Career Choices for Individuals with Hearing Impairment in Higher Learning Institutions in Lusaka-Zambia

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Abstract
This study established the facilitators and barriers to career choices for persons with hearing impairment in selected workplaces and higher institutions of learning in Lusaka, Zambia. A qualitative approach and a descriptive study design were used in the study. In-depth interviews were used to collect data from twenty (26) participants that included ten (10) students with hearing impairment, six (6) Lecturers and ten (10) individuals with Hearing Impairment. The findings revealed that there were various elements that influenced career choices and these included communication barriers which inhibited receipt of career information from providers, pre-conceived ideas of what a Hearing Impaired (HI) individual can or cannot do, unavailability of chances to show self-efficacy or determination among others. The study revealed that minimal efforts were made by higher learning institutions to enhance career choices for HI students. The study recommended that career guidance should be offered in secondary schools as a routine advancement programme for individuals with Hearing Impairment as a prerequisite to applying for admission in colleges and universities. Tertiary education institutions must provide reasonable accommodations and additional support to students with Hearing Impairment to be able to access career information.

Keywords: Barriers, Career choice, Facilitators, Hearing impairment.

INTRODUCTION
Employment opportunities for people with hearing impairment especially those that are deaf may not be as encouraging as expected, yet policies and laws in Zambia currently focus on equal equalization and access to job opportunities and other social services through the inclusive education policies. Deaf and hard of hearing persons are underrepresented in professional and managerial occupations yet overrepresented in unskilled jobs especially in the manufacturing sector compared to their hearing peers (Mandyata et al., 2017). The transition from school to employment can be difficult to negotiate for any young person particularly within the current labour market conditions that are accompanied with the major social and economic changes experienced by advanced industrialized nations in recent decades (Patton, 2000; Vondracek & Porfeli, 2003). Skills development is a central factor to enable persons with disabilities to take part in the labour force. Those who have had the opportunity to acquire marketable skills have demonstrated their potential to earn a living and contribute in the world of work. The development of
human resource capacities for sustainable economic growth and development is highly dependent on education. Education is a foundation of independent persons and acts as a protection against vulnerability, marginalisation and poverty. The International Labour Organisation (ILO, 2005) reports that every human being deserves the opportunity for self-realisation and that every society has the potential to provide this opportunity to its members. Through imparted knowledge and skills, education increases human capabilities and improves productivity in labour and national growth. People are able to participate and function better in various aspects of life. Education is an important tool in achieving independence and gender balance in equitable distribution of opportunities (Muthaka & Mwangi, 2002).

However, access to appropriate skills training is not available to a significant number of women and men with disabilities for differing reasons. In many cases, inclusive policies are not in place and training programmes fail to encourage or accommodate the participation of persons with disabilities. In other cases, the training available to persons with disabilities is outdated and/or fails to make the appropriate links to the workplace or self-employment. But the fact is that most persons with disabilities, especially those in developing countries, fail to get any vocational training at all. Most of them remain socially excluded and in poverty.

Employment is an undeniable right of every human that nowadays is explicitly stated in numerous international documents and local legislative papers of many countries, however, this right has not always been declared for all, especially for the individuals with special needs. A visible movement towards constructing more just and inclusive societies started from the middle of the 20th Century uniting different nations around these concepts. The right to access to education and employment was acknowledged as the universal human right and found its legal place in the “Declaration of Humans Rights” (United Nations, 1948).

Policy shifts in education over the past twenty years have signaled the need for commitment to integrated employment for individuals with disabilities as seen by the number of policies that have been enshrined in the Zambian Constitution. In 2005, ILO reported that the employment rate of persons with disabilities was 45.5 per cent of the population. This prompted the Zambian government to adopt its National Employment and Labour Market Policy in the same year. In the Policy, special reference is made to improving employment prospects for People with Disabilities (PWDs). The population census and housing conducted in 2000 in Zambia revealed that about 2.7 percent of the Zambia’s population were disabled and the HI were among the prevalent disabilities in the country. The report further showed that most individuals with Hearing Impairment were either self-employed, working in the education and agriculture sectors or in the streets begging. The Persons with Disabilities Act No. 6 of 2012 emphasized the need to promote access to employment for PWDs. This entails provision of adequate training to persons with disabilities in order to increase their chances of being recruited in formal employment.

