

Magreth Matonya

Accessibility and Participation
in Tanzanian Higher Education
from the Perspectives of
Women with Disabilities

**”MY
ABILITY
IS STRONGER
THAN MY
DISABILITY”**



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Esitetään Jyväskylän yliopiston kasvatustieteiden tiedekunnan suostumuksella
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UNIVERSITY OF JYVÄSKYLÄ

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UNIVERSITY OF JYVÄSKYLÄ

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ABSTRACT

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This study investigated how women with disabilities participate in higher education and what enables them to succeed in their studies. The Social Model of Disability (SMD) guided the study because it emphasises the removal of barriers which continue to exclude and marginalize women with disabilities from social, cultural and economic opportunities, including education. To support the model, this study was conducted at the University of Dar es Salaam (UDSM) in Tanzania to establish the challenges and opportunities that facilitated the women with disabilities to enrol at the university. The study involved 22 women with disabilities who managed to enrol at the UDSM, regardless of their types of disabilities, degree programmes or backgrounds. The assumption behind this study was that women with disabilities experience various challenges which originate from their families, communities and institutions. The interest to focus on women with disabilities studying at the UDSM was based on the understanding that those women were among the few who managed to obtain a place at the university despite these challenges. Thus, the study intended to establish the potential motivation, factors and strategies which enabled them to succeed in higher education. The study employed qualitative methodology using semi-structured interviews. Thematic analysis was also used to analyze the data.

The findings of the study showed that women with disabilities who succeeded in getting a university placement were highly motivated to participate in higher education and believed that education was important for their social mobility and empowerment. The positive attitudes of some of their family and community members highly motivated the women with disabilities to participate in higher education. While there were motivation and positive attitudes from some family members, the most disappointing issue for these women was their social marginalization. At the university, these women's main challenges were inaccessible learning and physical environments. Attending more than one informal group discussion was reported to be the key strategy of the majority of the women for overcoming the challenges associated with the learning environment at the university. The study concludes that accessibility and participation of women with disabilities in education depend on social attitude change, an enabling and encouraging university environment and family support.

Keywords: Accessibility, Participation, Gender, Higher Education, Disability, Inclusive Education, Tanzania

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ABBREVIATIONS

BEST	Basic Education Statistics in Tanzania
CEA	Compulsory Education Act
CRPD	Convention on the Rights of People with Disabilities
CRC	Convention on the Rights of the Child
CSP	Community Strategic Programmes
EFA	Education for All
ETP	Educational Training Policy
ESDP	Education Sector Development Programme
GER	Gross Enrolment Rate
GDP	Gender Development Policy
HEDP	Higher Education Development Programme
ICT	Information and Communication Technology
IDEA	Individual with Disabilities in Education Act
ILO	International Labour Organization
ITP	Institutional Transformation Programme
MDG	Millennium Development Goal
MoEVT	Ministry of Education and Vocational Training
NGO	Non-Governmental Organization
NORAD	Norwegian Agency Development
NSIE	National Strategy on Inclusive Education
NSGRP	National Strategy for Growth and Reduction of Poverty
OECD	Organization for Economic Co-operation and Development
OUT	Open University of Tanzania
PED	Pre-Entry Programme
PEDP	Primary Education Development Programme
SEKOMU	Sebastian Kolowa Memorial University
SEKUCO	Sebastian Kolowa College
SEDP	Secondary Education Development programme
SMD	Social Model of Disability
STD	Standard
SUA	Sokoine University of Agricultural
TCU	Tanzania Commissions of Universities
TDV	Tanzania Development Vision
TTP	Institutional Transformation Programme
UDHR	Universal Declaration of Human Right
UDSM	University of Dar es Salaam
UNESCO	United Nations Educational Scientific and Cultural Organization
UNDP	United Nation Development Programme
UGP	University Gender Policy
UNICEF	United Nation Children's Educational Fund
UN	United Nations

UPE	Universal Primary Education
UPIAS	Union of Physically Impaired against Segregation
URT	United Republic of Tanzania
WHO	World Health Organization

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1 INTRODUCTION

Approximately one billion people around the world live with some forms of disabilities (UNESCO, 2009a). Many of them are experiencing inequalities in their daily lives and have fewer opportunities to access quality education that takes place in an inclusive environment (ibid.). According to the Convention on the Rights of Persons with Disabilities (CRPD) Article 24, 2(a), persons with disabilities should not be excluded from general education systems on the basis of disability. Moreover, the Millennium Development Goals (MDG) and Education for All (EFA) insists on gender equity, equality and quality education for all. For example, the fifth and sixth Millennium Development Goals emphasise the promotion of gender equality along with women's empowerment and environmental sustainability in education, respectively. Moreover, the Education for All goal number five emphasises the achievement of gender equality and improvement in the quality of education. Meanwhile, the Sustainable Development Goals 2016-2030 also calls for inclusive and equitable education and promotion of lifelong learning opportunities to all (goal 4). Goal five also insists on the achievement of gender equality and empowerment of all women and girls. Global efforts to assist people with disabilities in education have a long history, culminating in the UN CRPD (Article 24) which came into effect in 2008, and at present has been ratified by over 150 countries. The UN CRPD reinforces the rights to education embodied in the Convention on the Rights of the Child (CRC) (Articles 29 and 42), which came into effect in 1990.

The importance of the right to education for all children was reflected as early as 1948 in the Universal Declaration of Human Rights (UDHR) Article 26, which states that "education is the right of everyone" (26, 1) and "shall be directed to the full development of human personality and strengthening respect for human rights and fundamental freedoms." (26,2). The Salamanca Statement and Framework for Action of 1994 proposed that "schools should accommodate all children regardless of their physical, intellectual, social, emotional, linguistic or other condition" (UNESCO, 1994, 1; 2005; 2006).

It is estimated that 43% of persons with disabilities live in relatively high poverty. This number is growing faster in Sub-Saharan African than in non-Sub-Saharan African countries, due to extreme poverty and malnutrition, inadequate health care, crime, disease and accidents (Chaudhry & Owen, 2005; ILO, 2005). In Sub-Saharan Africa, many people with disabilities are mistreated through negligence, superstition, inaccurate stereotyping and abuse. Segregation, discrimination and humiliation within the community are some of the traditional cultural beliefs and attitudes that negatively impact many people with disabilities. Furthermore, majority of people with disabilities are isolated and considered as weak and cursed group. However, majority of the people with disabilities are an integral part of these societies; they are parents, siblings, offspring and neighbours; people consult them for advice; they teach people of all ages and can perform to their full potential when given necessary support. Many people with disabilities can perform equally to those without disabilities provided that they are empowered with necessary assistive devices and technology (Maina, 2010). They can show different ways of leading the society and country towards development based on the profound human value of respect for each individual life. They need to be guaranteed free, appropriate public education, regardless of the severity of their conditions. In the area of employment, laws prohibit discrimination against many people with disabilities. However, they face many problems related to their lives and employment, such as prejudice; believe system, environmental barriers poor treatment, marginalization, architectural challenges, transport, and lack of access to education. Despite the long history of education nearly 200 years, only less than 10% of the students with disabilities in some developing countries have access to education (UNESCO, 2005).

General education has failed to provide strong inclusive education for many students with disabilities due to a shortage of affordable and accessible teaching and learning materials as well as lack of new technology that allows people with disabilities to learn effectively (Maina, 2010). Students with disabilities further experience an inadequate infrastructure, an acute shortage of professionals in general and inclusive educational schools, and a shortage of and/or non-existent of effective identification and interventions for majority of people with disabilities particularly in Sub-Saharan African countries.

Despite all the efforts to ensure the right to education for all persons including those with disabilities, the World Health Organization (WHO, 2011b) shows that the majority of persons with disabilities are deprived of access to education. The majority of women with disabilities in Sub-Saharan Africa including Tanzania have never had a chance to obtain any formal education (Heiman, 2006). A study from Tanzania, reported the existence of unequal opportunities to access higher education between men and women with disabilities (Possi, 1998). Only few women with disabilities have access to higher education, as the majority are deprived of this opportunity. Several factors could be attributed to the limited opportunities to access higher education among women with disabilities. Some of these factors include,

negative attitudes of the community and parents towards people with disabilities, lack of role models and poor teaching materials and inaccessibility of educational buildings (Macha, 2002b; Possi, 1998). Despite these challenges, few women with disabilities have managed to overcome the obstacles and are successfully accessing and completing higher education. It is important to investigate how they did it, what can be learned from them, and what is their advice to other girls and women with disabilities. Furthermore, little is known about how being a woman with disabilities can allow or limit access to higher education and how social, cultural and economic factors can influence women's access to higher education. What are the factors that enable them to access and participate in higher education? These questions are the basis for development of this qualitative study to uncover enabling factors and challenges which enabled few women with disabilities to access and participate in higher education.

1.1 Motivation for conducting this study

The motive for undertaking this study originated from the researcher's experiences as a student and a teacher. During the researcher's primary and secondary education she did not have the opportunity to study alongside students with disabilities because they were in special schools. Consequently, the researcher was of the view that this was supposed to be the case. However, as the researcher started working as a primary school teacher upon completion of her diploma in education in 2001, where she was assigned to teach Kiswahili and geography to Standard Seven (STD 7) and Six (STD 6) at Bulyaga primary school in the Rugwe District of the Mbeya region, she came to realize that there were pupils with disabilities, especially visual, hearing and physical disabilities, in her classroom. It was difficult to meet their diverse needs because the researcher did not have any awareness, knowledge or training on how to teach these pupils. A good number of children with disabilities were experiencing many challenges associated with the learning and teaching process, including inaccessible buildings (classrooms, toilets, teachers' offices, libraries), shortage of equipment and facilities and socialization with teachers and peers that were, in some ways, hindering the learners' with disabilities to participate in higher education. In 2002, the researcher was admitted to the University of Dar Es Salaam (UDSM) to study a bachelor's degree. Due to the researcher's previous experience, she was surprised to find herself studying alongside students with disabilities. The students with disabilities did not share the same examination rooms with students without disabilities, nor did they have any equipment or materials to facilitate the learning and teaching process. Moreover, the students with visual disability, including those with albinism, simply listened to the lectures without taking notes, and then went back to their dormitories to await the next lecture or lesson.

In 2006, the researcher registered for a Master of Art in Education, and discovered that two women and three men with disabilities were also pursuing the same degree. The researcher's MA thesis investigated the economic contribution of Integrated Community-Based Adult Education among women. This topic had nothing to do with disability in education. In March 2008, before completing her master's studies, the researcher got a job at the UDSM as an assistant lecturer in the Department of Adult Education (currently, the Department of Educational Management, Foundation and Lifelong Learning). The researcher taught Basic Adult Education courses and came across women with disabilities who were pursuing a bachelor's degree in various subjects. The researcher wished to develop an understanding of how these women with disabilities were able to enrol in, and participate in the university studies, and what enabled them to succeed in their studies despite the challenges they had experienced in the lower levels of their education.

