE IN HIGHER EDUCATION INSTITUTIONS: A REVIEW

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Abstract— Quality assurance (QA) in higher education has become a concern for both the public and private higher education institutions (HEIs). Compared to developed economies, the governments in developing economies are calling for quality education while pushing for sustainable education. Consequently, the drive towards provision of quality education has not ignored the involvement of the key stakeholders in education. The purpose of the research was to review the level of students' engagement in quality assurance processes (QAPs) in HEIs of developed and developing economies. The objectives of the research were to; determine the processes in which students are engaged in QA, identify the types of QA evaluations students are engaged in and recommend strategies for dealing with the existing gaps. The research was conducted by using a systematic review of literature and a total of 100 articles were collected in which 50 articles were classified into the A category of relevance. The criteria of relevance was based on the nature of the abstracts and 30 articles formed the sample size. The results revealed that, most institutions engage students in QA related questionnaires that focus on, student satisfaction and end of semester evaluation surveys. However, students are not widely engaged in committees of QAPs. In some institutions, students are allowed to engage with the external regulators but are not allowed to participate in the writing or reviewing of the reports. Further, feedback from the student surveys is normally unimplemented. From this research, a number of strategies for improving student engagement in QAPs are recommended. The research provides an insight of the extent of student engagement in QAPs from the developed and developing economies perspective. It provides strategies that are relevant to the Ministry of Higher Education, Higher Education Authorities and the HEIs.

Key words— Quality, Assurance, Education, Management, Students, Strategies

I. INTRODUCTION

Extensive reforms aimed at generating profound changes in HEIs across the globe continue to occur. The changes have resulted in the development, selection and implementation of numerous techniques that are aimed at making the HEIs accountable for the services provided. One technique or mechanism for making HEIs accountable for the services provided is the enforcement of quality assurance (QA). As stated in the 1999 Bologna Declaration by the European Ministers for Higher Education (HE), QA and performance evaluation crucial to the success of HEIs [1]. Thus, QA is crucial to the success of any HEI including the ones in

developing economies and as such, interest in QA and standards across the globe continue to increase. As the drive for sustainable QA in HEIs advances, internal and external quality policies for comparing and measuring total quality have been established [2]. Among the measures to assess student engagement in QA, student evaluation surveys are used to capture student feedback on their experiences. One of the interesting aspects of the student evaluation surveys is that, the focus is on the teachers' activities.

In most developing economies, the emergence of HEIs has prompted the Ministry of Education to regulate the registration and accreditation of academic programmes. In order to regulate and monitor the HEIs, outcome-based education has provided a platform for considering student evaluation surveys [3]. Adoption of outcome-based education has enabled the development of evaluation surveys that focus on students' perceptions of their learning experiences. This development has encouraged the HEIs, teachers and the stakeholders to place students learning at the core of their agendas [4, 5, 6]. Many studies have focused attention on student engagement in QA [7, 8, 9, 10, 11]. Ref [12] alludes that the current surveys used to measure student experience does not identify areas that need improvements in all aspects of University experience. Ref [12] further adds that, improving the standards and quality of HEIs education demands institutions to engage comparable students' academic experiences and outcomes regardless of mode. Ref [9] affirms that, majority of the studies conducted on QA in HEIs have been conducted in the context of Europe, North America and Asia and majority of the studies have used empirical, surveys and single case studies. Therefore, this study, reviews the level of student engagement in QAPs in HEIs by focusing on; the processes in which students are engaged in QA, identifying the types of QA evaluations students are engaged in and recommending strategies for dealing with the existing gaps.

The article is structured as follows; literature review which addresses; the processes used to engage students in QA and the types of QA evaluations students are engaged forms the first section. The second section, discusses the methodology while the discussion is presented as the third section. Conclusions and recommendations are presented in the last section.

II. LITERATURE REVIEW

A. Student Engagement

With the academic literature, engagement is a new concept within the HEIs [13]. Engagement of stakeholders in HEIs processes recommends student involvement and for most accreditation processes, engagement is required. According to a study conducted by [14], quality education cannot be achieved without stakeholder engagement. In most QA evaluation processes conducted by students, behavior, perceptions, attitudes and performance of individuals are identified for the purposes of improving educational outcomes [15, 16]. According to [16] educational growth is directly related to the amount of effort in student engagement. According to [17], student professional and academic engagement takes place when students are involved in education experiences and are able to connect the experiences in a sensible way. To this regard, it is important to evaluate the level of student engagement in QA processes in HEIs.

Several studies in the context of developed and developing economies have been conducted on student engagement in QAPs. [7] assessed the value of student engagement in higher education QA in Australia. The study used a review approach and the results showed that, a broader relevance on the engagement of students in QA. Ref [8] provided a general review of “student engagement” with the focus on the measurement of student engagement in the UK higher education. The study concluded that, a single instrument cannot examine all the facets and that surveys collect data on limited and discrete perspectives of student engagement. Ref [9] focused on understanding the meaning and operationalization of quality in the context of HEIs. The study indicated that, majority of the studies on QA have been conducted in the context of Europe, North America and Asia. Ref [10] conducted a study that developed a theoretical model for student involvement in the QAP in an Egyptian University. The study suggests the definition of student involvement term, regarding participation in QAP in HEIs. Ref [11] proposed that student engagement can be applied to QA and thus improving learning and teaching. The study indicated that, collecting data about student engagement and experience can yield more useful data about student learning.

Studies on student engagement have shown that limited studies have been conducted in developing economies such as Africa [9]. This gap shows the need for more studies to be conducted in the African context. The studies by Elassy [10] and [11] highlight the relevance of student engagement in QA to the teaching and learning processes. It is also interesting to note that, [8] mentions that, surveys collect data on limited and discrete perspective of student engagement.

Understanding the processes in which students are engaged means understanding the types of QA evaluations students are engaged. Therefore, the next section reviews the different QA evaluations students are engaged in HEIs.

B. Quality Assurance Evaluation Mechanisms

Quality Assurance in HEIs was established to assess how

institutions have incorporated student-centred approaches of learning using outcome-based education [18]. To this regard, methods of engaging students in QA in HEIs have been established. For example, end-of-semester surveys have a presence in the international landscape of HEIs [19, 20]. Ref [21] mentions that, student evaluation of teaching (SET) surveys have been traditionally used in HEIs for measuring internal quality. In a study conducted by [22] SET surveys were employed to explore issues of sheer impact, relevance and practicality of the quality of teaching. Ref [11] mentions that, student evaluation of courses and teaching (SECT) is another mechanism used in universities for internal collection of data about learning and teaching. It is important to note that, the evaluations conducted by students provide useful information to stakeholders on the teaching, learning and curriculum improvements desired to achieve the learning outcomes [23]. Thus, authors have further designed many mechanisms for assessing quality from the students’ perspective. Ref [24] proposes a responsive outcome mechanism as an alternative for internal quality assurance and is designed to complement existing QA mechanisms. Ref [10] designed a theoretical model as a mechanism for student engagement in QA processes. Figure 1 presents a schematic diagram of the mechanisms for evaluating teaching and learning in HEIs.

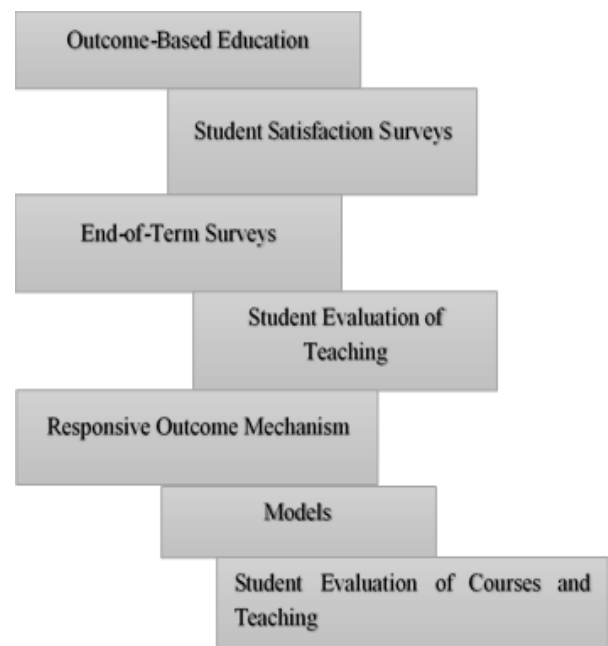


Fig 1: QA Evaluation Mechanisms

III. METHODOLOGY

The research was conducted by using a systematic review of literature. To ensure the inclusion of relevant studies, a number of steps were followed in conducting the literature review. Firstly, key words for the research were identified and consisted of words as such as, “student engagement, quality, assurance, higher education, institutions, assessment, management and processes.” Secondly, search strings were developed and consisted of the following,

“quality assurance AND engagement of students,” quality assurance in HEIs AND student engagement,” “quality assurance AND HEIs,” and “education management AND student engagement.” Thirdly, an inclusion and exclusion criteria for databases was employed. Elsevier, Emerald, Scopus and Google Scholar databases were searched for relevant articles. A total of 100 articles were collected in which 50 articles were classified into the A category of relevance. The criteria of relevance were based on the nature of the abstracts. 50 articles in the A category were filtered by paying attention to the key words and 30 articles formed the sample size. The sampled articles were evaluated based on the research objectives that were set. Figure 2 depicts the methodology that was used to conduct the study.

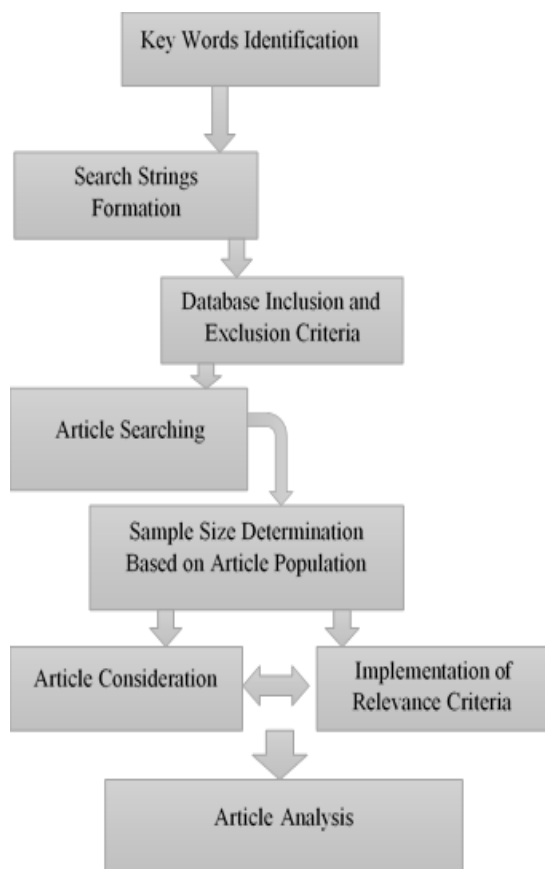


Fig 2: Research Framework Design

IV. DISCUSSION

Student engagement in QAP is a critical aspect of improving learning and teaching in HEIs. The feedback from students on study experiences and teaching provide stakeholders with valuable information for improving the quality of the curriculum. The processes of student engagement in QAPs are cardinal for supporting desired learning outcomes. From the studies reviewed, it is established that, many studies have been conducted on student engagement in QAPs [7, 8, 9, 10, 11]. However, majority of the studies have been conducted in the context of developed

economies. This is an indication to developing economies that, more studies on the subject matter are required.

Although there have been several changes in the education sector as far as student involvement in QAPs, majority of the student evaluation instruments have focused on rating teachers. This is supported in a study by [8] that showed that, surveys collect data on limited and discrete perspectives of student engagement. As a result of this observation, [10] suggests the definition of “student involvement term”, regarding participation in QAPs. The observations in the studies are cardinal for implementation as economies strive to achieve sustainable education.

It is also observed that, the relevance of student engagement in QAPs is alluded in the reviewed studies. This is an indication that, students are key stakeholders in the education sector. Their demand for education improvement should be incorporated through effective student evaluations. It is for this reason that, different types of evaluations have been designed to capture students’ perceptions and attitudes. Nevertheless, these evaluations are limited on the inclusion of students’ perceptions [8].

Majority of the studies reviewed have shown that, student evaluations are an internal process of the institution [22, 21, 11, 23]. The evaluations have been conducted as student satisfaction, end-of-term surveys, student evaluation of course and teaching. These evaluations have contributed to curriculum, teaching and learning improvement. However, is the feedback from students communicated to the students and the authorities responsible for the registration and accreditation of HEIs? Ref [3] indicates that, outcome-based education has provided a platform for considering of student engagement and HEIs are regulated and monitored on this basis. However, to what extent has outcome based education incorporated students’ perceptions of quality education? As the drive for sustainable education systems enhances, design of appropriate student evaluations is necessary.

As most student engagement processes are internal, ministries responsible for monitoring quality in HEIs should design evaluation tools that should engage students in the external processes of QA. Evaluation tools should shift from focusing on teacher and institution aspects but be inclusive of student perceptions. Ref [12] has pointed out that, the current surveys used to measure student experiences do not identify areas that demand improvements in all aspects of the University. The standards of the HEIs can only improve with consideration of comparable students’ academic experiences and outcomes regardless of the mode of the delivery and location [12].

V. RECOMMENDATION AND CONCLUSION

The study recommends the following;

- Universities should embrace an open, collaborative and sharing spirit across institutions to facilitate the enforcement of SECT as a University Performance Indicator.
- Student evaluation questions should be carefully designed to consider data that is good-quality and actionable.
- Students should be engaged throughout the process including decision-making as well as their role as respondents.

- Academic staff should be engaged in the SECT process to communicate progressive messages that students' perspectives matter.
- Authorities responsible for QA should provide a platform for engaging students in external QAPs.
- While student evaluation questions should not be the same across Universities, Authorities would need to provide a platform for agreement on the base number of question themes for comparisons across Universities while pedagogical approaches can be researched across sectors.
- Guidelines on SECT process across Universities need to be written and disseminated.
- SECT should be positioned as a process for improving teaching and learning that can be implemented as a performance indicator as opposed to being confined to institutional data only.

To ensure sustainable quality education, effective engagement of student in QAPs is necessary for consideration. Development of student evaluation mechanisms that do not focus on teacher and institution evaluation should be enforced.

The study evaluated QAPs students are engaged and the types of student evaluation mechanisms for assessing quality. The study has revealed that limited studies have been conducted in developing economies as the concentration has been in developed economies of Europe, North America and Asia. Further the study has showed that limited students' perceptions are included in the quality evaluation mechanism. In addition, majority of the QAPs engage students are the internal level of the institution.

The findings form these are cardinal for consideration in policy formulation by policy makers and for implementation in HEIs. These findings are necessary for consideration in developed and developing economies. The strategies recommended are applicable in economies and institutions that are pushing the agenda for sustainable education as one of the sustainable development goals (SDGs).

REFERENCES

- [15] (Translation Journals style)," *IEEE Transl. J. Magn.Jpn.*, vol. 2, Aug. 1987, pp. 740–741 [*Dig. 9th Annu. Conf. Magnetism Japan*, 1982, p. 301].
- [16] M. Young, *The Technical Writers Handbook*. Mill Valley, CA: University Science, 1989.
- [17] Kumpas-Lenk, k, Tucker, B. M, and Gupta, R. (2014). Validation of a unit evaluation survey for capturing students' perceptions of teaching and learning: A comparison among Australian and Estonian higher education students. *Studies in Educational Evaluation* 43 (2014) 178–185 Marsh, H. W., & Roche, L. (1993). The use of students' evaluations and an individually structured intervention to enhance university teaching effectiveness. *American Educational Research Journal*, 30(1), 217–251. <http://dx.doi.org/10.3102/00028312030001217> Biggs, J., & Tang, C. (2007). *Teaching for quality learning at university* (3rd ed.). The Society for Research into Higher Education, Open University Press.
- [18] S. P. Bingulac, "On the compatibility of adaptive controllers (Published Conference Proceedings style)," in *Proc. 4th Annu. Allerton Conf. Circuits and Systems Theory*, New York, 1994, pp. 8–16.
- [19] Lokhoff, J., Wegewijs, B., Durkin, K., Wagenaar, R., Gonzales, J., Isaacs, A. K., et al. (2010). A tuning guide to formulating degree programme profiles including programme competences and programme learning outcomes. Competences in Education and Recognition Project (CoRe). W. D. Doyle, "Magnetization reversal in films with biaxial anisotropy," in *1987 Proc. INTERMAG Conf.*, pp. 2.2-1–2.2-6.
- [20] G. W. Juette and L. E. Zeffanella, "Radio noise currents in short sections on bundle conductors (Presented Conference Paper style)," presented at the IEEE Summer power Meeting, Dallas, TX, Jun. 22–27, 1990, Paper 90 SM 690-0 PWRs.
- [21] Coates, H (2005). The value of student engagement for higher education quality assurance. *Journal of Higher Education*, 1, 11, (25-36). J. Williams, "Narrow-band analyzer (Thesis or Dissertation style)," Ph.D. dissertation, Dept. Elect. Eng., Harvard Univ., Cambridge, MA, 1993.
- [22] Maskell, E.C and Collins, L (2017). Measuring student engagement in UK higher education: do surveys deliver? *Journal of Applied Research in Higher Education*, vol. 9 no. 2. J. P. Wilkinson, "Nonlinear resonant circuit devices (Patent style)," U.S. Patent 3 624 12, July 16, 1990.
- [23] Prakash, G (2018). *Quality in higher education institutions: insights from the literature. The TQM Journal*, vol 30, iss 6. Letter Symbols for Quantities, ANSI Standard Y10.5-1968.
- [24] Elassy, N (2013). A model of student involvement in the quality assurance system at institutional level. *Quality Assurance in Education*, vol. 21 no. 2
- [25] Kinash, S., Naidu, V., Knight, D., Judd, M.M., Sid Nair, C., Booth, S., Fleming, J., Santhanam, E., Tucker, B.M and Tulloch, M. (2015). Student feedback: a learning and Leaching performance indicator: *Quality Assurance in Education*, vol. 23 no.
- [26] Mahsood Shah, Chenicheri Sid Nair, John T.E. Richardson, Chapter 11 - Student Engagement in National Quality Assurance, Editor(s): Mahsood Shah, Chenicheri Sid Nair, John T.E. Richardson, Measuring and Enhancing the Student Experience, Chandos Publishing, 2017, Pages 123-131, Berry, A.a.*, Emily Hammerb The relationship of accreditation and student engagement in a college of business: An internal, multi-year comparison of high impact practices. *The International Journal of Management Education* 16 (2018) 43–51.
- [27] (Handbook style) *Transmission Systems for Communications*, 3rd ed., Western Electric Co., Winston-Salem, NC, 1985, pp. 44–60.
- [28] *Motorola Semiconductor Data Manual*, Motorola Semiconductor Products Inc., Phoenix, AZ, 1989.
- [29] (Basic Book/Monograph Online Sources) J. K. Author. (year, month, day). *Title* (edition) [Type of medium]. Volume (issue). Available: <http://www.URL>
- [30] J. Jones. (1991, May 10). *Networks* (2nd ed.) [Online]. Available: <http://www.atm.com>
- [31] Chalmers, D. (2007). A review of Australian and international quality systems and indicators of learning and teaching. Strawberry Hills: The Carrick Institute for Learning and Teaching in Higher Education. R. J. Vidmar. (1992, August). On the use of atmospheric plasmas as electromagnetic reflectors. *IEEE Trans. Plasma Sci.* [Online]. 21(3). pp. 876–880. Available: <http://www.halcyon.com/pub/journals/21ps03-vidmar>
- [20] Johnson, R. (2000). The authority of the student evaluation questionnaire. *Teaching in Higher Education*, 5(4), 419–434.
- [21]
- [22] Lekena, L.L (2012) Quality Assurance in Education: Student Evaluation of Teaching (SET), *International Journal of Educational Sciences* 4(3):271-274
- [23]
- [24] Endut, A.S (2013). Enhancing Internal Quality Assurance Mechanism at HEI through Responsive Program Evaluation. *Procedia - Social and Behavioral Sciences* 123 (2014) 5 – 11

EFFECTIVE MANAGEMENT OF SCHOOL SANITATION AND HYGIENE IN ZAMBIA

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Abstract—Effective management of school sanitation and hygiene is the art of maintaining high levels of cleanliness and hygiene practices even in the face of shocks and stressors such as the 2019 Coronavirus world pandemic. This study utilized a critical review of government reports, legislature, journal articles, books and any published material on school sanitation and hygiene in Zambia. Content analysis was used to analyze the secondary data and isolate themes of interest in management of school sanitation and hygiene. Zambia's school sanitation management is governed by the policy on school, personal and environmental health which recognises that good student health is an essential pre-requisite for effective learning. The Ministry of General Education endorses the critical role of the school in promoting quality school environments. The aspect of school sanitation and hygiene is two-fold; the sanitary conditions and facilities available in and around the school compound, while on the other hand, is the activities aiming to promote conditions at school and practices of school staff and learners that help to prevent water and sanitation-related diseases. The study identified various strategies which can help improve the sanitary conditions in school environment as well as foster hygiene practices. In line with Zambia's Vision2030 and the 6th Sustainable Development Goal, School management can lead in coordinating and involving existing local health facilities and the Ministry of Water Development, Sanitation and Environmental Protection in the promotion of school hygiene and sanitation. School heads can also help spearhead the setting up of school Water, Sanitation and Hygiene (WASH) clubs and committees which can assist with routine surveillance of the state of sanitation facilities and advising the school community in adopting adequate sanitation and hygiene practices. Whereas appropriate, hygiene education during school gatherings and frequent use of hygiene teaching aids can bring about the intention to change. However, adequate safe water and sanitation facilities are needed to allow people to transform intention into action. A method which encompasses all groups with stakes in school management is ideal to achieving this. Thus, the study proposed the hybridization of the School-Led Total Sanitation (SLTS) and Community-Led Total Participation approaches to management of hygiene and sanitation in schools.

Keywords—school sanitation, hygiene, school management, Zambia, teachers, learners

I. INTRODUCTION

Quality in education would be better assured if school leaders take a frontline step in the management of sanitation in their schools. Since the major responsibility for creating quality schools anchors on school heads, they need to have sufficient knowledge relating to school sanitation and hygiene so that they ensure a conducive health school environment. A clean, healthy and green environment is not achieved overnight, but requires

continuous effort from a dedicated school management who is able to enthuse teachers and pupils with interest in maintaining clean school environments as they carry on their teaching and learning tasks. To ensure that school sanitation is managed effectively, school leaders need to learn the critical issues surrounding this subject. Thus, this review paper aims at providing a comprehensive undertaking for the effective management of sanitation and hygiene promotion in schools.

Good sanitation and Hygiene is an essential part of the wellbeing of school communities and key to a nation's development. The United Nations Children's Fund (UNICEF, 2016) states that improper or lack of sanitation and hygiene is hampering the quality of schooling and educational outcomes. At school level, therefore, head teachers have a primary obligation to ensure a conducive learning and teaching environment in a world that is characterized by rapid social, economic and technological changes. Performing this task requires adequate knowledge on sanitation, and embracing approaches allowing for innovation, diversification and possible intensification in school sanitation and hygiene. This study aimed at unveiling the need for improved sanitation in schools as well as suggesting strategies that school management can use for effective management of the sanitation and hygiene in their schools.

A. Problem Statement

Zambia is one of the countries in Africa with least access to sanitation and hygiene services. Overall, sanitation and its delivery remain a challenge throughout its schools (UNICEF, 2018). Accessing clean water and adequate sanitation is a major challenge. Based on the UNICEF and World Health Organisation (WHO) Joint Monitoring Program 2012 report, an estimated 5.6 million lack access to improved sanitation. The situation is worsened by poor sanitary health practices. In addition, the lack of access to improved sanitation in schools means a low-quality learning environment especially in rural areas where only 67% of the 8.4 million rural population have access to improved sanitation facilities. Grimes (2014) postulates that school sanitation plays a key role in the realization of educational goals. That is, if school facilities are inadequate, poorly maintained, and not safely guarded, effective teaching and learning cannot be guaranteed. That is, the teaching and learning process would be difficult and high educational achievement foreclosed. Arising from the above, the problem of this study put in interrogative form is: how can sanitation in schools be managed for effective instructional delivery?

B. Objectives

This paper was guided by the following objectives

- Explore the concept of school sanitation;
- Explain the value and purpose of school sanitation; and
- Suggest strategies which can be used for effective management of sanitation and Hygiene in school.

II. UNDERSTANDING THE CONCEPT OF SCHOOL SANITATION AND HYGIENE

There are many definitions propounded by various scholars with regard to understanding the concept of “school sanitation and hygiene”. To put this in perspective, these concepts are briefly discussed below;

A. Sanitation

Generally, school sanitation refers to the school-based adequate provision of toilets and having access to them, their maintenance including the school environment, and waste management while promoting personal cleanliness (WHO, 2010). This means that sanitation is the means for prevention of human contact with wastes, for hygienic purposes. It also entails a focus on management of waste produced by human activities. In addition, Ritchie (2019) simplifies sanitation as the state of being clean and conducive to health.

B. The Hardware and Software Sanitation

There are two main components of sanitation. Peal et al. (2010) identified them in their research about hygiene and sanitation approaches as ‘software’ and ‘hardware’.

The hardware - is the total package of sanitary conditions and facilities available in and around the school compound. Hardware sanitation focuses on the development and provision of sanitation facilities like drainages, landfills, toilets and hand wash basins.

The software - The software are the activities aiming to promote conditions at school and practices of school staff and children that help to prevent water and sanitation-related diseases.

C. Hygiene

Hygiene refers to the set of practices associated with the preservation of health and healthy living. The focus is mainly on personal hygiene that looks at cleanliness of the hair, body, hands, fingers, feet, clothing and menstrual hygiene. Other related terms are;

Hygiene Promotion - Hygiene Improvements in personal knowledge, skill and practice that modify an individual’s behaviour towards healthy practice are the focus of hygiene promotion. Safe hygiene practice includes a broad range of healthy behaviours, such as handwashing before eating and after cleaning a child’s bottom, and safe fecal disposal.

Hygiene Education - Hygiene education is the transferring of knowledge and understanding of hygiene and associated health risks in order to help people use better hygiene practices.

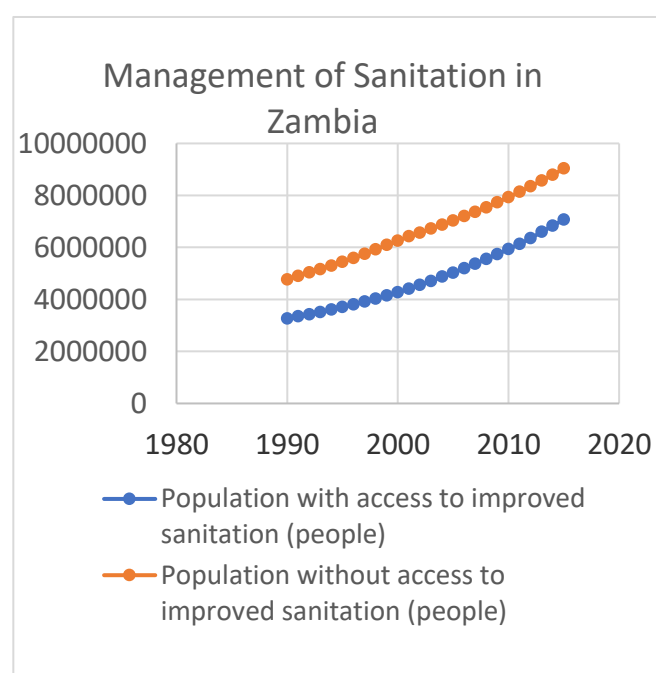
In this paper, school sanitation and hygiene refers to the provision of sanitation facilities and application of sanitary measures in the school environment, while teachers and learners practice personal cleanliness.

D. Health-Related Policies for Schools in Zambia

Zambia has a comprehensive policy to guide the development and management of sanitation. The specific policy measures for sanitation include a community-based approach; the promotion of appropriate technology; and capacity building at all levels. Zambia has a comprehensive policy to guide the development and management of sanitation. The specific policy measures for sanitation include a community-based approach; the promotion of appropriate technology; and capacity building at all levels.

E. The Sixth United Nations Sustainable Development Goal: Clean Water and Sanitation

This goal engenders adequate safe water and improved sanitation for all by 2030 (Vision 2030). Achieving this would require adequate infrastructure, provision and effective management of sanitation facilities, as well as encouraging the practice of hygiene. Although 2.1 billion people have improved water sanitation since 1990, a lot still needs to be done. In 2015, for instance, 4.5 billion people lacked safely managed sanitation and 2.3 billion lacked even the basic sanitation (Khale and Dyalchand, 2009). The situation is not different for Zambia as depicted in the chart below;



Adopted from (Ritchie, 2019): "Sanitation" OurWorldInData.org

In the visualization above, we see the number of people globally with and without safely managed sanitation. Although data specifically on how sanitation is managed in schools is currently unavailable, it is reported that Zambia was not able to reach the Millennium Development Goal (MDG) for water and sanitation which is halving the proportion of people without sustainable basic sanitation by 2015 (WHO, 2017). To caution this status quo, the country is utilizing the Sustainable Development Goals (SDGs) to achieve access to adequate and equitable sanitation and hygiene for all and end open defecation (ODF) by 2030 (UNICEF- Zambia, 2017).

III. THE NATIONAL SANITATION AND HYGIENE PROGRAM

The sanitation and hygiene Program for Zambia was developed in 2009. It covers all aspects of sanitation including human excreta management, liquid and solid waste, bathing shelters, other elements of hygiene besides hand washing and school sanitation. Through this program, the Government of Zambia with technical support from UNICEF, has placed emphasis on maximizing health benefits through promoting hand washing with soap, household water treatment, and construction and use of toilets to achieve an “open defecation free” environment. The promotion of these three thematic areas is meant to contribute to an improved quality of life through the delivery of integrated services and behaviour change programs focused at communities, households and schools.

A. *Community-Led Total Sanitation for Zambia*

Under the August 2011 new Sanitation and Hygiene Strategy 2011-2015, the Rural Water Supply and Sanitation Unit, sub-office of the Ministry of Local Government and Housing, recognized Community-Led Total Sanitation (CLTS) as an effective approach for improving Zambia’s hygiene and sanitation situation (Mwanza, 2012).

B. *The National Policy on Education in Zambia*

Management of school sanitation is governed by the policy on school, personal and environmental health which recognises that good student health is an essential pre-requisite for effective learning (GRZ, 1996). The Ministry of General Education endorses the critical role of the school in promoting quality school environments. It is expected that the Sanitation and Hygiene Program would have an impact on hygiene behaviours by 2030. This in turn, could lead to reduced cases of sanitation-related diseases and acute respiratory infections such as coronavirus

C. *The School-Led Total Sanitation Approach (SLTS)*

The School-Led Total Sanitation Approach (SLTS) is one of the diverse approaches used to implementing sanitation in schools. SLTS has been adapted for schools from Community-Led Total sanitation (CLTS). Explicitly, School-Led Total Sanitation (SLTS) is a process of directly involving school communities to analyse the current school sanitation and hygiene situation, their practices and consequences, and to improve their sanitation and hygiene status. It is expected that this method can lead to collective actions, thereby achieving total sanitation in both schools and catchment communities. SLTS is designed to promote sanitation and hygiene at both schools and communities through child-cantered approach. Given the high vulnerability of children to diarrheal diseases, their greater receptivity of behaviour changes and their propensity for development of lifelong behaviours, learners and their teachers are the targets. Suffice to state that the Ministry of General Education in Zambia supports the scaling-up of SLTS implementation in schools (GRZ, 2016). This is because it is currently one of the most effective and efficient way of disseminating messages and transforming behaviours among school communities.

D. *Other Legislations on Sanitation in Zambia*

There are other pieces of legislation which provides a guide on the management of sanitation in the country. The main ones that have had a direct impact on provision of water supply and sanitation in Zambia’s public institutions such as schools have

been clearly identified by Mwanza (2012) in his report as; The Water Act, Cap. 198, (enacted in 1948), The Environmental Protection and Pollution Control Act of 1990, the Public Health Act of 1995, WASHE (Water, Sanitation and Health Education) (adopted in May 1996) and Water Supply and Sanitation Act No. 28 of 1997. Arising from Zambia’s position on sanitation, it is imperative that all schools upscale towards maintaining clean and safe environments. Basic sanitation and hygiene promotion through school-based activities are some of the items that require the attention of the school authorities. However, the implementation of policy statements on sanitation can only be mooted by taking into account the availability of physical and human resources, the political will and concerted communal efforts.

IV. THE VALUE AND PURPOSE OF SCHOOL SANITATION

Schools are a stimulating learning environment for children and initiate change. If sanitary facilities in schools are available, they can act as a model, and teachers can function as role models.

Schools can also influence communities through outreach activities, since through their students, schools are in touch with a large proportion of the households in a community. On the other hand, if school sanitation and hygiene facilities are absent, or are badly maintained and used, schools become risky places where diseases are transmitted. Schools can also pollute the natural environment in such a way that it causes health hazards for the community at large. It is therefore important that schools have proper facilities.

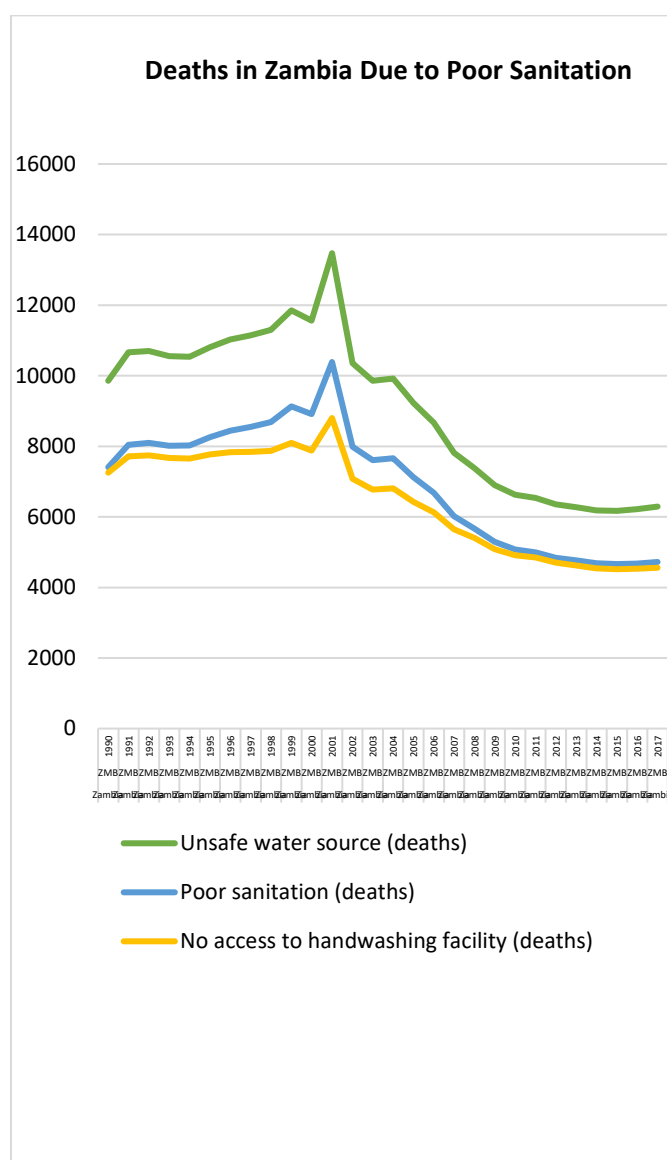
The provision of school hygiene and sanitation safeguards the rights of both learners and teachers to acceptable public health - safe water supply and adequate clean toilets.