In support of this view, the Technical Education, Vocational and Entrepreneurship Training (TEVET) Act, 1998 states that the “special needs of People with Disabilities will be taken into consideration”. This law seeks to promote equity in the provision of education and training for all by taking into consideration the individual differences of PWDs through considering the challenges which they face such as communication barriers, discrimination,
negative societal attitudes, inaccessible transportation and lack of suitable curriculum (Mandyata et al., 2017). Furthermore, Mandyata (2011) notes that the move to improve the lives of people living with disabilities through education and training in the society faces numerous challenges including insufficient physical infrastructure and teaching and learning resources to meet the learning needs of children with disabilities in schools practicing integration. Kalabula, Mandyata and Chinombwe (2006), established the need to make education and training more accessible to persons with disabilities. TEVET Act thus strives to eliminate all forms of barriers to access education and vocational training for persons with disabilities by providing relevant assistive educational devices and a differentiated curriculum thereby improving the socio-economic status of individuals living with disability for them to live a meaningful life.

TEVET services prepare PWDs to achieve a lifestyle of independence and integration within their workplaces, family and local community. This transition should ordinarily be achieved through career guidance, vocational training, choosing career and later on job placement and support through job counseling services, medical and therapeutic services and supporting them on job (Hardman, Drew & Egan, 2012). Vocational training for learners with Hearing Impairments (HI) in particular, is meant to assist them settle in gainful and skilled employment. The goal of training and employment is the same for both HI and Hearing individuals. Work offers opportunities for social contacts, facilitates independence, and allows greater access to community services and programs (Hardman et al., 2012).

It was clear from studies such as that of Kalabula et al. (2006); Mandyata et al. (2017) that learners with HI are admitted in Universities, Colleges of education and vocational training centres and are expected to pursue careers of their choice in readiness for formal and informal employment. However, lack of in regulations and policies that are centered on initiatives directed at increasing accessibility to education and training, continue to limit participation of persons with disabilities in the mainstream education and employment. As a result, PWDs are faced with limited choices when they get to Tertiary Education. The choice of training and employment is the same for both HI and Hearing individuals. Work offers opportunities for social contacts, facilitates independence, and allows greater access to community services and programs (Hardman et al., 2012).

In Zambia, according to the report by Muzata, Banja, and Kalimaposo (2020), many students with hearing impairment are compelled to study what they are studying perhaps for reasons that hinge on how difficult it is for one to have access or entry into the university. Punch, Creed, and Hyde (2005) report that, ability to hearing or not hearing seemed to limit or enhanced ability to access employment opportunities and achieve what one wanted to achieve. In Zambia. It appears that, persons with hearing impairments have less access to credible information on career choices as compared to the

Statement of the Problem
There is increased concern about the limited employment opportunities accorded to persons with Hearing Impairments (Hardman et al., 2012). In Zambia, according to the report by Muzata, Banja, and Kalimaposo (2020), many students with hearing impairment are compelled to study what they are studying perhaps for reasons that hinge on how difficult it is for one to have access or entry into the university. Punch, Creed, and Hyde (2005) report that, ability to hearing or not hearing seemed to limit or enhanced ability to access employment opportunities and achieve what one wanted to achieve. In Zambia. It appears that, persons with hearing impairments have less access to credible information on career choices as compared to the
hearing learners thereby, raising the question as to what elements seem to enhance or hinder choice of careers among persons with hearing impairment in various locations in Zambia. It is not clear as to what determines, limits or promotes the career choice among learners with hearing impairment in Higher Institutions of learning in Lusaka in Zambia. This study therefore sought to explore the elements that enhance or inhibit career choices among persons with hearing Impairments in Lusaka in Zambia.

**Research Questions**
The study sought answers for the following questions: (1) What influences choice of careers among persons with hearing impairments in study sites?; (2) What are the barriers to career choices among persons with hearing impairments in different social settings?; (3) What efforts are being made by various social settings to enhance career choice among persons with hearing impairment?

**Theoretical Framework**
The study was guided by the Astin’s (1984) Career Development Model. Career Development is a continuous lifelong process of developmental experiences that focuses on seeking, obtaining and processing information about self, occupational and educational alternatives, life styles and role options. In other words, career development is the process through which people come to understand them as they relate to the world of work and their role in it (Esters, 2008). In educational development, career development provides a person with focus for selecting a career or subject to undertake in the future. The Astin’s Career Development Model takes into account various variances, which seem to influence individuals’ career choices, development, aspirations, retention, and work behaviours. The theory argues that career choices, training, progression on the part of women and other special groups such as those with disabilities are subject to various factors such as, capacity of instructors, prejudice, discrimination, role models and availability of opportunities often imposed by the prevailing socioeconomic-political systems (Astin, 1984). The theory was therefore seen relevant to guide the present study to investigate the facilitators and barriers to career choices among HI individuals in the study site, as career development may be influenced by situations which are either intrinsic to the individual themselves or emanate from within the context in which the individual lives.