On 3rd December 2008, the International Day of Persons with Disabilities listed the challenges that were hindering people with disabilities from accessing different services including education, and campaigned for institutions, including schools and higher education establishments, to provide a free learning environment which would accommodate the diverse learning needs of all students at all levels of education. Combined with this information, the researcher's experience of being a teacher and assistant lecturer at the UDSM raised her interest in focusing her PhD on disability, gender and higher education in Tanzania.

The first stage of the researcher's research development involved compiling previous studies on disability and education in Tanzania. Within three months, 58 studies on disability and education in Tanzania had been compiled. This process helped the researcher to position her research topic using available knowledge. The compilation process informed the undertaking of the current study.

The overall literature review indicates the importance of women with disabilities being able to access, participate and succeed within higher education. Although many studies have examined the problem of students with disabilities in education and other social services, there is a lack of such studies in regard to women with disabilities in higher education. Studies have focused on gender in primary and secondary education rather than higher education in Tanzania. Out of the 58 studies on disability and education from 1998 through 2008, four (Bajeneza, 2000; Marcha, 2002a; 2000b; Possi, 1998) researched gender and education in primary and secondary education but not in higher education. Eight studies researched the enrolment and learning of some students with disabilities in higher education in Tanzania, but not women with disabilities. Therefore, there is little existing research, policies or programmes developed in the combined areas of gender, disability and higher education.

Bajeneza (2000) showed that women felt disempowered with regard to their individual concerns. Furthermore, society dehumanizes women on a practical level, excluding them from education, development planning and

decision-making. Macha (2002b) has shown that most women with disabilities were left at home without being enrolled in school, where cultural factors caused them to lag behind in the education system. Possi (1998) has indicated that girls and women with disabilities in Tanzania do not enjoy equal access to education compared to boys and men, especially in higher learning institutions. Women and girls with disabilities fare less well in the educational arena than men and boys. Furthermore, Macha (2002b) showed that women with disabilities face many barriers in education, such as an underlying cultural bias based on gender and disability. Moreover, Macha (2002a) revealed that culture and community were the main problems encountered by women with disabilities when seeking to access education. Manual (2003) stated that there is no clear policy in higher education to help students with disabilities take appropriate measures that could provide adequate and better services as well as facilities for students with disabilities. Nude et al. (2008) found that management support, resources accessibility and availability, intellectual investment, technology and learning styles are the major challenges that students with disabilities face in Tanzania. Generally, while there is research on women, research on women with disabilities in the field of higher education is largely lacking in the Tanzanian context.

It is the researcher's belief that the current study is relevant and timely on both global and local levels. It fits well with previous and current debates and goals such as Millennium Development Goals (MDG) and Education for All (EFA) and Sustainable Development Goals (SDG) 2016-2030 with a focus on gender equity, equality and quality education for all. The study is also consistent with an inclusive education agenda and the UN's CRPD. It is expected that the study may influence policies and practices related to women with disabilities in higher education as well as the community at large in Tanzania, help to improve the life prospects of women with disabilities, take remedial measures to ensure sustained enrolment, retention and completion rates, and raise awareness in families, society and institutions about the importance of education for this group.

1.2 Structure of the study

This study is organized into six chapters as follows: chapter one presents the introduction and background information, with the major concern being the statement of the problems and justification of the study. Chapter two outlines the literature review to meet the purpose of the study and explore the relationships among the theory, previous studies and this research. This chapter also presents the meaning of some of the types of disability under study to facilitate the reading process. Inclusive education worldwide, in Sub-Saharan Africa and Tanzania are also defined. Furthermore, it sheds light on the situation with regard to gender, education, and women with disabilities and education in Sub-Saharan Africa and Tanzania. Among other things, it

describes and orients the accessibility, participation, policy and higher education challenges as well as research gaps. Chapter three discusses the research tasks, questions, purpose, and rationale. Chapter four describes the research methodology regarding how the data were gathered in the field. The research approach and design, participants and research sites are identified, followed by the data collection methods, which include the piloting, semi-structured interviews and language used to collect the data. Moreover, this chapter focuses on the data collection and analysis processes, ethical considerations and methodological reflections of the study. Chapter five then discusses the research findings, divided into five main parts, such as the reasons why women with disabilities participate in higher education, as well as the family and community attitudes towards this phenomenon. These factors enabled the participants to access and participate in higher education, as well as the challenges and the strategies used to overcome them. Chapter six provides the discussion of main findings, practical conclusion of the study, the new knowledge developed by the study, and the connections among accessibility, participation and education. This chapter also discusses the dissemination of the findings and offers suggestions for further research.

2 DISABILITY, GENDER AND EDUCATION

This section focuses on the theoretical framework of the study. It describes the theoretical models of disabilities used in the study and their implications, as well as conceptualization of disability, special need education and inclusive education and their relationships with women with disabilities in Sub-Saharan Africa and Tanzanian education. The challenges encountered by women with disabilities in education are also discussed in this section.

2.1 Conceptualizing disability

Disability is a complicated construct that has been subjected to a variety of interpretations. These interpretations depended on personal perceptions and misperceptions and social context (Shakespeare & Watson, 2002). This suggests that the definition of disability is contextual, and varies according to time, location and socio cultural context. Understanding the concept of disability is very important as it helps in determining and shaping cultural views about disability. This section presents the models of disability. These models provide a framework for understanding the way in which people with disabilities experience social and cultural barriers. They also provide a reference for society, as laws, regulations and structures are developed that impact the lives of people with disabilities. There are several models of disabilities which have been defined over the last few years. The current study, however, draws attention to the charity/religious, medical and social models of disability that have been commonly and widely applied by several researchers.

2.1.1 The religious/charity model

The religious or charity model of disability traces back to the religious thought with the idea of helping the needy (Shakespeare, 2009). The first charity to facilitate blind people was set up by the King of France in the 1300s. In many

cultures, the model associated disability with sin and shame. The charity model views people with disabilities as victims of their disabilities who deserve to be pitied, in deficit and needing help. This model was most used by people without disabilities to clarify and identify disability. In this model the persons with disabilities by characterized by their inability to walk, talk, see, learn, or work as well as having difficulties helping themselves to live independent lives. The model viewed people with disabilities as disastrous and suffering; as a result, they need special services and special institutions (special colleges, schools or homes). Some people with disabilities are to be pitied and need our help, sympathy, charity and welfare in order to be looked after. Sometimes people with disabilities themselves adopt this concept, in which case they usually feel “unable” and through disability-specific charities have contributed to the segregation of many people with disabilities. This tends to reinforced negative stereotypes of people with disabilities.

According to Harris and Enfield (2003), the charity model had the following critiques: first, the charity model causes low self-esteem because the organizations are not run by people with disabilities. Second, the charities themselves benefited more than the people they were helping. Third, the charity model gives the charities a positive image while people with disabilities are once again represented as needy. Fourth, it emphasises the disability rather than the person and lastly, some people with disabilities were regarded as imperfect. Charities plug gaps in state provisions with many social services activities being farmed out to other charitable organizations.

2.1.2 The medical (or individual) model

This model considers people with disabilities as persons with physical disabilities that need to be cured. The aim of a medical model is to make people with disabilities “normal,” which of course implies that people with disabilities are in some way abnormal (Harris & Enfield, 2003). The medical model emphasises that people with disabilities have to be changed, not society or the surrounding environment. The medical model perceives special services, such as special transport systems and welfare social services as essential for persons with disabilities. Moreover, people with disabilities need special institutions, such as hospitals, special schools or protected employment, and professionals such as social workers, medical professionals, therapists and special education teachers for provisions of special treatment, education and occupations (Shakespeare, 2009).

The disability is seen as solely a medical condition, or even a defect, in a person. A person with a disability was seen either as an object of discrimination or pity, or solely as a person who needed to be “fixed,” in accordance with the medical model of disability (Oliver, 1996). A person who has an inability to see or hear because of a visual or hearing disability, for example, is understood to have a disability as an individual problem. The medical model regards the difficulties that many of people with disabilities experience as a consequence of the way in which their bodies are shaped. It views the future of these persons as

directly caused by disease, trauma or a health condition. The model calls for medical treatment or intervention to correct the problems of individuals (Oliver, 2009). Moreover, the model anticipates that the challenges facing majority of people with disabilities are due to a functional limitation or psychological loss proposed to have arisen from the disability (Shakespeare & Watson, 2002). In order to overcome the challenges that persons with disabilities face, the model draws attention to medical intervention and rehabilitation.

Carson (2009) argues that the medical model makes many people with disabilities think about and internalize their life problems as being caused by these disabilities. As a result, many people with disabilities are less likely to challenge their exclusion from mainstream society and more likely to perceive it as a normal way of living. With the medical model's conceptualization, doctors focus on diagnosing, treating and curing illness rather than improving social situations or surroundings (Oliver, 1990; 2009). Social model has added an alternative to the individualized medical concept of disability by emphasizing that people with disabilities are deprived not because of their disability but as a result of the restrictions imposed by social, cultural, economic and environmental barriers (Oliver, 2009). Disability, according to this formulation, is not about health or pathology, but about prejudice and social exclusion. Although the charity and medical models are still applicable today in many societies in Sub-Saharan Africa and Tanzania in particular, this study has adopted the social model of disability.

2.1.3 The social model of disability

The social model of disability was principally recognized by academicians and activists in 1970s who themselves had disabilities. The aim was to promote their rights to belong to and be appreciated in their societies. This was adapted by Mike Oliver from the booklet published by the Union of Physically Impaired against Segregation (UPIAS) entitled the Fundamental Principles of Disability. The social model regards disability as a result of the way society is organized (WHO, 2007b; Shakespeare, 2009; WHO, 2011b; Watson, Roulston & Thomas, 2012; WHO, 2013). SMD stated that in society majority of people with disabilities face three types of discrimination and barriers to participation: First, **attitudinal barriers** such as discrimination, isolation, segregation, poverty, economic and passivity/dependency that promote fear, ignorance and low expectations speeded up by traditional cultures and religions. Second **environmental factors** that consequently leads to physical inaccessibility which is likely to influence many people with disabilities in all aspects of life such as markets and shops, public buildings (schools, offices, and hospitals), places of worship, transport, etc. third, **institutional barriers**, which includes illegal discrimination, inadequate education and services such as medical and social models. Majority of persons with disabilities are excluded from certain rights, e.g., by not being allowed to participate effectively in school, etc. (Harris & Enfield, 2003, 172). These three types of barriers cause inability to people with

disabilities to take control of their own lives. According to the social model, a disability does not only depend on the individual but also on the environment, which can be disabling or enabling in various ways. In this line of reasoning, disability is attributable to a wider external environment rather than resulting from an individual's physical and/or cognitive deficiencies. Moreover, from the social model point of view, disability is the outcome of society failing to offer sufficient and suitable support (Lang, 2001; Shakespeare, 2009). The model carries the implication that the attitudinal, communication and social environments must be transformed to enable people living with disabilities to participate in society on an equal basis with others (Tregaskis 2002; Tugli, Klu & Morwe, 2014; WHO, 2006b).