In addition, the value of school sanitation is in its radial influence to affect the very purpose of establishing the educational facilities. That is, sanitary school environment has the potential to facilitate effective learning and provides opportunities for learners to acquire lifelong positive hygiene behaviours.

Furthermore, the Zambia Daily Mail (05/12/2019) newspaper article entitled “Mainstreaming gender in water, sanitation service provision” reaffirms the importance of school sanitation by indicting that it increases school enrolment, retention and attendance for girls.

Alongside sanitation, access to basic handwashing facilities is essential for the prevention of infectious diseases and malnutrition. Often, access to basic hygiene and access to sanitation are linked. According to the Global Burden of Disease (2018), 775,000 people died prematurely in 2017 as a result of poor sanitation, Zambia contributed at least 6,000 to this figure.

The two charts below show that the rate of deaths caused by poor sanitation in Zambia is alarming. Lack of access to good sanitation is a leading risk factor for childhood stunting and prevalence of infectious diseases, including cholera, diarrhea, dysentery, typhoid and polio (WHO, 2019). The main victims of these diseases are school going children. In light of this, the need for effective management of school sanitation and hygiene by people charged with the responsibility to oversee the activities in schools is indisputably significant.



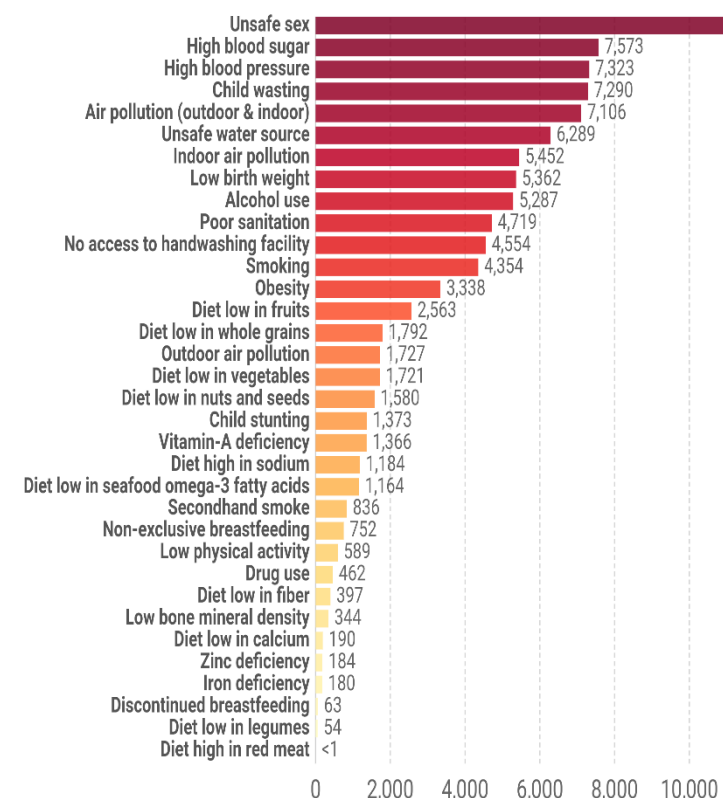
Adopted from the Global Burden of Disease (2018)

V. STRATEGIES FOR EFFECTIVE MANAGEMENT OF SANITATION FACILITIES IN SCHOOLS

The physical and aesthetic values of the school environment need to satisfy the physical, physiological and psychological development of students. To ensure a clean, safe and healthful school environment, the school management team

Number of deaths by risk factor, Zambia, 2017

Total annual number of deaths by risk factor, measured across all age groups and both sexes.



Source: IHME, Global Burden of Disease (GBD)

can adopt recommendations in the Public Health (1995) and WASHE (1996) for purposes of improving school sanitation;

A. Learning and Teaching Space

The general recommendation for a learning space is: 2 m² per student at kindergartens; 1.11 m² per student at primary school; 1.26 m² per student at secondary schools. This ensures adequate classroom space to avoid crowding.

B. Provision of Drinking Water in Schools

Many pupils may walk hours to get to school. As such, school administrators ought to ensure adequate provision of safe water for drinking and personal hygiene in school. The general advice is one water tap per fifty students. Low-cost water fountains and water taps arranged in a water trough design are acceptable for schools. Water availability should be about five litres per day per student and water must be available throughout the school day. A water storage tank may be necessary to provide water reserves and satisfy the demand at peak hours. The silage (wastewater) that results because of handwashing must be drained to a seepage or soak pit, or ditch.

C. Provision of Toilets

The provision of toilets is extremely important in the management of school sanitation. Gender sensitive sanitation need be prioritised in this regard. That is, separate toilets for girls and boys need to be provided to encourage girls to have privacy and feel safe. School toilets, therefore, need to meet the following requirements:

-Toilets must be located away from the classroom in order to avoid interfering with the learners' learning process. They must be reasonably accessible.

-They must be well-maintained and agreeable to use. Learners themselves should participate in daily cleaning of the toilet.

-They should provide privacy and security.

-Toilets for the staff must be separated.

-The dimensions of the toilet must be adequate to accommodate the storage needs for three to five years.

-There must be handwashing facilities near the toilet.

-There must be a bucket with water and a jug inside female toilets. This is essential for cleaning the bottom for female students during menstruation.

-In primary and secondary schools, there should be one toilet for every 30 pupils and one urinal for every 50 male pupils.

D. Provision of Solid Waste Management Facilities

Discarded paper are the usual type of waste at schools. There could also be chemical wastes from school laboratories. Thus, schools should have the following facilities:

-Waste bins in each classroom and staff room.

-Waste disposal pit at an appropriate location;

-A local incinerator can be used if the amount of school solid waste is significant.

E. Classroom Sanitation

Classroom sanitation involves maintenance of a smooth floor, having physical suitability of seats and desks, and adequate light and ventilation. The cleanliness of the classroom is vital for a good learning process. Students should be involved in the maintenance of classroom cleanliness on a daily basis. The floor of the classroom should be smooth to reduce dust.

F. Hygiene Education

Improved facilities in themselves are not sufficient. If the goal is to reduce the incidence of sanitation-related diseases, then behavioural changes are also needed which can lead to proper use of the facilities.

Hygiene information is usually incorporated within various school subjects such as science, Biology, Home Economics and Physical or Religious Education (MOGE, 2013). However, since there is no specific subject or course on school sanitation and hygiene in the current Zambian school curriculum, school heads and teachers can find ways to fill this gap. For instance, public health officers from the local health facility can be outsourced to train some members of the school community who would in turn, assist disseminate hygiene information aimed at changing attitudes and behavior. Moreover, setting up and supporting hygiene clubs in schools and colleges is a sure investment for sustainable activities aimed at improving school sanitation.

G. WASH (Water, Sanitation and Hygiene) Teacher or Club

The school management can appoint a responsible teacher or committee with genuine interest in sanitation and hygiene

matters to coordinate various school sanitation activities, to actively assist with regular school inspections and advising the school community on the proper use of school facilities.

VI. SUMMARY

When knowledge is supported by enabling and reinforcing factors, desirable changes may occur in the school setting. This stress the importance of combining hygiene education with the construction of water and environmental sanitation facilities. To effectively manage school sanitation and promote hygiene, the head teacher needs to involve all the school primary stakeholders such as learners, teachers, parents, the community, local health facilities and the council. Since improved facilities and hygiene education are intertwined, there is need for collective action towards improved water supply, adequate separate sanitation facilities for males and females, and hygiene education for the whole school community. Use of locally developed teaching aids which build on the practical situation in schools can spice the awareness campaign of the benefits of using improved facilities in a proper and hygienic way and the seriousness of diseases that result from poor sanitation. There is also need to consider the following points;

- Establish sanitation ambassadors and champions in schools
- Encourage peer-to-peer sanitation education
- Incentivise standout engagement in sanitation activities
- Prioritise behavioural and attitude change towards sanitation among learners
- Establish sanitation-centred clubs or associations
- Organise and encourage debates centred on sanitation

VII. CONCLUSION

From the foregoing, it can be concluded that school sanitation is a pertinent issue in educational management. The school is a formal organisation made up of teachers and other school staff, the head teacher, and students. The constant interactions between them may heighten the risk of infections if school sanitation is poorly managed. It is desirable then, for the school occupants to good maintenance culture of the provided sanitation facilities, embrace sanitary measures champion personal cleanliness. It is the primary duty of the school head, though, to ensure improved sanitation in a school and spearhead hygiene education for the benefit of learners and teachers. However, it must be borne that regardless of the efforts of the school community in caring for sanitation facilities, there is a limit to the types of maintenance work they can do due to lack of relevant skills. This study, therefore, proposed the use of the School-Led Total Sanitation (SLTS) approach to management of hygiene and sanitation in Zambia's rural and urban schools.

VIII. ACKNOWLEDGMENT

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REFERENCES

- A. Peal., B. Evans and C. van der Voorden. Water Supply & Sanitation Collaborative Council, Geneva: Switzerland, 2010.
- American Heritage Dictionary of the English Language. Fifth Edition. Houghton Mifflin Harcourt Publishing Company, 2016.
- Collins English Dictionary. Complete and Unabridged, 12th Edition. HarperCollins Publishers, 2014.
- Global Burden of Disease Study - the GBD 2017 Results. Seattle: Institute for Health Metrics and Evaluation (IHME), 2018.
- GRZ. Community Led Total Sanitation in Zambia: An Evaluation of Experiences and Approaches to Date, Ministry of Local Government and Housing: Lusaka, 2011. [Accessed on 20 July 2020].
- GRZ. National Rural Water Supply and Sanitation Programme 2006- 2015, Ministry of Local Government and Housing: Lusaka, 2006.
- GRZ. Zambia Vision 2030, 2007.
- H. Ritchie. "Sanitation". OurWorldInData.org. 2019. Retrieved from: <https://ourworldindata.org/> [Accessed on 22 July, 2020]
- J. E. Grimes., D. Croll., W. E. Harrison, J. Utzinger, M. C. Freeman & M. R. Templeton. The relationship between water, sanitation and schistosomiasis: a systematic review and meta-analysis. PLoS Negl Trop Dis, 2014.
- M. Khale and A. Dyalchand. Impact of Rural Sanitation on Water Quality and Water Borne Diseases, India, 2009.
- Ministry of Education (MOE). Educating Our Future. National Policy on Education. Lusaka: MOE, 1996.
- Ministry of General Education. The Zambia Education Curriculum Framework. Lusaka: Curriculum Development Center, 2013.
- Muzungu, N. Zambia Daily Mail - "Mainstreaming gender in water, sanitation service provision", (05/12/2019).
- UNICEF- Zambia. CLTS Programme Highlights, 2011, Plan Zambia, 2017.
- UNICEF. Drinking Water, Sanitation and Hygiene in Schools. Global Baseline Report, 2018.
- W. M. Mwanza, W. M. Zambia Situational Analysis on CLTS/SLTS/ULTS. Plan Nederland, 2012.
- Webster's College Dictionary. Random House, Inc., 2010.
- WHO. Zambia/United Nations Sustainable Development Partnership Framework (2016-2021), 2016.
- WHO/UNICEF. Joint Monitoring Programme (JMP) for Water Supply and Sanitation, 2017.
- WHO-UNICEF. Water, Sanitation and Hygiene in Health Care Facilities: Status in low-and middle-income countries and way forward. Geneva, 2015.

INCORPORATION OF SPECIAL NEEDS STUDENTS IN THE TEACHING INDUSTRY

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Abstract

The Government of Zambia recognizes that persons with disabilities ought to have the same rights, opportunities, choices and needs as people without disabilities. This paper presents the findings of a study which sought to establish how the students with special needs are incorporated in the teaching industry. Qualitative and quantitative research methods were used. A descriptive survey design was employed on a population which comprised Lecturers, Human Resource Officer at Teaching Service Commission, the registrar at Teaching Council of Zambia and Zambia Institute of Special Education (ZAMISE). Purposive and simple random sampling were employed, and instruments for data collection included interviews and questionnaires. Data was analysed using themes and descriptive statistics. Findings indicate that positive discrimination was used by the college as enrolment criteria in that those with Special needs were accepted based on four 'O' levels instead of the required five. As regards to curriculum delivery, learners are taught inclusively, using interpreters for the hearing impaired. However, the lecturers mentioned that they do not have sufficient teaching and learning material to enable them deliver the curriculum effectively. Findings also showed that 10% of all positions on recruitment are reserved for applicants with disabilities. In addition, Special Education Needs (SEN) teachers in the industry lack modern assistive technology devices to help them deliver the lessons effectively. The study therefore recommends that the college should: Capacity build the lecturers in sign language and braille; Employ the support staff that are required; and Plan for induction programmes. Additionally, Ministry of General Education (MOGE) should provide the necessary teaching aids and assistive technology devices to lecturers with special needs.

Keywords— Curriculum; Lecturer; Special Needs; Teaching Industry

I. INTRODUCTION

University is a critical arena for young disabled people in the construction of an adult identity and in obtaining higher level

qualifications which have a major impact on future labor market opportunities. The Government of Zambia recognizes that persons with disabilities ought to have the same rights, opportunities, choices and needs as people without disabilities. The vision of the Government is to have “persons with disabilities enjoying equal opportunities that are fundamental for living and development by 2030” (National Policy on Disability, 2015). As regards to equity of opportunities, among the measures indicated: “To create employment opportunities through deliberate positive discrimination; and conduct monitoring and evaluation of activities targeting equal opportunities and participation of persons with disabilities.” This is also noted in the 2019 Employment Act. Zambia has made notable strides, with regard to special education legislation, beginning with the Ministry of General Education assuming responsibility for educating students with disabilities. Through the policies, it fulfils the education for all and recognizes the needs of persons with disabilities through: The 1977 *Educational Reform Document* which outlined recommendations for special education and specified the need for integration and adaptation of the general education curriculum to meet identified and specified individual needs of students. Furthermore, the reform document outlined the need for adequate funding in order for special education to be more meaningful and beneficial to learners in need; The 1992 *Focus on Learning* which indicates that “every person—child, youth, and adult—shall be able to benefit from educational opportunities designed to meet their basic learning needs” (Ministry of Education, 1992, Article 1). Notably, the 1992 policy stressed the mobilization of resources for the education of all, including children with disabilities; The 1996 *Educating Our Future* (Ministry of Education, 1996), which focused on formal education. Recurring themes in the document included educational flexibility, responsiveness to educational needs, and enhancement of quality of education for all children. In relation to students with disabilities, the policy emphasized equality of educational opportunity, provision of good quality education, and improvement and strengthening of the supervision and

management of special education across the country (Ministry of Education, 1996). *Educating Our Future* (Ministry of Education, 1996), adopted after the Salamanca Statement (UNESCO, 1994), marked an important advancement in special education in Zambia. This policy endorsed the inclusion of children with disabilities in general education settings and set the stage for inclusive education in Zambia (Chitiyo & Muwana, 2018); The *2013 Curriculum framework* which contends the non-discrimination of the people with learning disabilities as spelled in the inclusive kind of education practiced in most of the learning institutions nowadays; and the *2019 Employment Act* which covers and protects the people living with disabilities. It advocates for equal employment of persons with disabilities in various industries. This study was conducted to investigate how the teachers with special needs transition from higher learning institution up to the time they are incorporated in the industry as well as their experiences in the institutions they are working from.

II. STATEMENT OF THE PROBLEM

The vision of the Government is to have “persons with disabilities enjoying equal opportunities that are fundamental for living and development by 2030” (National Policy on Disability, 2015). The 2019 employment Act of Zambia covers and protects the people living with disabilities. There are a few studies if any that indicate how graduates with special needs are incorporated in the teaching industry and their experiences as teachers. This study therefore sought to establish how the teachers with special education needs are incorporated in the teaching industry as well as their experiences as teachers

A. Objectives Of The Study

The objectives of the study were to:

- i. Establish how students with special education needs are enrolled at Zambia Institute of Special Education (ZAMISE) college
- ii. Investigate how the curriculum is delivered to students with special needs
- iii. Establish how the trained students are incorporated in the industry
- iv. Explore the experiences of teachers with special needs in the industry

L. Significance Of The Study

It is hoped that the results of the study will establish how students are enrolled for training, how they are trained and later on deployed in the teaching industry. The study will also establish what challenges the teacher trainers face as they handle the students with special educational needs. In addition, the research is hoped to reveal the challenges the employers face in deploying teachers with SEN. The findings of the research would help the trainers at ZAMISE to improve their mode of training. The information will also be useful to policy makers as they make decisions involving trained teachers with SEN.

M. Theoretical Framework

This study adopted the “social model” of disability by Abberley, (1987). In this model it is the society which disables physically impaired people. Disability is something imposed on top of their impairments by the way they are unnecessarily isolated and excluded from full participation in society. People with disabilities are therefore an oppressed group in society through various inequalities in the structures and systems in education institutions and industries where they are incorporated and are expected to function and participate fully without necessary adequate assistive technology and equipment as depicted in figure 1 below.



Figure 1: Social Media

III. RELATED LITERATURE

A. Enrollment of students with Special Education Needs in Higher Learning Institutions

The proportion of higher education students with disabilities is increasing at university level. The inadequate accessibility of higher education institutions, the lack of support, the negative social attitudes and social isolation, as well as the low financial capacity influence the success of students with disabilities and affect their inclusion in the higher education. The field of post-secondary education and disability services has moved through its adolescence and is embarking on adulthood. It has undergone rapid expansion in the past years and serves about 11 percent of the student population. Despite the revolution in social and legislative policies on provision of equal opportunities for education and employment for people with disabilities, there is still a long way to go as it is estimated that only 8-14% of all

students in post-secondary education institutes in the US and Great Britain are students with disabilities. Enrollment disparities continue to exist. In a study of 170 students with disabilities and 156 students without disabilities in higher education institutions in Israel, results revealed that academic achievements of students with disabilities were almost as high as those of students without disabilities. However, the two groups differed in areas of experiences. The researchers postulated that, 'Higher education institutes still have a long way to go to reduce the gap in social inclusion of students with disabilities and to adjust academic standards for their needs. (Madaus, 2011; Sachs & Schruer, 2011).

Higher learning institution is a critical arena for young disabled people in the construction of an adult identity and in obtaining higher level qualifications which adversely impact on future labor market opportunities. In Scotland, statistics show that there has been a steady increase in the proportion of students who are disabled. However, adopting the identity of a disabled person at university is far from straightforward, in part because of the conflicting discourses surrounding disability which are encountered (Riddell & Weedon, 2013). The Sustainable Development goals (SDGs) also explicitly include disability and persons with disabilities 11 times. Disability is referenced in multiple parts of the SDGs, specifically in the parts related to education, growth and employment, inequality, accessibility of human settlements, as well as data collection and the monitoring of the SDGs. Although, the word "disability" is not cited directly in all goals, the goals are indeed relevant to ensure the inclusion and development of persons with disabilities. In a study in Ireland, third level institutions were encouraged to facilitate greater access and participation for people from marginalized groups who have traditionally been excluded from higher education. The results indicated that, students with disabilities reported variable access experiences within higher education and physical access remained a serious obstacle to full participation. Generally, there was a low level of awareness of student needs in relation to assistive provision and assessment. A positive and informed staff/college attitude proved crucial in ensuring access and equitable treatment (Shevlin et al, 2004 and UN n.d).

On the procedures followed when enrolling students with disabilities a survey on 35 universities was carried out and 24 of these reported no specific admission procedures or restrictions, though some referred to assisting the students in choosing the appropriate course. The other universities referred to policies of affirmative action or to some restrictions placed on students with disabilities. The affirmative action included modified entrance criteria and preferential treatment in choice of subjects (UNESDO,1999). Despite changes in many Western Countries' legislation and the development of programs for students with disabilities, in recognition of the importance of higher education for individuals, families, and society at large, low enrolment and high first-year dropout have been found. Low enrolment and high dropout can be understood as the result of inadequate accessibility of higher education institutions, lack of support, adverse social attitudes and social isolation, as well as low financial capacity. (Sachs & Schruer, 2011).

2.2 Curriculum delivered to Students with Special Needs

Chitiyo, & Muwana, (2018) contend that Services for students with disability are provided in four types of settings: (a) special education schools where only students with disabilities are educated with no opportunities to interact with typically developing peers. (b) special education units attached to general education schools where students with disabilities are educated separately but have opportunities to interact with typically developing peers during arrival/departure and recess times. (c) Special education classrooms within general education schools where students with disabilities are educated separately but have opportunities to interact with typically developing peers during arrival/departure and recess times, as well as during teacher planned activities that foster interaction among students with and without disabilities. (d) Inclusive classrooms (This is applicable to ZAMISE), where learners with and without disabilities are educated in the same classrooms (Ministry of Education, 2009a). Typically, students with more severe disabilities are placed in special education schools and special education units where they spend most of their time with a special education teacher. Students with mild disabilities typically are placed in special education and inclusive classrooms (A. S. Chanda, personal communication, March 7, 2011).

Zambia launched the 2013 curriculum framework in January 2014 as a guide to inclusion of learners with special needs. Muzata, (2017) undertook a study to establish how the 2013 revised curriculum was being implemented in teaching Learners with Special Educational Needs (LSENs.), in Zambia. From the results of the study it was established that special education teachers were not involved in the CDP except at implementation and they were implementing the revised curriculum amidst numerous challenges. Lack of involvement in the curriculum development process was linked to special education teachers' lack of understanding of key concepts necessary for curriculum implementation for learners with special educational needs.

In another study by Banda (2014) on accessibility to the general curriculum by learners with special education needs, findings confirmed that, the majority of the teachers did not find the general curriculum relevant. It was also noted that there was the absence of relevant appropriate teaching and learning materials that would be a challenge for learners with special needs to successfully access the general curriculum. It was established in the research also that the current Zambian curriculum is not relevant to respond to the immediate needs of learners with Special Education Needs. The research also discussed on what the government could do to improve accessibility of curriculum to LSENs. The report further established that there was need for a legal framework and policy on the issue of curriculum accessibility in Zambia as a means and strategy of policy implementation. This is because the lack of a legal framework on education had also been identified as one of the barriers to successful curriculum accessibility to learners with special educational needs (SENs). The report however, recommended that, the current policy must be implementable and adjusted to allow all the pupils access the general curriculum. Furthermore, relevant, appropriate and necessary materials was suggested to being in place and available to all the special units and school so as to allow learners

with special educational needs access the general curriculum. Pupils who are differently abled must be separated and grouped with pupils of similar disability and the curriculum to be flexible enough to accommodate learners with special needs. The curriculum for teacher educators also to be re-visited and modified with regards to its content in all universities and colleges.

Additionally, Muzata, (2017) argued that the curriculum is a mirror reflecting the identity, goals, aims and objectives of any nation. The kind of graduates a country has are a reflection of the type of curriculum and the success of any curriculum depends on the involvement of those who implement it. Teachers in particular are the 'engine' of curriculum success but can also be the architects of its downfall. The study recommends a deliberative cycle of training of special education teachers in the revised curriculum as it relates to special education. The study further calls for the provision of necessary specialized and adapted materials for effective implementation of the revised curriculum.

Office of the Auditor General (2019), authored a report on Performance Auditor of preparedness for Implementation of sustainable development goals in Zambia in the period 2014 - 2018. The main objective of the report was to assess whether the Ministry of General has put in place measures that support the provision of and access to appropriate education for the learners with special education needs, which is equipping the schools for provision of education to LSENs. It was reported that the Ministry had not laid out any standard guidelines for infrastructure or for teaching and learning materials. There was no specific budget line allocated for the purchase of such. For assessment of LSENs, there was no plan for special education except for 25%. For Teacher training, ZAMISE trains teachers for special education but the number of graduates is not enough to satisfy the large population of learners with special education needs in the nation.

N. Incorporation of people with special needs in the industry

Sustainable deployment espouses inclusiveness. According to the United Nations convention on rights of persons with disabilities protocol, which Zambia ratified in May, 2008 persons with disabilities have the right to work. This includes the right to the opportunity to gain, on an equal basis with others, by work freely chosen or accepted in a labor market.

The above UN recognition also places an equal right to Special Education teachers who bear the responsibility of educating people with special needs. This United Nations convention on the rights of persons with disabilities provides a comprehensive framework to guide national policy making and legislation, including international cooperation, for building an inclusive society and for fostering disability-inclusive development.

The Republic of Zambia with its "catch theme" of "not leaving any one behind by 2030", recognises the right of every citizen, including those with disabilities and those who teach or train them, to be employed. The Zambia Institute of Special Education (ZAMISE) is one institution supported by the Zambian Government to train Special Education Teachers.

Among the concerns of this paper was to establish how the deployment of these ZAMISE teachers is done. As documented by Vlachou and Barton (1994), researchers anticipated the existence of anxieties, and a heightened dissatisfaction and barriers among graduate Special Education teachers in securing deployment. As a result, many end up not continuing to teach Special Education to students with special needs and join those who teach other subjects in regular schools as noted by Sindelar et al (2018).

The paper also anticipated the limited number of schools offering Special Education placement and lack of appropriate facilities as factors compounding the problem in Zambia. This dire situation was envisaged to be more severe in rural Zambia than urban areas.

Admittedly, there is a dearth of scholarly information on this problem in Zambia and this paper aimed to contribute to reducing the information gap.

O. Experiences of SEN teachers in the industry

Ojala, (2004) conducted a Qualitative Study of Special Education Teachers' Views and Classroom Practice. Findings indicate that teachers have a rather clear idea of how they want to work but few resources for implementing a meaningful curriculum. Teachers consider gaining independence as the most important aim for their pupils, while simultaneously many teachers are concerned with further educational opportunities of their pupils as well as their placement in society. Teaching of practical skills is considered important but schools are equipped with few resources for it. Although teachers adapt teaching in a variety of ways to respond to the special needs of their pupils this study suggests that teaching methods and curriculum planning still need to be developed further. Apart from the curriculum and resources needed positive attitudes towards disability at schools and in the communities seem to be essential for providing meaningful special education. In order for many educational aims to be achieved teachers, school administration, parents and community members need to work together to build schools and communities that accommodate diversity.

IV. METHODOLOGY

A. Research Design

A descriptive survey design was adopted. It attempted to establish the range and distribution of some social characteristics of people with special needs, and to discover how these characteristics may be related to certain behavior patterns and attitudes when incorporated in the industry (Kothari 2004).

P. Population, Sample and Sampling techniques

The population comprised Teachers, the Human Resource (HR) Officer at Teaching Service (TS), the registrar at Teaching Council of Zambia (TCZ) and Zambia Institute of Special Education (ZAMISE), and the Planning officer Ministry of General Education (MOGE) Head Quarters (HQ). The total sample was 34 and constituted 30 Teachers, 1 HR at TS, 1 registrar at TCZ and 1 at ZAMISE, 1 MOGE-HQ planning officer. Simple random sampling technique was used to select

teachers whereas purposive sampling was used on the rest of the participants.

Q. Instruments for data collection and analysis

Questionnaires were used to collect data from teachers whereas interview guides were used to collect data from the rest of the participants. Thematic analysis was used to analyze qualitative data. Major themes drawn from the interview guides, were coded. Quantitative data was analysed using SPSS to obtain descriptive statistics.

V. FINDINGS

A. How students with special education needs are enrolled at Zambia Institute of Special Education (ZAMISE) college

On the enrolment criteria the respondent reported that positive discrimination was used in that those with Special needs were accepted based on four O levels instead of the required five.

Yes, we use positive discrimination for students with Special Education Needs. We enroll them with four O levels. For those with hearing impairment we do not consider English as a requirement because we are aware that the hearing impaired have challenges in English.

On whether the members of staff were aware of the use of positive discrimination, it was reported that those who had been at the institution for a long time were aware.

R. The old members of staff are aware, unless the new ones who may be coming from other colleges.

As to whether the advert for enrolment did include information on positive discrimination the response was that the advert did not include that information as adverts were done by the Ministry of General Education Headquarters.

No, we do not include that information on the advert.... the ministry does the adverts for us. We just extract it from there.

When asked whether there were plans to include the information in future so that more capable people with Special Education needs are reached it was reported that this would be considered.

With this concern I think it is important that the ministry should include that information.

It was mentioned that the institution had no deliberate policy or guidelines on the number or percentage of those with Special Education Needs to be enrolled but observed that it would be important to look into that.

Students with SEN are fewer than those without. There is no deliberate policy or guidelines on the number of those with SEN to be enrolled as we enroll them as they apply and meet the requirements. It is something we can look into.

The respondent further explained that the college should have a deliberate policy for new members of staff both academic staff

and support staff on the criteria for enrollment of students with SEN.

There should be a deliberate policy or guidelines on informing members of staff of the enrollment criteria for those with SEN so that they too can be messengers in their communities. Otherwise for those who want to have relatives enrolled we ask them to bring the results then we advise accordingly if they have special education needs

Something observed by the respondent was that more needed to be done to advertise the college as most people did not know about it including heads of schools who are supposed to be part of those sensitizing the communities about the institution.

One thing I have observed as we go round to advertise our programmes is that very few know about ZAMISE. Institutions that deal in special education need to sensitise the community. Most people including heads of schools are not aware of this college. It is from these schools that we need to get students coming into the college.

S. How the curriculum is delivered to students with special needs

Qualifications

The research involved 30 respondents. From the findings it is clear that two third of the respondents have master's degree while the other third has their first degree. Most the first degree holders are studying for their masters in various universities. 24/30 have worked for over 10 years while 6/30 have worked less ten years

Human resource and CPD

Results indicated that two thirds of the population are trained to handle SENs. In addition, the college does have Continuous Professional Development (CPD) concerning special education. However, there is no written plan to train the new lecturers on the norms of special education or any related items. It was further revealed that the attitude towards CPD by both administration and teaching staff is negative. There are only three interpreters for the hearing impaired while there is no hired transcriber for the Visually impaired ((V.I)

Teaching and assessment

30 (100%) of the respondents indicated that learners are taught inclusively, using interpreters for the Hearing Impaired (HI). The lecturers mentioned that they do not have sufficient teaching and learning material to enable them deliver the curriculum effectively. For assessment, 29 (97%) indicated that the Visually Impaired (V.I), H.I and regular students sit for same test and exams. However, the SENs are given an extra 30 minutes of the SENs.

Challenges during curriculum delivery

30 (100%) respondents mentioned that there is inadequate teaching and learning materials for SENs.

The study also revealed that there is insufficient Human resource to cater for SENs.

15 (50%) revealed that there is no CPD for lecturers to handle SENs.

30 (100%) mentioned that there is no induction programme for new lecturers.

Suggestions for the cited challenges

It was revealed that the college should Capacity build the lectures in sign language

In addition, respondents mentioned that the college should provide the necessary teaching and learning aids

The findings also revealed that the college should employ the support staff that are required

Planning for induction programme was also among the cited suggestions revealed in the study.

T. How the trained students are incorporated in the industry

The study revealed that Employment Act 2019 and Disability Act 2015 guides deployment.

Teaching service mentioned that 10% of all positions are reserved to trained teachers with special needs. This is done in accordance with the 7th National Development plan which emphasizes on 'Leave no one behind'

Additionally, registration of teachers at TCZ also contend that special consideration is given to people with special needs. It is done in categories i.e., registration for Junior Secondary School teachers, Primary, ECE and Special Education teachers. The following are the considerations:

- Instead of 5 'O'-levels, 4 'O'-levels are considered and not so much emphasis on passing mathematics.
- Registration fee for Special Education teachers who are disabled is reduced

It was however difficult to establish how many teachers with special needs have been deployed in the teaching industry in the past 4 years because there was no database at TS and MOGE-HQ to show how many graduates with SEN have been employed.

U. Experiences of teachers with special needs in the industry

All the 30 respondents mentioned that SEN teachers in industry lack modern assistive technology devices like braille embossers, sign language interpreting machine and other advanced equipment for teaching.

Teachers with hearing impairment mentioned having difficulties to communicate with hearing colleagues not conversant with Sign Language (SL) as well as communicating with students when teaching.

The study also revealed inadequate braille materials and equipment for teaching and learning.

Respondents also mentioned lacking assistive technology to convert SL to oral language when teaching.

VI. DISCUSSION OF FINDINGS

A. Enrollment of students with special education needs at the Zambia Institute of Special Education (ZAMISE)

Findings revealed positive discrimination being used on enrollment. Similarly, Dimitrova-Radojichiki, & Chichevska-Jovanova (2018) and UNESDOC (1999) show that the increasing diversity of populations in many countries places demands on institutional structures to be responsive to the needs of diverse groups in communities. For this reason, Universities today are expected to be open to these new challenges. It has long been researched that Education is very important for an individual's success in life and this includes people with Special Education Needs (SEN). Obtaining a college degree is considered by many to be crucial to the pursuit of high-quality vocational opportunities. Although some existing higher education institutions are already providing for a range of students with different needs, others are looking into ways of creating a more supportive learning environment within their institution. In the case of the Zambia Institute of Special Education (ZAMISE), this support starts at the time of enrollment as positive discrimination is used. Students with SEN are enrolled on the basis of four 'O'-levels instead of the usual five. For those with hearing impairment English is not a requirement because it is a known fact that they have a challenge in this area especially those who are born with the impairment (Prelingual hearing loss).

It was reported that some members of staff were not aware of the use of positive discrimination and the advert for enrollment by the Ministry of General Education did not include that information. Some would be students and their families may not be aware because the information has not been widely spread to reach many. This shows that advertising has a crucial role in disseminating information to society. With the spring up like mushrooms of more teacher education Institutions ZAMISE has to be proactive in fully advertising its services. In contrast, Terkan (2014) argues that advertising serves as a tool for competition. In order to compete with others, companies use creative and appealing advertisements to lure consumers to patronize their brands. For this reason, being the only specialized institution ZAMISE can take up the challenge of encouraging more student with SEN to enroll and this can be achieved through creative and appealing strategies of advertising. This actually includes the advertising of the institution as participants observed that more needed to be done to advertise the college since most people did not know about it including heads of schools who are supposed to be part of those sensitizing the communities about the institution.

Though statistics were not given, students with SEN enrolled at the institution were much fewer than those without SEN. In the Disability survey of 2015, Prevalence of disability was estimated to be 10.9 per cent among adults (18+ years) and this is the age group that is enrolled at the institution. In a similar study Sachs & Schruer (2011) observed that, 'Despite the revolution in social and legislative policies on provision of equal opportunities for education and employment for people with disabilities, there is still a long way to go.'

In another similar study by Macleod and Cebula, (2009) on 'Experiences of disabled students in initial teacher education', it was reported that, from a historical point of view, the literature states that students with disabilities have been underrepresented in higher education. This study therefore suggests that while enrolment may not be equal, equity can be applied by having a certain percentage of slots for those with SEN and this can be achieved through establishment of a policy or guidelines for enrolment.