**LITERATURE REVIEW**
**Hearing Impairment and its Implication for Employment**
For the great majority of adults, work is a major aspect of life, not only necessary for economic survival but also instrumental in meeting myriad social and psychological needs (Blustein, 2008). This is, of course, just as true for the Hearing Impairment as for other adults. There are many HI individuals who have achieved success in a wide variety of occupations and careers, however, HI people historically have experienced higher rates of unemployment and underemployment and lower levels of educational attainment than people without hearing loss (Punch, Hyde, & Creed, 2004). However, what we do not know is the extent of the problem with regards to HI persons choosing their careers in the present study area.
Hearing impairment is defined by the American Individuals with Disabilities Education Improvement Act as impairment in hearing whether permanent or fluctuating that adversely affects communication (United States Department of Education, 2007). Communication has been seen as a key factor in the success of any organization. Hearing loss affects verbal communication with an impact on the ability to follow a conversation, therefore, a number of accommodations ought to be made in order to successfully integrate the HI in the world of work. These accommodation include telephone aids, coworker assistance, electronic communication such as text-based communication and digital forms of face-to-face contact through video telephony (Garberoglio et al., 2015). However, due monetary costs, such facilities to accommodate HI cannot be fully implemented. Other studies found that many employers have a rather negative attitude toward employees with disabilities (Harlan & Robert, 1998) because they have concerns about the costs of accommodations and fear the legal liability (Kaye, Jans, & Jones, 2011), they avoid the integration of people with disabilities or resist making reasonable accommodations. Harlan and Robert (1998) acknowledge that employers often do not make the necessary accommodations for an individual with a disability to become a successful employee. This attitude consequently limits the career choices of people with hearing loss.

Antonak and Livneh (2000) reported that having a hearing impairment often leads to social isolation in workplaces. Social isolation of people with HI is caused by physical barriers to attain social events or more often, is exclusion created by the hearing population. People with HI who are employed, frequently indicate that they feel stigmatized and less included in the group of colleagues than nondisabled employees (Mandyata et al., 2017).

Elements that Influence Career Choices

Career development is an essential task among adolescents which typically begins in middle school and progresses throughout the lifespan (Stringer, Kerpelman, & Skorikov, 2012). It is during high school that students are expected to begin narrowing down and finalizing their postsecondary options, such as seeking employment versus pursuing higher education, which will ultimately impact their future career plans and goals (Owens et al., 2010).

Though increasing numbers of deaf and hard-of-hearing students are entering mainstream colleges and are often accessing a variety of support services such as interpreters, note-takers, and computer-assisted transcription of lectures, these students still encounter many difficulties and challenges in mainstream settings (Luckner, 2002). The common assumption that the availability of support services for these students leads to positive academic and social integrative experiences reflects a lack of knowledge about these students' perspectives and continuous struggles to overcome the barriers that undermine their overall campus experience. Creed, Patton, and Bartrum (2004) illuminated various examples of the academic difficulties confronted by students even when they have access to support services. Firstly, deaf and hard-of-hearing students who rely on interpreters are unable to participate fully in class discussions, because it takes the interpreter 5 to 10 seconds to sign what the instructor has said. The time delay, or “lag time,” thus does not provide deaf students sufficient time to engage in the class discussion before the instructor calls on another student or moves to another topic. Secondly, deaf
students who rely on lip reading will encounter difficulties when instructors block the students’ line of sight unintentionally by holding papers too close to their faces, turning their faces away to write on the chalkboard, and pacing the room while lecturing. Thirdly, laboratory courses that involve lecturing and classroom demonstrations pose a distinctive challenge for deaf and hard-of-hearing students. The students must divide their attention among the interpreter, the instructor and the demonstration. In such situations, it is evident that deaf students may miss out on important information or actions that can undermine their ability to perform tasks adequately. Finally, outside of the classroom, because of their communication difficulties, deaf students are often relegated to the periphery of informal social exchanges that take place among hearing peers. Thus, they are excluded from opportunities to learn about important or “insider” information such as study tips and rules of classroom behaviour.

Reasons for the choice of career to pursue by HI students have not been widely researched, but several academic and factors as articulated above may contribute to this phenomenon, hence the present study is needed to establish how the different academic and social settings may influence these decisions.