A disability is observed as a socially formed problem, and any barriers created by society need to be eliminated to enable those with disabilities to enjoy their human rights (UNESCO, 2005; UNCEF, 2009). For example, in Kenya, negative attitudes, segregation policies and practices and inaccessible environments are the key barriers which exclude students with disabilities from accessing higher education (Kochung, 2011; Tugli et al., 2014). Inaccessible buses, buildings or stairs may hold them back. Blindness or limited sight may result in difficulty in handling work activities on a daily basis, while the accessibility of glasses may make it possible to cope with all tasks without difficulty (Tugli et al., 2014). The social model emphasises that the aforementioned challenges can only be resolved by groups working together with people with disabilities, their families, institutions, communities and doctors (Aisncow & Miles, 2009; Oliver, 1990; Tregaskis, 2002).

In the present study, the social model of disability by Oliver (1996) is used to situate the study because it recognizes that disability is a result of oppression, ranging from individual prejudice to institutional discrimination in the forms of inaccessible public buildings and transport systems as well as segregated education (Shakespeare & Watson, 2002). The social model is characterized by self-help, affirmation, discrimination, behaviour, rights, and politics, and requires flexibility. The model denies the fundamentals of disability in people's lives, pays attention to those social barriers related to their disabilities and removes the barriers that fail to accommodate the needs of all persons (Aisncow & Miles, 2009). The social model has a great impact on, first, the identification of disabling barriers to the promotion of appropriate inclusion for students with disabilities; second, social change and the total transformation of society; third, transforming the self-esteem of an individual and, lastly, sharing the knowledge that these individuals are disabled by society rather than their own bodies (Miles, 2000; Shakespeare & Watson, 2002; WHO, 2013). Physical, psychological, environmental and sociopolitical interventions are the keys to progressive change (Watson, Roulston & Thomas, 2012).

Equality in terms of equal rights is a fundamental aspect of the SMD because it provides the ability to make decisions and the chance to live life to the fullest (Carson, 2009; Oliver, 1996; Shakespeare & Watson, 2002; Sign, 2011). The under-estimation of the potentials of the majority of people with disabilities

can be addressed by providing equal rights, suitable facilities and opportunities for social change (Albert, 2004; Anderson, 2004; Shakespeare & Watson, 2002). The physical, economic and social environment can lead to disabling people, as well as the biological, emotional and sociocultural factors that generate pain for those with disabilities (Oliver, 2004). Poor knowledge, traditional attitudes, lack of experience, poor technology and poverty tend to continue to exclude many people with disabilities from equal access to services. The SMD emphasizes the essentials of investigating the interplay between personal and everyday life in a wider society (Albert, 2004; Barnes, 2007; Barnes, Mercer & Shakespeare, 1999; 2010; Winter, 2003). Disability can be determined through individuals, the environment, societal relationships and situational or contextual barriers to participation academically, socially and occupationally which are associated with disabilities (Kristiansen & Traustadottir, 2005; WHO, 2007a). Disability also results from the interaction of health conditions, personal (motivation and self-esteem) and environmental factors (natural and built environments, support, relationships, services, and attitudes). For effective provision of services and social life, knowledge and attitudes are important environmental factors (WHO, 2011b).

In the educational context, disability focuses on health conditions which cover body functions and structure, and activities and participation leading to education and developmental goals (Hollenweger, 2011). Methods and provision of services are determined by environmental, personal and activity factors. Education is also determined by the physical materials, social, attitudinal and environments, in which people live, socialize and conduct their lives. The SMD emphasizes that colleges and higher education should ensure that the academic environment is barrier-free and allows everyone to study (Oliver, 1996; Sign, 2011). The environment should be usable by all, including marginalized groups, to the greatest extent without the need for adaptation or specialized design. The model anticipates the needs of diverse learners and incorporates effective strategies into the curriculum and instruction to make learning more accessible. Oliver (2004) also argues that the lack of services, presence of barriers, negative attitudes and environments in education are the main causes of disability. An inaccessible transport system, poor arrangements, and individual-to-institutional discrimination constitute the factors that impose restrictions to some people with disabilities (ibid.). The model also pays attention to the fact that institutions and organizations should accommodate the diverse needs of majority of people with disabilities and investigates how they perceive education from different perspectives (Oliver, 2004). Institutions and organizations also need to change the environment to avoid excluding people with disabilities (WHO, 2011b). Thus, the model focuses more attention on the roles of choice, meaning and agency in the understanding of their disabilities by stressing that the needs of people with disabilities should be discovered in the context of equal power, access, participation and the social resources available to them in all arenas (Oliver, 1996).

The social model sets the basis for the conduct of this study as it provides reasons on why some women with disabilities were able to excel to higher education despite their disabilities. The model provides an understanding of the relationship between disability, gender, and education and the access to and participation in Tanzanian higher education. The model outlines the attitudinal, environmental and institutional challenges to students with disabilities and facilitates the assessment of the physical, economic, social and environmental barriers which continue to exclude women with disabilities from higher education, and proposes several methods for overcoming these challenges. In other words, the model tends to help us to understand the solutions to the barriers that people with disabilities experience.

Despite the strengths of the SMD, several studies have highlighted its shortfalls. The model failed to include the individual's experience of pain and limitation, which are often aspects of disability (Thomas, 2004). The social model has traditionally either avoided or excluded the issue of disability, as people are disabled by society as well as by their own bodies (Shakespeare & Watson, 2002). Genetic disability has different implications for self-identity than acquired disability. Some disability is static while others are episodic or degenerative; some affect appearance while others restrict functioning. All of these differences have a silent effect and are rejected or overlooked at the individual, psychological, social and structural levels (Albert, 2004). Thus, people are disabled by both social barriers and by their own bodies, although the social barriers provide greater challenges than the disability itself (Thomas, 2004).

2.1.4 Classification of disabilities

Disability means a condition whereby a person is unable to perform as a consequence of physical or mental unfitness, for instance hearing, visual, cognitive, emotional, speech or language disability (WHO 2008b, 2013). Moreover, disabilities are classified differently and have many local names, depending on the culture, attitudes, geographical location, beliefs, and status in a certain country. The Individuals with Disabilities Education Act (IDEA) categorizes thirteen types of disability, including autism, blindness, deafness, emotional disturbance, hearing disability, and intellectual disability. Other disabilities include orthopaedic, specific learning disability, speech or language disability, traumatic brain injury; visual, other and multiple disabilities (IDEA, 2013). WHO (2001; 2006a) has divided disability into six major categories, including seizure/fit, visual/seeing disability, physical/moving disability, hearing/speech disability, learning disability and strange behaviours resulting from psychotic mental illness. To convey a similar meaning, Heward (2009) has classified disabilities as mental retardation (intellectual disability), learning disability, and emotional and behavioural communication disorder, and hearing, physical and visual disability. WHO (2007a; 2011a; 2013), Hollenweger, (2008; 2011) and Hollenweger and Moretti (2012) have identified three areas of disabilities: functioning (blindness, deafness), activity limitation (walking,

eating) and participatory restriction (discrimination in education). Despite the categories of disability, in this study the researcher discusses only five categories based on the information from the participants interviewed (see appendix 5).

Hearing disability includes the inability to recognize small amounts of certain sound frequencies which can be heard by most people; and a person with a hearing disability is classified from totally to partially deaf (WHO, 2001, 2008a). Hearing disability according to WHO (2008a) is categorized into slight, moderate, severe and profound disability. A person with mild and moderate hearing disability needs counselling and hearing aids. A person who suffers from severe and profound hearing disability may experience supplementary speech difficulties and need appropriate educational intervention such as lip-reading, signing and rehabilitation (WHO, 2008a). Physical damage, meningitis, disease during pregnancy or exposure to very loud noises may cause deafness and hearing loss (ibid.). There is a difference between people who are deaf and those with a partial hearing disability (WHO, 2001, 2008a). Deafness can occur at birth or later in life, and sign language is an essential communication instrument for individuals who are totally deaf, while those who are partially deaf use a hearing aid (WHO, 2001, 2008a; WHO 2013). In education, hearing disability affects language and speech development, social interaction or socialization, and communication causing difficulties in social, behavioural and interpersonal relationships, which can result in poor academic achievements (WHO, 2007a, 2008a; WHO, 2013; 2014).

Intellectual disability, previously called mental retardation, refers to cognitive, developmental, learning or intellectual disabilities, and sub-average level of intellectual functioning and marks a significant deficit in daily life skills, or is a situation where by a person has certain limitations in both mental functioning and in skills development (communicating, taking care of him or herself, and social skills). The children with intellectual disability may take longer to learn, to speak, walk, and take care of their personal needs such as dressing or eating. These limitations will cause a child to learn and develop more slowly than a typical child. Any intellectual, learning or cognitive disability will reduce an individual's capacity to learn tasks or process information, which will also make it difficult for a person to take in information and communicate what they know, as well as lead to challenges associated with reading, writing and/or mathematics (WHO, 2001). These children are likely to have trouble in learning in school. They will learn, but it will take them longer and there can be some of the things they cannot learn at all. This impairment develops before the age of 18.

This problem may be caused by several factors. First, genetic or inherited conditions may result from the inheritance of abnormal genes from parents, or errors during genes combination. Second, during pregnancy can result when the baby does not develop inside the mother properly due to over stress, over use of drugs or alcohol and infection like rubella and the way the baby's cells divide as it grows. Third, the problem at birth may occur especially when baby

has problems during labour and birth, such as not getting enough oxygen. Health problems (diseases) like whooping cough, the measles, or meningitis can cause intellectual disabilities. They can also be caused by extreme malnutrition (not eating right), not getting enough medical care, or by being exposed to poisons such as lead or mercury.

These children with intellectual disability can be diagnosed by observing two signs soon after birth; first, the ability of children to learn, think, solve problems, and make sense of the world (called *IQ* or intellectual functioning); and second, by assessing whether the person has the skills he or she needs to live independently (called adaptive behaviour, or adaptive functioning). For example, taking long to sit up, crawl, or walk later than other children; having difficulties to learn to talk, or having trouble speaking, difficulties to remember things or understand how to pay for things, having trouble understanding social rules, seeing the consequences of their actions, solving problems, and thinking logically. Intellectual functioning, or IQ, is usually measured by a test called an IQ test. The average score is 100. People scoring below 70 to 75 are thought to have an intellectual disability (Arc, 2009). To measure adaptive behaviour, specialized look at what a child can do in comparison to other children of his or her age. Certain skills are important to adaptive behaviour. These are: daily living skills, such as getting dressed, going to the bathroom, and feeding one's self; communication skills, such as understanding what is said and being able to answer; social skills with peers, family members, adults, and others (IDEA, 2010).