VII. HOW THE CURRICULUM IS DELIVERED TO STUDENTS WITH SPECIAL NEEDS

A. *Qualifications*

The research involved 30 respondents composed of six (6) males and twenty-four females (24). From the findings it is clear that two third of the respondents have master's degree while the other third has their first degree. Most of the first-degree holders are studying for their masters in various universities. Twenty four out of the thirty have worked for over 10 years while six have worked for less ten years. A verification of what some of the lectures are studying indicates that most of them are not learning special education or inclusive education which would help them fit in the special education institute there by making their teaching effective. Due to this factor, there is need for capacity building in special education to enable the lecturers deliver the curriculum content effectively.

V. *Human resource and CPD*

As regards to human resource, two thirds of the population are trained to handle SENs. The findings indicate that most of the lecturers who are handling other subjects outside special education are actually not trained in special education. This shows that lack of skills, knowledge and values of special education created a gap in the implementation of the curriculum for the SENs. In addition, the college does have continuous professional development (CPD) concerning special education. There is no written plan to train the new lecturers on the norms of special education or any related items. The attitude towards CPD by both administration and teaching staff is negative. Similarly, Muzata (2017) contends that special education teachers were not involved in the CDP except at implementation and they were implementing the revised curriculum amidst numerous challenges. This shows evidence that lack of involvement in the curriculum development process was linked to special education teachers' lack of understanding of key concepts necessary for curriculum implementation for learners with special educational needs (LSENs.).

W. *Teaching and assessment*

Results revealed that learners are taught inclusively. Similarly, the education reform document (1977), the focus on learning (1992) and Educating our future ((1996) support the inclusive education. Based on the guiding documents of the ministry of education, the learners are taught inclusively, using interpreters for the Hearing Impaired (HI). This means that inclusive classrooms are where learners with and without disabilities are educated in the same classrooms (Ministry of

Education; 2009a). The finding is also in line with Chitiyo and Mwansa (2018) who have elaborated on how special education learners are handled.

These results show us that in cases where the translators are not present, the lesson may not be successful because there would be communication breakdown. Sometimes the translators may not be specialized in the subject that they are translating. Therefore, the chances of not explaining exactly what the lecturer is discussing are high. Such a scenario may dilute the lesson and the lesson will end up not being as effective as was meant to be. Additionally, the lecturers mentioned that they did not have sufficient teaching and learning material to enable them deliver the curriculum effectively. They cited lack of braille paper, magnifying glasses for the VI. The other lecturers mentioned flip charts, markers among others. For this reason, a lack of teaching and learning material to illustrate a lesson has high chances of reducing the effectiveness of the lesson. Learners normally remembers what they see or touch whether they are living with disabilities or not. Similarly, Banda (2014) asserts that the absence of teaching and learning materials in a lesson has negative effects on the retention of knowledge. This is also supported by the social model of disability by Abberley, (1987) which indicates that it is the teaching and learning environment which unnecessarily isolates and excludes students with disabilities from full participation in the learning process.

As regards to assessment, the visually impaired, hearing impaired and regular students sit for same test and exams. However, the SENs are given an extra 30 extra minutes of the SENs. These findings are not in line with the Governments recommendation of 25% of the total time for the examination (Office of the Auditor General;2019). This means that learners with special education need to be given ample time for the exam because they are already disadvantaged.

X. *Challenges*

The cited challenges in curriculum delivery showed lack of teaching and learning materials such as Pecking's Braille and Embosser. In addition, there was insufficient human resource to handle the SENs. This situation would impact negatively on their education attainment. The school has brief meetings but no planned CPD. This makes it difficult for new lectures to work with learners.

Y. *Suggestions*

The college should Capacity build the lectures in special education. One way of doing it is by having deliberate programme to capacity build to make the lecturers more effective. The college can source for funds from the government or from Non-Governmental Organizations (NGOs) to sponsor lecturers to learn special education. The college can even have a memorandum of understanding with The University of Zambia.

The college should provide the necessary teaching and learning aids by for example, purchasing a new Perkins braille, an embosser, braille paper plus other materials.

The college should employ the support staff that are required to help in the teaching and learning processes.

College visitation to learn from others should be done. Initially, colleges used to gather in one place to induct the new lecturers or learn a new phenomenon. This does not happen anymore due to financial and lack of political will.

The college to plan and implement CPD programme. Adequate time to be spared and road map to be drawn for professional development activities.

The Government should fund the college adequately so that the later can run its programmes effectively.

Z. Incorporation of teachers with special needs in the industry

Article 27 of 'A report on the right of persons with disabilities to work' (n.d) states that 'persons with disabilities have the right to work just like anyone else. They have the right to choose what job they want to do. They have the right to have a real job and work alongside persons without disabilities.' In Zambia the Employment Act (2019) and Disability Act (2015) guides the recruitment process of people with SEN. Through the guidance of these policy documents the Ministry of General Education (MoGE) reserves 10% of all positions to trained teachers with SEN. This is in accordance with the 7th National Development plan which emphasises on 'leaving no one behind'. It was however, difficult to establish how many graduates with SEN have been recruited, for instance in the past four (4) years because there is currently no database at Teaching Service Commission (TSC) and MoGE Headquarters to show that. It was reported that this is one way of avoiding discrimination as statistics would show the people with SEN recruited. Inclusion of this information, however, would be important as it would assist in monitoring and evaluation of recruitment of teachers with SEN in the country. It would also give guidance on designing and implementing strategies that would advantage persons with SEN in the recruitment process as disparities have been observed. In support of this finding, a study by Cornell University (2013) states that, 'Policymakers and advocates for people with disabilities have sought for decades to understand the reasons for ongoing disparities in employment rates between people with and without disabilities. In another similar study by Bonaccio et al (2019), the results indicated that in the United States (US), only one in three (34.9%) individuals with disabilities are employed compared to 76% of their counterparts without disabilities and this disparity appears to be increasing. Findings revealed that Teaching Council of Zambia (TCZ) treats Special Education teachers just like any other when it comes to registration. However, trained Special Education teachers with a disability are given special consideration. This Special consideration includes, the requirement of four (4) 'O' levels instead of the usual five (5) and minimal emphasis is placed on a pass in mathematics. Secondly, the registration fee for Special Education teachers who are disabled is reduced. This is an indication that teachers with disabilities are fairly considered when it comes to deployment.

While consideration given to Special Education teachers with SEN in the recruitment process is highly acknowledged and appreciated, more needs to be done to incentivise all Special

Education graduate teachers regardless. The argument here is that there is need to encourage more student teachers to choose Special Education teaching as their career if the goal of achieving inclusiveness is to be achieved. Comparatively, studying to be a Special Education teacher is not a choice that any student easily makes as is the case with other disciplines.

What all these findings mean is that the Zambia Institute of Special Education (ZAMISE) and other stakeholders need to strengthen their collaboration among themselves and with Government in the area of Special Education if the goal of inclusiveness in this area is to be attained.

AA. Experiences of teachers with special needs in the industry

SEN teachers in industry lack modern assistive technology devices to enable them to teach. They also experience difficulties to communicate with hearing colleagues who are not conversant with Sign Language. Similarly, Chikopela and Ndhlovu (2016) study showed that lack of materials and competence in sign language adversely affected the learners with hearing impairment academic progression.

The study also revealed inadequate braille materials and equipment coupled with unavailable assistive technology to convert SL to oral language when teaching. In support of this finding, Abberley, (1987) social model of disability shows that it is the society which disables physically impaired people due to unsupporting structures and systems. This implies that if all the necessary equipment and services were availed to teachers in the industry, delivery of lessons to the learners would be successful.

VIII. CONCLUSION AND RECCOMENDATIONS

In conclusion, the employment ACT of 2019 and Disability Act guides the employment of teachers with special needs. 10% of positions are reserved for graduates with disabilities. However due to lack of modern equipment and teaching materials, teachers in the teaching industry have challenges in delivering the curriculum effectively.

This study therefore recommends:

- Institutions to build capacity in lectures in sign language and braille
- Institutions to plan for induction programmes.
- MOGE to provide necessary teaching aids and assistive technology devices to institutions of learning.
- MOGE to include information on positive discrimination for persons with special needs on the recruitment advert

REFERENCES

P. Abberley, The concept of oppression and the development of a social theory of disability. Disability, Handicap and Society, 1987 2:5-20.

- D. Banda, Accessibility to the general curriculum by learners with Special Education Needs. Lusaka, UNZA 2014.
- S. Bonaccio, E. Connelly, I.R. Gellatly, A. Jetha, and M. Gini, The participation of people with Disabilities in the Workplace Across the Employment Cycle: Employer Concerns and Research Evidence, 2019 [Journal of Business and psychology 35:135-158
<https://doi.org/10.1007/s10869-018-9602-5>, 2020]
- R. Chikopela, and D. Ndhlovu, Teaching materials in phonology for pupils with hard of hearing in selected schools of Chongwe District, Lusaka province, Zambia. *International Journal of Multidisciplinary Research and Development*, 3. (Online ISSN: 2349-4182) PP121-125, 2016.
- M. Chitiyo, and F. C. Muwana, Positive developments in special education in Zambia and Zimbabwe. *International Journal of Whole Schooling*, 14(1), 93 – 115. *International Journal of Whole Schooling*. vol. 14, no, 2018.
- Cornell University, *Research brief: Employer Practices and the Employment of People with Disabilities: Scoping the Literature*.
<https://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1352&context=edicollect>, 2013.
- Dimitrova-Radojchiki, D. and Chichevska-Jovanova, Higher Education of Students with Disabilities: a Literature Review.
<https://www.researchgate.net/publication/329655350>, 2018.
- Laws of Zambia: <https://zambialaws.com/principal-legislation/chapter-65persons-with-disabilities-act>
- G. Macleod, G. and K.R. Cebula, Experiences of disabled students in initial teacher education. *Cambridge Journal of Education*, 39, pp. 457-472.
<https://www.tandfonline.com/doi/abs/10.1080/03057640903352465>, 2009.
- J. W. Madaus, The History of Disability Services in Higher Education.
<https://onlinelibrary.wiley.com/doi/epdf/10.1002/he.429>, 2011.
- Ministry of Education, *Education reform document*. Lusaka, Zambia: Author, 1977.
- Ministry of Education, *Focus on learning: Policy paper on Zambian education*. Lusaka, Zambia: Author, 1992.
- Ministry of Education, *Educating our future: National policy on education*. Lusaka: MOE, 1996.
- Ministry of Education, *Educational statistical bulletin*. Lusaka, Zambia: Directorate of Planning and Information, 2009a.
- K. K. Muzata, Curriculum implementation for learners with special education needs: the case of selected inclusive and special schools in Zambia, *University of South Africa, Pretoria*, and <http://hdl.handle.net/10500/24571>, 2017.
- Office of the Auditor General, Performance Auditor of preparedness for Implementation of sustainable development goals in Zambia in the period 2014 -2018, 2019.
- P. A. Ojala, *Qualitative Study of Special Education Teachers' Views and Classroom Practice*. Pro Gradu Thesis, Department of Special Education, University of Jyväskylä, Autumn 2004
- S. Riddell, and E. Weedon, Disabled students in higher education: Discourses of disability and the negotiation of identity.
<https://www.sciencedirect.com/science/article/pii/S0883035513000487>, 2013.
- D. Sachs, and N. Schruer, Inclusion of Students with Disabilities in Higher Education: Performance and participation in student's experiences.
<https://dsq-sds.org/article/view/1593/1561>, 2011.
- M. Shevlin, M. Kenny, and E. Cneela, Participation in higher education for students with disabilities: An Irish perspective.
https://www.researchgate.net/publication/248912776_Participation_in_higher_education_for_students_with_disabilities_An_Irish_perspective, 2004.
- P. T. Sindelar, D.J Pua, M.T Brownell, L. Maso-Williams, "The demand for special education teachers in rural schools revisited: an update on progress", in the *Rural Special Education Quarterly*, 37(1) 12-20, 2018.
- R. Terkan, Importance of creative Advertising and marketing According to University Students' perspectives. *International Review of Management and Marketing Vol. 4, No. 3, 2014*, pp.239-246 ISSN: 2146-4405 www.econjournals.com 239.
<https://www.econjournals.com/index.php/irmm/article/viewFile/882/pdf>, 2014.
- U.N (n.d). A report on the right of persons with disabilities to work.
https://www.ohchr.org/Documents/Issues/Disability/SubmissionThematicStudy/StudyEasytoRead_en.pdf
- UNESDOC, Provision for students with disabilities in higher education: a survey.
<https://unesdoc.unesco.org/ark:/48223/pf0000128761>, 1999.
- United nations:Envision2030: 17 goals to transform the world for persons with disabilities
<https://www.un.org/development/desa/disabilities/envision2030.html>
- A. Vlachou, and L. Barton, "Inclusive Education: Teachers and the Changing Culture of Schooling", in the *British Journal of Special Education*, (21), pp 105, 1994.
- Zambia National Disability Survey
<https://www.unicef.org/zambia/reports/zambia-national-disability-survey-2015>.

APPLYING THE THEORY OF PLANNED BEHAVIOUR (TPB) IN VILLAGE CHICKEN FARMERS' COMMERCIALISATION INTENTION – EVIDENCE FROM NORTH WESTERN ZAMBIA

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This paper contributes to the smallholder agriculture commercialisation literature by applying the Theory of Planned Behaviour in a developing country context. The study examines the influence of attitude, subjective norms and perceived behavioural control on the commercialisation Scaling Up intent among smallholder village chicken farmers in North-western Zambia. Furthermore, the mediating role of commercialisation practices intention is examined. Based on a quantitative correlational design, primary sample data were collected using a structured questionnaire from 556 village chicken smallholder farmers from two farming blocks in North-western Zambia. The data were analysed using statistical correlation and regression models. The findings indicate that attitudes, subjective norms, perceived behavioural control as well as commercialisation practices intention have unique positive significant effects on commercialisation practices intention (CPI) and CPI in turn positively influences commercialisation scaling-up intention (CSI). Notwithstanding the research limitations such as the study being cross-sectional and based on one district in Zambia, the findings have important implications. For policy makers and enterprise support institutions, understanding the socio- psychological factors of smallholder farmers are important before introducing any interventions to promote commercialisation of the village chicken. Additionally, for scaling-up to occur, there is need to encourage farmers to adopt commercialisation practices in management, investment and marketing. This would increase chances of transitioning from subsistence to commercial farming. The study is among the first to apply the theory of planned behaviour in the village chicken value chain in the under-researched Zambian context.

Keywords: commercialisation, village chicken, commercialisation practices. intention

I. BACKGROUND

It is well-documented in the literature that a majority of indigenous chicken farmers in Sub-Saharan Africa are mostly subsistence and very few have transitioned to rear indigenous chickens at commercial level despite the potential presented by the indigenous chickens [1]–[3]. There is also evidence which shows that a majority of the farmers (over 80%) in rural Africa keep indigenous chickens [4]–[6]. In Zambia, it is estimated that 84.4% of rural households keep village chickens [7]. It is also

evident in the literature that there has been a growing demand for the village chicken and the demand remains unsatisfied [2], [6]. The increased demand presents an opportunity for the rural farmers to generate income for themselves and therefore the need for them to transition from subsistence rearing to commercial rearing of the indigenous chickens. The attractiveness of the proposition for farmers to make the transition is because consumers do not only prefer indigenous chickens but are also willing to pay a premium price for them [2], [6]. Additionally, rearing indigenous chickens is not a seasonal business and farmers can rear them all year round and thereby provide a continuous flow of income unlike if they were just to depend on seasonal crops.

While a lot of studies have focused on looking at the technical aspects of improving the productivity or marketing of the indigenous chicken [8], [10]–[12], very few if not none at all have looked at how commercialisation behaviour can be developed among indigenous chicken farmers. [13] pointed out that research has not to date been nuanced around understanding how farmers can adopt business approach in their farming operations.

It is evident that little work has been done on the socio-psychological behaviour of farmers with regard to adoption of commercialisation behaviour for indigenous chickens. This study adopts the Theory of Planned Behaviour to understand smallholder indigenous chicken farmers' intentions to commercialise. The use of psychological models in farmer decision making is widely supported and this is evident from [14] who stated that;

“Economic models have been applied to human decision making for many years; however, humans are not financially rational beings and other characteristics of the decision maker (including attitude) and the pressure that people perceive to behave in a certain way (subjective norms) may influence decision making; these are characteristics considered by social psychologists interested in human decision making.”

The motivation of this study is therefore to use a social-psychological approach to understand the levels of commercialisation intention among the smallholder farmers of village chicken in Solwezi district of North-western Zambia.

This study has been organised in six sections. Section two of the study reviews the literature of the relevant study concepts as well as development of hypotheses. The third section discusses the methods that were employed in the study. In the fourth section, analyses are carried out while section five looks at a discussion of the results. Lastly, section six looks at the contribution of the study to the body of knowledge and the practical implications to diverse stakeholders.

III. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

This section will review the literature on agricultural commercialisation, business development services as well as the Theory of Planned Behaviour (TPB). Additionally, hypothesis and a conceptual model will be developed.

A. Agricultural Commercialisation and Commercialisation Behaviour

Agriculture commercialisation has without doubt taken centre stage and recognition in the smallholder agriculture and rural development discourse [3]. There are various definitions and perspectives of what agricultural commercialisation is really about. [15] argued that a lack of clarity about what agriculture commercialisations mean may give rise to misconceptions and evoke fears that may obstruct the passage of policy into practice. Some view commercialisation as managing or exploiting resources in a way to make profit [3]; [16] define commercialization as a transition from mostly subsistence agriculture (based on production for own consumption) to production for the market, i.e. both local and export markets. Others argue that commercialisation extends beyond the profit motive and this was pointed out by [17]:

“Agricultural commercialization means more than the marketing of agricultural output; it means the product choice and input use decisions are based on the principles of profit maximisation. Commercial reorientation of agriculture occurs for the primary staple cereals as well as for the so-called high value cash crops. On the input side, commercialization implies that both traded and non-traded inputs are valued in terms of their market value.”

The view of just restricting commercialisation by just focusing on producing for the market is a narrow view. It is therefore important to embracing a broader view of commercialisation which entails not only focusing on the marketing of agricultural output but also on product choice, input decisions and profit maximisation. This is the view that farmers of indigenous chickens and policy makers alike must embrace and it is a view that has been adopted in the study.

Having defined commercialisation, it is important to look at what entails commercialisation behaviour. Farmers are likely to exhibit different behaviours based on the production systems that they are pursuing or perspectives. Table 1 below shows the different production systems and the respective behaviours.

Table 1: Characteristics of food production systems with increasing commercialisation

Level of Market Orientation	Farmer's objective	Sources of inputs	Product mix sources	Income Sources
Subsistence systems	Food self-sufficiency	Household generated (non-traded)	Wide range	Predominantly Agricultural
Semi-commercial systems	Surplus generation	Mix of traded and non traded inputs	Moderately specialised	Agricultural and non-agricultural
Commercial systems	Profit maximisation	Predominantly traded inputs	Highly specialised	Predominantly non-agricultural

Source: Reproduced from [17]

The majority of the village chicken farmers in Zambia will fall into the subsistence system as the farmers primary objective is food sufficiency, the inputs are usually household generated (non-traded), have a wider product mix and the income sources are predominantly agricultural. [2] confirmed this subsistence status by stating that a majority of the rural households in Zambia keep flocks of indigenous chickens with little inputs. [18] noted that the greatest constraint for agricultural commercialisation in Zambia is that there is a lack of a business-oriented approach among the smallholder farmers and that most smallholders view agriculture as a way of life and not as a business.

The need for the smallholder farmers of village chicken to transition from subsistence to semi commercial and eventually to commercial systems is inevitable because of the huge potential presented by the village chicken. [3] posits that enhancing the production and productivity of indigenous chickens can accelerate development of the rural social economy as indigenous chickens are a viable income earner. Having a semi-commercial or commercial orientation therefore means that the farmer must be able to practice some of the suggestions put forward by [17] as depicted in Table 1.

B. Theory of Planned Behaviour and Farmer Commercialisation Behaviour

The theory of planned behaviour (TPB) was proposed by [19] and is an extension of the theory of reasoned action. This theory postulates that the best predictor of behaviour is intention and intention is influenced by three antecedents namely, attitude towards behaviour, subjective norms and perceived behavioural control. The appropriateness of this theory in studies regarding farmer decision making has been recommended by several scholars. The use of the TPB has been extensive in several studies involving farmers' behaviour e.g., [14], [20]–[22]. [21] acknowledged that the theory of planned behaviour is a pertinent theory to use in the analysis of farmers' decision making and behaviour. The use of TPB in studying indigenous chicken farmer commercialisation behaviour is thus appropriate.

The TPB model consists three independent latent constructs namely attitudes, subjective norms and perceived behavioural control. [23] posits that the TPB states that to sufficiently predict behaviour, the combined role of attitude, social pressures and the perceived difficulty in carrying out the action are important. The different definitions of the various components of the TPB model as defined by [19] follow below;

Attitude - attitude toward the behaviour refers to the degree to which a person has a favourable or unfavourable evaluation or appraisal of the behaviour in question. If an individual perceives that performance of a certain behaviour is likely to lead to an unfavourable outcome, it is very likely that they will not perform that behaviour.

Social Norms – refers to the perceived social pressure to perform or not to perform the behaviour. The pressure of what

the important others (such as friends, family and fellow farmers e.t.c.) think about adopting the innovation or practice has a bearing on adopting or not adopting the innovation. The role of important others in non-adoption of a particular innovation could be because an innovation may against a cultural norm or has negative externality to neighbours. For example, most village chickens are grown using the free extensive system where the chickens are left to scavenge for food without control and this might lead to destruction of garden crops belonging to a farmer's neighbour. Growing village chickens on a commercial basis using the extensive system might cause misunderstandings in the neighbourhood and the neighbours can advocate against this practice because the village chickens may be destroying their crops in the gardens.

Perceived Behavioural Control (PBC) – perceived behavioural control refers to people's perception of the ease or difficulty of performing the behaviour of interest. [19] further clarifies that perceived behavioural control is dependent on the resources and opportunities (e.g., time, money, skills, cooperation of others; available to a person in order to achieve a certain behavioural undertaking. Furthermore, PBC is assumed to reflect past experience as well as anticipated impediments and obstacles that an individual is likely to face when performing a certain behaviour [19].

Behavioural Intentions – the perceived likelihood of performing the behaviour. [19] further elaborates that intentions are indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behaviour. It follows therefore that the stronger the intention to engage in a behaviour, the higher the likelihood that it will be performed. In our suggested model, behavioural intentions is represented by the commercialisation scaling up intention as depicted in figure 1.

C. Commercialisation Practices Intention

An addition to the conceptual model proposed by [19] is the commercialisation practices intention construct. In order for village chicken farmers to commercialise, there are certain commercialisation practices that they need to adopt. Commercialisation practices intention therefore looks at the perceived likelihood that farmers are likely or willing to adopt commercialisation practices in order for them to transition from subsistence to commercial farming. The practices that farmers adopt or do not adopt have an implication in terms of the productivity and marketing of village chickens at commercial level. For example, [3] observed that farmers need to strengthen animal husbandry practices to reduce mortality and enhance productivity and that commercialisation can be promoted by feed supplementation and medicines.

The commercialisation practices intention construct in our model is a composite of three practices namely;

- i) Management practices intent – Refers to intention to adopt practices to do with feeding, health and housing of the village chickens. A failure to embrace management practices is a recipe for low village chicken productivity and therefore hampers any commercialisation prospects. [24] point out that poor management practices on feeding, housing and disease control of village chicken represent one of the constraints to increased productivity.
- ii) Investment practices intent – refers to intention to adopt practices to do with investing resources and time in the village chicken venture for production and marketing

purposes. A common description in the literature that characterise village chicken production is that it is a low input-low output system. Some of the areas where it is essential to invest include feeding, housing, health and marketing of village chickens. [25] noted that the conditions for successful commercial sector in poor countries are missing and these include the ability to purchase quality feed, vaccines, drugs and equipment. In their study, [10] in an attempt to signify the importance of investment, posited that lack of use of external or purchased inputs is another barrier that limits village poultry production. The point noted above is in line with [17] who characterise or emphasise the need to use traded input for commercially oriented farmers.

- iii) Marketing practices intent – intention to adopt practices such as sales record keeping, proactively searching for customers, use of collective marketing techniques and use of weighing scale. Poor marketing management practice was identified as one of the constraints of village poultry production by [26]. It has also been noted that well-organized marketing of indigenous chickens is difficult due to the small flock sizes reared by farmers (Chandraschka1998).

In summing up the theory of planned behaviour, [23] posits that the more positive the attitude, subjective norm and perceived behavioural control, the greater the likelihood an individual has of intending to carry out the behaviour when the opportunity arises. Based on this summary, we therefore hypothesize the following relationships;

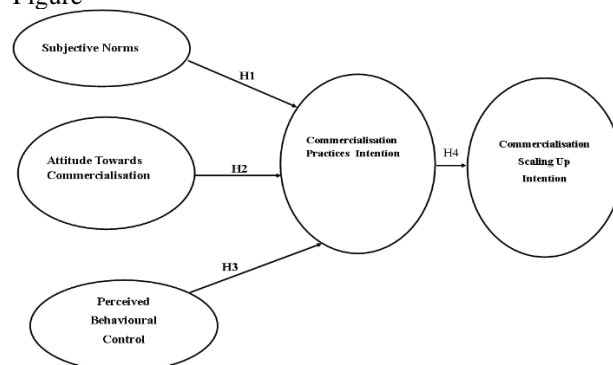
H1 – There is a positive relationship between subjective norms and commercialisation scaling-up intention

H2 – Attitude towards commercialisation positively influences the commercialisation scaling-up intention

H3 – There is a positive relationship between perceived behavioural control and commercialisation scaling up intention

H4 – The influence of subjective norms, attitudes and perceived behavioural control on commercialisation scaling-up intention is mediated by commercialisation practices intent.

Figure



IV. METHODS

This section of the study outlines the method that have been employed in the study.

A. Study Area

The study was conducted in Solwezi district of North Western Zambia. Solwezi district was selected because it is the new mining hub in Zambia which is situated in a province that is

referred to as the “new Copperbelt” because of the booming mining activities. Two farming blocks namely St Francis farming block and Mutanda farming block were selected from the district as study sites. Each farming block is made up of camps and each camp is made of farming zones.

B. Study design

A quantitative cross-sectional design was employed in the study.

C. Sampling

A multi-stage stratified sampling technique was employed. In the first stage, clusters of 20 village chicken farmers were purposively identified using the agricultural extension staff as there were no official registers that captured the names of farmers engaged in village chicken production. [6] made an observation regarding the non-existence of official records for the village chicken in Zambia as follows;

“In Zambia, no national livestock census has been conducted for almost 20 years. Estimates from the National Livestock Epidemiology and Information Centre (NALEIC) either do not include poultry at all, or do not disaggregate figures into poultry groups, or chicken types (i.e. indigenous or commercial).”

Further [27], observed that for the poultry sub-sector, there are no comprehensive or validated lists of individuals (farmers or laborers in agriculture/agribusiness) across the country.

Prior to collecting the data, 20 indigenous chicken farmers were selected from each farming zone in the two farming blocks to take part in the study. A total of 960 village chicken farmers were supposed to register and take part in the study from 48 zones but only 912 farmers from 46 zones registered. Out of the 912 targeted households, only 556 respondents showed up during the scheduled days for the interviews.

D. Data collection

A total of 556 questionnaire surveys were completed by farmers coming from 46 farming zones of two farming blocks (Mutanda farming block and St Francis farming block) between 25th June, 2019 and 15th July, 2019. Data was collected using SurveyCTO collect. In recruiting enumerators, only those who understand the local language (kii Kaonde) were recruited trained before the data was collected. Furthermore, the instrument was translated into Ki Kaonde to ensure consistency and reduce the chances of losing meaning. The questionnaire was piloted prior to administering it among village chicken farmers in another zone that was not part of the study in order to ensure that the respondents understood what was being asked.

E. Data Analysis

SPSS version 25 was used to analyse the data as well as the process add-on developed by Andrew F Hayes in mediation analysis.

F. Reliability Test

A reliability test was done to assess the internal consistency of the items in the instrument in order to address issues of validity as per Table 3. The questions in the instrument were adapted as there is currently no study (based on our knowledge) that has looked at commercialisation intention and behaviour in the village chicken value chain. All Cronbach’s Alpha values were

above the minimum threshold of 0.70[28] (refer to table 3 in the appendix).

V. RESULTS

The sample profile shows that a total of 556 farmers responded and it comprised 286 females and 270 males. The majority (66%) of the farmers were above the age of 40 which shows that farming among the young age group is not a famous occupation. The education profile of the farmers indicates that a majority of the farmers fall in the category of primary education or no education at all (62.6%). Those that attained Junior secondary school were only 24.3% while those who attended secondary school were 12.4%. Those that attended tertiary education were a paltry 1%.

Table 2: Farmer and Respondent Profile Information

Characteristic	Description	Frequency	Percent	Cummulative Frequency Percent
Gender	Female	286	51.4	51.4
	Male	270	48.6	100.0
Age Groups	30 and Below	63	11.3	11.3
	31 to 40	126	22.7	34.0
	41 to 50	157	28.2	62.2
	51 to 60	112	20.1	82.4
	61 to 90	98	17.6	100.0
Education Level	None	46	8.3	8.3
	Primary	302	54.3	62.6
	Junior	135	24.3	86.9
	Secondary	69	12.4	99.3
	Senior			
	Secondary			
	College	4	0.7	100.0
Marital Status	Not married	111	20.0	20.0
	Married	445	80.0	100.0
Household Type	Female headed	101	18.2	18.2
	Male headed	455	81.8	100.0

In terms of marital status, a majority (80%) of the respondents were married while only 20% are unmarried. In terms of household type, 82% were male headed while only 18% were female headed.

A. Correlation Analysis

A correlation analysis was conducted to determine the strength as well as the direction of the relationships among all the variables. The results of the correlation analysis are depicted in Table 3 (see correlations matrix in appendix 8.2) and it shows the correlations, means and standard deviations of the dependent variable (commercialization scaling-up intention), independent variables (subjective norms, attitude towards commercialization, perceived behavioral control), proposed mediator (commercialization practices intention) and control variables (age group, marital status, education level, household type and gender). The results in Table 4 show low to medium correlations among the independent variables and this confirms that multicollinearity is not a problem as it only exists when ($r=.9$ and above) [28].

The correlations for the control variable show that all the control variables are positively correlated with commercialisation practices intention but only gender and education level are statistically significant.

In terms of the independent variables, Table 4 shows that the commercialisation practices intention of the farmers is positively significantly correlated (all sig. ≤ 0.01) with each antecedent of commercialization practices intention i.e. subjective norms ($r = 0.276$), attitude towards commercialization ($r = 0.631$) and perceived behavioural control ($r = 0.652$). The effect sizes are generally small to large based on Cohen's criteria i.e. small = 0.10 to 0.29, medium .30 to 0.49 and large = 0.50 to 1.00 [29].

B. HIERACHICAL MULTIPLE REGRESSION

A hierarchical multiple regression analyses was conducted in order to predict the overall dependent variable (commercialisation scaling-up intention). The predicting variables in the model were three (attitude towards commercialisation, subjective norms and perceived behavioural control) and one mediating variable (commercialisation practices intent). As can be seen from Table 5 (see appendix 8.3), preliminary checks were undertaken and multicollinearity is not a problem as the Variance Inflation Factor (VIF) for all the control and predictor variables were all below 10 as per the recommended norm [28].

Model 1 shows the base model with control variables only i.e. gender, age, marital status and household type. The control variables make a collective significant contribution of the multiple coefficients of determination (R-Squared) of 2.1% and multiple correlation coefficient of (R) 0.145, representing a combined small effect size. In terms of the individual contribution of each control variable, only gender was significant and the rest were not. The overall model is also significant with an F score of 2.353 and df (7, 548).

In model 2, in addition to the control variables, subjective norms are introduced and a significant combined effect occurs (R-squared = 7.2% from 2.1%), with $R = 0.267$ representing a combined medium effect size. Individually, only gender and subjective norms make a significant contribution. The overall model is significant with an F score of 7.047 and df (6, 549).

In model 3, in addition to the control variables and subjective norms, attitude towards commercialisation is introduced. The introduction of attitude towards commercialisation to the model in model 3 leads to a significant combined effect of R-squared of 18.9% from 7.2%), with $R = 0.435$ representing a combined medium effect size. Individually, only gender and attitude towards commercialisation make a significant contribution. The overall model is significant with an F score of 18.261 and df (7, 548).

In model 4, in addition to the control variables, subjective norms and attitude towards commercialisation, a new variable i.e. perceived behavioural control is introduced. The introduction of perceived behavioural control leads to a significant combined effect of (R-squared = 23.9% from 18.9%), with $R = 0.489$ representing a combined large effect size. Individually, only attitude towards commercialisation and perceived behavioural control make a statistically significant contribution. The overall model is significant with an F score of 21.472 and df (8, 547). Lastly in model 5, in addition to the control variables and independent variables (subjective norms and attitude towards

commercialisation and perceived behavioural control), a new mediating variable, commercialisation practices intention (CPI) is introduced. The introduction of commercialisation practices intention (CPI) leads to a significant combined effect of (R-squared = 54.1% from 23.9%), with $R = 0.735$ representing a combined large effect size. Individually, only attitude towards commercialisation and commercialisation practices intention make a statistically significant contribution. The overall model is significant with an F score of 71.450 and df (9, 546).

Interestingly, subjective norms do not just make a significant contribution but also changes in sign from positive to negative.

The reduction of the regression coefficient for subjective norms (from Beta = 0.274 in model 2 to Beta = - 0.000 in model 3) when attitude towards commercialisation is introduced in the model can mean possible mediation as suggested by some scholars [30], [31].

In model 4, in addition to the control variables, subjective norms and attitude towards commercialisation, a new variable i.e. perceived behavioural control is introduced. The introduction of perceived behavioural control leads to a significant combined effect of (adjusted R² = 50.8% from 40.7%), with $R = 0.717$ representing a combined large effect size. Individually, only gender, subjective norms, attitude towards commercialisation and perceived behavioural control make a statistically significant contribution.

Model 4 shows how in totality how the variables effect commercialisation practices intention. All the three independent variables (subjective norms, attitude and perceived behavioural control) and one control variable i.e. gender make a statistically significant contribution to commercialisation practices intention. It must be noted however that out of all the variables that make a statistically significant contribution, only subjective norms made a negative contribution with beta = 0.0225.

Perceived behavioural control (beta = 0.302) makes the largest contribution in predicting the model, followed by attitude towards commercialisation (beta = 0.387). Subjective norms (beta = -0.076) make the least contribution to the model. Overall, the independent variables account for 54.1% variability in the dependent variable.

C. Table 6 – Summary of Hypothesis Testing

A summary of the results testing the different study hypotheses are captured in table 6 (see appendix 8.4). The summary shows that all four hypothesised relationships have been supported.