**Barriers to Career Choices for the HI**

Deaf children’s educational outcomes are a long-term global challenge. Literature is replete with research studies recording how most deaf high school leavers barely manage to achieve Tertiary Education (Powel, Hyde, Punch, 2013). The Zambian Policy on education entitled “Educating Our Future” which governs the provision of education to PWDs stipulates that every child regardless of status has the right to equal access to quality education (Ministry of Education, 1996). To this effect the policy document recognises the need for PWDs to acquire appropriate education that serves as key entry point to employment opportunities. Regardless of the development of this policy, the choice of careers to pursue for the HI have been limited due to unavailability of resources needed to meet their needs. As a result, HI people perceive their employment and career opportunities to be restricted. The barriers HI people face in gaining employment and functioning in the workplace are factors that contribute to the limits in career choices and employment outcomes. Most HI people working in a hearing environment are likely to face daily barriers and challenges involving communication difficulties, as well as a range of social, attitudinal and structural barriers (Punch et al., 2004). What is not clear are the factors that seem to influence the choice of careers among the HI in the study locations.

Research conducted by Punch, Creed and Hyde (2005) and Pressman (1999) suggest that deaf students do not have the ‘career knowledge’ of other students and often do not undertake part-time work while still at school which would assist in improving their knowledge of what is available and determining what is suitable, and think that there are potential barriers that will restrict their choice of career. Despite being capable of examining career-related options and being concerned about their future, individuals who are HI encounter a number of barriers during their career planning process. These barriers may cause individuals to delay or avoid making career-related decisions or rely on someone else to make a decision for them, which findings in less than ideal choices (Bardick et al, 2004). Students
may lack knowledge about potential sources for information needed to make an informed career decision (Witko, Bernes, & Bardick, 2009).

Recommendations from Punch, Hyde and Creed (2004) indicate that more research into factors contributing to career indecision in this population is warranted. The same authors (Punch, Creed & Hyde, 2005) conducted another study which recommended that intervention designed to address career indecision be implemented. It is unclear from the literature reviewed whether deaf students are able to access the career pathways available to students who are not deaf hence the need for the present study.

Several misconceptions about deafness and hearing loss have hindered individuals with Hearing Impairment to choose careers which they want. Although many deaf people want to study a variety of educational courses, educational administrators may regard hearing loss as a weakness which can hinder one from achieving in certain career paths. Thus, HI individuals often have restricted opportunities for expressing self-determination as they are limited by communication and congregate work settings that curtail opportunities for choice and decision-making (Powers, 2005).

Career decisions are interrelated to contributions from families and school based experiences. Research conducted by Stringer, Kerpelman and Skorikov (2012) highlighted the roles of family members which include introduction of the idea of employment, intentional career-related guidance and modeling of work values, especially during the transition years. Ankeny, Wilkins and Spain (2009) observed that it is during adolescence that student develop an orientation toward their internal and unique self. During adolescence period, young adolescents begin their experience with the learning process of educational decision making. This process which will be repeated in various forms and across many points throughout the lifespan, with most adolescents recognising that decisions made at school can have a significant impact on future life paths in education and career decision (Furlonger, 1998). Adolescents with hearing impairment face gross challenges in their career development and in school-to-work transition. On completion of their secondary education, most support given to HIs by parents and school cease (Lucker, 2002). In addition, they encounter environmental and attitudinal barriers that impede their achievement of advancement in their career development (Punch, Lyde & Creed, 2004). Thus, families of individuals with HI also provide significant practical and moral support in choosing competitive careers (Dixon & Reddacliff, 2001). However, the extent to which parents in Zambia are involved in the grooming of children into making decisions concerning their future careers is unknown.

Along with families, school-based experiences are critical during the development of employment goals. For example, Carter et al. (2010) found out that special-education teachers reported no designated responsibility for helping transition-age, students work toward their goals beyond academics. Employment-preparation for students with disabilities also appear limited to classroom settings rather than real-world work experiences (Guy et al., 2006).

In 1955, ILO made recommendation on vocational rehabilitation of persons with disabilities which include the importance of vocational guidance for all persons with disabilities (including HI). It was recommended that vocational rehabilitation should be made available in order for all persons with disabilities can prepare themselves and have reasonable prospects of securing and retaining suitable
employment. Convention No. 159 of the Vocational Rehabilitation and Employment Convention requires States to develop a national policy concerning vocational rehabilitation and employment of persons with disabilities based on the principles of equality of opportunity and equal treatment. However, a study conducted by Lambwe (2017) reported that individuals with Hearing Impairments in Zambia lacked competent vocational and career guidance which provides information about career choices. Furthermore, the stated that although career guidance teachers are present at schools, little emphasis has been placed on need for these teachers to be conversant in sign language in order for them to communicate effectively with pupils with Hearing Impairment. This communication barrier may perhaps be one of the reasons why majority of students with Hearing Impairment make uninformed decisions over their careers. In the same research, Lambwe (2017) investigated the status of career guidance service available for learners with Hearing Impairment in special schools in Lusaka in Zambia and the challenges that the career guidance teachers experienced. It was established that career guidance service was provided at least to some learners from special schools for the Hearing Impairment like in any other class also benefit from the career guidance service. There was however much need to support career guidance service in special schools for the HI so that more learners can benefit from the services. The study also revealed that some learners who passed through these special schools reported to have been assisted through career guidance service and were doing very well with their career. The above revelation showed that learners from special schools for the Deaf had been assisted in their career through career guidance service provided in school however not much is known about whether individuals with Hearing Impairment are offered any career guidance at tertiary level.