In education a child with intellectual disability can do well in school but is likely to need individualized help, such as special education and related services. The level of help and support that's needed will depend upon the degree of the problem involved. In the general education system students with intellectual disability are involved in and make progress according to the general education curriculum. That's the same curriculum that's learned by those without disabilities. Moreover, these children need **supplementary aids and services**. It is often crucial to provide support to students with intellectual disabilities in the classroom. This includes making accommodations appropriate to the needs of the student. Supplementary aids and services are supports that may include instruction, personnel, equipment, or other accommodations that enable children with disabilities to be educated with children without disabilities to the maximum extent appropriate. These children need also **adaptive skills** which are skills to live, work and play in the community. Teachers and parents can help children work on these skills at both school and home. Some of these skills include communicating with others; taking care of personal needs (dressing, bathing, going to the bathroom); health and safety; home living (helping to set the table, cleaning the house, or cooking dinner); social skills (manners, knowing the rules of conversation, getting along in a group, playing a game); reading, writing, and basic math; and as they get older, skills that will help them in the workplace (Arc, 2009). **Supports** include the resources and individual strategies necessary to promote the development,

education, interests, and well-being of a person. Supports enhance individual functioning. Supports can come from family, friends and community or from a service system. Home chores coaching are one example of a support often needed by a new employee with it is not a support. **Adaptive behaviour** is the collection of conceptual, social and practical skills that have been learned by people in order to function in their everyday lives (WHO, 2013). Significant limitations in adaptive behaviour impact a person's daily life and affect his or her ability to respond to a particular situation or to the environment. Standardized testing aims to measure the following skills: **Conceptual skills:** receptive and expressive language, reading and writing, money concepts and self-direction. **Social skills:** interpersonal, responsibility, self-esteem, follows rules, obeys laws, is not gullible, and avoids victimization. **Practical skills:** personal activities of daily living such as eating, dressing, mobility and toileting; instrumental activities of daily living such as preparing meals taking medication, using the telephone, managing money, using transportation and doing housekeeping activities; occupational skills; maintaining a safe environment (AIDEA, 2010; WHO, 2013).

There is no cure for intellectual disabilities. Treatment and education programmes are geared toward helping children reach their full potential. The sooner the diagnosis is made, the more the child can be helped. With infants, the treatment emphasis is on sensory-motor development, which can be stimulated by exercises and special type of play. Special pre-school education programmes are available for younger children. These programmes concentrate on essential self-care, feeding, dressing, toilet training and assistance with language and communication difficulties. As children reach school going age, education programmes geared towards their level of ability are available in both mainstream and special schools.

Therefore, an intellectual disability is not a disease. You can't catch an intellectual disability from anyone and this problem is also not a type of mental illness like depression. There is no treatment for intellectual disability; however, most children with an intellectual disability can learn to do many things. It just takes them more time and effort than other children's (Arch, 2009).

Visual disability includes both partial sight and blindness. Students with visual disability are identified as those with a corrected visual acuity of 20/70 or less in the better eye or field restriction of less than 20 degrees at its widest point or identified as cortically visually disability and functioning. Loss of sight caused by medical conditions such as glaucoma, retinopathy of prematurity, cataracts, retinal detachment, macular degeneration, diabetes, infection and trauma (WHO & World Bank, 2011). The classification of disability depends on functional classification (visual acuity), functional vision (low, functionality and totally blind) and congenital (fatal development). Lighting, environment fatigue and emotional status may influence visual functioning. Light or glare, blind spots in the visual field or contrast or certain colours also cause problems (WHO, 2007a; 2008a). Congenital or degenerative states cannot be corrected by conventional methods, such as refractive modification, medication and surgery

(WHO, 2001; 2011a). There are 4 levels of visual function, according to the International Classification of visual impairments, such as normal vision, moderate visual disability, severe visual disability, blindness. However, moderate visual disability combined with severe visual disability is grouped under the term low vision taken together with blindness represents all visual disability (WHO, 2006). According to WHO (2007a; 2008a), visual disability involves people with vision less than 3/60 (0.05) or equivalent to a visual field loss in the better eye with the best possible correction. Moreover, a person with low vision corresponds to vision of less than 6/18 (0.3), which is equal to 3/60 (0.05) in the better eye with the best achievable correction (WHO, 1997; 2008a; 2011a). Common vision disability involves a scratched cornea and sclera, diabetes-related eye conditions, dry eye and corneal grafts. People experience minor to serious vision disability (ibid.), and these injuries can also result in serious problems or diseases, such as blindness and ocular trauma. Disease, accidents and congenital illnesses can result in visual disability and there are inconsistencies between the needs of individuals with visual disabilities and blind people (WHO, 2001; 2006; 2012).

Children with visual disability can be diagnosed in the classroom by observing the following: first, children may appear "clumsy," especially in a new situation, hold head in an awkward position to look at something or hold a book or other objects in a peculiar position to look at them. Moreover, these children may "tune out" when information is on the chalkboard or in a book which the student cannot read (WHO, 2001). The children may constantly ask a neighbour to tell what is going on and show signs of fatigue or inattentiveness. Second, communication abilities may be less effective, e.g. in the use of gesture and bodily action, lip movement in the articulation of sounds. They may rub eyes excessively, shut or cover one eye, tilt head or thrust head forward. One sign is the difficulty in reading or in other work requiring close use of the eyes. Children with visual disability tend to blink more than usual or be irritable when doing close work, hold books close to eyes, be unable to see distant things clearly, squint eyelids together or frown. Third, eye appearance, for example crossed eyes, inflamed or watery eyes and recurring styles, require teachers' attention. Fourth, children with visual impairment may complain about eyes itching, burning or feeling scratchy, or that they cannot see well, feel dizziness, headaches, or nausea following close eye work and blurred or double vision (WHO, 2012).

In education, visual disability affects students' abilities to learn, professional determination and life expectations. It also influences the learning process in social, motor, language and cognitive development, low motivation to explore the environment, initiate social interaction and manipulate objects. In addition, students with visual disability experience difficulties in mastering their lives because of low self-esteem caused by low development of appropriate skills. The effect depends on the onset, severity, type of visual loss and any coexisting disabilities (WHO, 2011b). Therefore, students with visual disability need proper and appropriate implementation of classroom

accommodations, modifications and strategies to meet their diverse needs. Moreover, they need to be taught compensatory skills and adaptive techniques to be able to obtain knowledge (WHO, 2008a). They also need specialized instruction in other skills such as communication, social interaction, independent living skills and the use of assistive technology orientation and mobility. In addition, they need visual efficiency and career education skills for self-determination (ibid.). Moreover, they need mobility skills (white cane, GPS devices and guide dogs), eco-locating, tactile paving/ audible traffic signals, reading magnification and computer (screen reader, screen magnifies and refreshable Braille displays (WHO, 2012).

Physical disability refers to an inability to use legs, arms, or body trunk effectively because of paralysis, stiffness and pain (WHO, 2008a). The physical disability can be caused by birth defects, diseases, age or accidents (WHO, 2013). Severe sleep disorders, fractured limbs and gross motor disability have a significant influence on daily life activities (WHO, 2001). Physical disability can be inborn, acquired or the result of disease. Many methods are used to help people with actual physical disability, such as substituting life-like wooden, metal or plastic arms, legs or body parts to replace those that have been lost (WHO, 1997; 2007a). A person with a physical disability may need to use some sort of equipment to support his/her mobility (WHO, 2008). In education, students with physical disability are unique because they need considerable adjustments to access physical environment and intense special accommodations for accessible learning. Moreover, physical disability has an influence on accessing and participating in education sometimes due to speech/language disorders, memory loss, short stature and hearing loss (Hollenweger, 2011; WHO, 2014). Accommodations such as relocation of classrooms and alternatives to in-class writing are important.

Albinism is recognized as a disability in Tanzania. A person with albinism suffers from a genetic disorder known as albinism. Albinism is a (usually inherited) genetic disorder resulting from hypo pigmentation of the hair, eyes and skin due to reduced or absent of coetaneous melanin production. Pale skin is vulnerable to sunburn which may result in skin cancer (Marcon, 2014). Persons with albinism also experience visual difficulties, with discoloured eyes caused by a lack of pigmentation (ibid.). They face attitudes of rejection and detestation due to their skin colour (Obulutsa, 2009). In education, students with albinism may need large print books or may hold printed materials close to facilitate reading. Students with albinism have limited access to higher education. Severe sunburn, skin cancer, and visual difficulties create the need for special care and equipment to sustain their situations (Omolo, 2009).

Albinism requires protection in families, society, on the way to school and in school and high education environment because of traditional healers (Chenenyé & Dave, 2010). In Tanzania, especially in the regions such as Mwanza, Shinyanga and Mara people with albinism, both children and adults, are killed, because of witchcraft beliefs. The killings are done to obtain some of

the body parts which are used in making charms by traditional witchdoctors (Uromi & Mazagwa, 2014). There is a belief that the body parts of persons with albinism, mainly hair, genitals, limbs, breasts, fingers, the tongue and blood make strong magic portions. The albino organs are sold on higher prices in Tanzania ranging from US\$1,000 to US\$3,000 (Salewi, 2011). The brutal killings, amputations and trafficking of body parts of albinos in Tanzania is a disrespect of the human dignity and sanctity of the human body as provided for under international human rights law as well as national laws of the countries (Chinenye & Dave, 2010; Obulutsa, 2009; Omolo, 2009; Salewi, 2011).

Moreover, the **Constitution of Tanzania (1977)** from Article 12 to 26 ensures universal human rights. For example, Article 13 (1) provides that “all human beings are born free and are all equal.” The article emphasises freedom and equality of also people with albinism as human beings, who are born free and deserve equal rights like other human beings. The fundamental rights and freedoms contained in the constitution are applicable to everyone in Tanzania including persons with disabilities. However, in Tanzania due to discrimination, people with albinism fall short of being free. Article 14 of the constitution also provides for every person to have the right to live and to the protection of his life by the society in accordance with law. This means that people with albinism have right to live and to be protected. Article 15 of the constitution declares that “every person has the right to, and to freedom to live as a free person”. The current situation where albinos are killing in Tanzania disobeys their right to live and to be protected as provided by the constitution.