VI. DISCUSSION

It is evident from the study findings that subjective norms, attitude towards commercialisation and perceived behavioural control each significantly influence the commercialisation practices intent of the village chicken farmers. This therefore leads to the conclusion that the proposed conceptual model has been supported which hypothesizes that each of the antecedents of commercialisation intention significantly influences commercialisation practices intention which in turn influences commercialisation scaling up intention. Firstly, subjective norms do significantly influence commercialisation practices intention positively with a correlation's coefficient of 0.276. It should be noted ,however, that the relationship between subjective norms and commercialisation practices intention is

the weakest among the antecedents and this finding is consistent with other results in the extant literature [32].

Secondly, as can be seen from Table 6, H2 which states that attitude towards commercialisation positively influences commercialisation practices intention is fully supported. This conclusion is in line with the conceptual model (figure 1). This finding is consistent with prior studies linking attitude with intention, [33] in Mexico; [21] in Brazil and [34] in the Netherlands.

Thirdly, hypothesis 3 suggested that there is a positive relationship between perceived behavioural control and intention to engage in commercialisation practices that enhance village chicken commercialisation. This hypothesis is also supported as per the conceptual model and results in Table 3. These results are consistent with prior studies in the literature done by [21]. [21] posited that the higher the perceived capability to adopt a practice, the greater the intention of farmers to use this practice.

Hypothesis 4 which indicates that commercialisation practices intention positively influences commercialisation scaling up intention has also been supported. The hierarchical multiple regression also shows that commercialisation practices intention makes a contribution of 30.2% to the final variability of 54.1% in commercialisation scaling-up intent. The overall 54% of variability explained in CSI is significant as a majority of studies where the TPB has been applied have only explained about 39% of the variance in intention [32].

VII. CONTRIBUTIONS AND PRACTICAL IMPLICATIONS

While the literature is replete with the application of the theory of planned behaviour in various areas of agriculture such as conservation, dairy, natural grassland adoption, agriculture technology adoption etc., few or no studies have used this model to study village chicken farmer related decisions. This study is therefore among the first if not the first to apply this model in village chicken commercialisation.

The second contribution made is that this study examined the mediation effect of commercialisation practices intention and is a pioneer in that regard.

A. Practical Implications

The biggest contributor in predicting the commercialisation practices intention model was attitude towards commercialisation and perceived behavioural. It is therefore important for policy makers and development agencies to pay particular attention to the attitudes that the farmers have and the perceived behavioural control before any interventions promoting village chicken commercialisation are introduced. The implication is that if farmers attitude towards village chicken commercialisation is unfavourable, the likelihood that they will develop any intention to pursue commercialisation is reduced. Furthermore, if the farmers perceive that they do not have control of factors that could facilitate or inhibit the commercialisation of the village chicken, this reduces the likelihood of engaging in village chicken commercialisation.

The second implication of this study for policy makers and development agencies is that the mediating role of commercialisation practices intention should not be ignored. It is cardinal to promote the adoption of commercialisation

practices among the village chicken farmers as a prerequisite to actualise commercialisation behaviour. The village chicken value chain has largely remained a low-input low output system because of failure on the part of farmers to embrace commercialisation practices such as good management practices, good investment practices and good marketing practices.

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REFERENCES

- [1] B. J. J. Siyaya and M. B. Masuku, "Factors Affecting Commercialisation of Indigenous Chickens in Swaziland," *J. Agric. Stud.*, vol. 1, no. 2, p. 86, 2013.
- [2] R. Bwalya and T. Kalinda, "An Analysis of the Value Chain for Indigenous Chickens in Zambia's Lusaka and Central Provinces," *J. Agric. Stud.*, vol. 2, no. 2, p. 32, 2014.
- [3] D. Maumburudze, J. Mutambara, P. Mugabe, and H. Manyumwa, "Prospects for commercialization of indigenous chickens in Makoni District, Zimbabwe," *Livest. Res. Rural Dev.*, vol. 28, no. 4, pp. 1–13, 2016.
- [4] E. F. Guèye, "The role of family poultry in poverty alleviation, food security and the promotion of gender equality in rural Africa Women and family poultry production in rural," *Outlook Agric.*, vol. 29, no. No. 2, pp. 129–136, 2000.
- [5] J. C. Riise, K. N. Kryger, D. S. Seeberg, and P. F. Chistensen, "Impact of smallholder poultry production in Bangladesh – 12 years experience with Danida supported livestock projects in Bangladesh. Copenhagen, Danida, Ministry of Foreign Affairs.," 2005.
- [6] K. Queenan et al., "An appraisal of the indigenous chicken market in Tanzania and Zambia. Are the markets ready for improved outputs from village production systems?," *Livest. Res. Rural Dev.*, vol. 28, no. 10, 2016.
- [7] IAPRI, "Rural Agricultural Livelihoods Survey: 2015 Survey Report," 2015.
- [8] K. Queenan et al., "An appraisal of the indigenous chicken market in Tanzania and Zambia. Are the markets ready for improved outputs from village production systems," *Livest. Res. Rural Dev.*, vol. 28, no. 10, 2016.
- [9] R. Bwalya and T. Kalinda, "An Analysis of the Value Chain for Indigenous Chickens in Zambia's Lusaka and Central Provinces," *J. Agric. Stud.*, vol. 2, no. 2, p. 32, 2014.
- [10] A. Hailemichael, B. Gebremedhin, and A. Tegegne, "Status and drivers of village poultry production and its efficiency in Ethiopia," *NJAS - Wageningen J. Life Sci.*, vol. 83, no. July, pp. 30–38, 2017.
- [11] A. Hailemichael, B. Gebremedhin, S. Gizaw, and A. Tegegne, "Analysis of village poultry value chain in Ethiopia: Implications for action research and development," p. 578, 2016.
- [12] T. Dessie and B. Ogle, "Village poultry production systems in the central highlands of Ethiopia.," *Trop. Anim. Health Prod.*, vol. 33, no. 6, pp. 521–537, 2001.
- [13] A. Yaseen, K. Bryceson, and A. N. Mungai, "Commercialization behaviour in production agriculture: The overlooked role of market orientation," *J. Agribus. Dev. Emerg.*

Econ., vol. 8, no. 3, pp. 579–602, 2018.

- [14] F. A. V. St. John, G. Edwards-Jones, and J. P. G. Jones, "Conservation and human behaviour: Lessons from social psychology," *Wildl. Res.*, vol. 37, no. 8, pp. 658–667, 2010.
- [15] J. Leavy and C. Poulton, "Commercialisations in agriculture," *Ethiop. J. Econ.*, vol. 16, no. 1, pp. 1–37, 2007.
- [16] M. Rukuni, P. Tawonezvi, C. Eicher, M. Munyuki-Hungwe, and P. Matondi, "Zimbabwe's agricultural revolution revisited," *Univ. Zimbabwe Publ. Harare*, pp. 119–140, 2006.
- [17] P. L. Pingali and M. W. Rosegrant, "Agricultural commercialization and diversification: processes and policies," *Food Policy*, vol. 20, no. 3, pp. 171–185, 1995.
- [18] B. P. Siegel, "Profile of Zambia's Smallholders: Where and Who are the Potential Beneficiaries of Agricultural Commercialization?," *Africa Reg. Work. Pap. Ser.*, no. 113, p. 63, 2008.
- [19] I. Ajzen, "The theory of planned behavior," in *Organizational behavior and human decision processes*, vol. 50, no. 2, San Diego, 1991, pp. 179–211.
- [20] J. Beedell and T. Rehman, "Using social-psychology models to understand farmers' conservation behaviour: The relationship of verbal and overt verbal responses to attitude objects," *J. Rural Stud.*, vol. 16, pp. 117–127, 2000.
- [21] J. Augusto, R. Borges, A. G. J. M. Oude, C. Marques, and V. Lutke, "Understanding farmers intention to adopt grassland using the theory of planned behavior," vol. 169, pp. 163–174, 2014.
- [22] J. Wang, M. Chu, Y. yuan Deng, H. Lam, and J. Tang, "Determinants of pesticide application: an empirical analysis with theory of planned behaviour," *China Agric. Econ. Rev.*, vol. 10, no. 4, pp. 608–625, 2018.
- [23] C. Hattam, "Adopting Organic Agriculture: An Investigation Using the Theory of Planned Behaviour," *Int. Assoc. Agric. Econ. Conf.*, p. 16, 2006.
- [24] S. Zewdu, B. Kassa, B. Agza, and F. Alemu, "Village chicken production systems in Metekel zone, Northwest Ethiopia," *Wudpecker J. Agric. Res. ISSN*, vol. 2, no. 9, pp. 2315–7259, 2013.
- [25] R. G. Alders and R. A. E. Pym, "Village poultry: Still important to millions, eight thousand years after domestication," *Worlds. Poult. Sci. J.*, vol. 65, no. 2, pp. 181–190, 2009.
- [26] "2005_Mapiye and Sibanda_Constraints and opportunities of village chicken production systems in the smallholder sector of Rushinga district of Zimbabwe.pdf." .
- [27] S. B. Krishnan and T. Peterburs, "Jobs in Value Chains - Zambia," *World Bank Jobs Ser. Issue No. 6. Oppor. Agribus.*, no. 6, 2017.
- [28] J. Pallant, *SPSS Survival Manual - A Step by Step Guide to Data Analysis Using IBM SPSS*, 6th ed. New York: Open University Press, 2016.
- [29] J. W. Cohen, *Statistical power analysis for the behavioral sciences*, 2nd ed. Hillsdale, NJ: Lawrence Erlbaum Associates, 1988.
- [30] R. M. Baron and D. A. Kenny, "The Moderator-Mediator Variable Distinction in Social Psychological Research. Conceptual, Strategic, and Statistical Considerations," *J. Pers. Soc. Psychol.*, vol. 51, no. 6, pp. 1173–1182, 1986.
- [31] B. M. K. Mwiya, Y. Wang, B. Kaulungombe, M. Kayekesi, and Y. Wang, "Exploring entrepreneurial intention's mediating role in the relationship between self-efficacy and nascent behaviour Evidence from Zambia, Africa," 2018.
- [32] C. J. Armitage and M. Conner, "Efficacy of the Theory of Planned Behaviour: A Meta-Analytic Review E Y cacy of the Theory of Planned Behaviour: A meta-analytic review," vol. 40, no. July 2017, pp. 471–499, 2001.
- [33] C. G. Martínez-García, P. Dorward, and T. Rehman, "Factors influencing adoption of improved grassland management by small-scale dairy farmers in central Mexico and the implications for future research on smallholder adoption in developing countries," *Livest. Sci.*, vol. 152, no. 2–3, pp. 228–238, 2013.
- [34] M. Bruijn, *Foot disorders in dairy cattle*. 2012.

8.0. Appendix

8.1. Table 3: Internal consistency test of the instrument

Variable	Items	Cronbach's Alpha
Factor 1: Scaling up intention	2	0.896
Factor 2: Investment intention	5	0.887
Factor 3: Management Practices Intention	6	0.831
Factor 4: Marketing Practices Intention	8	0.876
Factor 5: Attitude Towards Commercialisation	4	0.795
Factor 6: Subjective Norms Towards Commercialisation	6	0.903
Factor 7: Perceived Behavioural Control Towards Commercialisation	5	0.793
Factor 8: Commercialisation Practices Intent	19	0.940

8.2. Table 4: Correlations Matrix

#	Variable	Mean	SD	N	1	2	3	4	5	6	7	8	9	10	11	12
1	Scaling Up Intent	4.527	0.744	556	-											
2	Commercialisation Practices Intent	4.163	0.684	556	.729**	-										
3	Management Practices Intent	4.258	0.681	556	.714**	.902**	-									
4	Investment Practices Intent	4.111	0.838	556	.613**	.887**	.723**	-								
5	Marketing Practices Intent	4.123	0.744	556	.670**	.939**	.774**	.735**	-							
6	Age Groups	3.10	1.257	556	-0.023	0.023	0.038	0.019	0.012	-						
7	Marital Status	0.80	0.400	556	0.042	0.053	0.032	0.071	0.043	-0.017	-					
8	Education Level	1.43	0.839	556	0.065	.107*	0.081	.110**	.099*	-.163**	.111**	-				
9	Household Type	0.82	0.386	556	0.077	0.077	0.061	0.081	0.069	-0.055	.838**	.169**	-			
10	Gender	0.49	0.500	556	.132**	.185**	.136**	.183**	.181**	0.080	.368**	.318**	.420**	-		
11	Commercialisation Attitude	4.271	0.715	556	.418**	.631**	.536**	.638**	.559**	0.005	0.046	.121**	0.048	.097*	-	
12	Subjective Norms Perceived	3.773	1.038	556	.226**	.276**	.190**	.284**	.272**	0.038	0.051	-0.016	0.040	0.027	.441**	-
13	Behavioural Control	3.953	0.775	556	.449**	.652**	.556**	.619**	.605**	0.016	0.059	.131**	0.059	.128**	.650**	.426**

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

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

8.3. Table 5: Hierarchical Multiple Regression

Dependent Variable: Commercialisation Scaling-UP Intent						
Variable s	Model 1	Model 2	Model 3	Model 4	Model 5	VIF
	Beta, t	Beta, t	Beta, t	Beta, t	Beta, t	VIF
Gender	0.121**, 2.460	0.118**, 2.465	0.097**, 2.164	0.081, 1.852	-0.096, 0.923	1.386
Age Groups	-0.027, -0.615	-0.035, -0.818	-0.035, -0.884	-0.038, -0.990	-0.043, -1.428	1.06
Education Level	0.016, 0.361	0.021, 0.471	-0.023, -0.546	-0.039, -0.951	-0.014, -0.439	1.186
Marital Status	-0.076, -0.979	-0.088, -1.156	-0.089, -1.253	-0.092, -1.364	-0.040, -0.741	3.401
Household Type	0.085, 1.070	0.086, 1.105	0.091, 1.256	0.096, 1.364	0.054, 0.983	3.591
Subjective Norms		0.225***, 5.468	0.055, 1.272	0.001, 0.021	0.061, 1.835	1.322
Commercialisation attitude			0.387***, 8.916	0.217***, 4.289	-0.082**, -1.940	2.143
Perceived Behavioural Control				0.302***, 5.985	-0.036, -0.827	2.209
commercialisation Practices Intent					0.789***, 18.944	2.061
R	0.145	0.267	0.435	0.489	0.735	
R Square	0.021	0.072	0.189	0.239	0.541	
R Square Change	0.021	0.051	0.118	0.05	0.302	
Adjusted R Square	0.012	0.061	0.179	0.228	0.533	
F-Statistics	2.353***	29.903***	79.495***	35.825***	358.884***	

***significant at p<0.001

**significant at p<0.05

8.4. Table 6; Hypothesis Testing Summary

Hypothesis	Statistic	Test	Results
There is a positive relationship between subjective norms and the intention to engage in village chicken commercialisation practices.	$r = 0.276$	correlation	Supported
Attitude towards commercialisation positively influences the intention to engage in commercialisation practices of village chicken.	$r = 0.631$	Correlation	Supported
There is a positive relationship between perceived behavioural control and the intention to engage in commercialisation practices of village chicken.	$r = 0.652$	Correlation	Supported
The intention to engage in commercialisation practices is positively associated with commercialisation scaling up intention.	$\text{Beta} = 0.789$	Regression	Supported

YOUTH RELIGIOUS EXPERIENCES IN TERMS OF CONVERSION FROM MAINSTREAM TO PENTECOSTAL CHURCHES IN THE 1960s: A CASE OF SELECTED CHURCHES IN MATERO AND EMASDALE TOWNSHIPS IN LUSAKA DISTRICT

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The study sought to investigate the reason that led to youth conversion from mainstream to Pentecostal churches in Emmasdale and in the neighbourhood of Matero. The study was guided by Horton's intellectualist theory of conversion in Africa. The method of data collection included semi-structured interviews, focus group discussion and questionnaire. Findings of the study were that, there was automatic conversion taking place among the youths in mainstream churches. Evidence was noted from respondents in Pentecostal churches. Church leaders in mainstream, were aware of youth converting to Pentecostal churches. Further, non-Pentecostal parents supported and encouraged their children who converted to Pentecostal churches owing to incentives such as; scholarships, employment and supportive programs provided to their children. The study recommended that: sermon presentation should be revised in some mainstream churches. Explaining scriptures should not be exegetical only but linking scriptures to real life struggles of the youth. The church leaders in mainstream churches must formulate programs that are more practical and youth oriented like charismatic prayer service, provision of scholarship, employment and positions of responsibilities through different ministries within the mainstream churches. Non-Pentecostal parents should not be too skeptical about children who associate themselves with Pentecostalism but encourage them to genuinely convert to this brand of Christianity.

Key words: *Conversion, Pentecostal, Charismatic churches, Mainstream churches*

I. BACKGROUND AND CONTEXT

Christianity was introduced in Zambia by different missionaries from Europe in the last half of the nineteenth century due to Livingstone's missionary work in central Africa. The setting up of Livingstonia mission in Malawi prompted different missionaries to reach Zambia and spread the good news. Gadsden (1992) observes that, by the beginning of the 19th century the influx of Christians from many denominations had already spread in Northern Rhodesia. In the 1960s the Renewal Movement of the Neo-Pentecostalism emerged in America and spread to other continents through American evangelists who first penetrated through learning institutions such as universities, colleges and high schools (Ojo, 1988). Hunt (2012) describes the feature

that distinguished the modern movement as its appeal to the youths. The missionaries invaded the learning institutions because youths were open to modernity. In Africa neo-Pentecostalism increased in the decades between 1980s and 1990s in West Africa. The movement was first experienced in Nigeria among students in universities and spread to other sub-Saharan regions. The activities of charismatic movement through student unions enabled the movement to reach Zambia through international interaction between students in Universities, Colleges and High Schools (Ojo, 1988 and Cheyeka, 2006). The introduction of Scripture Union in Secondary schools and Zambia Fellowship of Evangelical Students (ZAFES) in colleges brought a new Charismatic way of praise and worship. This changed the young people who proclaimed having been baptized in the Holy Spirit and spoke in tongues. Further, Cheyeka (2006) observed that, Charismatic movement in Zambia was reinforced by the visit of Televangelist Bill Graham in 1960 and attracted as many young people as possible from different denominations. From that time Zambian Charismatic adopted practices which would characterize the movement in the 1990s (Cheyeka, 2009; Lumbe, 2008).

A. Problem And Purpose

Since the arrival of Pentecostal churches in Matero and Emmasdale Townships in Lusaka district of Zambia, youth conversion has never been given attention in terms of what causes youths to convert from mainstream to Pentecostal churches. There is need to know what attracts youth to Pentecostalism through empirical research in order to lessen dependence on theoretical constructs outside the Zambian context. Therefore, the purpose of this study is to investigate the reasons that lead to youth conversion to Pentecostalism.

B. Objectives

1. To explore reasons for youth conversion to Pentecostalism?
2. To examine the reactions of mainstream church leaders who may be losing youths to Pentecostalism.
3. To ascertain the reaction of non- Pentecostal parents whose children are converting to Pentecostalism.

IX. METHODOLOGY AND DESIGN

This study used qualitative approaches; specifically, it employed a case study design. The study was conducted from Matero and Emmasdale mainstream and Pentecostal churches in Lusaka. The population of the study comprised youths, church leaders and non-Pentecostal parents. The study used purposive (typical) sampling. Purposive (typical) sampling method was appropriate for this study because it only targeted those respondents who were expected to have adequate knowledge and information about youth converting to Pentecostalism. Therefore, the sample consisted of 36 participants out of which 24 were youths from three selected churches (8 from each church); 6 church leaders two from each church and 6 non-Pentecostal parents who were snowballed through youths from Pentecostal churches. Moreover, the instruments used for data collection in this study were: *semi-structured interviews*, focus group discussion and questionnaires. Data from the instruments used was analysed from the emerging themes of the study objectives. Multiple methods of data collection validated the research. This was so because methods complement each other with no overlapping weaknesses (Patton, 1990). Combination of methods ensured that inconsistencies were removed. To guarantee the validity and reliability of the results, the researcher ensured that the instruments of data collection were piloted and reviewed by research experts.

X. FINDINGS

A. *Reasons youths have for converting to Pentecostalism*

Using focus group discussions, questions were asked to respondents in all the three selected churches, to find out if youths were satisfied with the messages that were preached in their churches. Findings revealed that, some youths in mainstream churches were not satisfied with the sermons preached in those churches. As one respondent from Roman Catholic Church said, "some clergy preach the messages by reading direct from the bible with little applications of real life situations." This finding was also revealed in United Church of Zambia that, some clergymen preached messages that were quoted direct from the bible, as one male respondent narrated that, "sometimes you find someone is just quoting scriptures throughout his sermon, without giving proper explanations. I do not get touched to such messages."

But a few respondents challenged their friends and said that, they were still satisfied with the messages preached in mainstream churches and were not ready to leave the churches and the reason was that, because they were born in those churches. This was explained by one respondent from Roman Catholic Church that, "I was born Catholic and am comfortable in my church." Another respondent from Roman Catholic maintained that,

I have been to other churches before but am comfortable in Roman Catholic because of its doctrine, the systematic way of

conducting mass and repetition of homily activities such as partaking of holy communion in every mass, confession of one's sins through the Priest, peace-making with each other and many other activities, that help us [members] to cement our relationship with God as well as among ourselves.

The researcher wanted to know if at all respondents had friends who left mainstream churches and joined Pentecostal churches and one respondent in Roman Catholic gave example of his two friends who left the church and joined Pentecostal churches following the word of prophecy and prosperity messages, preached by Pentecostal preachers. As he commented that,

Two of my friends left our church and joined Pentecostal churches saying that, in Catholic Church messages were boring because they do not address issues of being successful and prosperity. They said that, were more comfortable in Pentecostal churches because they do receive the prophetic word of being rich and prosperous in future.

Further, a follow up question on prayer was posed and the findings revealed that, some youths in mainstream churches had intentions to join Pentecostalism because they no longer wanted prayers offered by one man on their behalf due to different social problems youths undergo. Generally, the respondents indicated that, they wanted to participate in individual spontaneous prayers and worship, to lift up their hands, shouting, jumping and dance. One respondent from United Church of Zambia explained that, "I personally love prayer and I do admire how Pentecostals pray whereby one person gives prayer points and the congregation raise their voices and pray individually. As youths we have different problems that need us to pray on our own, lifting up our voices and express ourselves to God." While another respondent pointed out that, he appreciated the worship music in local languages that the Pentecostal visiting preachers introduced to them before his sermon. A female respondent recalled the name of the preacher and commented that, "Pastor Eddie from Bread of Life Church started his message with praise and worship songs then he began to preach, you know, he prepared our hearts to receive the gospel through worship songs." In addition another respondent said that, "music is a powerful tool that moves an individual to the spiritual realms." Further, in the church where the instruments were tested general response showed that, youths were attracted to Pentecostal music as one of them commented that, "Pentecostal music touch the inner most feelings more than listening from sermons, that is why some of our friends have left our church [SDA] to join Bread of Church across in Emmasdale."

The findings on media indicated that some youths were attracted to Pentecostal preachers through local and international mass media that exposed them to different religious programmes. The follow up questions that were given to respondents who had already converted to Bread of Life Church, a male respondent said that, "I joined Bread of Life after watching the 'The Hour of Blessing' by Bishop Imakando in 2001 and in 2009 I became a full member." Some respondents from Roman Catholic Church explained that, the use of new technology such as television, radio and internet

caused some of them to join Pentecostal churches while respondents from United Church of Zambia said that, because of this new technology in media, some opt to stay home and watch different religious channels on television. One respondent indicated that, “nowadays I do not go to church to listen from boring sermons; I just stay home and choose a religious channel I could enjoy.” Youths in both mainstream and Pentecostal churches indicated that, were more interested in Pentecostal preachers than those in mainstream churches.

B. Reactions of the church leaders who may be losing youths to Pentecostalism

To answer the above research question the researcher used the semi- structured interviews which were done in all three selected churches and the findings in mainstream churches revealed that leaders were aware of young people converting to Pentecostalism. When the follow up questions were posed in both churches the respondents indicated that, sermons that were preached in mainstream churches were somehow boring to young people because they cover all social groups found in church. The Priest from Roman Catholic Church commented that, “in the Catholic Church we are a universal church, we do not do things opposite or different from what other Catholics do in terms of preaching the word. If am preaching from John 7: 2 even in Rome it is the same.” Reverend from United Church of Zambia also gave her explanation that,

In this generation, it is true nowadays children do not want to suffer. So, you find youths go to Pentecostal churches where they preach sermons of prosperity in life. So we see them leaving our church bit by bit at different levels. They go to their church of choice and worship in those Pentecostal churches.

When the researcher probed further to find out how the respondent reacts towards those youths who leave the United Church of Zambia, the respondent said that: “They do worship in those Pentecostal churches quite okay but they know their roots as I have already explained that, they worship and worship*Nzeru zika bwera* [when they made up their mind] they realize and come back to their original churches.” The same question was posed to the Priest and his reaction was that, youths should not be withheld because they are just looking for happiness in life therefore it is good to let go of them and experience this happiness. The Priest further indicated that, “preaching against some Pentecostal Preachers is not a solution for stopping youths from leaving our churches. Youths who find happiness in those churches, they do stay there but those who fail to find happiness we see them come back.” The Priest further commented that, “those whose needs or requirements are not met are the ones who come back. When they make up their mind and come back, we do receive them. But for those who find what they wanted in life, we lose them because we do not provide what they expected

to find in our church.” The Priest potted it up by giving an example of the prodigal son that,

Have you read the story about the prodigal son? When you read that story you will understand that young people can go and experience life on their own and can come back later if at all they fail to meet their expectations. It doesn’t mean that they are unfaithful. They are in search of something. Leave those who want to go and when they come back, receive them. If they find happiness in Pentecostal churches let them stay; if they find no problems where they have gone.

C. Reaction of non- Pentecostal parents whose children convert to Pentecostalism

To answer the above research question the researcher used the one-to-one interviews and collected data from non-Pentecostal parents whose children were already in Bread of Life Church. This data was supplemented with a questionnaire. The findings revealed that, at first, the non-Pentecostal parents opposed the decision their children had made to join a Pentecostal church. One of the respondents said that, he was not happy with his daughter who left a family church [Presbyterian Church] and joined Bread of Life church. Another respondent said that, “at first I opposed my daughter from joining Bread of Life Church I thought it was a Satanist church because I was not comfortable with their charismatic way of worship [*ku kuwa ngati chinji, ku panga chongo*]. This was because Charismatic worship was not yet introduced in my church [Reformed Church of Zambia].” Furthermore, the parent from Seventh Day Advents commented that, “it was my son’s choice to join Bread of Life Church but I faced opposition from my fellow church members being a church elder there.”

As the interview discussion went on, the non-Pentecostal parents indicated that, later their reaction changed toward their children who converted to Bread of Life Church. The researcher wanted to know what made the parents to accept the decision their children had made. The general response was that, the Pentecostal churches met the social needs of their children which were not attended to in their original churches. However, the social needs that were pointed out to cause the conversion of those youths were said to be; employment, scholarships, need of promotion at work, how to grow their business and other supportive programs that were initiated by different ministries run by the church, for instant the ministry of Home Based Care Unit, made follow ups of the identified vulnerable children in Matero and Emmasdale Townships. One parent said that, “even though I had condemned that church like what others have done, I later regretted because through youth ministry, my daughter has been given a scholarship to do nursing at Katete general hospital.” The parent whose son converted from Seventh Day Adventist commented that, “am happy that later my son was given

scholarship to University of Lusaka. It was a good decision that he made.” Whereas another parent indicated that, “even though we have lost Florence from our family church, I am happy that finally, she was given employment at Bread of Life church.”

The researcher further, wanted to find out if at all the non-Pentecostal parents supported their children because of the incentives that the Pentecostal churches provided. The findings revealed that, parents were happy and supported their children to remain in Pentecostal church because those churches seemed to be more responsive to their children’s needs than what the mainstream churches offered to them. Therefore, the parents encouraged their children to continue attending church services at Bread of Life Church.

XI. DISCUSSIONS

The key findings of the study are discussed under three headings representing the research questions that the study aimed to answer.

A. *Reasons for youth conversion*

The study established that youths seem to automatically convert from mainstream to Pentecostal churches due to a number of reasons. Youths were disappointed with routine way of sermon presentation in some mainstream churches; clergymen preached the messages by reading direct from the bible with less application to young people’s expectations in life. Exegetical explanations of scriptures in messages were not quite appealing to young people. It is for this reason that one respondent said some of his friends left mainstream churches and joined Pentecostal churches because they wanted prophetic ministries that enable the youths to build their hope for future expectations in life. Pentecostalism promotes radical conversion of young people due to relevant messages through the work of the Holy Spirit that the mainstream churches have been challenged to provide (Asamoah-Gyadu, 2013). Although some youths were still comfortable and satisfied in mainstream churches due to its doctrine and systematic way of preaching. Those youths felt they would never leave the church because its teachings and doctrines have shaped their lives and are undergoing moral conversion (Lonergan, 1992) shifting from self- satisfactions to value as the criterion of one’s decision making and action.

Prosperity gospel and its modern preachers was another pinpointing cause for youth conversion from mainstream to Pentecostal churches revealed by the majority of the respondents. This finding indicated that Pentecostal Pastors in Emmasdale and in the neighbourhood of Matero preach the prosperity gospel messages that attract young people for material blessings and well-being (Robeck and Cecil, 2006). Youths move from their mother churches to join Pentecostal churches following prosperity messages that respond to the existential needs of people within the contemporary situation of social struggles. The messages articulate issues of being successful, victorious, promotion, elevation, power,

breakthrough and winning. On the contrary, this does not happen in some mainstream churches where the prosperity gospel does not take centre stage (Asamoah-Gyadu, 2013; Ojo, 1988).

Majority respondents in mainstream churches revealed that they lacked closer interactions with their leaders despite many problems they encountered. One respondent said youths have many problems but it is difficult to share with the church leaders because of less or no attention given to young people. Youths felt hopeless because their energies were not utilised in those churches as a result, they move towards Pentecostalism that seem to emphasize on personal, heart-felt experiences of God through the spirit to all people without preconditions, enabling them to be powerful and assertive in societies where they have been marginalised. Pentecostal churches just like African Independent churches, offer solutions to people-felt needs in all their varieties (Asamoah-Gyadu, 2007; Anderson, 2005).

Some mainstream churches do not emphasise on spontaneous prayers. Youths who took part in the study indicated that they did not want someone to offer prayers on their behalf. One of them said that they were human beings and had personal issues such as unemployment, lack of promotion at the place of work, lack of scholarship, sickness, poverty and many other situations. Youth wanted prayers that engaged them individually and worship by lifting up their voices, stretch-out their hands, shouting, jumping, clapping and other gusto they could master (Asamoah-Gyadu, 2013; Robeck, 2006).

The study revealed that young people in Matero and Emmasdale appreciated the value of gospel music. Majority of the respondents viewed music as a powerful tool that moves an individual to the spiritual realms. Some respondents in mainstream churches indicated that, music touches the inner most feeling more than listening from sermons. Some youths in United Church of Zambia were touched by a Pentecostal pastor who gave praise and worship choruses before he could preach to prepare young people’s hearts to receive the gospel. Evidently, both locally and internationally composed songs played in Pentecostal churches attract young people to join Pentecostalism. Pentecostal music gospel played in local and international tunes cause youths to be attracted to this kind of music because it draws them with appropriate gestures such as hand raising, prostration, kneeling, weeping and other symbolic and emotional expression that lead people literally abandon themselves in worship before God (Asamoah-Gyadu, 2013; Chitando, 2002).

B. *Reactions of church leaders*

The study revealed that, church leaders were aware of the movement of some youths from mainstream to Pentecostal churches. The church leaders exercise tolerance and patience, they tend to teach and stick to doctrines of their churches because they understood the age group they were dealing with. They do not bother to follow up those youths who leave their churches to join Pentecostal churches instead they wait for those who might make up their minds to come back. Both

respondents said there was no need for them to preach against Pentecostal churches that seemed to accommodate those young people since in Christianity the central teaching is the belief in one God. Moreover, there is a general belief in Zambia among Christians that as long as they worship the same God, there is no problem with the church affiliation. This belief and attitude is held by ordinary Christians as much as by the clergy.

Another finding revealed that, the church leaders indicated that youths needed happiness to achieve their goals in life. Reverend from United Church of Zambia said at this stage the youths have many expectations, they want to hear what the future has for them; they want somebody who can tell them prophetic words about their future. Young people join Pentecostal churches that seem to have a cultural flexibility in its experiential and participatory liturgy, offering a place-to-feel-at-home (Asamoah-Gyadu, 2013).

Lastly, on reaction of the church leader who might be losing youth to Pentecostalism, the study revealed that the church leaders showed love and forgiveness to those youths who had left the mainstream churches and later make up their minds to go back. The Parable of the Prodigal Son helps the leaders to understand and accept some situations that attract youths to convert to Pentecostal churches. However, Even though youths seem to convert to Pentecostal churches, they are not convinced with what is taught in those Pentecostal churches they had joined as a result they perceived God as the same either in mainstream or Pentecostal church.

C. Reactions of non-Pentecostal parents

The study on reactions of non-Pentecostal parents revealed that non-Pentecostal parents at first had challenges in accepting their children/dependants who seem to have converted to Pentecostal churches in Matero and Emmasdale Townships. Some parents were sceptical while others showed reservations towards that conversion. In some mainstream churches, Charismatic worship is not emphasised. It is for this reason that one parent said she questioned her daughter the mannerism of praying in louder voices which was not experienced in her church (RCZ). Some parents were not yet acquainted with this kind of prayers, others wanted their children to remain in their family church as a result they were disappointed with the decisions that their children had made. However, later some parents accepted and supported their children who joined Pentecostal churches due to some incentives that their children were provided with such as scholarship, employment and other necessities. Similarly, at Chikuni the progressive older generation came to perceive the advantage of schooling for their children, they recommended it and its trappings to them [baptism], for their own part, since they were beyond taking advantage of schooling. They felt that neither schooling nor Catholicism was good for them (Carmody, 1998).

Further, the study showed that, non-Pentecostal parents were aware of the social needs of their children in Matero and

Emmasdale Townships. Therefore, the acceptance of their children who seem to convert to Pentecostalism came upon seeing the benefits that their children acquired from the Pentecostal churches they had joined. The respondents themselves were not attracted to Pentecostal churches, but the incentives offered to their children caused them to support and give freedom of worship to their children/dependants. At Chikuni, young people converted to Catholicism because of education and access to wage employment offered by the mission (Carmody, 2001). However, conversion those youths in Matero and Emmasdale might claim to have, taken place, may not be true conversion, youths may have just been attracted to Pentecostal churches because of the incentives that were provided in those churches and not necessary undergoing deep conversion.

Finally, the study on reaction of non-Pentecostal parent revealed that, some parents were attracted to spiritual well-being of their children who converted to Pentecostal churches. The majority indicated that, children were able to pray and read the bible more than ever before but none of the respondents had joined Pentecostalism. Non-Pentecostal parents were more interested in the benefits that their children/dependants found in Pentecostal churches and not necessarily the faith of their children. Conversion at Chikuni showed that Tongas and other Zambians who went through Chikuni schooling became Catholic largely because of the material incentives which the mission offered (Carmody, 2001).