Lack of vocational training, career guidance and support leading to wrong career choices for learners with Hearing Impairment is wide spread (Malinda & Mandyata, 2021). Katende (1994) observes that in Uganda, PWDs who are lucky to join vocational rehabilitation institution are often subjected to low skill courses whose marketability is very poor. Consequently, after graduation and engaging in work they have no option but to abandon their unprofitable jobs and go back to begging. Katende (2004) further asserts that in the 1960s’ such courses as carpentry, tailoring, telephone operating, typing and other handicrafts were fashionable but they have always been equated to low educational levels and therefore, low income. These are the courses that many learners with Hearing Impairment enroll for in most of vocational institutions in Zambia and the reason behind pursuing such careers regardless of having successfully passed their secondary school leaving exams and qualified for enrollment in colleges and universities for better careers is still unknown, hence the present study.

Unfortunately, not much research has been accomplished with HI students at the university and college levels. At the university or college level, HI students faced more cultural and career barriers than their hearing peers based on their hearing loss and their identification as HI. The lack of interpreters has an impact on the academic achievements and retention of students with HI. Luyando (2015) revealed that students with HI faced a number of barriers in gaining access to information in the classroom. A research conducted by Munyuia, Awori and Rukangu (2014) in Kenya revealed that 29 per cent of HI students successfully
graduated from college, where as a larger percentage opted out of college or chose to pursue nonacademic courses which were vocational. However, it remains unknown the extent to which educators in colleges and universities have influenced career choices of students with HI.

RESEARCH METHODOLOGY
The study took a qualitative approach and used a descriptive research design. A descriptive research design was preferred because the study focused on a small unit, group or community with common features and would help understand, investigate and analyse barriers faced by individuals with hearing impairment (Merriam & Simpson, 1995). In addition a descriptive research design was suitable for this research because of its applicability to real life and human situations. It also provides background data for a larger study (Yin, 2003).

Descriptive qualitative approach was used because it is suitable for gaining an in-depth understanding of underlying reasons and motivations. It provides insight into the setting of a problem (Mason, 1994). Furthermore, the technique was preferred because it is not based on unstructured or semi-structured but methodologically flexible techniques, for example, individual depth interviews or group discussions. It is suitable for eliciting great detail and comprehensive view (Punch, 1998).

The target population for this study consisted of students with hearing impairment and workers in selected workplaces and university or college lecturers in Lusaka district. The participants were chosen to participate as they gave a picture of what facilitated or challenged their career choices.

Sampling is the choice researchers make of who should participate in their study based on the characteristics they possess to provide answers to the research questions planned (Muzata, 2020). The sample for this study was drawn from workplaces and institutions of higher education where learners and employees with hearing impairment were identified. The total sample of participants in this study was twenty-six (26) respondents broken down as follows: six (6) Lecturers, ten (10) HI students in College or University and ten (10) HI students in formal and informal employment. However, a limitation encountered in the selection of participants who are HI was the failure to categorize them in the degrees of hearing loss and onset of the loss they had (Muzata, 2020a). However, basically those involved were the deaf.

In this study, purposive sampling procedure was used to select Lecturers for those with hearing impairment. Students with hearing impairment in college/university and individuals with hearing impairment in formal and informal employment were selected using the snowball sampling technique. Purposive sampling is where the elements selected for the sample are chosen by the judgment of the researcher. Crossman (2020), reports that purposive sampling is a non-probability sampling technique where the researcher focuses on particular characteristic that is of interest which enables to answer his or her questions. Snowball sampling is a technique whereby after the interview, the participants are asked to identify others who belong to the target population of interest. Subsequent respondents are then selected on the basis of referral. Interview guides were used to collect data from participants. The interview guides were developed by the researcher and were used as a guide in getting data for the study. The instruments
were administered to the participants in order to cross check what was being obtained on the ground. Interviews are particularly useful for getting the story behind a participant’s experiences.