The Persons with Disability Act, 2010 was enacted by the Parliament of the United Republic of Tanzania (the Parliament) in April 2010 and assented to by the President of the United Republic of Tanzania on 20 May 2010. Act emphasis promotion of basic rights for persons with disabilities, for example Article 4 (a) of the Act provides for “respect for human dignity, an individual’s freedom to make own choices and independence of persons with disabilities.” However, the people with albinism are killed and do not enjoy respect of their dignity and freedom to make choices. Article 4 (b) of the Act provides for non-discrimination of people living with disabilities. Article 5 of the Act obliges the Minister responsible to undertake various methods in order to ensure that the rights of persons with disabilities (including those with Albinism) are realized and protected. Moreover, Article 6 (a) provides that the Government is required to “ensure that all persons with disabilities are equal, and are fully entitled without any discrimination to the equal protection and benefits of this Act; and Article 6 (b) mandates the Government to “prohibit persons with disabilities from all forms of discrimination on the basis of disability and guarantee the persons with disabilities an equal and effective legal protection against discrimination on all grounds” (Persons with Disability Act, 2010).

2.1.5 Superstition underpinning people with disabilities in Sub-Saharan Africa

Sub-Saharan Africa is a region extremely rooted in superstition beliefs and the cultural ideology of bewitching others; thus calamities such as flood, drought, outbreak of deadly diseases including polio, malaria, and disability related illness, would be perceived as curse from the spiritual world and given a supernatural meaning. It is noticeable that disability exists throughout the world, without deference for National, ethnic or cultural limit. Among of major cause of disability are poverty and malnutrition, inadequate health care, crime, diseases, accidents, and violent conflicting. Historically the treatment of people with disabilities has been one of lack of knowledge and segregation from the society (Anderson, 2004; Kisanji, 1995). In Sub-Saharan Africa majority of people with disabilities are tend to be mistreated by neglecting, superstition, inaccurate stereotyping and misuse because of disability. Traditional cultural beliefs and attitudes concerning people with disabilities often include segregation, discrimination and indignity to the community (Nelson, 2007). Many people with disabilities are isolated, discriminated and considered inferior and society considered people with disabilities an accursed group, other subjected to various abused that cumulatively make them (Kiani, 2009). Many people with disability are an absolutely part of the society; they are our parents, brothers and sisters, children and neighbour hoods; we consult and seek advice from them; they teach us and our children and can perform their best upon when provided with necessary support.

Although the impaired functions of their party or whole body, majority of people with disabilities if are empowered with the necessary tools and technology, they can perform as well as people without disabilities (UNESCO, 2008). Many people with disabilities can show a different way and lead the society/country to an approach to development based on the profound human value of respect for each individual life. People with disabilities have legal right to social security and public-assistance entitlements. In education, people with disabilities should be guaranteed a free and appropriate public education regardless of the severity of their condition (Choudhuri, Khandake, Hasan & Rashida, 2005). In the area of employment, laws prohibit discrimination against disabled people. People with disabilities may face many problems in their life like prejudice, beliefs, physical barriers, poor treatment, marginalization, architectural, transport.

Separation and marginalization of people with disabilities keep them at the low economic status and rejection of comparable opportunities and access to social and other benefits. Marginalization of people with disabilities is affecting the progress towards achieving EFA and MDGs, and currently Sustainable Development Goals 2016-2030 (SDG). Most people with disability live without accessing suitable fundamental services including education and rehabilitation. In Sub-Saharan Africa in general is affected by traditional beliefs, values and culture. Experience from Ethiopia, Namibia, most people perceives disability as a punishment for what one has done wrong (Heiman, 2006; Kiani,

2009; Maart et al., 2007). Among the greatest factors contributes to exclude and discriminate people with disability in Sub-Saharan Africa are superstition that regard disability as a curse from the god. In Sub-Saharan African families regard a disability as a stain in their social status that causes children with disabilities to be hidden inside (Lewis, 2007; Matshedisho, 2007). This happen because of the lack of clear initiatives to create awareness, activate and authorize people with disabilities and their families and community to develop into efficient supporter (Abosi, 2007).

Lack of acceptance, recognition and negative role models in Sub-Saharan Africa for many people with disabilities contributes to discrimination, marginalization and negative attitudes. The values and attitudes concerning the source and character of disability in conventional rural society could affect the disabled people to experiencing more barriers in terms of the approach of the society. Attitude change is the key issue to deal with in Sub-Saharan Africa in order to save the life of majority of people with disabilities and to experience equal accessibility to every arena. Disability perceived as related to witchcraft and negative attitudes are significantly greater among rural population than urban population (Kangera, 2007).

Therefore, bridging the gap between people with disabilities and people without disabilities needs strong and effective attitudinal change among individuals and society in general. Majority of people with disabilities tend to need full human dignity, equality and respect from all people and all levels of education. In some communities in Kenya and Uganda, a child with a disability is a symbol of a curse befalling the whole family. Such a child is a shame to the whole family, hence resulted to rejection by the family or the community (Anderson, 2004; Choudhuri et al. 2005). Children who are met by those beliefs and attitudes can hardly develop to their full potential. They experience less attention, less stimulation, less education, less medical care, less upbringing and sometimes less nourishment than other children (Abosi, 2007; Kangera, 2007).

The degree to which persons with disabilities are accepted within a society is not directly proportionate to that society's financial resources and/or technical knowhow. Kangera (2007) observed that in many European countries, such as Denmark and Sweden, citizens with disabilities are more accepted. He also found that these countries provided more effective rehabilitation services and that people with disabilities are more accepted than in the United States (ibid.). The Scandinavian countries bear the social responsibility for all members of the society, regardless of the type or degree of disabilities (Munyi, 2012).

2.1.6 Attitudes and beliefs towards people with disabilities in Tanzania

In Tanzania cultural beliefs and superstitions are based on four aspects: first, the causes of disabilities; second, the attitudes about people with disabilities; third, treatment of people with disabilities; fourth, the language use about disability (Possi, 1998). Beliefs about the cause of disability, in Tanzania, traditional beliefs about the causes of disability continue to be prevalent and

has influence on how a person or family is treated (Morley & Croft, 2011). Beliefs about disability vary between groups, the traditional people believing that disability is a punishment for bad deeds or the result of witchcraft. Christians believe that disability is an act of God's will and the medical people believe that the inappropriate use of modern medicine is the cause of disabilities. Taboos and punishment for bad deeds are among the beliefs about the causes of disability which have been described in proverbs, folktales, oral tradition, and traditional healers like killing of albinism. For example, some in Tanzania attributed cerebral palsy to witchcraft, spirits, or disobeying a taboo. Also they attributed blindness to witchcraft and leprosy to witchcraft, spirits, or natural causes (Kisanji, 1998). In this perception, disabilities are regarded as punishment from the gods or bad omens, and hence made people with disabilities to be rejected or discarded. Also some people belief on taboos that, when broken, are thought to cause a disability.

In Tanzania, Kisanji (1995b) found the majority of tribal elders believed that disabilities were caused by God's will or witchcraft, whereas the classroom teachers believed those disabilities were caused by diseases. Beliefs are changing and fewer in Tanzania are described as believing that witchcraft, curses or retribution from God(s) are the sole cause of disability. Currently, social explanations are more widely accepted. The influences of Christianity and Westernized education and medicine have altered traditional belief.

In Tanzania the attitudes toward people with disabilities have both positive and negative aspects and are often linked to beliefs about the causes of disability. Similarly, Kisanji (1995a) found a range of views when he interviewed Tanzanian tribal elders and school teachers about people who were deaf, blind, or had physical or severe disabilities. Some people felt that individuals with disabilities could be productive in society if trained to do certain jobs, while others felt that training people with disabilities was a waste of time and money. In general, teachers gave more positive responses than others (Kisanji, 1995b). Kisanji (ibid.) explains culture to be a broad concept, including e.g. beliefs, language and traditions, religion and value systems, and is created historically *per se*. In Tanzania, few negative attitudes can be gathered; regarding sayings in traditional Tanzania, people with disabilities are not seen negatively but as a proof of various ways a human can function despite impairments.

In Tanzania, understanding the culture and beliefs about education for people with disabilities is important and need to be acknowledged. For many reasons, cultural beliefs and values play a critical role in the design of educational programs. Clearly beliefs and values influence decisions about curriculum as well as many other aspects of intervention even if the underlying beliefs and values are unexamined (Possi, 1998). Cultural beliefs and values also play a critical role in how families and educational programs interact. As parents try to find the meaning of their child's disability, they draw on cultural beliefs and values as well as their understanding of normative development for their culture (URT, 2007). Misunderstanding cultural beliefs may interfere with

family participation in programs whereas understanding beliefs can facilitate trust between families and education programs (Stone-MacDonald, 2010)

The treatment of people with disabilities, in many Tanzania societies, families and communities care for their children with disabilities, but children and family members appear to be less accepted into the community if the individual cannot contribute economically to the family or the community. Specific characteristics, such as disability appear as less important features than other aspects of an individual (Miles, 2002). Kisanji (1995) reports that marginalization and the categorization of people with physical disabilities as "subhuman" has been reported in other East African countries, but is not seen in Tanzanian proverbs and oral tradition.

Language use about disability, recently have people in Tanzania started using terms which are not stereotyping people with disabilities. For example, previously a person with disability was called "kilema", a Swahili word meaning physically disabled. Currently, words "mtu mwenye ulemavu" are used referring to a person with disability. Other terms such as "asiyeona" and "asiyesikia", "mwenye ulemavu wa ngozi", "asiyetembea", "ulemavu wa akili" to refer to an individual who cannot see and the one who cannot hear are becoming popular replacing the old terms such as kipofu (blind), kiziwi (deaf) and zeruzeru (albino), kiwete (wheelchair user), utindio wa ubongo (intellectual disability) respectively. In Tanzania, the term "watoto wenye ulemavu," meaning children with disabilities is relatively new in the daily language (Kisanji, 1995; Stone-MacDonald, 2010; 2014). These newer terms use person first language and move away from words in the ki-vi noun class that are normally used to reference objects rather than people. Proverbs are an important form of oral and written communication in Tanzania. In many proverbs, kindness towards individuals with disabilities and punishment for negative attitudes or actions are evoked. In Tanzania not all people had negative attitudes and beliefs on people with disabilities, it depends on cultural background.

However, in developed countries nowadays recognise and respect the person with disabilities as a person first and disability second. People with disabilities are not perceived as inferior or second-class persons, but competent of communicating and participating, entering into dialogue with other people (Munyi, 2012). These are the empowering practices, the very basis of people-centred development, which recognise that people with disabilities, or any other group of human beings in community, need to be responsible for their own affairs (Stone-MacDonald, 2010).

2.1.7 Disability movements in Tanzania

Tanzania ratified the United Nations Convention on the Rights of Persons with Disabilities and its Optional Protocol in 2009. Following the country's ratification of the CRPD, Tanzania on 9 November 2011 and no report has been submitted to date and the Department of Social Welfare, under the Ministry of Health and Social Welfare, is the responsible government department for the

preparation and submission of country reports. The department started the process of gathering information, and it is not clear when the report will be ready for submission (URT, 2014).