XII. CONCLUSION

After a careful analysis of the findings in the light of the study purpose the researcher was of the view that, sermons in mainstream churches were not youth oriented. The messages in sermons were more exegetical in explanation of scriptures with less interpretation on real life struggles of the youths. Youths in mainstream churches admired the prosperity gospel that was preached by Pentecostal preachers in Pentecostal churches that gave them hope in their social struggles and to remain expectant. The study further showed that, youths in Matero wanted charismatic prayers; to approach God in their own way and express themselves by lifting up hands, shouting, jumping and dancing. The petition and confessional prayers were not enough to overcome their social needs.

The findings on reactions of church leaders in mainstream churches, whose youths may be converting to Pentecostalism, indicated that, the church leaders were aware of the youths converting to Pentecostal churches in Matero. The leaders accepted the youths who had converted but had later made up their minds to come back. Further, church leaders did not excommunicate youths who had converted, but gave them chance to explore and find happiness in life.

Finally, the findings on reactions of non-Pentecostal parents whose children converted to Bread of Life Church were that, the parents gave support to their children/dependants by encouraging them to continue attending services at a Pentecostal Church. Acceptance came upon seeing benefits in

form of incentives such as education, employment and other supportive programs provided by different church ministries.

XIII. RECOMMENDATIONS

In the light of the main findings, the following were some of the recommendations proposed to mainstream churches to ensure effective youth oriented programmes.

The study recommends that, sermon presentation should be revised in mainstream churches. Explanation of scriptures should not be exegetical only but link scriptures to real life struggles of the youth.

The church leaders in some mainstream churches must formulate programmes that are more practical and youth oriented such as charismatic prayers that allow individuals to offer prayers on their own during mass or after mass services. In addition, incentives such as scholarship, employment and other necessities should be provided especially to the youths who are in need. For instance, the church can come up with different projects that will generate resources to support the needy.

The study further suggests that, non-Pentecostal parents should not be sceptical to children who associate themselves with Pentecostal churches. Instead, they should give their children freedom of worship.

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REFERENCES

- [1] Asamoah-Gyadu, K.J. (2013) *Contemporary Pentecostal Christianity- Interpretations from an African Context*. Eugene: Regnum Book International.
- [2] Carmody, B. (1998). *Conversion and Jesuit schooling in Zambia*. New York: E. J. Brill.
- [3] Carmody, B. (2001). *African Conversion*. Ndola: Mission Press.
- [4] Cheyeka, A.M. (2006). "Charismatic Churches and their Impact on Mainline Churches in Zambia". *The Journal of Humanities*, vol.5 pp. 54-71.
- [5] Cheyeka, A. M. (2009). "Towards a history of the Charismatic churches in post-colonial Zambia". In Jan-Bart Gewald, Marja Hanfelaar, Giacomo Macola (eds.) *One Zambia Many Histories: Towards A History of Zambia*. Lusaka: Brill.
- [6] Chitando, E. (2002). *A Study of Gospel Music in Zimbabwe*. Uppsala: Nordic African Institute.
- [7] Gadsden, F. (1992). *Education and society in colonial Zambia*. In Chipungu (ed.) *Guardians in their Time*. London: Macmillan Press.
- [8] Hunt S. J. (2002) *Deprivation and Western Pentecostalism Revisited: Neo-Pentecostalism*, *Online Journal for the interdisciplinary study of Pentecostalism and Charismatic movements*. *Pentecost Studies*, Vol. 1, nr 2.
- [9] Lonergan, B. (1992). *Method in Theology*. New York: Herder and Herder.
- [10] Ojo, A.M. (1988). "The church in the African State: The Charismatic Pentecostal Experience in Nigeria". *Journal of African Thought* Vol. 1 No.2.
- [11] Patton, M.Q. (1990). *Qualitative Education and Research Methods* (2nded). Newburg Park, CA: Sage Publications Inc.
- [12] Robeck, Jr. and Cecil, M. (2006). 'An Emerging Magisterium? The Case of the Assemblies of God'. *Pneuma: The Journal of the Society for Pentecostal Studies* 25.No.2.pp.164-215.

INTEGRATION OF ZAMBIAN LANGUAGES IN THE CURRICULUM OF HEALTH SCIENCE TRAINING INSTITUTIONS: TOWARDS THE ABILITY TO TRANSLATE COVID-19 TERMINOLOGIES INTO ZAMBIAN LANGUAGES

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Abstract - Communication in the language that is better understood by patients and clients is the most crucial factor in the provision of better and quality healthcare services to the public. This study attempted to investigate integration of Zambian languages in the training programmes of health workers in Zambia. This paper also attempted to establish how some common COVID-19 terms are translated to Nyanja and Tonga which are some of the regional official languages in Zambia. The bulk of the data was elicited through guided interviews from selected participants. To the lesser degree, reviewed literature related to the study was used as well. The study interviewed health workers and students from selected districts in Lusaka and Southern provinces where Nyanja and Tonga are regional official languages respectively. It was revealed that higher learning institutions in Zambia where health workers are trained do not offer Zambian languages to their students. This has resulted in most health workers failing to fluently communicate with patients in the language they fluently know. On the other hand, it has been revealed that teachers who are trained to teach Zambian languages in schools were able to translate medical terms from English to Zambian languages effectively. The study has also recommended that all colleges offering medical and health study programmes should integrate Zambian languages in their curriculum just like teacher training institutions do. This is necessary as good communication is considered essential for clinical competence. This paper also referred to relevant theories of second language translation that are the most appropriate and recommended in the field of translation.

Keywords: COVID-19, Zambian languages, Health workers, Nyanja, Tonga

I. INTRODUCTION

Zambia faces numerous challenges in the provision of healthcare services which have resulted in rural communities not receiving adequate and quality services. These problems are compounded when health workers are unable to communicate with their patients in the language understood by members of the community. According to Madzimbamuto (2012), patients always prefer receiving vital information in their own language, but in Africa the development of such technical language has been neglected. In Zambia, scientific especially medical terminologies are not formally translated and used uniformly by public health officers and scientists. In most these medical terminologies are simply used as borrowed or loaned words

because most health workers are unable to communicate with rural patients in the community familiar languages. It is not uncommon for most rural and township patient to present as monolingual speakers in health centres of Zambia. Therefore, the ability to speak an indigenous language should be emphasised in communication and identified as a core competency for all health workers.

It cannot be gainsaid, especially in the Zambian situation, that the root cause of health workers inability to translate medical terms into local languages is the absence of Zambian languages in the curriculum of health science institutions. In all higher education institutions offering health sciences, English tends to be the dominant language despite the fact that English is only the country's eighth most commonly spoken home language

This communicative competence in Zambian languages by health workers can be achieved if Zambian languages are incorporated in the curriculum of health workers in their training institutions. According to Mathews, M et al (2018) universities have an important role to play in ensuring that students do more than just graduate – they also need to be linguistically competent to work in sectors of society where the majority of people who access services can't speak English.

With the advent of COVID-19, which started in China, there is need to have health workers who have the skill of translating medical terms into Zambian languages. Okonkwo (2016) points out that in emergency situation, there is need for translation and it is unreasonable to think that everyone speaks and understands English or an international language. This means that language comprehension is the centre of all communication and without it the world would remain static. Since all the vital information about the COVID-19 pandemic is transmitted in the English language, the limited English proficient individuals are at risk of not understanding the steps they must take to protect themselves and others. In order to enhance this exercise of ensuring everyone is not left behind, there is need to translate this vital information to minority indigenous languages of the world.

The challenge however with the health training institutions is that there hasn't been any effort made to integrate Zambian languages into the curriculum of these institutions. This has compounded the development of science and ICT terminologies in Zambian languages to adapt to the fast changing lifestyles and technological trends. Example: Basic protective measures

to limit the spread of COVID-19 include recommendations using new terminologies which are new to Zambian indigenous language vocabulary. It is not uncommon to hear health professionals failing to translate COVID-19 terms to Nyanja, Bemba, Tonga or Lozi and other regional local languages. However, teachers who are specialists in local languages exhibited extensive fluency and competence in translating most of the key COVID-19 words to Tonga. The study sought to investigate the role of health science institutions in the teaching of Zambian language. The study also attempted to assess the fluency of health workers in translating medical terms from English to Nyanja one of the predominant Zambian local languages.

II. THEORETICAL FRAMEWORK

This study falls under the umbrella of sociolinguistics and language use, translation to be specific. There are six main approaches within contemporary translation theory: the sociolinguistic approach, the communicative approach, the hermeneutic approach, the linguistic approach, the literary approach and the Philological perspective/ Sociolinguistic approach. For the purpose of this study, the Philological perspective/ Sociolinguistic approach, Communicative translation perspective and the Linguistic approach will be discussed as they underpin this study.

A. *Philological perspective or Sociolinguistic Approach*

The Philological or Sociolinguistic approach is based on the translation act which links language to social factors of society by analysing the weaknesses and strengths of the original text. Nida (1991) argues that the meaning of verbal symbols on any level depends on the culture of the language of the community. Language is a part of culture, and in fact it is the most complex set of habits that any culture exhibits.

According to the Sociolinguistic approach, a translator is naturally the product of his or her society. This means therefore that our own sociocultural background is present in everything we translate and the moral norms of society prevail over contents of the original text.

B. *Communicative translation perspective*

According to Ali, W, I (2018) Communicative translation perspective attempts to render the exact contextual meaning of the original text in such a way that both content and language are readily acceptable. Nida, E (2006) points out that the process of translation is not simply the replacement of one word or expression by another, but places the message before the language used. "Communicative translation attempts to produce on its readers an effect as close as possible to that obtained on the readers of the original. It is the process of conveying a message from one language into another while respecting the linguistic features of the target language (TL) at different levels, morphological, lexical and grammatical" (Newmark, 2006: 39). He claims that the message in communicative translation is the most significant factor. It

stresses the power and influence of the message more than the content of the message. In communicative translation, the translator is available, somehow, when necessary, and has the right to remove obscurities or repetition and specify general terms.

C. *Linguistic perspective*

Linguistics plays an important role in the translation of a document from one language to another. Translating information includes more than just changing each word from the original language to another. Ulanska (2014) stresses the fact that since linguistics is essentially the study of human language, it takes a significant place in the process of translation. Linguistic perspective therefore breaks down the target language into several sub-categories: Grammar: the study of language structure and the system of rules it uses. It includes several fields as follows, Morphology, Syntax, Phonology and Semantics. According to Ulanska (2014) translation is a language act in which a text from one language is substituted with an equivalent text from another, by making that substitution in accordance with the regulations of both language systems. This, according to the Linguistic approach to translation, means that the translator should consider all the grammatical elements of the source language as he or she attempts to translate the text to the target language.

D. *Main aim of the study*

The main focus of this study is to investigate the integration of Zambian languages in the curriculum of health sciences institutions.

E. *Research questions*

The research questions for this study were three fold:

- i. Do colleges of health sciences integrate Zambian languages in their programmes?
- ii. Are health workers able to translate COVID-19 terms to Zambian languages?
- iii. How should COVID-19 terms be translated to Nyanja and Tonga?

III. RESEARCH APPROACH

In order to answer the research questions, personal interviews were used to elicit data from participants. To a lesser degree, some literature reviews added to the data required for the study. Fifteen health workers from selected district under study participated in the current study. The study also interviewed student clinical officers in both Lusaka and Livingstone districts. To establish the correct translation of COVID-19 translation, teachers of Zambian languages were given lists of Covid-19 terms to translate to Nyanja and Tonga respectively.

IV. TRANSLATING COVID-19 TERMINOLOGIES INTO NYANJA AND TONGA

Nyanja is one of the seven regional official languages in Zambia. It is the second language with the widest communication after Bemba. Nyanja is the regional official language for Eastern and Lusaka provinces of Zambia. It is as well the familiar language and lingua franca used in informal domains in most of the urban areas of the country. Kashoki (1998) reports that Chitonga is one of the seven officially recognised languages in Zambia and represents a cluster of languages (Bantu Botatwe) spoken by about 20% of Zambians. Members of the Bantu Botatwe linguistic group Lenje, Ila, Kaonde-Ila and Sala are closely related to Chitonga though Chitonga is considered as a separate language. According to Simwinga (2006), Chitonga has the status of a regional official language spoken in Southern, Central and parts of Lusaka (rural) province. In these regions, Nyanja and Tonga are widely used in public discussion, on the radio and television and in various print literatures. In the domain of education these languages are used as language of instruction in the lower levels of primary education, and are taught as subjects up to tertiary level in few colleges of education in the country.

As some of the indigenous official languages in the country, Nyanja and Tonga are used as media of communication in disseminating COVID-19 information which is currently a lifesaving tool. It is against this background that this study sought to establish how competent health workers are in Nyanja and Tonga oral and written expression. The study also attempted to investigate whether colleges of health sciences do teach communication competence in health science programmes.

In this study 15 health workers from Lusaka and southern provinces respectively were asked to interpret some prominent COVID-19 into Nyanja and Tonga. The responses given by these health workers were not consistent and uniform. Most of them asked the researcher to give them enough time to translate the given English terms at home but they could not be allowed for fear that they would use other people to translate for them. When asked why they had challenges in translating medical terms into Zambian languages, they all replied that Zambian languages were neither components nor integrated subjects in their training programmes. However, two tutors in selected nursing schools responded that there is a general course called Information Education Communication (IEC) which is a topic taught in the first year in which nurses are taught communication skills to use wherever they would be deployed. Two health environmental specialists selected from two districts in each of the two provinces explained that the challenge faced by these ministry of health agencies in disseminating COVID-19 information is lack of language experts in Tonga and Nyanja. This study revealed that there was no consistence and uniformity in coming up with the equivalent COVID- 19 words and terms in Tonga by these organisations. It was noted that each organisation had different terminologies for the same words.

V. FORMATION OF TONGA AND NYANJA WORDS FROM ENGLISH COVID-19 TERMS

In order to come with uniform and correct Nyanja and Tonga COVID-19 terms, this study in consultation Tonga and Nyanja language experts from the Ministry of Education comprising teachers and Curriculum Development Centre experts to help develop and translate the following Nyanja and Tonga terms used in COVID- 19. There are three methods of translating English words to Zambian languages: Borrowing, Loan and Contextual translation.

F. Nyanja translated version

- **Borrowing-** A term is borrowed with its meaning and Zambianised e.g *Coronavirus*- Koronavairasi
COVID-19- Kovid 19
- **Loan translation-** Form and meaning of the word in the source language is kept but the word is translated using words from the target language. e.g. *New normal*- Umoyo wacilendo
Self quarantine-Kudzipatula ndikukhala paweka
Lockdown- Kuletsa kuyenda
- **Contextual translation-** What is translated is the meaning of the message in the source language rather than the words used e.g.
Contact tracing- Kufufuza anthu amene anakumanako nao
Mass screening and testing- kufufuza matenda kwakukulu
Hand sanitisers- Zodzola kumanja kupha zilombo
Face mask- Nsalu yotsekera pakamwa ndimphuno
Social distance- Kukhala motalikirana

G. Tonga translated versión

- **Borrowing-** A term is borrowed with its meaning and Zambianised e.g *Coronavirus*- Koronavailasi
COVID-19- Kovid 19
- **Loan translation-** Form and meaning of the word in the source language is kept but the word is translated using words from the target language. e.g. *New normal*- Buponi bweenzu
Self quarantine- Kulizandula omwini
Lockdown- Kujalilwa
- **Contextual translation-** What is translated is the meaning of the message in the source language rather than the words used e.g.
Contact tracing- Kulangaula bantu bakaswangana amulwazi mazuba masyonto ayinda
Mass screening and testing- Kufunyungulwa mubunji

Hand sanitisers- Musamu wakunana mumanza ujaya tuzunda.

- **Face mask**- Kasabwe kakulivumba kumulomo akumpemo
- Social distance**- Mwaako

VI. DISCUSSION

As revealed by this study, there is no integration of Zambian languages in the training of health workers in Zambia. This is the source of communication challenges faced by health workers in the dissemination of health awareness information especially Covid-19 information. The role played by higher education institutions in teaching healthcare providers local languages should not be trivialised. Margaret (2018) reports that the university of KwaZulu Natal has recognised the need to offer isiZulu to all undergraduate students which is in line with the South African constitution with states that patients in the healthcare settings should have access to information in the language they understand best.

The study has also revealed that healthcare providers also lack the skill of translation from English to the indigenous language of the majority of the patients and general public. Many terms used in the medical fraternity are not easy to translate into African language; consequently, most of them are borrowed and transformed morphologically to suit the Zambian language orthography and phonology. As noted by Okonkwo (2016), technical terms should be translated in the language of the less educated individuals so that the message communicated is actualised. In the same vein, Madzimbamuto (2012) points out that this problem of failure to use local familiar languages to disseminate life saving information is complicated by the fact that most of the science and medical experts have no linguistic knowhow. "Terminology development in science and technology is more difficult because many African scientists may have no formal training in their mother tongue or another African language and language specialists usually have little background in sciences."

Apart from using the borrowing method in translation, public health workers use the loan method which is based on the linguistic perspective. This is the most common translation method where translators put much stress and concentration on the lexical and grammatical elements of the language used. This method is not reliable as some terms may be translated out of contextual meaning of their original source words. Osborn (2010) observes that it is of primary importance to accommodate a familiar language of the community so as to impart modern technology to the less privileged. This is the most fundamental reason why this study employed the Communicative translation approach to come up with the appropriate Tonga and Nyanja terms for COVID- 19. It cannot be gainsaid that Communicative translation perspective is the most appropriate method for translating as it is not easy to find equivalent terminologies in target Zambian language. Since translation is a mutual process of conveying meaning from one language to another, the most effective way is to translate the

context of the original text rather than translating the elements of the source language.

VII. CONCLUSION

Based on the findings, the study revealed that there is no much effort being put in place to ensure that important information about COVID-19 is disseminated in indigenous Zambian languages so as to reach out to the rural communities of the country. It has also been revealed that institutions that train health workers in Zambia do not teach competency in communicating in Zambian or indigenous languages. The researcher, working with Nyanja and Tonga language specialists in the ministry of education, managed to translate the most pertinent COVID-19 terminologies from English to Nyanja and Tonga using the Communicative translation approach which is the most effective and appropriate approach to translation. It is seriously proposed that Zambian languages should be taught to health institution students to enable them communicate effectively to the majority of Zambians.

REFERENCES

- [1] Ali, W. (2018) "Communicative Translation as a New Approach to Translation with Reference to English and Kurdish" Cihan University- Erbil *Second International Conference on Linguistics and Arts. June 27-28, 2018.*
- [2] Kashoki, M.E. Language Policy in Multilingual Countries vis-a-vis Language Maintenance, Language Shift and Language Death. *In Journal of Humanities. Vol.2. 1998-1999. Lusaka: University of Zambia.*
- [3] Madzimbamuto, F (2012) Developing anatomical terms in an African language, *South African Medical Journal* 2012 volume 105 Number 05 pp 102.
- [4] Malmkjaer, K. "Translation and Linguistics" *Studies in translation theory and practice. Vol 13, 2005 issue 5 pp 5-20*
- [5] Mathews, M et al Second language teaching of vocation-specific isiZulu communication skills to health sciences students. *South African journal of African languages. Volume 38, no:2, 2018 pp149-158*
- [6] Newmark, P. (1998) "About Translation" Oxford. Oxford Print House. UK.
- [7] Nida, E. A. (2006) "Theories of Translation" Pliegos de Yuste.
- [8] Okonkwo B.A. (2016) The Importance of Local Language to the Development of Technology. In: Babaci-Wilhite Z. (eds) *Human Rights in Language and STEM Education. Sense Publishers, Rotterdam. https://doi.org/10.1007/978-94-6300-405-3_10*
- [9] Osborn, D. (2010) African Languages in a Digital Age: Challenges and Opportunities for Indigenous Language Computing, IDRC: Cape Town
- [10] Ulanska, T (2014) "The Role of Linguistic Factor in Translation" *Procedia - Social and Behavioural Sciences* 191 (2015) 2585 – 2587

THE ROLE OF STREET VENDOR REGISTER IN THE SUSTENANCE OF BUSINESS IN LUNDAZI CENTRAL BUSINESS AREA

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Abstract-The purpose of this study was to analyse how street vendor business is sustained through language in Lundazi District Central Business Area. The main aim of the study was to find out if street-vendors register could sustain business from a socio-linguistic point of view. The objectives of the study were to: (i) identify specific register vendors use in their business; (ii) explain specific influence the register identified had on vendor-customer relationship; and (iii) state how this type of register affected business. This study was done qualitatively through the descriptive and narrative designs. A sample size of 100 street vendors was purposively picked; 30 males and 30 females with more than a year of street vending experience and 20 males and 20 females with less than a year of street vending experience. The idea behind attaching an aspect of experience was to see if the more experienced someone was, the wider their vocabulary. Data was collected through Interviews using a guide with unstructured questions. The interviews were recorded for easy reference during the analysis of data. From the findings, it was concluded that the maintenance of business and successes that the central business area recorded were largely as a result of the persuasive, respectful, accommodating and friendly language that the vendors used to facilitate interaction with the customers. This language made possible flexible business negotiations between the vendors and the customer. The study recommended that street vendor register should be embraced by all sectors of society as it is an aid to the growth of street business from which the majority Zambians draw their income for daily livelihood.

Key words: *Street vendor register, street vendor, customer, Lundazi Central Business Area.*

I. INTRODUCTION

Language is very important for human beings. In business, its importance is seen in that it facilitates communication between traders and buyers. This study assumed that language and business influenced each other, and that the interface of the two could be better understood in sociolinguistics.

Sociolinguistics is the relationship between language and society. This relationship as recorded by Wardhaugh (2006) can be understood from the perspective that language structure and behaviour may be influenced by the social structure of a particular society. Bernstein and Henderson, (1969) talk about the higher-, middle- and lower-class levels of society in which language is respectively used. However, there is also inter-class level interaction where the three classes interact among themselves. This is usually seen in among other areas the business sector. In the use of language, Sociolinguistics emphasizes the importance of context. In this situation, the context of use for language is trade that traders are involved

in. Context according to Rondell and Fox (2006) is the general situation in which something happens, which helps explain it. The field of Sociolinguistics also looks at how the language of a people controls their view of the world they live in. From this perspective, it is important to carry out a sociolinguistic study of a particular language (street vendor register) as that would reveal why and how traders (vendors) use it in their context.

From a linguistic point of view, street vendors are seen to have a register which makes them socialize among themselves and with people from different sectors of society. It is this register which they use to sustain their business. Though street vending is practiced everywhere in the world, this study restricted itself to the study of the sustenance of business through street vendor register in Lundazi District Central Business Area. In this area, a number of languages are spoken and among them are Tumbuka, Bemba, Chewa, Nsenga and Senga. Of all these languages mentioned among others, Tumbuka is the most spoken language not only in the area of business but also the district as a whole. The main aim of carrying out this research was to find out how street-vendors sustain their business through street vendor register from a sociolinguistic point of view.

A. Purpose of the study

The purpose of the study was to establish how street vendor business is sustained through register in Lundazi District Central Business Area.

B. Objectives of the study

The study was guided by the following objectives:

- i. To identify the specific register that street vendors use in order to maintain their business in Lundazi District Central Business Area.
- ii. To explain the specific impact the register identified above has on vendor-customer relationship.
- iii. To state how the register identified above affects business.

II. METHODOLOGY

The study used qualitative methods in which one hundred street vendors were interviewed on the nature of the register they used when conducting business, the impact of the register on vendor/customer relationships and the effect of the register on business since the researcher sought to use a descriptive research design with narrative forms. The

descriptive research design was used because the register was being described. On the other hand, narrative forms were used in order to have cross-checked information from the respondents. The intended use of the descriptive research design was consistent with that of Kombo and Tromp (2006) who pointed out that a descriptive research design is used to describe the state of affairs in detail. Hence, an in-depth analysis of the sustenance of street vendor business through register was conducted. An unstructured questionnaire was used to collect data. This gave the researcher the flexibility to pose more enhanced questions with a view to collecting more detailed information about the study at hand.

III. FINDINGS AND DISCUSSIONS

Of the one hundred street vendors that were interviewed on the sustenance of street vendor business through register, thirty were males with more than a year of street vending experience; thirty were females with more than a year of street vending experience; twenty were males with less than a year of street vending experience; and the other twenty were females with less than a year of street vending experience. The conversations were recorded and transcribed. In order for non-speakers of Tumbuka, Chewa and Senga to get the meaning of the data, the utterances were glossed into English as presented in brackets. It must however be mentioned that the English equivalents are not representational of the diction and structure of the Tumbuka, Chewa or Senga utterances but simply the meaning.

A. Findings from the first question

Question one of the questionnaires was meant to find out the nature of the register street vendors used when conducting business in Lundazi District Central Business Area. It was divided into three (3) parts which were (a) the register street vendors used, (b) how street vendors used the register and (c) when the street vendors used the register. All the four categories of street vendors were interviewed. The findings on the register included greetings in a respectful way like **“mulu uli akastoma?”** (*how are you customer?*); and mentioning of prices of commodities being sold in a loud way as in **“k5 kadishi kambwete!, k30 vovala vabakulu na k25 vabana!”** (*k5 a dish of sweet potatoes!, k30 clothes for elders and k25 those for children!*).

The register was mainly used in a way that showed respect to the customers by making use of among other morphemes **‘mu-’** and **‘a-’** in **‘mulu’** and **‘akastoma’** respectively. The register was also used in a way that showed accommodation of the customers as in **“namupokelerani akastoma”** (*I welcome you customer*). Accommodation here was meant to make the customer feel free and willing to buy thereby sustaining the business of the vendor. Accommodation of the customer was also seen in the expression **“tathyola mtengo akastoma selo niapa”**. From this expression, one can tell that there is code mixing. Code mixing is the use of more than one language in an expression (Gardner-Chloros, 2009). Therefore, in the expression **‘tathyola mtengo akastoma selo niapa’**, one can tell that the words

‘tathyola’ and **‘niapa’** belong to chewa, senga and nsenga languages while **‘akastoma’** is a mixture of chewa as in **‘a-’** and English **‘customer’**. In addition, **‘selo’** is an English word with a nativised pronunciation but it is **‘sell’**. Therefore, the meaning of the expression **‘tathyola mtengo akastoma selo niapa’** is bound to be understood by more than one language user in the street as the expression has more than one language item in it. Hence, different language users would respond to this expression.

Persuasive expressions as in **“palamugulenge vinandi mbasela ni’ikenepo.”** (*if you buy more, I will give you extra of what you buy*). It was found out that vendors sustained their businesses through persuasive expressions because the giving of **“Mbasela”** (*extra of what someone bought*) encouraged the customers to continue buying from them. The register was also used in a way that made known to the customers what was being sold as in the singing of the song. One of them adopted a famous song by ‘Mozy B’ a local musician whose Tumbuka song is titled **‘Amchona bawera’** which means **‘someone who had gone out is here’**. In the light of this, the street vendor decided to paraphrase the song into **‘walepu wawera’** which means **‘the one selling vegetables (rape) is here’**. According to him, it was easy to reach out to people at a distance because they would hear the song and know that someone was selling vegetables. An epigraph of his song went as follows:

Pala mwapulika njinga yalila, walepu wawera!

(*if you hear the sound of a bicycle, the one selling rape is here!*)

Pala mwapulika njinga yalila, wamphangwe waweraaa!

(*if you hear the sound of a bicycle, the one selling vegetables is here!*)

From the song one can tell that the street vendor register in Lundazi District Central Business Area was highly informative which made it easy for vendors to sustain their business as they interacted with customers.

B. Findings from the second question

Question two focused on finding out the impact of street vendor register on the relationship between vendors and customers. The question was divided into two parts (i) why vendors used their register when conducting business (ii) the effect of the register on the relationship between street vendors and customers. All the four categories of street vendors were interviewed and the general response on the reason for the use of their register during business was that they wanted to have their goods bought by the customers. It was found out from all the four categories of vendors that the register had a positive effect on the relationship between street vendors and customers. This was so in that

- It was flexible to negotiations as can be seen in the following tape recorded dialogue between the customer (C) and the Street Vendor (SV):

C: **Tomato nizilinga?** (*How much is tomato?*)

SV: **Ni k5 mbale, koma munga tolapo pa k4** (*a plate is costing k5, but you can get at k4*)

C : **Nili na k3 waka** (*I have k3 only*)

SV: **Paliye suzgo tolani** (*there is no problem get*)

SV: **Pala mwatola unandi mbasela ni'ikengepo** (*if you buy a lot, I will give you an extra quantity for free*).

- It brought about mutual agreement between the street vendors and the customers as it contained such expressions as “**pala ndalama yashota tingapulikana**”(if the money you have is not enough we can mutually agree)
- Because of the mutual agreement, there was mutual benefit since as vendors reduced the prices of their commodities to accommodate the customers, customers did not fail to buy and infact most of them bought in huge quantities.
- There was friendship created as traders and customers got to know each other even by name.
- It was highly informative in that customers got to know what was being sold even at a distance as the vendors were shouting as in “vovala vabakulu k50, vabana k25!” (clothes for elders cost k50, for children k25!)

C. Findings from question three

Question three looked at how the street vendor register affected business in Lundazi District Central Business Area. The findings from all the four categories of the interviewed street vendors were that the register identified had a positive effect on the running of the business. This was so because of the following reasons among others:

- it made customers happy and willing to buy
- it created friendship between the trader and the customer
- Because of the friendship created, there was mutual benefit between the trader and the customer as traders would either reduce the prices or promise to give **mbasela** (extra of what one bought) and the customer reciprocated by buying.

IV. CONCLUSION

In conclusion, all the study objectives were fulfilled and the qualitative findings indicated that in order for street vendors to sustain their business in Lundazi District Central Business Area, their register was responsible. This is so because it was persuasive, respectful, accommodating, friendly, facilitated interaction between vendors and customers (flexible to negotiation) and it resulted into maintenance of business.

V. RECOMMENDATIONS

1. Further research should be done on language and culture in business to understand how culture influences business.
2. An investigation into the use of music in business should be done to understand why music is used in certain business. While others do without it.

REFERENCES

- [1] Bernstein, B and Henderson, D. (1969). Social Class Difference in the Relevance of Language to Socialisation. New York: Blackwell.
- [2] Gardner-Chloros, P. (2009). Code-switching. London: Cambridge University press.
- [3] Kombo, D.K. and Tromp. D. L. A. (2006). Proposal and Thesis Writing. Nairobi: Paulines Publications Africa.
- [4] Kombo D. K. and Tromp, D. L. A (2014). Proposal and Thesis Writing. Nairobi: Paulines Publications Africa.
- [5] Rundell, M. and Fox, J. (2006). Macmillan English Dictionary for Advanced Learners. Oxford: Oxford University Press.
- [6] Wardhaugh, R. (2006). An Introduction to Sociolinguistics. Oxford: Blackwell.

TRAINING FOR GHOSTS: THE FLUIDITY OF THE LABOUR MARKET IN ZAMBIA

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Abstract: Education has been known to play a pivotal role in turning the wheels of development in any given society as it is a social equalizer. Any iota of compromise or undermining the value of education results in a downward trend in national development. Training Institutions, therefore, take Centre stage in moulding a cadre of experts that drive the economic engines in the world. It means that training institutions should train human resources in response to the Labour market. Curiously, however, Zambia, like many other countries in Africa, has not witnessed a significant increase in job access by graduates from training institutions. This study argues that training institutions in Zambia are merely churning out graduates to Ghosts as they do not know which Labour market is going to employ their products. Drawing from the above argument, the study set out to find out whether university graduates access the Labour market in their area of specialization. Being qualitative research, data collection was done through face-to-face in-depth interviews while documents such as newspapers were used as a secondary source of data. A total of 25 graduates from 3 public universities were interviewed through face-to-face interaction. The study revealed that most graduates end up getting jobs they were not trained in. The jobs they get are contrary to their area of specialisation as there is no ready market for them. From the findings, the study concludes that training institutions are simply training for Ghosts as their target Labour market is fluid and cannot guarantee the availability of jobs to the graduates

Keywords— Education, Fluidity, Ghosts, Training, Job Market, National Development, graduates.

I. INTRODUCTION

Some scholars have described education as the live wire of its industries and also as the foundation of moral regeneration and the revival of its people. It is also said to be the force and bulwark of any nation's defence and according to Orji and Maekae (2013:312-320), no nation rises above the level of its education.

The National Higher Education Policy of 2019 states that strides to achieve quality and relevance in higher education have been clogged by numerous factors which include poor linkages among higher education institutions and between these institutions and industry. Other issues that have been cited are inappropriate curriculum, inadequate qualifications of academic staff, insufficient training materials and equipment; and poor teaching and learning facilities. The policy also identifies a mismatch between the skills demanded by industry and the graduates produced in higher education institutions. As a result, the graduates are unable to find employment in industry, or in some cases, they have to be retrained by their employers before recruitment (p.4.). Training institutions, therefore, find themselves at the Centre of this fire-fighting about moulding citizens who respond to

the needs of the industry. However, the Zambian scenario speaks otherwise as the country has had not witnessed a significant increase in job access by graduates from higher learning institutions. Lau (2017: 7) submits that sometimes it takes a long time for some graduates to find jobs after leaving higher education and even then, some are not in jobs that appear to be well-matched to their qualifications. He further indicates that there are indications that skills mismatch or inadequate levels of skill is more of a problem than over-qualification.

Given the above, the current study focused on the prevailing situation currently in Zambia concerning the unemployment of university graduates from three (3) selected higher learning institutions. There are indications that unemployment being experienced in Zambia is structural in nature, that is, many graduates are unemployed for lack of skills necessary to fill the existing vacant positions and they are, therefore, unemployable. The situation is a big challenge for the relevance of university education, and thus, needs immediate attention. Hence the objective of the current study was to find out whether university graduates access the labour market in their area of specialization. The study's central argument is that training institutions in Zambia seem to merely churn out graduates to Ghosts as they are not assured of the job market for their products.

II. LITERATURE REVIEW

Various studies have been done in the area of enhancing university graduates' employability and the role of education in national development. Orji and Maekae (2013) conducted a study on the role of education in National Development in Nigeria which indicated that education supplies the needed manpower for national development. Their observation is supported by Afolabi and Loto (2012:330) who state that a developed or educated polity is the one that has enough manpower and each person occupies his or her rightful position to enhance the growth of the society. Ajayi and Afolabi (2009:34-36) have also added that education is largely perceived in Nigeria as an indispensable tool which will not only assist in meeting the nation's social, political, moral, cultural, and economic aspirations but will also inculcate in the individual knowledge, skills, dexterity, character and desirable values that will foster national development and self-actualisation.

Orji and Maekae 's (2013) study also revealed that education develops in individuals those values which make for good citizenship, such as honesty, selflessness, tolerance, dedication, hard work, and personal integrity, all of which provide the rich soil from which good leadership potential is

groomed. But in the absence of the labour market, such training or education is wasted efforts and resources.

As for Enric, C.R. et al (2010), they analysed the level of match between different degrees and the jobs held by graduates from the public higher education system in Catalonia, and the changes that have taken place over the last ten years in five main fields of knowledge – Humanities, social sciences, experimental science, Health Sciences, and Engineering and Architecture- in relation to the education-job match. The results of this study indicate that the field of study is clearly connected with the education job match.