Data was analysed using themes that emerged from the interviews. Thematic analysis refers to topic or major subjects that come out of synthesized qualitative data from the interviews or discussion. Irrelevant information was separated from relevant information in the interviews. Relevant information was written down and arranged into sentences or phrases which mirrored a single, specific thought and these sentences or phrases were further grouped into categories that mirrored the various aspects of meanings. It was those various meanings which were used to develop an overall description as seen by the participants.

RESULTS AND DISCUSSION
The findings of this study were presented according to the themes generated from the data but guided by the research questions. Basically, the findings reflect the elements that influenced career choices for persons with hearing impairment, the barriers and facilitators to the choices they made and the efforts being made to enhance career choices for persons with hearing impairment.

The participants were given identifiers to help differentiate them as follows; Lecturers by L1-L6 and also by gender, HI students by S1-S10, HI in employment were identified according to their work places and nature of work (e.g. teacher, chef) and by gender.

Elements that Influence Career Choices among Persons with Hearing Impairments in Workplaces and Higher Institutions of Learning
The findings of the study revealed that the elements that influence career choices include communication, preconceived ideas of what a HI individual can or cannot do, unavailability of chances to show self-efficacy or determination and the available employment opportunities on labor market for the HI. These findings are evident in the following participants’ responses.

L2 stated:
*It is not possible for the HI to find a job outside education because of the communication barrier. This limits them. If they don’t study education they end up in vocational colleges or self-employed.*

L4 stated:
*Hands on courses such as engineering and apprenticeship would be more suitable for the HI because it entails they learn by doing as opposed to just being theoretical.*

S1 stated:
*We are generally ignored and treated like the rest of the people in class without hearing impairment. At first I almost quit. I was struggling and it was affecting my academic performance. I was dependent on my peers. I was lucky to have some course mates who knew basic sign language and would interpret for me. But challenge would come when they were unavailable and sometimes*
they also got tired because they too needed to learn at the same time as they were helping me.

The findings of this study are consistent with relevant literature, suggesting that difficulties with communication, inadequate educational and technical support contribute to or influence career development for individuals who are deaf. Educational and Technical support for students with disabilities can help access to higher learning institutions. The lack of it inhibits information flow and knowledge of choice (Muzata et al, 2019). Communication is cardinal for learning to take place and therefore unavailability of SLI in other fields of study makes it difficult for the HI to succeed (Muzata, 2020b). Reasonable accommodation for individuals with hearing loss may include amplification or clarity technology, assistive listening devices and alerting devices, the provision of qualified SLI and note takers (Jennings et al., 2010). The absence of these in colleges and universities has resulted in unmet needs of individuals with HI which in turn limits career options.

It was well explained by one of the respondents that choice of career is highly proportional to the labor market. Individuals with HI choose careers based on employability and opportunities accorded to them. The government of the Republic of Zambia currently employs individuals with HI in the education sector and have pledged that 10 per cent of all teacher recruitments is reserved for PWDs. Equipped with knowledge of higher chances of employment upon graduation, the HI opt to take up courses in education and study to become special educators.

Preconceived ideas about what an individual who is HI can or cannot do have highly hindered deaf individuals from taking up careers of their choice. It was noted in the findings of the study that whereas the HI students had aspirations other than those in the educational or vocational fields they were still advised to follow educational and vocational courses because these were courses believed to be suitable for the HI. Therefore the career barriers construct appears to be particularly relevant to people who are HI. This is in agreement with studies conducted by Punch Hyde and Creed (2004) which highlighted how the functional effects of hearing loss and other people’s negative attitudes created career barriers for many people who are HI. Further, the effects of their hearing loss may be perceived by young people and by important others such as parents, teachers, and potential employers as a limitation to the accessibility of many occupations.

The interview findings showed that a number of HI individuals were not accorded chance to show self-efficacy and self-determination. This was evident in the following response from one participant.

S4 stated:

*It is not always that lack of assistive facilities that are reason for limited career choices. Very few colleges and universities enroll and accept applications from the HI in Zambia. This also limits career choice. For example medical colleges and universities, accounting colleges, law schools. All these do not accept applications. Only if they are affiliated to international organizations which are sponsoring you will they allow you.*

This proved detrimental to these students’ choice of career paths and contradicted Astin’s (1984) model of career development which describes career
development as a lifelong process where individuals access and process information about self and determine their career paths. Theory and vocational based career paths were largely advised as careers suitable for the HI because they were the only careers with readily available employment on the labour market. A number of students ruled out certain careers based on concerns related to their hearing loss as expressed in the following statements.