In Tanzania there are several organizations which are spearheading the movement for the rights of persons with disabilities. One of the oldest organizations taking the leading in ensuring that the dignity of the people with disabilities is restored is the Tanzania Federation for the People with Disabilities' Organizations (SHIVYAWATA). Majority of people with disabilities are among the most vulnerable groups in society. They are often undereducated, untrained, often unemployed or underemployed and poor especially women, youth and those living in rural areas. In Tanzania, the disability movement is quite well-established. Different person with disabilities' organizations and the umbrella organization regularly take part in discussions with the government on issues affecting the lives of people with disabilities including women with disabilities.

SHIVYAWATA is a nongovernmental federation which brings together ten national People with disabilities' Organizations (DPOs). These DPOs are; The Tanzania Albino Society (TAS), The Tanzania League of the Blind (TLB), The Tanzania Association of the Physically Handicapped (CHAWATA), The Tanzania Society of the Deaf (CHAVITA), The Tanzania Association of the Deaf - Blind (TASODEB), The Tanzania Association for the Mentally Handicapped (TAMH), The Kilimanjaro Association of Spinal cord Injuries (KASI), The Psoriasis Association of Tanzania (PSORATA), The Tanzania Users and Survivors of Psychiatric Organization (TUSPO) and The Association of Spinal Bifida And Hydrocephalous of Tanzania (ASBAHT) At the federal level, SHIVYAWATA is an umbrella organization of six People with Disabilities' Organizations (DPOs). Other significant organizations are Legal Affairs and Social Economic Development (DOLASED) and the Information Centre on Disability (ICD). The DPOs works to bring together people with expertise in disability and development and to improve the lives of children, youth and adults with disabilities. (SHIVYAWATA report, 2015)

The cooperation with development partners including Finland in the transformation is important for Tanzania. Tanzania has been the largest recipients of Finnish development aid. Finland's bilateral projects on inclusive education have had several aims such as enhance the rights and status of women and youth, minorities, people with disabilities and other marginalised groups through dialogue and targeted interventions. Special attention has been paid on gender equality and the status of women.

Article 24 of the CRPD emphasises providing education to children, youth and adults with disabilities on an equal basis with other children; and provide that education within an inclusive system. This is important for strengthening and meeting the diverse learning of the learners in inclusive education in all ages such as children, youth and adult with disabilities.

The Universal Periodic Review (UPR) a system put in place by UN in which each member nation of the UN has its human rights record examined by

other UN member states to assess compliance with human rights obligations and commitments. Each country is reviewed every four and a half years. The UPR is a new mechanism that began in 2008. Tanzania was reviewed for the first time in October 2011. Universal Periodic Review (UPR) in 2011, it focuses on children's rights and the rights of vulnerable groups, in particular sexual and gender minorities, sex workers, people who use drugs, and widows. During Tanzania's 2011 UPR review, the country accepted to end practices that are discriminatory and lead to violence against women and girls. Tanzania has also accepted the 2011 UPR recommendation to put in place a strategy to ensure equal access to education for all and give special attention to secondary school attendance (UPR, 2011).

2.2 Accessibility and participation in higher education

According to the UN Convention, Article No 24 (2006), accessibility implies full and effective participation and inclusion in society with equality of opportunity between men and women. Negash, Olusola and Colucci (2010), and Kouroupetrogoou, Pino and Kaconi (2011) have defined access to education in terms of successful participation in the institutional curriculum, physical environment and communication of the school. Universal access to education means that all people have equal opportunity in education, regardless of their social class, gender, ethnicity background or physical and mental disabilities. Access typically refers to the ways in which educational institutions and policies ensure or at least strive to ensure that students have equal and equitable opportunities to take full advantage of their education (URT, 2013). Access generally requires higher education to provide additional services or remove any actual or potential barriers that might prevent some students from equitable access in certain courses or academic programs. Factors such as race, religion, gender, sexual orientation, disability, perceived intellectual ability, past academic performance, special-education status, English-language ability, and family income or educational-attainment levels in addition to factors such as relative community affluence, geographical location, or facilities may contribute to certain students having less "access" to educational opportunities than other students that make full participation in programmes possible for students with various forms of disability.

Access in education, along with related terms such as equity or at-risk, reflects increased national attention to the needs of students who have historically been underserved by education institutions, who have failed to take full advantage of their education, whose learning needs have been overlooked, or who have otherwise. Access typically refers to higher education strategies or policies designed to remove institutional disincentives, impediments, or barriers to academic success, whether intentional or unintentional, or to provide the resources, social services, and academic support that certain students may need to succeed in higher education. If access is denied or left unaddressed by

higher education, students may struggle academically or drop out, learning gaps may compound or widen over time, students may graduate unprepared or students may be unable to participate in certain courses, higher education programmes, extracurricular activities, or sports, among other undesirable outcomes (Seale, 2014).

Access to education includes personal requirements, the ability to evaluate educational success, accessible buildings, surroundings and transport. It also includes psychological guidance and counselling, and access to university proceedings and research information. Moreover, it includes access to special seating and positioning as well as the opportunity to participate in university events at all times. These are essential for social interaction and service distribution. Access to education depends on physical, communication and information, programme accessibility and community. Furthermore, it depends on the ability of the learning environment to adjust to the needs of all learners in terms of learner support, modality access and methods determined by the flexibility of the education environment (UNESCO, 2008). Therefore, students with disabilities are able if we offer appropriate technologies and barrier-free environments or locations through the removal of needless barriers to enable them to work and learn like everyone else (Seale, 2014).

Accessibility depends on learners' involvement in the whole process of education, which is characterized by learners being valued and supported as individuals with diverse ideas, aspiration, talents and backgrounds, as well as interaction among learners, the learning environment and curriculum (URT, 2013; Drame & Kamphoff, 2014). Accessibility must also include justice, independent living and inclusion in the community, information and communication (Maina, 2010). Furthermore, informal support such as family and friends is important in enabling students with disabilities to access education (Kelly, 2012) while access to technology and other learning support is critical to their success in post-secondary education. For example, computer technology allows individuals who are blind to access print materials that they otherwise would have had to depend upon others to access for them (Ndume, Tilya, and Twaakyondo, 2008). Since women with disabilities experience attitudinal, architectural and flexibility barriers with regard to accessing particular courses, thus a supportive, more systematic society, families, government and friends are essential.

Accessibility in education also depends on positive institutional environmental, social and attitudinal factors for teachers, peers and service providers (WHO, 2013). Accessible buildings, roads, transport, availability of facilities and information and communication are important for students with disabilities to access and participate in education in rural and urban settings (United Nations, 2006). Moreover, proper identification and elimination of educational obstacles and barriers to accessibility are important.

According to Mbilinyi (2003), access to education in Tanzania has remained a major issue, with inequalities persisting according to race, ethnicity, gender and urban-rural location. Access may be undermined by inadequate

attention paid to the quality of education. The majority of students with disabilities do not have access to good quality schools with highly motivated teachers, adequate learning materials and appropriate methods of teaching. Thus, strong measures are urgently needed to counteract discrimination in schools on the grounds of disability, gender and income differences (ibid.). Tungaraza (2005), Tungaraza and Mkumbo (2008), and HakiElimu (2007; 2008) asserted that cultural beliefs, traditions and practices by society result in discrimination and negative attitudes among schools, parents, and society, a situation that has resulted in inaccessibility to education. Self-determination is the essential factor for students with learning disabilities to progress (Field, Sarver & Shaw, 2003). Accessing higher education depends on the successful entrance to higher education (application, admission and starting a new life), access to information, the physical environment and levels of awareness (Tungaraza, 2010). Accessibility to higher education also depends greatly on peer support in order to succeed (Chanika, 2010). Having friends in a course, at the university, and family and friends outside the university supported the students with disabilities to succeed in higher education (Jacklin & Robinson, 2007).

The government and institutions must encourage women's access, participation and success at all levels of education to reduce inequality and increase participation rates in higher education. Equity does not imply only access, but also successful participation and completion, which need to include appropriate financial and educational support for those from poor and marginalized communities. Restrictive teaching and learning and poor assessment strategies, inappropriate learning objectives, a lack of adaptive equipment, poor practical activities, a lack of modification of teaching by tutors, and limited discussion about learning needs between teachers and students with disabilities challenge this group's achievement in higher education (Kisanji, 1998a). Accessibility for students with disabilities in higher education is important because first, it enhances fairness and respect for students with disabilities; everyone has a right to study and become educated and denying access to education wastes human resources and makes society less successful. Second, it contributes to the diversity of the community, which makes everyone's life richer and provides wider life opportunities. Third, accessibility improves everything, including infrastructure, accessible seating and routes for wheelchairs (Matonya, 2012). Lastly, accessibility may create new technology; encourage interactive classroom teaching and learning, effective and appropriate home environments, openness towards needs and effective support services, community awareness and attitudinal changes (ibid.).

Indicators of educational access, attainment, and accomplishment are elements that help to measure the gender disparity in secondary and higher education. Access can be measured by using secondary and higher education enrollment rates. Attainment is defined by rates of completion and continuation. Finally, accomplishment "is measured according to labor force participation and career mobility patterns in professional and managerial fields.

Each of these three indicators plays a role in describing women's with disability educational patterns and habits as they enter higher education (Maina, 2010).

Participation includes everyone in all aspects of a community's political, social, economic and cultural life; for example, attending school or university (URT, 2013). Participation is essential for identifying specific needs and empowering individuals. Full and effective participation and inclusion in society are recognized as principal rights for many people with disabilities. Equal human rights and fundamental freedoms are important in enabling students with disabilities to participate in education. Moreover, full participation depends on access to the physical environment, design and construction and information (HakiElimu, 2008). It also promotes equal primary, secondary and higher education opportunities for children, youths and older students with disabilities in an integrated system that allows for a flexible curriculum and adaptation of quality materials as well as the provision of ongoing training and support. It creates a clearly stated policy that is understood and accepted at the school level and in the community at large, and integrates the education of students with disabilities as part of formal education (URT, 2013).

Participation also depends on physical access, such as the shape and design of buildings (Chanika, 2010). Meaningful participation depends on a flexible curriculum, the consideration of academic achievement, disability assessment, the establishment of guidance and counselling for students with disabilities, the provision of knowledge and skills for job-seeking, and the creation of ways to support students with disabilities in higher education, all of which could increase their rights and help them to fulfil their full potential (Chanika, 2010). The promotion of sign language, materials in Braille, an individualized curriculum, the adaptation of buildings, raising the awareness of the school staff about the needs of children with disabilities and promoting disability support units at the university would be necessary to allow students with disabilities to access higher education (SIDA, 2014). In that context, the personal experiences of students with disabilities with regard to higher education and the dissemination of successful stories about students with disabilities and situational analysis of profound and multiple disabilities need strong collaboration among the community, family, doctors, health professionals and educators (Oliver, 1990).