III. METHODOLOGY

Being qualitative research, data collection was done through face-to-face in-depth interviews while documents such as newspapers were used as a secondary source of data.

A. Sample Characteristics

The data analysed in this study were from the interview on the labour market outcomes of five cohorts of graduates from three public higher education institutions in Zambia who completed their studies in the academic year's corresponding to 2013-14, 2015-2016, 2017-2018. The study was conducted one year after their graduation by way of mobile phone interviews, face to face interviews, and via WhatsApp platform.

B. Sampling Technique

The study used a snowball sampling technique (non-probability sampling technique) or Chain Referral sampling. This is the case where the first participants of the study recruit future participants from among their acquaintances. Thus the sample group appears to grow like a rolling snowball (Sahaya, 2017:51).

C. Data Collection Method

Semi-structured interviews were the major data collection method used in the current study. This method was chosen because it was the best for generating data for qualitative research (Briggs, 1986). It is more flexible than traditional methods such as structured interviews, questionnaires, etc. The interviewer has an interview guide with some main questions, however, as the interviewee answers, the interviewer spontaneously probes an idea and when exhausted, comes back to the prepared questions. In this way, the researcher can gain a detailed picture of a topic. Data were captured through recordings and taking of field notes in the diary.

D. Data Analysis

Data analysis took a pure inductive thematic approach. It was a descriptive qualitative analysis taking a narrative approach..

IV. FINDINGS AND DISCUSSION

The study set out to find out whether university graduates access the labour market in their area of specialization. A total of 25 respondents from three public universities were interviewed. 15 were from public universities X representing 60% of the total respondents while 5 from public universities

Y and 5 from university Z representing 20% of total respondents respectively. Of the 15 (60%) respondents 3 were employed in their field of specialization while 12 (%) were employed in different sectors as tabulated: 3 were with ZRA, 2 with Council (Local Government), 1 was in the transport sector as a conductor, 3 were with Anti-corruption commission, 2 were with the ministry of labour while 3 had joined politics and lastly, 2 were with Energy Regulation Board (ERB). Of the 15 respondents, 10 were trained as secondary school teachers while 3 were trained engineers and 2 were trained, social workers.

When asked as to why they joined the fields they were not trained in, one respondent said:

"I stayed home doing nothing for two years as a trained teacher. I became a bother to my parents who had already done their part by sending me to the university. Hence, I had no choice but to join politics as a way of making quick money and live independent of my parents."

Such responses as above perhaps explain why the Zambian political scene of late has flooded by youths who are desperate for jobs. It seems the only way graduates can survive in a fluid labour market with their hard-earned degree qualifications is to join politics and ultimately end up at the mercy of political entrepreneurs who take advantage of them by using them as political vuvuzelas as well as tools of political violence. This scenario is in sharp contrast with Orji and Maekae (2013) who submit that education develops in individuals those values which make for good citizenship, such as honesty, selflessness, tolerance, and personal integrity. Politics which is perceived as a dirty game does not seem to inculcate these values in those that seek the political kingdom. One respondent conceded that 'I don't mind about my university degree qualification as long as politics gives me financial freedom.' And the interesting finding was that of a bus conductor who indicated that :

"Before I went to university and while at university, during recess, I used to work as a bus conductor to raise money for my school fees. For me, it is not strange to be found in this situation. After my graduation, I could not find a job and as such, I had to go back to something I knew better - bus conductor until I find a job I was trained in, that is, social work."

In an event that such a respondent fails to find a job completely, there is a high possibility that he may end up a minibus driver or transporter for the rest of his life because he may gradually lose interest in the job he was trained in. The training institutions' goal is not to offload graduates into the streets like the case in point but to train graduates who would enter the labour market and use their acquired skills to develop the nation. The scenario above and the one of a bus conductor who was aired on Muvi Television is a clear demonstration that institutions of higher learning train for ghosts in a fluid labour market. This finding is consistent with Lau (2017) who concede that it sometimes takes longer for some graduates to find jobs after leaving higher education and that even then, some are not in jobs that appear to be well-matched to their qualifications.

Lau(2017) further adds that there appear to be problems with graduates not always having the skills required by employers. His view, however, may not be consistent with the findings of the current study because the respondents had the

right skills. Probably the closest explanation to this scenario could be over-supply of graduates against the available labour market which seems to be the case in Zambia. Lau (2017), however, submits that one response to his findings is to make sure that vocational courses meet the requirements of the employer and to ensure that the accreditation system is appropriate.

In this case, one would agree with Lau's (2017) submission that there is a need for the balance between employer-provided training and education provided by institutions of higher education. This perhaps explains why the findings in the current study indicate that the majority of the graduates are not employed as per their qualifications. Hence, ghosts take advantage of the graduates. Therefore, employers have a role in addressing concerns about skills mismatch. And governments play an important role in improving information about training opportunities, setting appropriate legal frameworks, and ensuring portability of skills. Graduates should be encouraged to study subjects for which there is high relative demand in the labour market.

The current study further indicates that of the 5 graduates of university Y, 2 were employed by non-governmental organisations (NGOs) as programmes officers, 1 as a research assistant while 2 were doing nothing except helping their parents in their businesses. All the 5 respondents were trained teachers and had stayed for over 3 years without being deployed. From this finding, it was clear that the skills acquired by the respondents were being misapplied in the jobs they were doing. Hence, denying the nation the much needed human resource in the education sector. One respondent lamented thus:

"I have lost hope of ever being deployed because I have overstayed in the compound without a job. To make matters worse, age is catching up with me. This is why I ended up taking up this job that does not inspire me to do more as it is not my area of specialisation. I trained as a secondary school teacher. To find myself working as a programmes officer in an NGO where there is no job security is a huge misplacement."

The above finding suggests that training institutions do not care where their end products end up. It appears, as long as they have trained and churned them out of their institutional corridors, who employ them is none of the institutions' business. Training institutions, as Orji and Maekae (2013) have indicated, are mandated to churn out a cadre of graduates whose output is to develop the nation by exploiting their skills in their area of specialisation. What institutions and other stakeholders such as governments should never forget is that education is a weapon, an instrument that remains silent but

has the greatest impact on a nation. Therefore, how we develop, how we deal with our daily challenges, and how we excel in every walk of life depends directly on our level of education. Some scholars have further argued that education is a force that makes a nation stand out and defend themselves among other nations of the world. Any casual approach to the training of human resources that is also not guaranteed the job market remains uncertain about the nation's destiny.

V. RECOMMENDATIONS

Arising from the findings of the current study, two recommendations that emerged are that there is a need to enhance partnerships between higher education institutions, research institutions, and industry to promote institutions-industry linkages in as far as labour market assurance is concerned. There is also a need to promote effective participation of the private sector and other stakeholders in the provision of higher education - thereby creating an atmosphere for the availability of ready market jobs for graduates.

VI. CONCLUSION

The current study set out to find out whether university graduates access the labour market in their area of specialization in Zambia. 25 university graduates respondents were drawn from three public universities. The findings of the study revealed that training institutions of higher education churn out graduates who end up being employed in areas they not are trained for and as such, are taken advantage of by the ghosts- unreliable employers. Other graduates fail to find jobs as the labour market is fluid and not able to assimilate them. Worse still, some graduates can not be employed based on the mismatch of skills. Higher learning institutions, therefore, are expected to promote employability in their programmes to avoid training graduates for ghosts.

REFERENCES

- Eric, C.R., et al. (2010). The Match Between University Education and Graduate Labour Market outcomes. NP.
- Lau, K. (2007). Higher Education and the labour market. NP: Centre Piece Autumn.
- MOHE (2019). National Higher Education Policy. Lusaka: MOHE
- Oluyomibo, S.P. (2016). Towards Enhancing University Graduates Employability in Nigeria. J sociology soc Anthy, 7(1): 1-11.
- Orji, K.E., & Maekae, J. (2013). The Role of Education in National Development: Nigerian Experience. European Scientific Journal, vol.9. No 28, 312-320.
- Sahaya, G.S. SDB (2017). Empirical Research: A Study Guide. Kenya: Paulines Publications Africa.

DIGITAL FINANACIAL SERVICES ADOPTION AMONG SCALE TRADERS IN ZAMBIA

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Abstract—the research sought to find out the use of digital financial services and their impact on the lives of traders in Zambia. To achieve its objectives research used convenient sampling to obtain data from the traders from various parts of Zambia. The instrument used to collect information from the traders was a questionnaire which had both closed and opened questions. To analyze the data collected from the traders, Statistical Package for Social Science (SPSS) software version 16 was used to generate pie charts, bar charts, histograms and cross tabulations and to conduct ANOVA analysis. The findings showed that 93% of the traders interviewed make use of digital financial services while only 7% do not. The ANOVA analysis showed that there is no significant statistical difference between the traders from the provinces namely Central, Copperbelt Western and Muchinga,. The research also revealed that mobile money takes the lions' share when it comes to the type of digital financial services traders make use of. The findings show that the majority of traders make use of digital financial services through mobile money, those are services provided by mobile service providers. This is because of the ease with which they can manage their finances either in respect to banking their money or conducting money transfers. This is also in line with the technology acceptance model, comprises of perceived ease of use (the ability to transact easily) and perceived usefulness (the mobile platforms offer so much more services)

Keywords: *Digital Financials services, Mobile Money, Mobile Service providers, Conventional banking*

I. INTRODUCTION

Money is considered as the life line of any economy. It not only enables Individuals to conduct their transactions of goods and services, but it also helps producers in acquiring factors of productions to produce goods and services. But as technology continues to advance so does the means through which to conduct business. One of the advancements are what are called Digital financial services. These digital financial services have the ability of introducing businesses of whatever size and nature to other means of transacting. [1] Digital Financial Services (DFS) are defined as a "broad range of financial services accessed and delivered through digital channels, including payments, credit, savings, remittances and insurance." [1] Further adds that the digital financial services (DFS) concept includes mobile financial (MFS). Digital Financial Services (DFS) models usually employs agents and the networks of other third-party intermediaries to improve accessibility and lower the overall service delivery cost. [4] Digital Financial Services (DFS) are defined as a broad range of financial services accessed and delivered through digital channels, including payments, credit, savings, remittances and insurance. [4] further states the digital financial services (DFS) concept includes mobile

financial (MFS). Digital Financial Services (DFS) models usually employs agents and the networks of other third-party intermediaries to improve accessibility and lower the overall service delivery cost

II. LITERATURE REVIEW

A. Theoretical Frame Work

The technology acceptance model is one of the information systems theory that projects the use and acceptance of technology. According to [5] the literature on the technology acceptance model or TAM providers' very good predictions of usage of technology by linking behaviors to attitudes and beliefs, of which beliefs are comprised of ease of use and usefulness. Furthermore, according to [6], Davis the founder of technology acceptance model suggested that users' motivation can be determined by three factors; these are Perceived Ease of use, Perceived usefulness and Attitude toward using the system. He theorized that the attitude of an individual making use of a system, was a huge factor in whether they made use of the system or not. The attitude of an individual was influenced by two major beliefs and these are perceived ease of use and perceived usefulness. And that perceived ease of use having an influence on the perceived usefulness; both are influenced by the system design characteristics

B. Emprical Frame work

Whereas developed economies have enhanced access to and provision of quality and sustainable formal financial services like credit, savings, payment systems, insurance and pension among others, in most of the developing economies, the bulk of the adult population still lack access to basic financial services. In SSA, 80% of the adult population has no access to basic financial services and only 34% have an account at a formal financial institution in [5]. [6] who wrote a paper on research and impacts of digital financial services talks about the value of financial services in the lives of the poor and states that roughly 2.5 billion people in the world who live on less than \$2 a day are not detained to remain in a state of chronic poverty. Typically this would occur by finding steady employment or through entrepreneurial activities such as growing a business or improving agriculture harvest. During that same period however, roughly equal number of households slip below the poverty line. In many situations financial tools such as personal savings insurance credit or cash transfers from family and friends are important buffers against setbacks. According [7] there is "A digital transformation is taking place in the financial services industry, with a host of non-bank innovators offering both customer facing and back office financial technology products

and services. This transformation includes emerging market economies, and in many places offers a viable digital alternative to traditional banks, which have left significant populations underbanked". [8] Whose objective was to establish the effects of digital banking on financial inclusion among banks in Kenya, states in her paper that digital financial services are vital to the public as they boost security of their cash and is more convenient as compared to keeping money at home. she further points digital financial mechanisms also need improvement of infrastructures to make the services user-friendly, secure and cost effective manner. [9] wrote a paper on Financial inclusion: policies and particles and in their introduction they highlight that globally, financial inclusion is a major policy concern with governments across the world. The lack of access of a large percentage of working age adults to the formal financial sector is a genuine global policy concern. Besides of providing access, financial inclusion includes also helps people manage their resources in a better way and building financial capabilities. According to [10] financial Inclusion land scape has increased over time in all the four courtiers that he sampled c. In Uganda, 85% of the adult population was financially served in 2013 compared to 70% in 2009. On the other hand adult population which had not been served by financial services reduced from 50% to 15%. In Kenya those who were financially served increased to 75% in 2013 and those excluded from accessing financial services has reduced to 8% from 25% in 2013. In Malawi and Zambia, slightly more people have been brought into the formal financial system. In the case of Malawi the was an increase 2 Zambia and Malawi also registered higher levels of financial exclusion at 63% and 51% respectively, which could imply large size of the informal sector in these countries. Even though Uganda recorded a relatively small share of the adult population who are financially excluded, it has also a larger share of adult population accessing the informal financial services (31%) compared to Kenya (8%). According to [11] whose "the success story of digital financial services beyond Kenya," states that Agents are the cornerstone to any DFS, because they allow customers to access their account from any small kiosk or rural store, where they can cash in and cash out from their account without the need to access traditional physical banking infrastructure. Moreover[12] also argue that although consumers may have digital banking credentials to access the digital financial system, consumers in many emerging markets are not active users of the digital channels due to lack of consumer trust and confidence in the new channels. The lack of trust in digital finance channels by customers has negative effect for a digital-finance-led financial inclusion program in emerging and developing countries, and this problem is greater in countries that lack strong consumer protection institutions and frameworks. What this means is that having greater financial data inclusion (or having digital banking credentials) does not necessarily improve access to finance for poor individuals if individuals do not trust digital channels. The literature reviewed was used by the author of this paper to consulted related works in order to have had understanding, to investigate the research problem and to identify the information gaps

III. METHODOLOGY

The study was based on primary data. The study adopted both qualitative and quantitative approaches. The research aimed at collecting information on the nature and use of digital financial services from traders from around the country of

Zambia. The research sample consisted 120 respondents. Non-probability sampling method was used to collect data for the research.. The research adopted convenient sampling in order to obtain data on the use and nature of digital financial services from the various traders. A self-administered questionnaires with both closed and open ended questions was used as the data gathering instrument. Statistical Package for Social Science (SPSS) software version 16., was In analysing the data gathered from the field from questionnaire to generate frequencies, means, and ANOVA were calculated using SPSS.

IV. PRESENTATIONS AND DISCUSSIONS OF FINDINGS

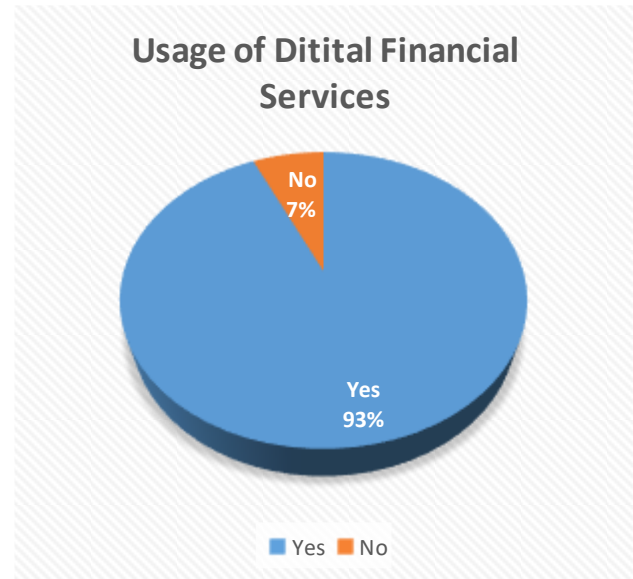


Figure 1: Usage of Digital Financial Services

Figure 1 is pie chart showing the percentage people that make use of and those that do not make use of digital financial among traders that were interviewed in the case study. A total of a 117 where interviewed and of these, 93% of them make use of digital financial services while only 7% do not. This shows that there is a high use of digital financial services among the traders interviewed. This also shows that the authors in [5], shades some light into the nature and use of digital financial services. According to [5] financial inclusion land scape has increased over time in four courtiers that they sampled that included Zambia. And from the Figure 1, it can be seen that 93 percent have access to digital financial services.

Table 1: Digital Financial Services ANOVA Analysis

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	0.168	3	0.062	0.966	0.412
Within Groups	7.267	113	0.064		
Total	7.453	116			

Table 1 above shows the output of the ANOVA analysis when traders where asked if they make use of digital financial services. The ANOVA table shows whether there is no significant statistical difference between the groups, because our Sig. (P-value) of 0.412 is $> \alpha$ (a significance level) of 0.05.

We cannot reject the null hypothesis which states that all population means are equal. Highlighting that there is no significant statistical difference when it comes to the use of digital financial services between the provinces. The research had divided the sample into three categories developed provinces, semi developed provinces and least developed provinces. The research wanted to find out if the level of development had a bearing on the use of digital financial services. To do this an ANOVA test was run and it revealed that it had no bearing on the use.

Figure 2 below highlights percentage of use of certain services accessed when making use of digital financial services. This is in respect to paying bills 44.4 percent, for ordering goods for their various business 18.8, receiving payments 47 percent, paying school fees for themselves and other people 7.7 percent, buying day to day items 29.1 percent, for money transfer 77.8 percent, banking 29.9 percent and other 0.9 percent. A majority of traders mostly use digital financial services for money transfer. This could be mainly because most digital financial services in Zambia were advertised as cheaper alternative money transfer technologies. The findings show that other services are not used as much could mean a lack of information about the other services digital financial services offer.

Figure 3 below shows the use of some of Zambia's digital financial services. From the chart below, it can be seen that from the traders interviewed, the three most used digital financial services are MTM mobile money, Airtel Money and Zoono in that order. From the Chart in can be seen that 72.6 percent of the traders make use of MTN Mobile, 20.5 did not make use of it and 6.8 do not have access to all kinds of digital financial services. 43.6 make use of Airtel money while 49.6 do not and 6.8 do not make use of any kind of digital financial services. Zoono has 42.7 of the traders interviewed use of while 50.4 do not make use of it and 6.8 do not make use of digital financial services. The other digital financial services had the following percentages in terms of their use: Shoprite Money Transfer 16.2 percent, 11.1 percent, Swift cash 10.3 percent, western Union 8.5 percent, ZANACO Express 7.7 percent, Bill Master/ZANACO Xapit 6 percent, Zamtel kwacha 2.6 percent, Kazang 1.7 percent, while Speed pay and Master Card both had 0 percent use amongst the traders interviewed. As can be seen form the findings in figure 3, MTN Mobile Money, Airtel money and Zoono, have the largest percentage of people making use of them. One reason for this could be because of the easy access to these digital financial services. [11] Also points out that Agents are the cornerstone to any DFS, because they allow customers to access their account from any small kiosk or rural store, where they can cash in and cash out from their account without the need to access traditional physical banking infrastructure.

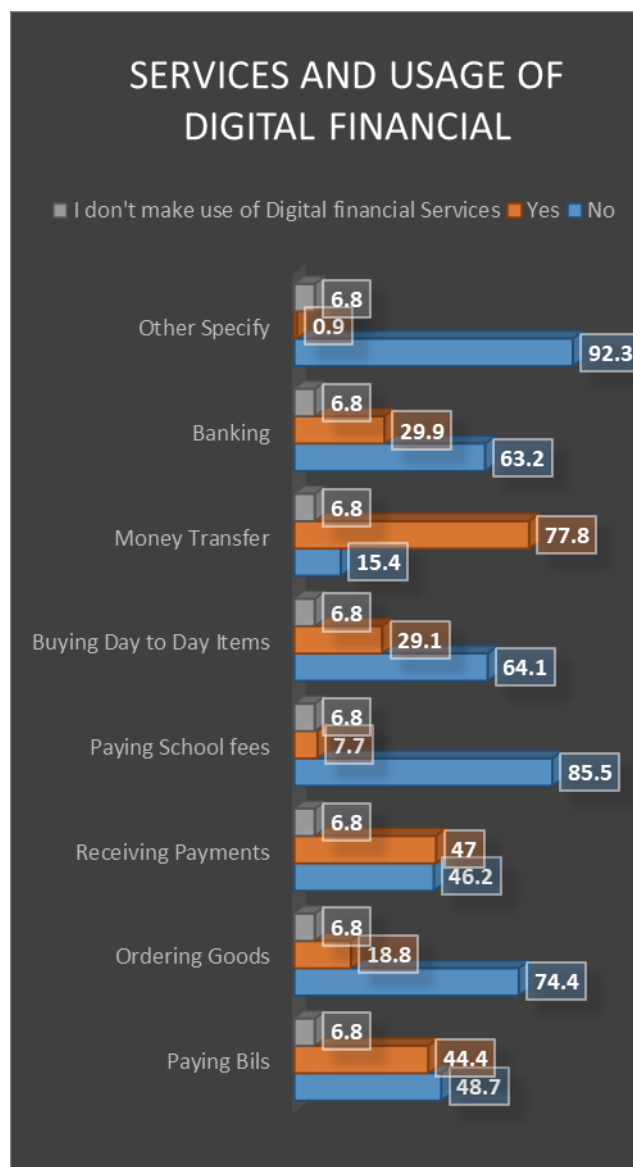


Figure 2: Usage of Digital Financial Services by Traders

This is true for the case of Zambia, because in very market there is a high chance of finding a MTN Mobile Money, Airtel Money or Zoono booth (Kiosk). The presence of mobile money booths (kiosks) and high use of mobile money type digital financial services among the traders' further shows that the Technology Acceptance Model holds true. The ability of mobile money platforms to easily provide digital financial services is in line with perceived ease of use and mobile money platforms offering more financial services is in line with perceived usefulness. The mobile money platforms having a far larger percentage of traders making use of digital financial is an indication of good attitude towards the technology and hence acceptance of the technology

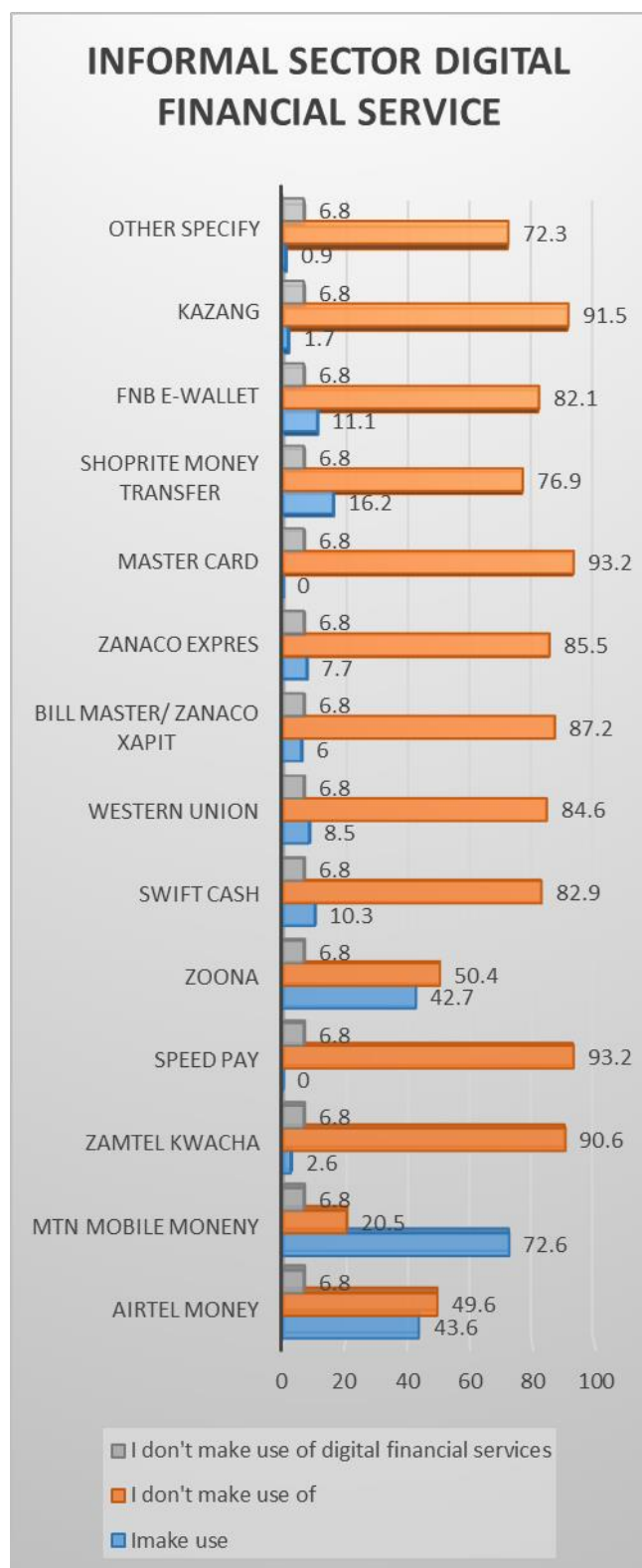


Figure 3: Digital Financial Services Providers for Informal Sector Traders

V. RECOMMENDATIONS

More education on the use of digital services, the education on the use could encompass: education on the actually use, education on other services other that money transfer. The introduction of some form of interest on interest on money banked with digital financial services would be on way of attracting more users. If possible, the introduction of longer

service hours by the providers of digital financial services. The introduction of a better graphical interfaces, when use and accessing digital financial services.

REFERENCES

- AFI (2016) : Digital financial service Basic terminology. Guideline Note 19.
- Barbara H. Wixom, Peter A Todd (2005): A theoretical Integration of User Satisfaction and Technology acceptance. McIntire School of Commerce, University of Virginia, Olarlottesville, Virginia 22904-4173 Information Systems Research
- Chuttur M.Y. (2009). "Overview of the Technology Acceptance Model: Origins, Developments and Future Directions," Indiana University, USA . Sprouts: Working Papers on Information Systems, 9(37)
- Sakala Lute and Phiri Jackson (2019), Factors Affecting Adoption and Use of Mobile Banking Services in Zambia Based on TAM Model. Open Journalof Business and Management , 7,1380-1394
- Shem Alfred Ouma , Maureen Odongo and Maureen Were (2017): Mobile Financial Services and Financial services and financial inclusion: Is it a boon for savings mobilization. Review of Development Finance, Science Direct
- Karlan D Kendall J Mann R Pandle R Suri T and Zinman J (2016): Research And Impacts Of Digital Financial Services: Cambridge, National Bureau Of Economic Research.
- European Investment Bank (2014): Digital Financial Services in Africa: Beyond the Kenyan Success story UNCDF
- Agufa Midika Michelle (2016): The Effect of Digital Finance on Financial Inclusion in the Banking Industry in Kenya. University of Nairobi
- Thankom Arun and Rajalaxmi Kamath(2015): Financial inclusion: Policies and Practices, IIMB Management Review, Science Direct
- Shem Alfred Ouma , Maureen Odongo and Maureen Were (2017): Mobile Financial Services and Financial services and financial inclusion: Is it a boon for savings mobilization. Review of Development Finance, Science Direct
- International financial corporation (2017) Digital Financial Services: Challenges and Opportunities for Emerging Market Banks EM compass issue 42
- Malady (2016): Consumer protection issues for digital financial services in emerging. Banking and Finance Law Review
- Emily Kthinji (2017): Effects of digital banking strategy on financial inclusion Among commercial banks in kenya. University of Nairobi

THE SEMANTICS OF CHICHEWA PERSONAL NAMES AND NICKNAMES

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Abstract—This study was aimed at finding out what the etymological basis and meaning of each one of the Chichewa personal traditional names and nicknames is in Katete District of Eastern Zambia. The descriptive research design was used to provide a clear understanding of the semantics of Chichewa nouns and adjectives. The population for the study was 100 informants. Informants included teachers of Chichewa and native speakers of the language. The purposive sampling technique was used to select participants. Research instruments used included unstructured questionnaires for face-to-face interviews and open-ended questionnaires to conduct focus group discussions. The referential theory of meaning was used. Richards and Ogdens (1927) theorised that language is used to talk about things outside it and that the meaning of a word is the object it denotes. This theory justified the idea that all linguistic items, including Chichewa traditional names, have meaning. The study has indicated that Chichewa has several names. These names can be given socially, culturally and religiously. Others are also given based on the problems, relationships and misunderstandings within the society. Thus, their meanings are to be understood based on such circumstances. The study was in line with the relationship between language and the real world in which the referents exist, as stated by Russell's (1985). According to Russell, nouns represent the relationship between the thought patterns of the speakers and the objects that are referred to in the real world.

Keywords—Chichewa; meaning, names, object, Referential, relationship.

I. BACKGROUND

A. Chichewa Nouns

Chichewa, the language whose semantics of nouns is the subject of this study, is a Bantu language classified as N31 by Guthrie (1948). Generally, Bantu languages are known for their comprehensive noun class systems and concordial agreement systems among terms. Like the case is in other Bantu languages, each noun class in Chichewa has its own Concords with other lexical categories, notable among them, verbs. The Bantu noun class system generally and Chichewa noun class system in particular, has a concordial agreement pattern that leads to complexity in the morphological and syntactical features of the language. This complexity can be best described in terms of the various prefixes, typical of each class and this greatly affects meaning. It follows that each Chichewa noun class has a number of affixes that are important in agreement patterns. Thus, each noun class has some semantics. Although previous studies on the semantics of Bantu nouns such as those conducted by Mohlala (2003) and Dingemanse (2006) have

perceived semantics of nouns as universal linguistic phenomena, the subject matter differs in many important ways across languages. This is because different languages, within and outside the Bantu languages are influenced highly by social, cultural and linguistic factors within the different environments in which they are used. In Chichewa, the meaning of a word in general and a noun in particular is its reference. There exists a link between the nouns and the objects they refer to. Fromkin and Rodman (2010:154) calls this link, generally, as reference and the real world object referred to as the referent. Based on this idea, it can be established that the meaning of Chichewa proper nouns like *Tisimbenji* is its reference and that the link between the noun *Tisimbenji* and the person named *Tisimbenji* is the referent.

Bennet (1970) defines a noun class as a set of nouns which share a concordance pattern of adjective, pronoun, and verb prefixes. Although there are specific semantic rules for noun class membership, variation in noun classes tend to affect the way people construct semantic reality of words. In Chichewa, noun classes are mainly determined by prefixes. This relationship is mutual -members of a given noun class take one of a few prefixes, and a given noun prefix is found in only a few noun classes. Hoffmann (1963:169) looks at noun classes as mere morphological categories that are void of any meaning whatsoever. According to Burton and Kirk (1976), the semantics of syntactic categories is determined by observation of the distribution of real world phenomena, such as objects, across syntactic categories.

II. METHODOLOGY

In exploring through the semantics of the Chichewa Nouns and adjectives, it is important to pay attention to noun class systems. The noun classes play a significant role in the agreement patterning of the language. Mchombo (1978) notes that in Chichewa, modifiers of nouns agree with the head noun in the relevant features of gender and number, as will be illustrated. A major feature of Bantu languages is the classification of nouns into various classes. In perceiving meaning, most Bantu languages have a common norm for categorising and classifying nouns. Mohlala (2003) recognises that the semantic content in most Bantu languages refers to the concreteness of entities. In the case of Chichewa, a reservation can only be made with attributive nouns. The contents of attributive nouns

are based on the size and appearance of an entity and not concreteness. Bantu nouns can be classified in many ways, and all these classifications are important in understanding meaning. The case of Chichewa is no exception. Demuth (2000) classifies Bantu nouns generally into three typological categories.

A. Chichewa names given according to different Social groups.

The Chewa social groups can be best traditionally categorised and this shape the meanings of the names given to different social groupings. The Chewa people recognise different social groups of people, with different groups or individuals having different names. They have different names that show the social ranks of individuals. There are various Chewa names according to the clan that one belongs to Finnegan (1970) recognises generally that in several African societies, individuals have names belonging to at least one the four categories of names, the umbilical names, lineage names, kinship names and nick names. Names of leaders belong to lineage category of names.

B. The Gender Aspect of Chichewa Semantics

Like with many other Bantu languages, some Chichewa nouns have a semantic gender basis. Hendrikse and Poulos cited by Katamba (2003:115) provides a general overview of the traditional consensus on the broad semantic characteristics of the Bantu genders and identifies a wide range of aspects to semantically gendered features used in Chichewa. Other nouns may include those that refer to tools, derogative, augmentatives and diminutives. However, certain nouns overlap the two genders and this, notes Dingamasane (2006), making it difficult to predict to which gender a noun belongs, in relation to its semantics. This study challenges this assumption. Gender can only be predicted on semantic accounts with proper nouns and kinship terms. Previous studies on the gender aspect of Chichewa nouns have been mainly generalisations of the Chichewa noun class systems. For instance, Cobert (1987) describes gender in Chichewa as a complete system, without bringing out ideas on what constitutes this completeness. Such an assertion seldom includes Chichewa proper nouns for humans generally and their meanings in particular. Generally, it is assumed that most of the nouns in Bantu languages belong to a gender. This constitutes an important relationship between gender systems and systems of noun classifiers. The findings of the study on the semantics of Chichewa gendered nouns conform to this view. However, other studies on other Bantu languages such as those conducted by Dingamasane (2006) on Eton show that gender assignment cannot be predicted on semantic grounds in Eton, except for proper names and deictic kinship terms. The case is almost the same with Chichewa. Chichewa, like many other Bantu languages, has a much less semantically influenced noun class system. Alexandra (2012) makes an observation that in most Bantu languages, shape and size also appear as semantic parameters. In Chichewa, the findings of the study show, there exists a semantic rationale for

the gender assignment of nouns to different semantic groups. Masculine and feminine genders mark the terms for male and female humans (young and old), including domestic animals. Chichewa also has certain general names that are not specific to gender. Thus, Chichewa has a semantic basis for gender assignment of nouns.

C. The Semantic Functions of Chichewa Nouns.

Chichewa nouns are a form of address that can be best compared to speech acts. The nouns are a type of speech that are indicative of the ways in which the members of the Chewa speech community find meaning, perceive, and express the relationships in a variety of contexts. The nouns demonstrate certain communicative behaviours that identify different individuals. Thus, each Chewa name given to an individual is nothing short of a speech act. In many cases, the names are given not in a quest to obtain information, but to highlight the social relationships and talk about behaviour patterns or appearance. There is a general tendency among the Chewa people to give certain names in expression of specific behaviour patterns, character and other personality traits. Each name signifies something and therefore, Chichewa names are 'symbols' that are of remarkable significance, semantically. It can be argued, therefore, that Chichewa names are formidable tools for communication. Most of the names in Chichewa are used as a means of social control. This resonates with the functions of the Chichewa names stipulated by Mvula (1995), who posits that Chichewa names warn individuals against dangers of nonconformity to the norms and values of the Chewa society. Mvula further identifies as functions of Chichewa nouns, criticising and ridiculing bad behaviour and teaching acceptable behavioural patterns, including giving advice, giving orders and making prohibitions among others.