T1 stated:
If I study what I want who will employ me? They say the deaf can’t do this or that because they have to talk or use the phone. Now if I just go and say I want to become so and so where will I work? Better to study knowing when I finish government job can be there in education or in food industry. I don’t want to sit begging in the street with papers I want to work.

C1 stated:
“Most deaf students lack career choices, often they may choose a career, but after training they find it difficult to be employed in the labour market due to perception society has on them that they may be unsuitable for the job hence few of them make progress and develop.”

Barriers to Career Choices among Persons with Hearing Impairments in Workplaces and Higher Institutions of Learning

The second study objective sought to establish the barriers to career choices among persons with hearing impairments in higher learning institutions and workplaces. The study brought to light the minimal career guidance that was offered to students prior to enrollment into tertiary education. The following statement was recorded from one of the participants.

L3 stated:
Most of them do not manage to come here not because they didn’t pass but because they have no one to guide them. So, I think that’s the major negative that they experience when they come here and which program to choose. And in fact the other thing is that they may not even know they may not even have the information that the University of Zambia is now accepting application forms.

L4 additionally stated that:
Assistance is not 100 per cent provided, it all depends on the students interests. If they are willing the school goes ahead and guides them accordingly, however because of the language barrier they are mostly advised to take up education courses which are theory based.

This largely contributed to individuals with HI making uninformed decisions as they did not know what available options existed out there for them. Many individuals with HI encountered difficulties in making career choices because they lacked the relevant information about the various occupations and the specific requirements in order to make progress in them. This situation could be monumental because of communication difficulties coupled with social and
Attitudinal barriers constitute myriads of disadvantages in achieving both education and career goals. This revelation was in line with a study conducted by Lambwe (2017) which revealed that learners with HI were not offered comprehensive career guidance as there was a communication barrier between career counsellors and learners and thus resulted into them making uninformed decisions about their careers.

The study brought to light parent, teacher and peer involvement in the career choices and career development of children with HI. The involvement of parents in grooming their children for the world of work could not be over emphasised. Like the general population, deaf young people relied on their parents, teachers of the deaf and their peers to assist them to consider their future career options. The guidance from parents was invaluable to the decision making for students with HI because community perception hindered individuals with HI from undertaking a range of career options.

Perceptions on disability always hindered career development of many individuals. A study conducted by Rogers and Creed (2011) observed that it was often difficult for individuals with disabilities to have confidence in their abilities to find occupations appropriate to their conditions and this lack of confidence led to poorer career explorations and decision making skills. As a result of communication difficulties, individuals with HI left secondary school unadjusted to the hearing society, unprepared, had little or no experience about future careers. These problems were attributed to career decisions made by HI. Therefore, parents of individuals with HI are encouraged to have positive attitudes and expectations about their HI children careers. They should be optimistic that their HI children could make wise career decisions when given the appropriate support and training.

Barriers to employment opportunities were a problem for many and some were deterred from completing courses or were unsure of the usefulness of the outcomes due to the uncertainty of sustainable employment opportunities. As recorded in this article HI individuals described pursuing a career of own choice as of no use because of the uncertainty in retrenchment. There was also uncertainty about how to overcome the barriers perceived by employers. A wide range of barriers to employment existed for the HI and many were attributable to the lack of awareness amongst employers of the skills and abilities deaf people could bring to a job. Many employers were therefore unaware of the ways in which a person with a hearing loss could both safely and adequately contribute fully in the workplace and not become a ‘burden’ to be accommodated by the employer.

Although more deaf individuals accessed tertiary education, it was observed that education providers and specific support agencies including employment agencies did not collaborate to ensure that deaf people were able to make the most of their potential and progressed towards satisfying career outcomes and thus were unsure of what their long-term career path would be. As revealed by one of the respondents, individuals with HI were not well informed about the career options available to them. This revelation was backed by a study conducted by Furlong (1988) which revealed that career-related information that was easily available to normally hearing adolescents through listening to others, talking and watching Television was often missed by the deaf and hard of hearing who had less auditory access to this kind of incidental learning.
Additionally, it was revealed that students with HI were enrolled in universities and mostly pursued theory or vocational-based careers due to communication barriers and also unavailability of resources to cater for their needs. Although many HI students showed self-determination and interest in different fields, the unavailability of assistive services led the HI to choose careers in fields which they felt they could manage given the limited resources and support available. As, such one could be employed only if one had belief and confidence in different possibilities to get employed. Communication difficulties were a significant contributing factor to career decisions and continued to be a primary barrier to the access to tertiary education and advancement for a student who is HI who is deaf (Frasier, Hansmann & Saladin, 2009).