Participation has focused on physical access and the shape and design of the built environment (Chatanika, 2010). This excludes assistive devices for particular groups of students with disabilities. Enrolling many students with disabilities does not imply full participation in their life or equality, but marks a quantitative increase that is also essential in enabling students with disabilities to access higher education (Bloom, Canning & Chan, 2006). Assistive technology provides essential support to enable students with disabilities to access education (Albert, Dube & Riis-Hansen, 2005; SightSavers, 2009; 2011). In South Africa, teachers' support is regarded as essential for enabling students with disabilities to participate in and remain at the university (Matshedisho,

2007). Students with disabilities are often reliant on informal support by peers, such as reading key text aloud for blind students, as happens in Rwandan higher education. Government loans for students with severe disability have also been investigated as being among the essential factors for participation in higher education in Namibia and Rwanda (Haihambo, 2008; Karangwa, 2008).

Understanding the meaning of agency, advocacy, self-determination and independence is important for the participation of students with disabilities in higher education because it makes the students with disabilities autonomous actors rather than passive recipients, and counterpoints to the silencing and disempowerment of exclusion (Haihambo, 2008; Hedrick, Stumbo, Martin, Nordstrom & Morrill, 2012). Education-related self-evaluation, attitudes, goals, expectations, life transitions, information on opportunities and the decision to participate have a great influence on students with disabilities' participation in education. Also, examinations should have special conditions which are known to all, such as mastery of the material, relaxation and an absence of stress (Heiman, 2006).

Moreover, the presence of relevant policies, projects and local initiatives to improve social and academic competences is essential for enabling students with disabilities to participate fully in education. In that regard, enabling factors include, among others, adequate teaching and learning materials, opportunities, the proper organization of inclusive classrooms, guidance and counselling services and expert teachers (Dixon & Verenikina, 2007).

Self-efficacy and self-determination skills are important in enabling students with disabilities to participate in education because they provide the ability to understand, create freedom of expression and make wise decisions for academic success (Heiman, 2006; Stodden, Jones & Chang, 2002). Self-determination cultivates an intrinsic motivation to learn that promotes a spirit of valuing and internalizing education and creates confidence to enhance personal development and change. Similarly, a supportive school environment and the availability of resources and information are important elements for enabling students with disabilities to succeed (Gidley, Gany, Wheeler & Elleni, 2010; Thomas, 1999). Furthermore, the availability of funds, rehabilitation services, changing policies in departments and transparent goals help students with disabilities successfully progress to higher education (Stodden & Conway, 2003). However, the lack of special education teachers, lack of teaching materials and poor physical infrastructure have resulted in low success rates, and the few students who managed to survive the situations ended up with poor results (*ibid.*). Teachers' encouragement at the lower levels of education, family values and motivation for education are considered as promoting the successful participation of students with disabilities in higher education (Morley & Croft, 2011). However, the students with disabilities were influenced by attitudinal and structural difficulties related to accessing higher education (Karangwa, 2008).

A positive, enabling environment such as support and accessible lectures, experiences and aspirations have helped students with disabilities to participate

academically. Additionally, enjoyable, well-taught programmes of study, good peer relationships, independent learning, self-efficacy, self-confidence and the development of social capital in the form of networking have promoted the participation and retention of students with disabilities in education in Tanzania and Ghana (Morley & Croft, 2011). In order for the students with disabilities to study and participate effectively, linkages with other departments and professional institutes are essential. More time to complete exams, better accommodation, improved pedagogy, greater religious support, stronger financial support, accessible library services, interdependent discussion groups and practical training for students with disabilities are also important for their participation in higher education (ibid.).

Participation is essential for identifying specific needs and empowering individuals. Full and effective participation and inclusion of students with disabilities are recognized as principal obligations, rights and non-discrimination. Recording full participation of women with disabilities depends on access to physical environment, design and construction and information. It also promotes equal opportunities for students with disabilities in inclusive systems and allows flexible curriculum and adaptation, quality materials provision, ongoing training and support (Mont, 2015).

Students with disabilities were motivated to access and participate in higher education because of social mobility; status and employability have motivated students with disabilities to enter, remain within and value higher education (Morley, 2012a). Thus, students with disabilities are motivated to join and pursue higher education because of the labour market, due to career aspirations, employment, improved life chances, social responsibilities and changing status (Morley, 2012b). Poverty, economic independence, realizing personal dreams and understanding the meaning of education and expectations to combat their undermined positions in society, credentials and the influence of significant others were stated by the women with disabilities in Kenya as key motives for pursuing a higher education. Motivation and support from parents, schools, colleges and universities are thus regarded as essential for students with disabilities' intellectual accomplishments, particularly those of women (Opini, 2012a). According to Smith (2012), the involvement of students with disabilities in higher education transformed them into feeling they were each an important person, and provides the social interaction that promotes a positive life. Some students with disabilities are motivated to participate in certain institutions because of their type of disability, facilities, desired courses or field of study and being closer to their home, peers, family and/or partners (Fuller, Bradley & Healey, 2004). Students with disabilities also consider their disabilities when selecting a field of study. Students are eager to select courses that require less written work, few or no examinations, and little practical requirements or technology (Smith, 2012).

Desire for personal status, professional status, independence, and to help others with disabilities to reconstruct the image of this group in society in general have been stated as motivations for students with disabilities in

Tanzania to study higher education (Morley & Croft, 2011). Furthermore, a reflexive identity, positive educational experience, agency, educational transformation and disability clearly motivate them to pursue higher education. Society's notion that women with disabilities cannot do anything and their failure to be treated as part of society inspired the women to study. Changing their peers' attitudes and understanding about students with disabilities, as Morley and Croft reported, influences students with disabilities to pursue a higher education.

However, at present, challenges persist in terms of disability and structures of inequalities at all levels of education, including primary, secondary and higher education (David, 2011). Therefore, inaccessibility to education by majority of women with disabilities results in low expectations of what could be achieved, a denial of opportunities and marginalization from social livelihoods. Furthermore, the discrimination against and the marginalization of women with disabilities result from a lack of education, and certain cultural beliefs and attitudes, this situation leads those with disabilities to strive harder in difficult conditions than any other group of people.

2.3 Special needs education in Sub-Saharan Africa

In Sub-Saharan Africa the involvement of students with disabilities in education went through several stages. **The first approach was segregation** (special education), whereby children with disabilities were categorized according to their disabilities and allocated to special schools designed to respond to the particular disability according to the medical model of disability. In this approach, students with disability are being placed in any form of segregated education setting, for example separate special school or college, separate unit within school/college or separate segregated courses within mainstream education settings. This system or design of education can cater for children with profound and complex disability. The system is significant because have specialised equipment and resources for looking after children with disabilities. Trained teachers who are easily facilitate the learning process of the students with disabilities. Despite the usefulness of the system it has limitations such as cost of providing education for children with disabilities is higher when placed in special schools as opposed to providing for their needs in mainstream education distance to school resulting in higher transportation costs. Children with disabilities also are deprived of socialisation opportunities and prone to continued exclusion. Special school reinforces discrimination against those with disabilities.

This system also creates lower expectations for children with disabilities and watered down their curricula (Mont, 2015; Powell, Hyde & Ponch, 2013). This mode tends to force many of people with disabilities to lead a separate life. It also imposed extra costs by creating a separate school system and requiring extra transport for families sending their children to the special schools.

Moreover, the approach did not allow children with and without disabilities to get to know each other as people. In particular, special schools were denying children with disabilities the opportunity to learn under the same roof with other children, which was devaluing and discriminatory (Heard, 2009).

The second approach was integration in mainstream, both students with disabilities and without are on the same location or compound in separate class/units. Students with disabilities still have the attest expertise and individualized attention of the specialized teacher for part of their school day but they don't experience the marginalization of being in a segregated setting full-time. The students without disabilities experience the strengths of the students with disabilities as well as a greater understanding of what it means to live in a diverse society. This system has the following advantages. It breaks down barriers and negative attitudes; facilitates social integration and cohesion in communities. The involvement of parents and the local community further strengthens this process. The child is able to socialise with other children as part of a school community. The parents or guardian experience reduced costs for transportation and institutional provision of education. This system also has the disadvantages on the process of providing education such as inability to accommodate the learning needs of all learners, limited resources and also requires assistance by parents, volunteers' or other children. In this phase the lack of proper supports for children with disabilities set them up to fail because the teachers and schools were not equipped to deal with their particular needs, and often had limited expectations from children with disabilities (Heward, 2009; Polat, 2010a). With support, these negative effects can be lessened, but still not as effectively as in a truly inclusive system. Many people with disabilities in Sub-Saharan Africa are not benefiting in segregation approach.

The third approach is inclusive education. A major shift towards inclusive education worldwide was demonstrated when 92 governments and 25 international organizations signed onto the Salamanca Statement on Principles, Policy, and Practices in Special Education in 1994 (UNESCO, 1994), emphasizing the importance of equity and access to educational opportunities for children with disabilities. In Africa, governments and non-governmental organizations (NGOS) have taken steps to address problems of individuals with disabilities and the African Decade of Disabled Persons (2000- 2009) was proclaimed in 2000 by Heads of State and Government meeting at Lomé in 2000. A Plan of Action was adopted at the Pan African Conference on the African Decade of Disabled persons in February 2002 (African Studies Centre Leiden, 2008). Several African countries have passed disability-related legislation in an effort to improve opportunities for individuals with disabilities (Mamboleo, 2011). It is important to note that, while three components of education development (access, equity and quality) are acknowledged as critical to improving education in developing countries, access is often viewed as the lens through which equity and quality are understood.

Inclusive education began as a critical aspect of the conceptualization of inclusive education as a long-term process of creating an inclusive life (society)

and barrier-free environment (Polat, 2010b; Powell et al., 2013). Inclusive practice can be defined as attitudes, approaches and strategies that we take to ensure that no learners are excluded or isolated from the education on offer. In other words, we all work to create a culture where all learners feel welcome, accepted, safe, valued and confident that they will get the right support to assist them to develop their talent and achieve their goals. Inclusive education in Sub-Saharan Africa today has passed into different paradigms and approaches from the traditional ones, with different causes, perspectives, development and efforts, to ensure that it meets the needs and interests of the students.

Inclusion is useful because students with and without disabilities can change attitudes towards diversity by educating all children/students together, less costly because no additional costs to parents and reduction of social welfare costs and future dependence. Inclusion may cause higher achievement for children than in segregated settings. Children with special educational needs can be educated with no adaptations and 80-90% can be educated in regular schools with minor adaptations (e.g. teaching strategy training, child-to-child support and environmental adaptations) A child with disability is less stigmatised, more socially included. Children/students with disabilities have access to a wider curriculum (UNESCO, 2009).