D. The Meanings of Chichewa personal names.

In Chichewa, the meaning of a word in general and a noun in particular is its reference. There exists a link between the nouns and the objects they refer to. Fromkin and Rodman (2010:154) calls this link, generally, as reference and the real world object referred to as the referent. Based on this idea, it can be established that the meaning of Chichewa proper nouns like *Tisimbenji* is its referent and that the link between the noun *Tisimbenji* and the person named *Tisimbenji* is the reference. Baptista et al (2007) presents a general view that first names, which he also calls given names or Christian names, can be intuitively identified whereas last names (surnames or family names) are more often ambiguous with words of the common lexicon. In Chichewa, a wide variety of proper names exist, most notable of which may include anthroponyms, (names of persons), toponyms (names of locations) and hydronyms (names of water bodies). In this paper, particular interest is on the Chewa anthroponyms. Morris (1998) recognises generally that a Chewa name consist of three parts, a personal first name, a second name derived from the child's father's first name and a surname taken from a member of the fathers kin group or from the fathers clan name. As a subfield of onomastics,

anthroponyms deal with not only the formation of personal names but also the social-cultural conditions that characterise the allocation of such names. Thus, Chichewa personal names conform to a particular semantic value. There seem to be a set of circumstances within the Chewa language community that shapes guides or determine the name that a child is given at birth.

III. FINDINGS AND DISCUSSIONS

The findings of the study showed that the naming process (of a child) in the Chewa speech community is treated with utmost significance that an important rite deserves. It is commonly held among the Chewa people that names given to children are such important factors in their lives that they not only define but also determine their life-long character. As noted by Mvula(1995), in the Chewa society, great importance is attached to the meaning of names; they are not just labels or appellations put on individuals to identify them in a community. Mvula goes on to say that when an individual is given a name, the naming is a speech act by which the name giver does not seek information, but talks about the social relationships between characters and about their behaviour pattern or physical outlook. Sharon (2001) makes a similar observation that when one bestows a name upon a child, the person is not just naming the fresh of the child but rather the name is the person's soul. Thus, each Chewa personal name is a sign or symbol which has character and significance of its own. Any endeavour to explain the semantic aspect of Chichewa or any other language, must consider the various social, cultural and religious factors embodied in the naming practices. Taking the works of Lwangale (2016) into account, most African speech communities have a systematic way of naming their children and the naming process of a given speech community speaks a lot about their way of life. Thus, Lwangale goes on, names are not only cultural but also linguistic. The study establishes that most of the Chewa personal names are based on the events surrounding the birth of the child. Although other names are given as inherited names from either dead or living relatives, selection of such names largely depends on the social, cultural and religious circumstances that characterise the period of birth. A similar study conducted by Hang'ombe (2015) on the semantics of Tonga names shows that in Tonga, there are given names that denote seasons and days. However, the case is different with Chichewa where there are no personal names for seasons and days. As per Chewa tradition, names are given by the grand parent of the child, the parents of the child or the siblings to the parents. However, the first child is given the name by the father's side and the second born, the mother's side with the turn going on with more children born. The commonest practice among the Chewa people is an accompaniment of a gift when giving a name to child. It is believed that if the child grips the gift, it means acceptance of the name while if the child cries upon given the gift, it means rejection of the names. A child may be given two names sometimes, and this is either by choice, or conflicting interest between the people who names

the child. Giving a child a meaningful name in Africa requires acceptance on the part of those that give such names that the child has personal dignity and right from the moment of conception that needs not only to be respected but also protected, (Uzo, 2011). Modern day Chewa naming and inventory of personal names has been defiled by encroachment of 'imported' or loan names. However, typical Chewa names, once more, are based on social, cultural and religious factors that characterise child birth. Specific factors that determine the Chewa names given to children may include problems faced by parents during child birth, death, witchcraft, the place where the child is born, warning, expectations, religion, joy, love, hatred, requests, gratitude, order or number of the child in the family at birth, confession, complaints, behaviour and approval among others. A number of Chewa personal names given according to different factors indicated as subthemes below are discussed in the foregoing.

A. Meanings of names given based on problems.

Names in this category are given to children according to the problems that characterise their birth. For instance, **Mabvutol** literally means *problems or trouble and is only given to males*. **Tilire** (*we shall cry/mourn*)' literally means someone whose parents have anticipations of the challenges that can make them cry. This name is derived from the verb '*lira*' (to cry). **Tivutike** '*we shall suffer*' literary means *we will suffer*. Connotatively, it means a family with a baby in the village faces difficulties posed by ill-will members of the society. **Saukani** '*you suffer*' literary means *you must suffer*. It is a noun derived from the verb *sauka* which means *surfer* (many). Culturally, this name refers to a child whose parents have accepted suffering with the hope of being happy in the future. **Masauso** '*troubles or challenges*' is an anthroponym which literally means *troubles*. It connotes the many troubles that punctuate the birth of the child so named. These troubles may be maternal, social, cultural or economically.

B. Perseverance names

Perseverance related names in Chichewa are names that describe the strength, resistance and persistence of the parents of the bearer of the name, before, during and even much later after birth. However, some names discussed also show lack of the attributes stated above, implying giving up. **Tipilire** means '*we shall persevere*.' The name points to the readiness of the parents of the name's bearer to persevere the various circumstances in their quest to achieve their goals. **Pilira** literally means *persevere*. The name *Pilira*, according to the findings of the study, is given to a child, usually a girl born at the time when the mother faces so many challenges that she nearly gives up. **Sindigwa** by denotation means *I will not fall down*. It is usually given to boys whose parents are doing better economically and that other people are expecting them to crumble to the zone of unsuccessfulness.

C. Funerary names

These are names given based on the various funerary related circumstances that punctuate child birth. The choice of any of these names is determined by a number of factors, all related to the theme of death. Kenji (1993) explains the various belief systems that the Chewa people hold in relation to death. The inventory below depicts most of them and their meanings.

Maliro is name means death or funeral. The name means that the child's birth was preceded by the death of a parent, grandparent or close relative to the parent. **Nyamazawene** 'other people's meat is an anthroponym which literally means that the child is born in a family in which death is order of the day and that the family has come to attribute the multiple deaths to witchcraft. **Chakumanda** 'one who belongs to the grave yard' literally means the one who belongs to the grave yard or cemetery. At second level meaning, the name is a complaint about the prospects of the bearer dying like the preceding siblings have done. Other names under this category include Capansi 'the underground one,' and **Tafele** 'let us die for them.'

D. Witchcraft related names

The Chewa people believe that some people practice witchcraft to cause harm or kill others. In view of this terrifying practice, names are given to children to appeal, complain, ridicule or mock the withes. For example, **Mwatitha** 'you have finished us,' **Tatha** 'we are extincting' **Tabalire** 'let us reproduce for them and **Malizani** 'can you finish or can you complete.' Other names are **Dyilentoni** 'eat the whole lot of me,' **Phaniso** 'kill again,' **Tsilizani** 'can you finish' and **Gezani** 'clean out.'

E. Behaviour related names

Names under this category are given based on the behaviour of different people before or at the very time a child is born. The Chewa people recognise different types of behaviour, with some being classified as either bad or good. Examples include **Mekani** 'be proud,' **Timeke** 'we will show pride,' **Dumbo** 'the one who is very proud or makes others proud,' **Anyada** 'someone who has pride.' Others, but not all, are **Ayiwala** 'the one who forgets,' **Alota-lota** 'the one who dreams' and **Aononga** 'destroyer.'

F. Religious names

The Chewa people have religious beliefs that influence in many important ways, some names that are given to children. Chichewa religious names include **Batizani** 'baptise,' **Mphatso** 'gift,' **Dalitso** 'blessing,' **Madalitso** 'blessings,' and **Mwai** 'fortune.'

Apart from the above types of Chichewa personal names, there are also other categories that the study unearthed. These include gratitude names, love oriented names, names of approval, confessional names, hatred names, warning names and names that remind about the past. More categories are the names of

joy, request names, names given according to number of children in the family and names that show expectations. Each one of these categories has its own names.

G. ChiChewa Nicknames

Just like in many other Bantu languages, the Chewa nicknames are names that do not reflect the original identity of an individual. A nick name is an informal name that friends or family call someone that is not his or her real name. Because they are informal, the use of nicknames is restricted to relatively informal contexts. It must also be noted that some nicknames are chosen by the bearer's other are given against the wish of the people to whom they are bestowed. A similar view is given by Smith (1970) cited by Mvula (1995) who defines a nickname as a name added to, or substituted for, or used alternately with, the proper name of a person, place or thing given by other sin contempt, derision, ridicule, sportive, familiarity or affection. The findings of the study showed that the many Chewa nicknames exalts, praise, ridicule, mock, humiliate or intimidate the individuals to whom they are bestowed. The Chewa nick names can be divided into four broad categories, namely metaphorical nick names, anatomical nicknames, behavioural nicknames and proverbial nicknames. The present study discusses the Chewa nicknames in the light of these categories, although most of the names discussed in the preceding sections, not including the section for anthroponyms, are actually nicknames. The Chewa nicknames are commonly used in day-to-day conversations, some of which are liked by those upon whom they are bestowed while others are disliked with utmost resentment.

H. Metaphoric Nicknames

Metaphorical nicknames describe an individual by means of comparison. According to James (1979), a metaphor is a figure of speech that makes a comparison between two things that are basically dissimilar. Mvula (1995) defines metaphorical nicknames as appellations drawn from the fauna and flora, including birds and animals which are part of the local environment and further asserts that individuals are likened to or equated with animals using metaphors. The metaphoric nicknames give either praise or derogatory attributes. The praise nick names can be understood from two main perspectives, namely from the self-imposed praise or an individual's achievements based on the community's judgements about him. Both perspectives have a positive attribute to an individual. Derogatory nicknames however, are negative because they ridicule, criticise or demean the referent. Examples of praise metaphorical nicknames include **chirombo** 'beast', **Mango** (feared) and **kariba** (very beautiful)

I. Derogatory Metaphoric nicknames

These are nick names that are pejorative in nature. They demean, belittle or disregard the persons to whom they are bestowed. Derogatory nicknames in Chichewa are hardly selected by the bearers. According to the findings of the study,

most derogatory nicknames are in fact used without the knowledge of the bearer, in the background. Sometimes, the persons to whom they are bestowed consider them to be contemptuous and disparaging. Thus, most of the nick names under this category are not used directly in addressing the persons to whom they are bestowed. Some of here derogatory metaphorical nicknames may include Bilimankhwe/Tonkhwe-tonkhwe '*chameleon*', and fisi (hyena).

J. Anatomical nicknames

Chichewa anatomical nicknames provide a description of an individual's physical characteristics. According to Mvula(1995), Chichewa nicknames are employed vocatively or referentially and they have either derogatory or positive connotations depending on the specific situations. Some of the Chichewa anatomical nicknames include Chimutu (big headed) and Chiminba (big bellied) and Chiphazi (big footed).

K. Behavioural nicknames

These are nicknames that provide a description of the different behaviours exhibited by different individuals. These names define the character and personalities of those people upon whom they are bestowed. Examples of names under this category Cidwolankhali '*great eater* and mbalephamu '*full plate*. 'Khelenge '*trick star*.'

IV. CONCLUSION

The study was tailored towards identifying the various Chewa personal names and nicknames and finding out the meanings of each one of them. It must be evident from the findings discussed that each one of the many Chichewa personal names discussed has both literal and implied meanings. The findings clearly demonstrated that various factors determine the Chewa personal names bestowed to children at birth. Generally, these factors can be classified as social, religious, ceremonial and economical. According to the findings of the study, Chewa personal names are given to the child soon after birth, usually by the father, mother, grandparents or siblings to the parents. There exists a mutually accepted naming practice among the Chewa people in which turns in naming children are taken. The first-born child is usually named by the father's side or the father himself, with the second born child being named by the mother's side and the turn going on like that.

Arising from the findings of the study, Chewa personal names are given based a variety of events and circumstances that characterise child birth or the period before the birth of the child. These circumstances are very important in the understanding of the meanings of the various Chewa personal names. The most common grounds for naming a child among the Chewa people include among others, problems at birth, resilience to challenges, death of a relative, witchcraft practices, good and bad behaviour including names of approval or disapproval of certain things. Other factors may include love between parents or lack of it, expression of gratitude, confession, hatred and warnings.

Some more names are given as reminders of good or bad events in the past, expression of joy, making requests, number in the family and expectations. Also of great importance are names given based on complaints over certain occurrences, sexuality, pledges, comparison and discouragement. The study concluded that certain Chewa personal names that connote negativity such as pejoratives and diminutives are no longer given as person names in the present day, regardless of the circumstances that characterise child birth. This is because it has become increasingly held among the Chewa people that negative names also influence the character of an individual so named in a negative way. Most of the Chewa personal names have moral lessons intended to educate the members of the society.

The findings of the study clearly showed that the meanings of most of the Chewa personal names can hardly be understood without considering their morphological behaviours. The study concluded that a wide range of Chichewa personal names are formed by the morphological process of derivation. The study demonstrated that most of the given names are derived from verbs and this because the Chewa people believe in performance of actions. Pre-fixation also greatly shape the meanings of Chichewa personal names. Usually, the names consist of a prefix and a stem.

Chichewa nicknames are different from the personal names. Among other things, whereas personal names are only bestowed, nicknames are either bestowed or given by oneself. The study concluded that nicknames that are self-given tend to be biased because they only praise the bearer. However, an objective perspective characterises the bestowed Chewa nicknames that either have a negative or positive meaning. Most of the Chewa nicknames that have negative meanings are not accepted by the bearers and are therefore not used directly when addressing the persons upon whom they are bestowed. The study identified various types of Chewa nicknames, namely metaphorical nicknames, anatomical nicknames, behavioural nicknames, proverbial nicknames, leadership nicknames and ceremonial nicknames among others.

V. RECOMMENDATIONS

The decline in the bestowing of Chichewa nicknames to children is a form of loss of culture. Therefore, the Chewa people should take it upon themselves to revive their culture by giving these names. future studies on the subject matter pay particular attention to other areas such as ambiguous Chewa personal names and nicknames, the syntax of the Chewa personal names and nicknames, including the pragmatics of the Chewa names.

REFERENCES

- [1] Alexandra(2011). Semantics of Noun classes and Classifiers. Melbourne: La Trobe.
- [2] Baptista J.etal(2007). Building a Dictionary of Anthroponyms. Lisbon: Rovisco.
- [3] Bennett, P. R. (1970). The Problem of Class in Kikuyu. Nairobi: African Language Studies.

- [4] Cobert G.(1987). Gender Agreement in Chichewa. London: University of Surrey.
- [5] Demuth, K.(2000). Bantu Noun Class Systems: Loan word and Acquisition Evidence of Genderless Nouns. Nairobi: African Languages Studies.
- [6] Dingemanse M.(2006). The semantics of Bantu Noun classification. Leiden: Leiden University.
- [7] Fromkin V. and Rodman R.(2010). An Introduction to Language. Wordsworth: Canage.
- [8] Guthrie M.(1948). The Classification of Bantu Languages. London: Oxford University Press.
- [9] Hang'ombe K. (2015). Morphology and Semantics of Tonga Anthroponyms: a Case of Tonga Given Names and Nicknames. Unpublished desertation.
- [10] Hoffman, C.(1963). The Noun Class System of Central Kambari. Journal of African Languages.
- [11] James E.(1979). Adventures in American Literature. New York: Harcourt
- [12] Katamba, F. (2003). Bantu Nominal Morphology. London: Routledge.
- [13] Kirk L. (1976). Semantic Reality of Bantu Noun Classes: The Kikuyu Case. Irvine: University of California Press.
- [14] Kofi D.(1986). Noun Class System and Agreement Patterns in Logba. Acra: University of Ghana.
- [15] Kunkeyani T.(2007). Semantic Classification and Chichewa Derived Nouns. Working Papers in Linguistics Vol.15. Lilongwe: SOAS.
- [16] Lwangale(2016). A Genealogical Linguistic Implication of the Abaluhya Naming System. Egerton: EgertonUniversity press.
- [17] Mohlala L.(2003)The Bantu attribute Noun Class Prefixes and Their Suffixal counterparts, with special reference to Zulu. University of Pretoria: Unpublished thesis.
- [18] Morris, B.(1998). The Power of Animals. New York: Berg.
- [19] Mvula E.T.(1995). Nicknaming in Conversational Context Among the Chewa of Malawi. Blantyre: Macmillan.
- [20] Ngoma J.L., Chauma A.M.(2006). TizameM'chichewa. Ogden, C.K., Richards, I.A.(1927). Meaning of Meaning. New York: Harcourt, & Brace.
- [21] Russell. D. (1985). Grammar, Structure and Style. New York: Silver Burdett and Ginn.
- [22] Sharon B. (2001). African Names: Reclaim Your Heritage. Pretoria: Struik Publishers.
- [23] Uzo, U. (2011) Names and the value of a human person. In Just Genesis: African Naming Practices. Retrieved on 7 July 2018 from: <http://jadyongenesis.blos.com>.

THE INITIATION CEREMONY AND JARGON OF THE CHEWA CULTURAL TRADITION FOR GIRLS

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This study aimed at analyzing the sociolinguistic role of the jargon used in girl-child initiation ceremonies in Chipata District of Zambia. It employed a survey design in which face to face and focus group interviews were conducted with 20 initiates and 10 initiators, respectively, who were selected from 10 villages of Chipata District. The qualitative data that was collected was recorded and later transcribed for analysis. Analysis of the data involved coming up with codes and themes which were later presented as descriptions. The study revealed that the jargon was key in transmitting cultural values to the initiates. These values are essential to the girl-child, as she develops into a responsible member of the community. Furthermore, the study revealed that the initiators and initiates had sound relations and that both were comfortable with the register that was used during the initiation process. The study also found out that there was a curriculum that was followed at the ceremony although this curriculum was not written but only passed on verbally by word of mouth. Revisions of the curriculum were done by stakeholders. The study recommended that, the curriculum followed in cinamwali, lessons should include the modern teaching on usage of sanitary towels during menstrual periods in modern Zambian society. The study concluded that the ceremony still plays an important role in inculcating societal values in the initiates and that the jargon used plays an important role in the process. Although the revisions have been made to certain practices in the ceremony, its importance and necessity still holds. The study recommended that the teachings related to hygiene (puberty) be separated from teachings related to running a home (marriage).

Keywords: Register, significance, cinamwali, culture, familiar language and predominant language.

I. INTRODUCTION

Zambia is a multi-ethnic country, with more than 72 natural languages being spoken. This large number of languages entails that, there is diversity in culture. Mbiti (1996) defined culture as “the way people live, behaviour, and their physical as well as their intellectual achievements.” Presently, Zambia has seven officially recognized local languages. These are local languages of each Linguistic zone of the country. Initiation ceremonies are forms of traditional education and they are influenced by language, since language is a medium of instruction. A medium of instruction, according to MOE (2000:22) “is a pedagogical tool for explaining, communicating, asking, responding, understanding and activating the learning process.” The fact that language and society are interrelated has long been established in linguistic scholarship. Indeed, it has been agreed

that language is the mirror of society’s culture since it reflects the beliefs and norms of its members. The spiritual traits and the structure of the language of a people are so closely related that, given either of the two, one should be able to derive the other from it to the fullest extent. Language is the outward manifestation of the spirit of the people: their language is their spirit and their spirit is their language; it is difficult to imagine any two things more identical (Salzmann, 1998). Similarly, Wardhaugh (2010) argues that the exact nature of the relationship between language and culture has fascinated, and continues to fascinate people from a wide variety of backgrounds. There should be some kind of relationship between the sounds, words, and syntax of a language and the ways in which speakers of that language experience the world and behave in it. Sapir (1921) also lends his voice to the connection between language and society when he asserts that “language and society are intricately interwoven, and are in a sense, one and the same”. Indeed, the connection between the two is deeply rooted. Language performs various functions in the society and the society does the same. If one does not exist, the other will be affected. Language and society have a symbiotic relationship because every language is a social product, and every society constitutes itself through language. In this regard therefore, this paper presents the Chewa Girls’ initiation (*Cinamwali*) jargon. *Cinamwali* is an adolescent initiation ceremony of the Chewa people of Zambia. An adolescent initiation ceremony is defined as some social recognition, in ceremonial form, of the transition from childhood into either adolescence or adulthood (Fair, 1996). Ceremonies can take place during a rather long period in biological late childhood or adolescence. This could be any time between 8 and 18 years although the majority of the ceremonies for both sexes occur around puberty. A ceremony must include at least two participants, an initiate and an initiator. In other words, this initiation ceremony is a form of rite of passage where individuals are transformed from one stage to another, experiencing some status change. This is said to be accompanied by a lot of drama and is characterized by various forms of symbols and rituals (Fair, 1996). It is a cultural experience shared by all children of the specified sex, uniformly changing them to the adult status. The ceremony thereby minimizes discrepancies based on wealth, social status, or other characteristics of the initiates or of their parents. In a broader sense initiation ceremony express and enhance social cohesiveness. The initiation ceremony also emphasizes sex differentiation. Introduction to the sex-typed category of man

or women is typically a prominent feature of the ceremony. A ceremony for either sex serves as a marker for sex differentiation, whether or not there is a ceremony for the other sex. In the societies where both sexes are initiated, the ceremonies for boys and girls are separate and typically differ from each other in several aspects (Breugel, 2001).

In the Chewa tradition, the initiation ceremonies and processes for boys and girls are separate and both sexes are not allowed to share what they are taught despite the fact that generally society as a whole is always expectant to notice the difference after the ceremony. In the initiation process, jargon [register] has a significant function. This is because at the time of initiation girls are in the transition from childhood to adulthood, hence the need to study the particular ways in which jargon is used in changing girls to women (Van Gennep, 2011). Initiation ceremonies are a form of informal education and therefore register is vital in passing on cultural beliefs and traditions.

A. Conceptual Framework

This study is inspired by the sociolinguistic view of language. Sociolinguistics is the descriptive study of the effect of any and all aspects of society, including cultural norms, expectations, and context, on the way language is used, and society's effect on language (Chambers, 2009). It differs from sociology of language, which focuses on the effect of language on society. Sociolinguistics overlaps considerably with pragmatics. Sociolinguistics also studies how language varieties differ between groups separated by certain social variables such as ethnicity, religion, status, gender, level of education, and age among others. It also studies how creation and adherence to the rules is used to categorize individuals in social or socioeconomic classes (Chambers, 2009). This is so because usage of a language varies from place to place, language usage also varies among social classes. For example, a sociolinguist might determine through study of social attitudes that a particular vernacular would not be considered appropriate language use in an academic or business setting. Sociolinguists might also study the grammar, phonetics, vocabulary, and other aspects of this sociolect much as dialectologists would study the same for a regional dialect (Vygotsky, 1978).

In line with the sociolinguistic view of language, the socio-cultural theory asserts that children learn through social and cultural interaction. Kosulin et al (2003) say that "At the heart of Vygotsky's theory lies the understanding of human cognition and learning as social and cultural rather than individual phenomena." Socio-cultural forces are key in a child's development and learning and a child is also an active participant in the learning process. The child's intellectual development is mainly dependent on his/her interactions with surrounding culture and other members of the community.

II. REVIEWED RELATED LITERATURE

A. Jargon used

The jargon used during the initiation ceremony is mainly composed of the figures of speech. These include: proverbs, metaphors, similes, alliteration and hyperbole among others. The used is meant to restrict the teachings of *Cinamwali* to the initiates and initiators. The initiates and initiators were comfortable with the jargon used. This is because the jargon was explained during the ceremony so that only those who have attended the ceremony (have been initiated) understand the jargon used. For example, the colour black symbolizes dark days such as time of bereavement, when there is sickness in the household, hence the need to abstain from sex. On the other hand, white is said to symbolize good days.

B. Examples of the Jargon Used

One of the jargons used during *Cinamwali* initiation ceremony is metaphoric language. A metaphor is a figure of speech that constructs an analogy between two things or ideas; the analogy is conveyed by the use of a metaphorical word in place of some other word. For example:

1. *Amai nagwamo* - 'Mother, I have fallen in.'
Meaning: The girl has started menstruating.
2. *Suli bwino* - 'You are not ok.' Meaning: The girl has messed up.
3. *Nsalu yataika* - 'The cloth has fallen.' Meaning: The girl is not properly sitted.

The metaphorical jargon used here is euphemism. This is because the jargon used is a substitution of a cultured or less offensive term for a harsh one. Euphemism is an indirect word or phrase that people refer to something embarrassing or an unpleasant, sometimes to make it seem more acceptable than it really is. (Oxford dictionary of English)

C. Teachings/ Sayings

There are a lot of teachings that are given during the ceremony. These are passed on by means of parables, similes and proverbs (wise sayings). Some teachings or sayings that are used during the ceremony and their literal meanings are presented below;

1. What did you see for you to know that you have come of age (puberty)?
2. "I saw blood, can a child see blood?"
3. Between a dressed chicken and an undressed chicken, which one can you choose?
4. "Undressed chicken (referring to elderly people who have seen pubic hair on their private parts)."
5. If my husband and I find our parents bathing on the way. What are we supposed to do?
6. "We are also supposed to undress."
7. Close the winnowing basket.
8. "Girls were taught to be givers and not to be selfish".
9. N'bwerekeni kabende asumbali, ndani ali naco cidanana?
10. Afunika kubvala bwino osaonetsa cinthako.
11. "Girls were encouraged to dress properly not showing their nakedness".

D. Initiation Jargon Through Songs

Initiation jargon through songs is mainly done by means of alliteration. This is a figure of speech that occurs through the repetition of initial consonant letters (or sounds) in two or more different words across successive sentences, clauses, or phrases.

1. *Cidandale ede...cidandale ca anamwali*

Amafunika kuchapa mwere ngati wada'

'The girls are supposed to wash their sanitary clothes when soiled,' This teaching encourages girls to be clean when they are menstruating.

2. *Ico ncimwere cayanika.....*

Azimai akakhala kumphepo afunika kuika kobisika mwere osati pali-ponse ai.'

'when women are menstruating, they are not supposed to put their sanitary towels everywhere, but in their bedrooms.'

3. *Ndine mkulu nane ndico nkhalira pampando, ndine mkulu nane.*

Ana amafunika kupatsa ulemu akulu-akulu iwo nadzicepetsa.'

'Children are supposed to respect elderly people and humble themselves by offering seats'

4. *Nabwera udzapala moto niribo bwerera za mkamwa nabwera udzapala moto.*

Osati ngati apita ku kapara moto ayamba maboza.

'When they go to a neighboring house to collect fire, it has to be only what they have gone there for and not gossip'

5. *Kanjoka kabvungana kumatako,*

Osati adzipereka matupi yao kwa azimuna ali ndi zinthu zomwe zingawaononge.

'Girls were advised not to be taking their bodies to men as they are considered to be carrying dangerous weapons which can destroy them'

6. *Cidyadyamule,kusinja-kusinja anamwali.*

Ngati anamwali apeza anthu akulu-akulu ali kugwira nchito, aziwathandiza.

'When the initiates find elderly people working, they have to help them.'

7. *'Amai nawo kuntuma-tuma, angokhala ali gone.*

Asazidandaula kuti amai nawo anyanya kuntuma.'

'They should not be complaining too much when their mothers assign them with some chores.'

8. *'Mwana ali kundende wa mangisa amai ake.*

Kuba yai angamangise amai ao.'

'Stealing was discouraged as the girls would end up having their mothers jailed.'

9. *'Acembere mudiuzanzi kodi? Ine zam'nyumba ndidzidziwa kale.*

Osati ine za mu nyumba anandiuza kale zonse.'

'Initiates were not to question initiators what they were teaching them nor saying we already know everything.'

10. *'Ine amai nakula ine, yai nakula, yai nakula.*

Asaziderera makolo kuwapatsa ulemu.'

'They should not look down on their parents but give them respect.'

Mwambo Wa M`khutu (Jargon through tradition of the ear)

This tradition is meant to foster sense of sexual responsibility in the minds of the initiates. The jargon used for the tradition of the ear is mainly in parables. A parable is a brief, didactic story, in prose or verse, which illustrates one or more instructive lesson or principles.

1. Jargon: '*Citseko canga n`natseka pakati n`nasiya n`nasiyira ninji?*

N`nasiyira cangade, cangade ninji? Cangade ni nkhole. Kanamwali kocenjera kanagona mkhonde mwa acembere, acembere anati kuno kulibe mwambo wako, mwambo uli kwa a phungu ako, aphungu anati thu singindi namwali gwira mwambo, mwambo wako namwali.'

Literal meaning: "I closed my door and left the middle part. Why did I leave it? I left it because it was mine. What was mine? The secrets of an initiate. A wise initiate slept on the verandah of elderly women, the elderly women said, there is no tradition for you here. The tradition is with your initiator, the initiator said indeed initiate hold on to your tradition, your tradition initiate."

Hidden Meaning: Initiates are advised to keep their virginity for their future husbands and not sleeping around with boys and men, as that can bring embarrassment to their initiators as well as their parents.

2. *Ng`oma yanga uku n`napana uku n`napana pakati n`nasiya. N`nasiyira ninji? N`nasiyira cangade, cangade ninji? Cangade ni nkhole. Kanamwali kocenjera kanagona mkhonde mwa acembere kuti akauze mwambo. Acembere anakamba kuti kuno kulibe mwambo wako, mwambo uli kwa aphungu ako, aphungu anati thu singindi namwali gwira mwambo, mwambo wako namwali.*

"I squeezed my drum this side and that side. Why did I squeeze it? Because it was mine. What was mine? The secrets of an initiate. A wise initiate slept on the verandah of elderly women, elderly women said, here there is no tradition for you. The tradition is with your initiator, the initiator said, indeed initiate hold on to your tradition. Your tradition initiate."

Hidden Meaning: Initiators check their initiates whether they have elongated labia or not. If not, it is the initiators' responsibility to help them have to the desired size.

3. *Mphasa yanga uku n`nayanza uku n`nayanza pakati n`nasiya, n`nasiyira ninji?* (chorus as above.)

Literal meaning: "I spread my reedmat this side and that side, and left the middle part. Why did I leave it? Because it was mine. What was mine? The secrets of an initiate. A wise initiate slept on the elderly women's verandah. The elderly women said, here there is no tradition for you. The tradition is with your initiator, the initiator said, initiate hold onto your tradition. Your tradition initiate." Hidden Meaning: The girl is told some of the bedroom issues in readiness for her future marriage life.

4. Jargon: *Mnzanga akati mkanda nane nkuti mkanda. ...*

Literal meaning: "When my friend says beads, I also say beads.

Hidden Meaning: What initiates have learnt from their initiators should also be taught to other initiates.

5. Jargon: *Nsalu yanga uku n`namanga uku n`namanga pakati n`nasiya, n`nasiyira ninji?*

Literal meaning: "I tied my wrapper both sides and left the middle part. Why did I leave it?"

Hidden Meaning: The girl is told not to be involved in any marital unfaithfulness once married but to remain faithful to her husband.

6. Jargon: *Nyumba yanga uku n`nadikha, uku n`nadikha pakati n`nasiya....*

Literal meaning: "I roofed my house both sides and left the middle part...."

Hidden Meaning: A girl is advised to keep the bedroom secrets to herself concerning her future husband's performance in bed.

7. Jargon: *Namwali yanga n`natobeka pakati n`nasiya n`nasiyila ninji?*

Literal meaning: "I spotted my initiate and left the middle part, why did I leave it?"

Hidden Meaning: Initiates are encouraged to wear beads in their waists for attraction to their future husbands and as a symbol of communication in the bedroom. Red beads symbolize blood, meaning the woman has started her menses while white beads symbolize purity, meaning that she has now finished her menses. From the sayings exemplified above, it can be stated that the jargon used during Chewa girl-child initiation ceremony is meant to transform her into an adult. This is because the jargon used is meant to be understood by those who have been initiated.

E. Cilengo tradition

On the last night before the final day of the ceremony, girls are also told about the Cilengo tradition. One initiator explained that "*Cilengo (illustrations or molded vessels and figures) or sketches, ciikidwa mkanda mitundu patatu. Wofiira, wakuda ndi woyera.*" Komanso amafunsa kuti, "*Namwali udaonanji?*" mtsikana anali kuyankha kulingana ndi zimene anaona, mkanda wofiira utanthauza magazi, wakuda utanthauza maliro kapena matenda komanso mkanda woyera utanthauza ukhondo"

Cilengo tradition is explained using an allegory. An allegory is a story or picture with a hidden meaning. The characters in allegories are symbols which represent particular ideas. The story has a figurative meaning, not just a literal one. Allegory is an example of rhetoric, but an allegory does not have to be a story in language. It may be something to look at, such as a painting or sculpture. An allegory is like a long metaphor. People have to use their imagination to understand what it is trying to say. A fable or parable is a short allegory with one basic idea (a moral). To illustrate Cilengo tradition, initiators draw illustrations which have three kinds of beads within them. The girl is then asked to mention what she can see and the colour of the beads'. The initiator explains that the beads are meant to explain the state of affairs for a girl. The colour black is meant to symbolize dark days for instance, during a funeral or when the child is sick, parents were expected to *jingula* (abstain from sexual intercourse). So tradition here is taking care of the psychological well-being of the involved parties as both are meant to enjoy the sexual union. Through the same

restraint, men are taught to be considerate and respectful of their women's well-being not to see them as sexual objects meant to satisfy the sexual needs of their husbands. It was also meant to inform the husband that it was time for shaving. Red symbolized blood (menstruation) and white symbolized purity or clean (end of menstruation, ready for sexual intercourse). The initiators indicate that the beads are meant to communicate the state of affairs in a matrimonial home. However, such symbolic language is not practical nowadays as couples have resorted to communicating directly by word of mouth.

F. Cilengo Tradition Songs

1. Kwenda kwali pambana

nakazuba naka mwezi. "The movements of the sun and the moon are different." Meaning:

"Menstrual cycle."

2. Kanamzelenga zelenga

Kanamzelenga namwali-kanamzelenga.

'What initiates usually experience every month.'

It's informing the whole family that the girl has come out of her menstrual cycle (meaning that she has ended her menses for that month). This is seen when the girl has started adding salt when preparing any kind of relish or smearing the floor with mud.

III. FINDINGS OF THE STUDY

A. Effects of the jargon on the relationship between initiates and initiators

The researcher also wanted to find-out the effects of the jargon on the initiates' relationship with the initiators. The jargon used during the ceremony had the following effects on the relationship between the initiators and initiates. The researcher found out that, the jargon used during girl-child initiation helps the initiators and the initiates to get along well. This is because the register used elevates the girls to the status of women, thus making them almost equal to their mentors. This in turn breaks any possible communication barriers that are likely to impede the initiation process. It also promotes unity and solidarity. Explaining the nature of their relationships, the subjects agreed that they had good relations with their initiators. For example, one initiate said '.....the initiators are our mothers'. Another initiate said '...a good relationship is maintained because our initiators are the ones who become our matrons when that time for marriage comes'. The effectiveness of the relationship between the initiates and their initiators is attributed to the effective communication process. In this communication system, the encoder is the initiator, while the decoder is the girl-child being initiated. On the other hand, the medium of transmitting information is the mouth. Traditional values and

customs are passed on to the initiates orally. This is done by means of singing and dancing, plays and verbal advices given to the initiates. The Chewas say 'Kuuza mwana ndiku msirizira' meaning 'if you want to teach a child, ensure you tell them everything.' By telling children everything they need to know, the assumption is that they will be able to understand the information without ambiguity.