**Efforts Being Made by Study Sites to Enhance Career Choice among Persons with Hearing Impairment**

The study revealed minimal efforts being made by institutions in order to enhance career choices. Colleges and universities are yet to implement the disability policies to guide the education of individuals who are HI. In response to this participants made the following statement.

Lecturer L5 stated:

“There is need for deliberate efforts to implement the disability policy in colleges and universities to support the learning needs of students. Finances need to be set aside specifically for this purpose.”

L6 stated that:

“Implementing the disability policy will ensure that more systematic support are accorded to students with HI. It will also ensure that the university allocates more resources to their learning needs and by doing so can broaden their career choice options.”

The 1996 Education Policy enacted by the Ministry of Education (1996) which supports the education of PWDs was taken into account given that individuals with HI were accepted into colleges and universities. However, the implementation of this policy in universities and colleges was slow because of limited financial resources needed to successfully accommodate individuals with HI. While some colleges employed on call SLIs when funding was available, students were highly dependent on peers during their studies.

S5 stated:

“Management has been promising to engage sign language interpreters for a long time. We have been for some time reminding them. Some of our fellows have since graduated with only help from peers.”

Additionally, the findings revealed that the focus of the Ministry of Education. (1996) education policy on education was centered on early childhood education (ECE), primary and secondary education. One participant revealed that students with HI were treated the same way as their hearing counterparts. This made
transition difficult for them especially when they were used to receiving classroom instructions through ZSL.

A common thread throughout the literature and evident in this study is the importance of appropriate accommodation to the successful educational outcomes for individuals who are HI. Although this study involved a limited sample size, the findings are useful in offering suggestions to enhance competitive tertiary education outcomes for employment opportunities for this population. It was discovered that some colleges hired temporary on call SLI to help HI students with their studies.

To the researcher, deaf individuals in Zambia represented one of the vulnerable groups with a high learning and working potential but with the limited opportunities for its realization. Academic achievements and literacy levels of deaf school graduates were very low that obviously restricted their further educational and employment opportunities. In the last decades, no deaf individual entered high education and there were only few cases of deaf persons educated in vocational colleges. Consequently, employment possibilities of deaf individuals were also restricted in the country. Several years ago, as a high school graduate, the researcher was denied entry into the School of Natural Sciences because the university had no reasonable accommodation to aid her educational success in that school. It was evidently revealed in this study that universities and colleges still needed to put in more efforts to ensure that the HI individuals are accommodated accordingly in order to broaden their career choices.

**CONCLUSION**

This study’s findings uncovered that different factors limiting career choices of the HI. These barriers were highly centred on the availability of accommodation to meet the learners with HI’s needs. These assistive accommodations include SLIs, amplifiers, video technology and note takers. The unavailability of these has led to individuals with HI to choose careers that are more accommodating to their needs such as theory-based and vocational-based careers. It was also showed that information on career options does not reach individuals with HI and this somewhat influences them to make uninformed decisions on careers to pursue. In harmony with the literature reviewed pre-conceived perceptions on the nature of HI has lead individuals to believe that they can only be accepted in certain fields of study as they are the only sectors of employment available for the HI.

The study showed that minimal efforts were made to change the status quo, however the university and college managements provided on call interpreters for the HI and therefore, because this practice was done only in the Special Education departments, many deaf individuals apply to study special education so that they succeed in their post-secondary education. This research advocated for funding to be allocated for the employment of SLIs to assist the HI.

Legislative mandates and recent technological advances are not being fully realized in the education of individuals with HI at tertiary level. The present review highlighted the need to renew efforts to address the barriers that impede HI individuals’ attainment of their full potential and optimal career advancement. This can encourage and support individuals with HI to attain the highest educational level possible, to develop the traits of persistence and resilience, and to develop strong self-advocacy skills and knowledge, including an understanding of their
legal rights and skills in explaining the implications of their hearing loss and negotiating for necessary accommodations.

Arising from the study findings and discussion of findings, the following recommendations were made. First, Universities should offer career education programme as a routine advancement programme for individuals with HI and as a prerequisite for their entry into workplaces and higher learning institutions. Second, tertiary education institutions must provide additional support to students with HI such as SLI, note-takers, amplifiers, extra tutorial time and extra time during mid-year and final year examinations for them to effectively participate in education programmes offered. Third, access to information related to career pathways should be improved, with information provided in a format accessible to deaf students (for example, video clips in ZSL) in workplaces as well as higher institutions of learning. Fourth, workplaces and higher institutions of learning should work to remove obstacles associated with obtaining interpreter and/or note taker to reduce or eliminate challenges experienced the HI employees or students.

REFERENCES


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