B. Curriculum

All the initiates agreed that they were not told the content of the ceremony before being admitted to the ceremony. On the other hand, Initiators said they do have a curriculum for the content taught during the ceremony. However, this curriculum was not written although specific teachings (topics) were passed on by word of mouth. These topics include among others;

- a) Hygiene
- b) How to respect elders.
- c) How to respect husbands.
- d) How to look after homes.

C. Importance of the ceremonies

When asked how important the initiation ceremony is, all the respondents said the rite is very important. This is because initiation ceremonies help in passing on cultural knowledge to the young generations. They also help in the preservation of culture, as well as conformity and adherence to the Chewa tradition. The initiates' responses on the importance of the ceremony were similar. All the subjects agreed that the ceremony was important. The other reason is that it promotes family unity. This is because the ceremony prepares girls for family and societal responsibilities. This in turn strengthens marriage bonds. The values learnt are important because they enhance cultural continuity. Continuity is ensured by means of passing on cultural values and virtues. This is because *Cinamwali* gives girls holistic education. This in turn promotes social cohesion, as all Chewa girls undergo the same initiation rite with the same curriculum. The other significant thing is that this initiation ceremony enables girls to take social responsibilities and obligations. The values learnt are important to the community in that they help the girls uphold morality.

IV. RECOMMENDATIONS

The study recommended that, the curriculum followed in instituting *Cinamwali*, lessons should include the modern teaching on usage of sanitary towels during menstrual periods in modern Zambian society.

V. CONCLUSIONS

In conclusion, it can be stated that initiation ceremonies play an important role in transmitting values and traditions of the Chewa people. These values transmitted during the initiation of girls aid in developing the girls into responsible women in society who are able to not only take care of themselves, but also their future husbands and society as a whole. Further, initiation enables the initiates to acquire cultural identity and self-confidence, influences the behavior of initiated girls. A key value inculcated into the initiates is respect which is mostly demonstrated by kneeling, dressing modestly and even the way they interact with others in the community. The study also concluded that marriage lessons were relevant to initiation since they contributed to the women's behavior in a home. The study also found that the jargon used helped to maintain a good relationship between the initiates and initiators. The jargon also distinguished the initiated girls from those not initiated as only the initiated girls were able to interpret the jargon used at the ceremonies. Furthermore, the study concluded that in as much as certain practices in the ceremony were modified as and when need arose, the revisions have not displaced the role the ceremonies have in the Zambian society. Therefore, the practice still remains important for women today despite the religious, social, political and cultural changes because of the value attached to family life in almost all African traditions.

REFERENCES

- [1] Chambers, J. K. (2009). *Sociolinguistic Theory: Linguistic Variation and Its Social Significance*. Malden: Wiley Blackwell.
- [2] Fair, L. (1996). 'Identity, Difference and Dance: female initiation in Zanzibar' 1890-1939. *Frontiers: A journal of Women Studies*, 146-172. University of Nebraska Press.
- [3] Kozulin, A. et al (2003). *Vygotsky's Educational Theory in Cultural Context*. Cambridge: Cambridge University Press.
- [4] Mwanakatwe, J. M. (2013). *The Growth of Education in Zambia Since Independence*. Lusaka: UNZA Press.
- [5] Oxford dictionary of English v1.9.
- [6] Sapir, Edward. (1921). *Language: An Introduction to the Study of speech*. New York: Harcourt
- [7] Van Breugel, W. (2001). *Chewa Traditional Religion*. Blantyre: Christian Literature Association. Van Gennep A. (1977) *A Rite of Passage*. Translated by Monika Vikadom and Gabrielle Caffé. London. Routledge and Kegan Paul.
- [8] Vygotsky, L. S. (1978). *Mind in Society. The Development of Higher Psychological Processes*. Cambridge: Harvard University Press.
- [9] Wardhaugh, Ronald. (1998). *An Introduction to Sociolinguistics 3rd ed*. Oxford and Malden MA: Blackwell Publishers Ltd.

THE SEMANTICS AND PRAGMATICS OF NYAU TERMS AS USED IN KATETE DISTRICT OF EASTERN ZAMBIA

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Abstract - The study sought to provide the semantic and pragmatic meanings of Nyau terms. It further gave an explanation on functions of these terms in the Nyau cult. The target population comprised initiated Nyau dancers whether retired or currently practising. The researcher used Katete district because that is where Nyau dancing tradition is practised. The study sample was picked based on the fact that they were initiated Nyau dancers. The problem of the study was that the uninitiated members of the society did not understand the Nyau terms whenever Nyau initiates communicated with them. Since the uninitiated always faced punishment when they showed ignorance about these terms, it became imperative to provide this set of knowledge which must be known by all people to avoid further unfair punishments. The study used two sampling techniques and these are purposive and random sampling. The instruments used were unstructured questionnaires and a research guide. The qualitative research approach was adopted as it relied on the perceptions of the participants as owners of the Nyau cult. The data was qualitatively analyzed. The study bordered on two theories; the sign theory by Saussure (1966) whose work was published posthumously by his students and referential theory propounded by Lycan (2000). Several terms were identified. These include maliya, liunde, citsa, usakaulule, to mention a few. The study has an educative purpose. Finally, the recommendations were that a study be conducted on the psychological aspect of these terminologies on the public so that judgement could be made as to whether or not they are good. In addition, this research was conducted in Katete district of Eastern Zambia. It is recommended that a similar study be conducted in an area other than Zambia so as to determine whether or not the findings are the same.

Keywords: *Nyau (Gule wamkulu), initiated 'olowa', uninitiated 'citsa', sacred/secret place for Nyau lessons 'dambwe', semantics (denotative meanings), pragmatics (contextual meanings), identity, term.*

I. INTRODUCTION

The study was conducted in Katete district of Eastern Province of Zambia. It sought to discuss the semantics and pragmatics of Nyau terms as used in Katete district of Eastern Zambia. Nyau association uses terms which are also used in the Chewa community by everybody. However, the difference lies in the varying meanings in the two different worlds. Indigenous people who are not initiated (outside Nyau contexts) interpret these terms differently from the way Nyau initiates do. Therefore, this study provides the meanings of terms used in the Nyau cult from the uninitiated (semantic) to the initiated (pragmatic) points of view. Semantics looks at the direct meanings of terms while pragmatics looks at contextual (Nyau) meanings. The study was driven by the strife existing between the initiates and the uninitiated. The uninitiated members faced punishments whenever they failed to provide meanings to these terms whenever the initiates asked them to do so. This tension

provided a thin line between the initiates and the uninitiated people of Katete district of Eastern Zambia. It is hoped that this study may reduce tension between the initiates and the uninitiated. The study may add to the body of knowledge on the culture and tradition of the Chewa speaking people.

II. METHODOLOGY

The study employed the qualitative method and a phenomenological design to explore the subject matter. As Tavakoli (2012) puts it, this design examines the lived or experiential meaning and attempts to describe and interpret these meanings in the ways that they emerge and are shaped by consciousness, language, our cognitive sensibilities among others. To encourage these perspectives to emerge, phenomenologists use open-ended interviews as their primary data collection tool (Creswell, 2009). The study targeted 40 participants who were Nyau initiates, either retired or currently practising. All the participants were male as Nyau is a men's secret association. The aim of the study was clearly explained to participants and how their rights were protected throughout the study. Interviews were conducted at the convenient time of the participants so as not to interrupt their economic activities. The responses were transcribed and recorded. The data was thematically arranged and qualitatively analyzed.

III. FINDINGS AND DISCUSSIONS

The findings were presented and discussed in line with the set objectives which were to determine the semantics and pragmatics of Nyau terms and discussing their functions as used in Katete district of Eastern Zambia. The Nyau terms' presentation is in form of single words, phrases and questions that are well classified. These terms are generally used to ascertain the initiation status of a person being questioned.

A. Terms of Identity

Terms of identity define a person as either initiated or not. These terms come into play when a person meets a Nyau dancer who threatens to beat him by whipping the ground with a whip. If the threatened person identifies himself by mentioning any of the terms, he is exonerated. When the person shows ignorance about these terms, he is in trouble. These punishments are only meted on men, not women. The reason why women are exempted is that Nyau is a men's association.

i. Nchopita 'he is gone there'

Semantically, **nchopita** means 'he is gone there'. It is used when a Nyau dancer meets a stranger and wishes to know whether or not that stranger is initiated. Upon meeting that person, the Nyau dancer may ask, "**nchopita**?" If the respondent is an initiate, he would say, **nchopita** as well to

confirm his initiation status. This response usually attracts more assessment questions for the Nyau dancer to prove the initiation of the respondent. **Nchopita** simply means he is initiated. For a person to join Nyau, he goes to the Nyau sacred place, the **dambwe**. The act of 'going' is what led to the term **nchopita** from the verb **pita** 'go.'

ii. **Citsa** 'nest'

Semantically **citsa** means 'a nest', a house for birds. However, pragmatically, the term **citsa** refers to a person who is not initiated into Nyau cult. In Nyau, the term is used to interrupt the Nyau discussions conducted by the initiates when a stranger abruptly joins them. One of the initiates may just produce the term **citsa** to warn friends that there is a stranger who may not be initiated. This warning is made so that their discussions about Nyau are not heard or shared with the stranger, in case he is not initiated.

B. *Terms Related to Nyau Leaders*

There are leaders in the Nyau cult who perform various roles as prescribed. They organise and mentor the dancers in the cult. Each term stands for a particular leader who performs a particular job.

i. **Lubwe** (untranslatable in English)

The term **lubwe** has only one meaning, which is semantic. The term socially stratifies the Nyau initiates in terms of political structure. This leader holds the power to discipline and manage all the activities at the **dambwe** 'Nyau sacred/secret camping site'. The term is culturally and traditionally valued because it helps to maintain order among the initiates. He is highly respected by both the initiates and the uninitiated who may know him.

ii. **Zingano** 'needle'

Semantically, the term **zingano** refers to a needle for sewing clothes and other material. Pragmatically, the term is used to refer to the counsellor who is responsible for only one type of dancers, known as **kacipapa**. Other special types of dancers equally have their own kinds of leaders. Some leaders help to take other types of Nyau to dancing arenas because their eyes are closed because of the masquerade (mask). Some dancers cannot walk without their leader; if they try to, they may fall or even get lost. The leaders help to keep the integrity of the Nyau cult in general.

iii. **Atsabwala** 'place leavers'

Semantically, **atsabwalo** 'place leavers' are people who leave a particular place for another for various reasons. Pragmatically, the term stands for leaders or people who are responsible for organising Nyau equipment like drums, dress code, etc. For example, the **atsabwalo** take drums to the dancing arena which is very important in the Nyau cult. Other than this, the **atsabwalo** are also responsible for preparing the dancing arena. Further, they do clean-ups like picking stones which may make the dancer trip and fall.

iv. **Wakunjira** 'one from the road'

Outside Nyau, **wakunjira** means 'one who stays at the road and comes from there'. In Nyau, **wakunjira** has two descriptions. Firstly, **wakunjira** refers to a male Nyau counsellor or advisor for all initiates in the village in case they commit mistakes. He is also in charge of general discipline of the initiates. He generally counsels Nyau dancers and instructors. Secondly, **wakunjira** refers to a leader who is responsible for the general organisation of the Nyau dancers. If one wants to hire Nyau

dancers, one arranges with **wakunjira** to do so. In short, **wakunjira** is regarded as the director of Nyau programmes.

v. **Namkungwi** 'counsellor'

The term semantically means a female advisor to female folk, young or old. The same leader is also called by the term '**aphungu**'. Paas, (2016) agrees with the first term when he says that **namkungwi** refers to a female counsellor/advisor. Pragmatically, the term **namkungwi** can refer to an elderly woman in charge of the initiation of girls.

C. *Terms for Tools Used in Nyau*

These are tools used to prepare Nyau structures at the Nyau sacred place. There are a number of such tools in this case.

i. **Kamuna** 'male dwarf'

Semantically, **kamuna** means a small man like a dwarf, i.e., short and small-bodied. Pragmatically, the term **kamuna** means an axe. The function of this term in Nyau cult is to help in cutting trees and logs for construction of Nyau structures in general. Traditionally, the term **kamuna** is significant because it symbolises a hard-working man when he possesses it. The term is also a symbol of a cultured man who underwent a men's school which does not promote lazy behaviour and this is **Gule wamkulu** 'big dance'.

ii. **Nchelero** 'small hoe-like tool'

The Chewa people use the term **nchelero** only in Nyau. Outside Nyau, it is called **kambazo** 'small hoe-like tool.' Nyau dancers refer **nchelero** to a form of an axe that is used for curving. It looks like a small hoe. It is used to curve Nyau body parts, e.g. masks. The participants emphasised on the difference that exists between the two tools. **Kamuna** is for cutting big trees and logs whereas **nchelero** is for curving the logs already cut by **kamuna**. It is also used to remove barks of trees as material for construction works at the **dambwe** 'Nyau sacred site'. There are certain constructions which require this tool. Its absence is able to interrupt events at the **dambwe** 'Nyau sacred place'.

iii. **Nyamkungu** 'counsellor'

The term **Nyamkungu** refers to a drilling rod. If they want to create eyes for the face of the Nyau, they use a **nyamkungu** 'drilling rod' to do the work. Remember, this is one of the items in the tool kit for working on the face (mask) of the Nyau. It is used by Nyau dancers to drill holes for eyes, nose, mouth etc of the Nyau mask.

iv. **Mpaliro** 'smoother'

Semantically, the term **mpaliro** means a smoother. It is used to smoothen wood pieces of work, e.g. axe and hoe handles. In contrast, Nyau dancers refer **mpaliro** to a knife. The term is used for different works like cutting rags, vegetables, meat, etc. **Mpaliro** 'knife' is used in two situations. Firstly, it is used when cooking to cut food items like meat, vegetables etc. Secondly, to prepare Nyau structures.

v. **Mlangamfiti** 'witch discipliner'

Literally, this term comes from two words, **mlanga** 'discipliner' and **mfiti** 'witch'. This explains that the term literally means 'the one who disciplines witches', somebody who offers correction to the witch. It can be beating/whipping, eating exemption and others.

In Nyau, the term **mlangamfiti** simply means a whip. It is a very important tool in the cult. It focuses on the maintenance of discipline among the initiates. The trainers use the whip to reinforce discipline and general good behaviour.

D. Terms for Nyau Construction Materials

There are some construction works at the Nyau camping site. Each raw material to use has its own special term. The materials include trees/plants, empty sacks, paint, earth and others. All these have special terms.

i. Makhwati 'untranslatable in English'

Makhwati in Nyau refers to the leaves of a tree. The term plays an important role in the construction of Nyau. **Makhwati** 'leaves' are carried in the hands by Nyau dancers as they dance. **Makhwati** 'leaves' are used to smoke their sacred constructions where they sleep in the night. Sometimes as the Nyau dancer performs in the arena and people get too close making the dancing arena very small, **makhwati** 'leaves' are used to scare spectators away. Finally, the term **makhwati** 'leaves' further adds beauty to the Nyau dancer.

ii. Fupa 'bone'

Semantically, the term represents a 'bone' of an animal. In Nyau vocabulary, **fupa** 'bone' refers to the tree trunk or a branch whose bark has been removed.

iii. Mafuta 'oil/fat/lotion'

The term **mafuta** semantically refers to 'oil', 'lotion' or 'fat'. Generally, **mafuta** can be used on foods; e. g. cooking oil makes relish like vegetables soft and tasty. Pragmatically, **mafuta** 'oil/fat/lotion' refers to mud. The term is used to dress Nyau to destroy the identity of the dancer.

iv. Utoto 'paint'

The Chewa people use the term **utoto** outside Nyau to mean 'paint' for painting buildings and other items. In Nyau, the term **utoto** means mud. The term **utoto** is synonymous in meaning to the term **mafuta**. Each **utoto** 'paint' colour has a representation, e.g. **utoto wakuda uyimilira mfiti** 'the colour black represents a witch'.

v. Ubweya 'fur/hair'

Semantically, **ubweya** 'fur/hair' refers to fur or hair on bodies of human beings and other warm blooded animals. **Ubweya** 'hair/fur' provides warmth during cold seasons.

Pragmatically, the term **ubweya** refers to grass. Aligning the term with its functions, **ubweya** 'grass' provides a covering for Nyau dancers at the **dambwe** 'Nyau secret/sacred camping site'. Also in special cases, **ubweya** 'grass' is used to construct the roofs of Nyau structures.

E. Terms for Nyau Body Parts

The findings indicated that all parts of the Nyau body have terms.

i. Mkota 'old'

Semantically, the term **mkota** refers to parent animal/mother animal. This is the reason why the Chewa speaking people coined a proverb, **galu wamkota sakandira pacabe** 'a parent dog does not bark in vain'. This means that when an elderly person keeps talking about the same thing, it means there is an observation made. In pragmatic terms, the term **mkota** means 'hat' of the Nyau.

ii. Nzobwe (untranslatable in English)

In Nyau, the term **nzobwe** refers to those items worn on the ankles of the Nyau dancers. They are made out of sisal or fibre from trees. The role of **nzobwe** is to modify the dancing by the Nyau. Lastly, **nzobwe** equally plays the role of providing the aesthetic beauty of the dancer.

iii. Chibiya 'utensil'

Semantically, the term **chibiya** refers to the cooking utensil in the domestic or commercial environment such as plates, pots, spoons, cups etc. The storage for the **chibiya** or **zibiya** (plural form) is actually the kitchen. Pragmatically, **chibiya** means **cikete** 'kilt' made from the skin of an animal or other material. It is worn around the waist to make the dancing quite interesting. **Chibiya** 'kilt' can also be made from the tree fibres and sisal strings.

iv. Chipande 'beat it'

In semantic terms, the term **chipande** means 'beat it'. It is an instruction given to somebody to beat something. The object could either be a human being or a thing. **Chipande** is synonymous in meaning to **chibade** 'broken clay pot piece'. From the secondary source, **chipande** means a wooden spoon (Paas, 2016). In the context of Nyau, **chipande** refers to the masquerade of the Nyau.

v. M'chizombo 'in the hole'

Outside Nyau, the term **m'chizombo** means the open termite mound. This is the hiding place for the termites. Sometimes even serpents hide **m'chizombo** 'in the 'termite mound' for safety purposes. Yet, in the context of Nyau, **m'chizombo** simply means in the stomach of the Nyau. The role of the **m'chizombo** 'termite mound' is to provide shelter to the Nyau dancers at the **dambwe** 'Nyau sacred place'.

vi. Maria and Chadzunda 'mary and chadzunda'

Chewa people use the terms **maliya** and **chadzunda** like wife and husband in Nyau. The terms are not used outside Nyau.

As a body part, the term **maliya** refers to the front part of a person e. g. the stomach, face and private parts. **Chadzunda** is the back part of a person or Nyau dancer.

F. Terms for Nyau Venues

The study revealed that there are only three venues of assembly in Nyau and these are **dambwe**, **liunde** and **bwalo**.

i. Dambwe 'Nyau sacred site/place'

The Chewa people use the term **dambwe** 'sacred site/place' in Nyau to mean a place of seclusion for Nyau initiates where sacred activities take place. No stranger is allowed to go near this place. A stranger going there inadvertently would be driven away; in both cases, heavy fines are imposed payable to the **mwini mzinda** 'owner of the land' and before being released, he would have sworn that he would not disclose anything he has seen or heard; or he may be introduced by force into the Nyau.

ii. Liunde (untranslatable in English)

The report submitted that the term **liunde** has only a semantic meaning. This is because it was designed for use in Nyau. Therefore, it only has a single context, Nyau. For this reason, a **liunde** is the dressing place near the village where the Nyau images coming from different **madambwe** 'Nyau secret places' meet together and get ready to appear in public at night. It is also a secret place just like the **dambwe** visited by initiates only. The role of the **liunde** is to cut short the distance for Nyau dancers to move as they prepare for various operations in the night. When there are some dances needed to take place, the **liunde** is the dressing room for the dancers.

iii. Bwalo 'place'

The term **bwalo** literally means a particular place of a town/village. A particular place could be for many reasons. Some places could be used as courts of law, playgrounds,

elders' charting place etc. In Nyau, the term **bwalo** is a dancing arena for Nyau.

G. Terms for Nyau Types

These present a variety of Nyau dances which have a particular moral lesson among the Chewa people.

i. Makanja 'tall Nyau'

The term **makanja** only has the semantic meaning. **Makanja** is a Nyau dancer who performs on tilts. **Makanja** 'dancer on tilts' is synonymous in meaning to **Chimtalala** and **dziko lalenda**, the latter semantically meaning 'country of tall frail people'. The function of the term **makanja** 'dancer on tilts' is to educate people that amidst a lot of problems in a subsistence economy such as the hazards of hunting, honey collecting, food gathering, or domestic conflicts, such as problems of courting a girl and marital relations, people can still rise above these challenges.

ii. Gologolo 'mice trap'

The term **gologolo** is a type of animal which looks like a hare or a rabbit covered in fur but with a big, long, fatty tail which climbs trees and feeds on nuts and seeds. The term could also be used to refer to the tin-like traps for catching mice. Men and boys set **zigologolo** 'mice trappers' in the afternoon which they collect early in the morning. In the context of Nyau, **gologolo** is an acrobatic type of Nyau performed on a very tall sisal pole, dancing on his stomach and also on the rope between two poles. **Gologolo** is used to teach two things: (i) that there is safety if you want to hide from danger below, just climb up higher just as **gologolo** animal does and (ii) that aim higher for the sky is the limit.

iii. Njobvu 'elephant /surname'

Denotatively, the term **njobvu** is an elephant or a surname of a person. Connotatively, **njobvu** refers to the most important Nyau of all. It takes four men inside, one in each leg. The out is covered with sacks, painted dark grey with mud. The **njobvu** represents the **mzimu** 'spirit' of important chiefs. The initiates additionally said it is considered the king of the animals because of its massiveness. The study indicated that the **njobvu** has a **liunde** 'Nyau dressing arena' all to itself, which is a sign of its importance.

iv. Maliya 'mary'

The term **maliya** has two meanings and these are semantic and pragmatic. Outside Nyau, the term **maliya** refers to a woman or a girl. In short, it names women and girls. However, in the Nyau context, **maliya** is a Nyau dressed like a woman, with a scarf around the head and beads around the waist. She represents a **mzimu** 'spirit' that is tender-hearted like a woman. There is no cruelty in this **mzimu** 'spirit' only goodness. While dancing, the dancer shows the string of beads around the waist. He dances well and his dance is meant to make people happy. It also reminds the women of their tradition of wearing a wrapper of beads around their waist to entertain husbands during sexual intercourse. The term **maliya** teaches the values of submission, traditionalism i.e. wearing a wrapper of beads around the waist. In addition, it teaches tender-heartedness by both men and women.

v. Jere 'jail'

Semantically, **jere** is a surname and a jail or prison. The illiterates fail to pronounce the word 'jail'; they say '**jere**', a place where criminals are quarantined for punishment. In the context of Nyau, **jere** is a type of Nyau representing the spirit of the wicked people who kill with evil medicines **m'pheranjiru**. **Jere** dancers appear in a group, they wear black loin cloths and masks of straw and small whitish cloths fixed with some strings on their shoulders and they carry axes. They accompany the **njobvu**; this shows that powerful chiefs often use evil sorcerers to reach their aims.

vi. Kang'wing'wi (untranslatable in English)

The term **kang'wing'wi** is used by Nyau dancers only. It is not found in any other context. Hence, it only has the literal meaning as used by the Nyau dancers. It is a type of Nyau which comes to the village when there is a funeral of a person who has died suddenly. He performs and women sing for him. He is usually with dangerous items called '**zigero**'. He shows displeasure by angrily moving round the village and could kill a chicken and even beat people.

vii. Tsempho 'cough like disease'

The semantic meaning of **tsempho** is **mdulo** 'to be cut', i.e. to die of a cough-like disease. In Nyau, **tsempho** is a type of Gule. It represents a man suffering from a strange disease following immoral behaviour (Metcalf 2014: 148). Just like in the semantic meaning, **tsempho** is a Nyau dancer who aims to educate the community on the dangers of **tsempho** 'cough-like disease' in the home. Traditionally, **tsempho** comes when either of the spouses has committed adultery when the child is still a baby. There is a period of withdrawal from sex when there is a baby at home. Withdrawing from sex is called '**kujingula**' in Chewa language. Also when there is a funeral in the village, people are not allowed to sleep in their homes for fear of **tsempho**. It is a disease that kills people especially babies.

viii. Katumbidza 'pregnancy'

The term **katumbidza** is just used in the Nyau cult. There is no any other context in which it can be used. **Katumbidza** is a type of Nyau which educates the families on family planning. **Katumbidza** is a pregnant character representing the complaint; "Why does my husband not give me breathing space?" Women complain so much if their husbands do not give them chance in terms of child-bearing. They get impregnated frequently without a breathing space. Hence, the **katumbidza** serves the purpose of speaking on behalf of the women so that men could conduct a good family planning programme in homes so as not to burden women with pregnancies.

ix. Nyata 'Nyau ruffian'

The findings showed that the term **nyata** only has a semantic meaning. This is because there is no any other context in which it can be used. The term **nyata** refers to a Nyau ruffian. Society thinks he is abnormal because he doesn't care. He causes trouble by stealing eggs, goats, chickens, and so on. **Nyata** like **ndatola** represents a chronic thief who does not want to be recognised by the society he steals from.

x. Masoja 'soldiers'

The term **masoja** has two contexts of use and these are the Nyau context and the general context. Generally, **masoja** refers to the soldiers in English translation. These are people who are trained to keep peace in the country. They are associated with guns and other security materials. They are even licensed to kill with a view to maintain peace and order. In the context of Nyau, **masoja** refers to the Nyau that goes into the village when an

uninitiated person has committed an offence against the Nyau cult. They go out with anger and threats just to protect their rich cultural norms and values.

H. Terms as Phrases

These are short sayings determining whether or not somebody is initiated into Nyau. Whenever such phrases are used, there is answer demand from the respondent.

i. Kugula Njira 'Buying the way/road'

Semantically, the term means to buy the way/road. Sometimes people buy the way/road to extend a farm land. In the context of Nyau, the term **kugula njira** means to pay tribute to the chief if a person wishes to be initiated into Nyau. This act takes place in cases

- a. Where a person is victimised for not being initiated into Nyau,
- b. Where a person wilfully wishes to be initiated and
- c. Where a person would want to have his child initiated.

ii. Wapsya Phwetekere ku Munda Kwa Make Chenjerani 'Tomato has ripened at the mother of Chenjerani's garden'

Semantically, the phrase implies that the mother of Chenjerani planted some tomatoes and took care of it until it ripened. All that people would do is to go and buy or pluck the ripened tomato. In Nyau, the phrase **wapsa pwetekere kumunda kwa make Chenjerani** serves as a notification to the initiates about a performance the following day.

iii. Kusaka Nyama 'Hunting animals'

Semantically, the phrase means the act of hunting animals. People go to the bush to hunt different animals of interest. These can be hares, impalas, elephants etc. Nevertheless, in Nyau, it means to construct great Nyau of charms, in short, the type of Nyau which is mysterious.

iv. Kuchotsa Ziwanda 'Casting out demons'

Semantically, the term means casting out demons. Pragmatically, **kuchotsa ziwanda** is a tradition practised by the Nyau dancers at the **dambwe** 'Nyau sacred/secret place'. It is a graduation ceremony for the boys who are initiated who should pass out. On this day, Nyau dancers conduct the last tradition called **gweregwere**. Before the boys are graduated, the **namkungwi** 'girls'counsellor' brings the girls to have sexual intercourse with the graduating boys. This is done for the trainers to see whether or not the boys understood sexual lessons learnt. It is also done to assess boys' potency.

v. Usakaulule 'You shall not review'

The phrase has the same meaning semantically and pragmatically. They base their interpretation on confidentiality. Elders may tell a child something of secrecy and warn them not to reveal wherever they go. However, in Nyau, it is embraced with fear and trembling because it is the greatest tradition of all. It emphasises on the importance of confidentiality among the initiates. Nyau bases on its highly regarded principle of **usakaulule** 'you shall not review'. This implies that whatever the initiates saw and did at the **dambwe** 'Nyau secret site' should not be shared with the non-initiates. If this tradition is broken, the culprit is subjected to heavy punishment to curb the scourge.

vi. Maliya Sanacitike Bwino 'Maliya has not been done well'
Semantically, the term means that something was being done on **maliya** which was not well done. An observer could say

maliya sanacitike bwino 'Maliya has not been done well' so that the mistake could be corrected. The same meaning applies to Nyau. However, in Nyau, the word **maliya** stands for all Nyau dancers of both male and female types who could be in the **bwalo** 'dancing arena' dancing or about to dance who may realise that they have not been well prepared to dance. The dancer may just shout **maliya sanacitike bwino** 'maliya has not been done well' to notify the Nyau leaders. He then leaves the **bwalo** 'dancing arena' and goes to the **liunde** 'dressing room' to be prepared well.

vii. Namkungwi Otha Zonse 'Counsellor who finishes everything'

Semantically speaking, **namkungwi** refers to the old woman who counsels girls during initiation ceremonies. She is in-charge of the affairs of the **anamwali** 'girls' as called by the local people of Katete district. She is directly connected to the elders of the Nyau for her to have a cadre of girls that are traditionally and culturally accepted in the Chewa land. To add the words '**otha zonse**', directly means that this type of **namkungwi** has a special responsibility where if she is not present, the initiation curriculum would not have been completed. So it means that her presence means a completion of the course outline.

In contrast, **namkungwi otha zonse** 'female counsellor who finishes everything' simply means fire.

viii. Lemba Manda 'Write the grave'

Outside Nyau, **lemba manda** means 'write the grave'. This term does not make sense outside Nyau because the grave is treated as a sacred place. They may just marvel and fail to interpret. Sometimes they may just stop answering you and analyse your state of mind. In Nyau, the term **lemba manda** means to sleep on the ground so that one is whipped. The term is completely off track in semantic terms. How can somebody write on the grave? Through discussions, this came out clearly that the whipping is hard because referring it to the grave means a serious matter.

ix. Anidya Ambulu 'The tadpoles have eaten me'

From the social contexts, it was revealed that the term **anidya ambulu** has both semantic and pragmatic meanings. Semantically, **anidya** is a verb meaning 'they have eaten me'. **Ambulu** is a plural form for the word **mbulu**. **Mbulu** is a tadpole. **Ambulu** is therefore translated as tadpoles. Tadpoles are animals. Hence put together, the semantic meaning is 'I have been eaten by the tadpoles'. In the context of Gule wamkulu, the term **anidya ambulu** refers to a tradition where the newly initiated boys are instructed to start playing with one another's private parts, obviously with the motive to assess the boys' potency. The assertion is that when potency is checked and deemed weak, something better could be done to help the boys.

x. Mlumira 'What to use for biting'

Semantically, the term **mlumira** refers to what to use for biting or a tool for biting. Pragmatically, the term **mlumira** is a traditional practice done at the **dambwe** 'sacred place' to the new boys that have come to be initiated. It is done by preparing a roasted chicken where they add medicine to remove fear for Nyau and prevent them from screaming while asleep for fear of the Nyau images.

I. Terms as Questions

Nyau cult uses questions to ascertain whether or not a person is initiated. When correct answers are given, there is always a cordial relationship between the interviewer and interviewee. Note that the symbols **Qtn** stands for question, **Ans** for answer and **Disc** for discussion.

- i. **Mwambo waukulu wa Gule nciani?** 'What is the greatest tradition of Gule?'

Ans: Usakaulule 'You shall not reveal'

Disc: This question **mwambo waukulu wa Gule nciani** 'what is the greatest tradition of Gule' is semantic in meaning. The question finds its use only in Nyau. As already given, the greatest tradition of Nyau is **usakaulule** 'you shall not review'. This simply means that the initiates must be extremely secretive. The question is viewed as the backbone of the Nyau association. Gule wamkulu is founded on secrecy. That is why from the onset, all the initiates are sensitized to uphold the greatest tradition of 'secrecy'. This is in line with Smith (2001) who describes Nyau as a secret society of Central Malawi and Eastern Zambia.

- ii. **Mitsinje nciani ku Nyau?** 'What are rivers in Nyau?'

Ans: Ng'oma 'drums'

Disc: This question only applies to Gule wamkulu. It has only the semantic meaning. **Mitsinje** in Nyau refers to drums. This is a classified way of communicating. It is just for the initiated. It is used when the boys have just come to join Nyau and so they are trained how to respond when they meet an initiate who threatens to whip them. These are just drills to make sure that children who are initiated are safe in their communities.

It is also a means for protection and care for the new initiates. They emphasise to say if they do not respond like that, they would be whipped or punished.

- iii. **Zimwera kuti?** 'Where are they drinking from?'

Ans: Mwakuti-mwakuti (untranslatable in English)

Disc: The question **zimwera kuti** is both semantic and pragmatic. It is semantic because it means where are they drinking from? However, the way it is coming out, it is not a

question that asks about human beings, but animals. Nevertheless, in the context of Nyau, they are referring to human beings themselves although the answer is somehow hidden. This is just a means of determining whether or not somebody is initiated into the Nyau cult. The expected answer is **mwakuti-mwakuti** which has no translation in English. The question is also meant for initiates to socialise on a lighter note.

VI. CONCLUSION

The study provides a wonderful platform to discuss the secretive way of communicating with initiated Nyau dancers. This allows room for a cordial relationship between the uninitiated and the initiated. Use of these terms induces a high sense of inclination to the Chewa Nyau association thereby killing the previously existing tension between the initiates and the uninitiated. It is in the best interest of the author to freely provide this set of knowledge to the willing would-be users thereby expanding the body of knowledge on Chewa culture and tradition.

REFERENCES

- [1] Creswell, J. W. (2009). Research Design: Qualitative, Quantitative and Mixed Methods Approaches (3rd ed.). Los Angeles: Sage Publications.
- [2] Lycan, W. G. (2000). Philosophy of Language: A Contemporary Introduction. U. S. A: Routledge.
- [3] Metcalfe, D. (2014). Zambia: Celebrating Zambia's Golden Jubilee. Lusaka: C B C Publishers.
- [4] Paas, S. (2016) Oxford Chichewa-English English-Chichewa Dictionary. Cape Town: Oxford University Press.
- [5] Smith, W. E (1984) Forbidden Images: Rock Paintings and the Nyau Secret Societies of Central Malawi: African Archeological Review, 18 (4), 187-212.
- [6] Tavakoli, H. (2012). A Dictionary of Research Methods and Statistics in Applied Linguistics. London: Rahnama Press.
- [7] Saussure, F. (1966). A Course in General Linguistics. New York: McGraw Hi