In inclusive education, all of those learners with special educational needs are being educated in mainstream education settings alongside their peers without disabilities where there is a commitment to removing all barriers to the full participation of all as equally valued and unique individuals (Miles & Signal, 2010; Polat, 2010a). Moreover, inclusive education is aimed at transforming academic and social potential and involves removing barriers within the environment, attitudes, communication with peers and teachers and the curriculum. It is also teaching socialization and assessment at all levels (UNESCO, 2014). According to UNESCO (2006; 2009d), inclusive education concentrates on and responds to the variety of needs of all learners, through increasing involvement in learning, cultures and communities, and reducing exclusion within and from education. Inclusive education involves changes in content, approaches, structures and strategies, with a universal vision that covers all students within the appropriate age range, and a conviction that it is the state's responsibility to educate all students (WHO, 2006b). Therefore, in order to achieve an inclusive education, the conceptual framework for promoting the right to education, the right to quality education and respect for rights within education is important (Mont, 2015; UNESCO, 2009c). The focus of social model of disability went hand in hand with the goal of inclusive education. The social model of disability identified barriers such as attitude, environment and institutional, and emphasizes for the removed of those barriers to maximize the potential of all students with special needs including students with disabilities. Inclusive education- schools where all are welcomed, staff, parents and pupils value diversity and support is provided so that all learners can be successful academically and socially. This requires reorganizing

teaching, learning and assessment. Peer support is encouraged and the major focus is on what you can do.

The readiness to accept inclusion varies across the countries and continents of the world. Most people in Sub-Saharan Africa do not believe and recognize that enrolling students with disabilities in inclusive education can provide individuals with opportunities to learn in natural stimulating settings and may also increase acceptance and appreciation of their differences (Ajuwon, 2008). There is a focus on process rather than a fixed state and working with the barriers occurring in education to the social interaction of learners and their environment. Inclusive education focuses on the diversity of learners and learning characteristics addressed and responded to in a unified system.

Most Sub-Saharan African countries are still struggling with the provision of appropriate inclusive education and others still provide special education for children with disabilities (Garuba, 2003; UNESCO, 2010; 2014). This situation has caused exclusion, including negative attitude towards children with disabilities in schools and the surrounding communities. Moreover, in Sub-Saharan Africa, there exist no valid, reliable or standardized diagnosis, identification and assessment for children with regard to intelligence tests, language tests, health care tests and tests for cognitive domain suitable for African settings (Braathen & Kvam, 2008; Hailemariam, 2006; Kenosi, 2000; Lorenzo, 2003). A lack of effective and trained personnel has led to inadequate knowledge of teachers on how to teach and care for students with disabilities; for instance, Kenya suffers from a shortage of qualified teachers (Lorenzo, 2003; UNESCO, 2008; 2009c). In the period from 2011 to 2015, Sub-Saharan Africa needed to recruit about 5.1 million additional primary school teachers, including substitutes, per year in order to achieve universal primary education by 2015. In the same years, in lower secondary education, about 3.5 (1.6%) million extra teachers were also needed. In the periods 2011 to 2020 and 2011 to 2025, approximately 4.3, 4.8 and 5.1 million teachers will be needed respectively, including accounting for replacement, retirement and death (UNESCO, 2014). The global monitoring report also reported that in Sub-Saharan Africa, the countries that demand more primary and secondary teachers include Nigeria (13%), Ethiopia (6%) and Tanzania (5%). However, in Burkina Faso, Mozambique and Malawi, the demand is estimated as 2%. Inclusive education may use the same curriculum with a formal structure with specially trained personnel, equipment and space (UNESCO, 2011).

Moreover, teaching and learning in higher education in Sub-Saharan Africa are not promising because teachers are poorly paid and have limited opportunities for on job training. This situation causes teachers to lose enthusiasm for teaching and hence resort to ensuring their family's survival through undertaking private tuition. In Nigeria, Ghana, Zimbabwe, Botswana and Kenya, teachers fail to teach appropriately because of a shortage of teaching resources and the huge number of students per class (Abosi, 2007; Miles, 2009). The teachers' ignorance about disability contributes to these negative attitudes

because they seem to be highly conservative when they are supposed to associate, interact or form social relationships with students with disabilities (Abosi, 2007). The presence of students with disabilities in the classroom, as well as the attitudes towards and management of these children are major concerns, based on the fact that a teacher is part of their culture who shares the same traditional beliefs concerning disability (Miles & Singal, 2010). The inadequate preparation of teachers and use of ineffective methods lead to unsuccessful management of the diverse needs of students with disabilities in the classroom. Some students with disabilities drop out of school because of the negative attitudes and stereotypes among their teachers, peers and communities (Abosi, 2007; Kenosi, 2000; Miles & Singal, 2010). There exist severe shortages of professionals, limited training and capacity building for teachers and school staff in relation to education for students with disabilities (UNESCO, 2014). Teachers need to be trained in order to be able to identify the learners' difficulties and plan appropriate support systems (UNESCO, 2008).

Poverty has made a great contribution to the participation of students with disabilities in the field of education. Since relevant data about those with disabilities are unavailable, it is very difficult to estimate the poverty situation and measures in developing countries (Braithwaite & Mont, 2009; Fujii, 2008). Poverty contributes to disability through a lack of education, malnutrition, poor health, a polluted environment, occupational and road accidents, conflicts and disasters (Braithwaite & Mont, 2009). Poverty is linked to insufficient nutrition, poor housing, and inadequate health care services, which increase the risks of impairment that may result from disability (Filmer, 2005; Nhlapo, 2007). Thomas (2004), Wedgwood (2007) and WHO (2010b) estimate that about 100 million people worldwide have impairments because of malnutrition and poor sanitation. In order to eradicate poverty for those with disabilities, progressive legislation is required, as well as accessible, inclusive education programmes, where monitoring and evaluation are key to assessing the true effectiveness of the Millennium Development Goals and Sustainable Development Goals.

Moreover, negative attitudes towards persons with disabilities in Sub-Saharan Africa, which are influenced by traditional beliefs in some schools, increase the problem. For example, in Ghana, poor relationships and strong prejudices related to their peers caused students with disabilities to fail to participate effectively in higher education (Naami & Harvshi, 2012; UNESCO, 2009d). Inadequate support services for students with disabilities create another major issue that is closely connected with dropout and failure. For example, in South Africa, the support services available in higher education are only for blind and students using wheelchair (Matshedisho, 2007; Storbeck & Martin, 2010). In Ethiopia, the support services in higher education are limited to blind and physically students with disabilities, with little provision for deaf students (Hailemariam, 2006). Moreover, peers feel uncomfortable about interacting with students with disabilities, which leads to strong discrimination within Ghanaian higher education (Naami & Harvshi, 2012). Thus, as observed in Kenya, the women with disabilities failed to meet their objectives and dreams

because of societal barriers and discrimination towards those with disabilities (Opini, 2012b). Coble (2012) identified that some students and staff in higher education had negative attitudes towards the abilities of students with disabilities, which indicated that the issue of including students with disabilities at all levels of education is complex. These staff members were ignorant of the issues linked with disability and therefore needed guidelines and tools on how to take care of students with disabilities. Therefore, the inadequate curriculum, poor planning, lack of technical skills, negative attitudes towards disabilities issues, classrooms and premises, and the class seating arrangements cannot accommodate students with different types of disabilities (Choudhuri, Khandake, Hasan & Rashinda, 2005; Cobley, 2012) who are currently not attending higher education. Worldwide, educating students with disabilities started in the 18th century in Europe, originating in schools for the deaf, and followed by schools for children with visual and intellectual disabilities, and later for those with physical disabilities (Braddock & Parish, 2001).

In America, residential schools for children with disabilities, specifically education for deaf and speech-disability were introduced in the 1800s. In the 1990s, the growth of schools for children with disabilities took off throughout Europe and North America. Later, different continents, including Africa, started schools for children with disabilities. As educational institutions should offer a foundation for lifelong learning, they need to be accessible, of high quality and sensitive to the most disadvantaged groups, including women and girls with disabilities. Inclusive education provides an equal opportunity for education to students with disabilities and marginalized groups through collective efforts for both political and social action (Polat & Kisanji, 2009; UNESCO, 2011; WHO, 2011b).

2.4 Special needs education in Tanzania

The history of special needs education in Tanzania can be traced back to the 1950s, when special schools were established to meet the needs of students with disabilities and special educational needs. In Tanzania, special needs education for students with disabilities was introduced by European missionaries, and in 1963 the government of Tanzania adopted integrated schools, followed by inclusive schools in 1997 (URT, 2009).

2.4.1 Segregation approach

The first school system was segregation, whereby the children were categorized according to their disability (special schools) and allocated a school designed to respond to that particular disability, in line with the medical model. In 1950, the Anglican Church was the first to start a special school for blind boys, while in 1963 the Roman Catholic Church opened the first school for deaf children

(Karakoski & Ström, 2005; Kisanji, 1995; 1998a). In 1967, the Salvation Army started to provide services for those with physical disabilities. The first government primary school in the field of special education was established in 1982, providing services for children with mental retardation. Schools for children with autism and deaf-blindness were established in 1984 in the Tabora Region, while services for certain disability groups such as visual and hearing disabilities were provided by churches and charitable organizations (Tungaraza, 1994). Generally, only non-governmental organizations provide services for individuals with special educational needs (Ndume et al., 2008). Special need is defined as specially designed instruction, at no cost to the parents or guardians to meet the unique needs of a child with a disability. (Heward, 2009) the education should be individualized provided in various settings and designed to meet the unique needs of the student. Special education is first of all, purposeful intervention designed to prevent, eliminate, and or overcome the obstacles that might keep an individual with disabilities from learning and from full and active participation in school and society (Heward, 2009) this means that Special education is a profession with its own history, cultural, practices tools and research base focused on the learning needs of exceptional children and adults. However, history of special needs education in Tanzania does not indicate how personnel e.g., teachers, dealing with children with disabilities were trained. This may be the cause as to why special needs education is not given its due attention in educational institutions. Currently, it is only Sebastian Kolowa Memorial University (SEKOMU) which provides a degree course with major emphasis in special needs education.

Though special schools for person with disability in Tanzania, they are very few and are faced by weaknesses such as inadequacy of special teachers, lack of teaching materials, lack of food for students and poor physical infrastructure. These challenges create a situation where only few disabled persons can access these schools and these few end up performing poorly (URT, 2014) exclusion or segregation of students with special needs is a violation of their human rights and represents an unfair distribution of educational resources. Oliver (1996) has argued that the special education system has failed to equip students with disabilities to exercise their rights and responsibilities as citizens which resulted to exclude them from both the education process and wider social life. The segregation approach causes lower expectations, a watered down curriculum for students with disabilities and leads to extra costs and transport issues for families that can limit attendance in Tanzania. Moreover, it does not allow students with and without disabilities to get to know each other as people, and increases costs by creating a separate school system (Polat, 2010b).

In Tanzania the services and support for students with disabilities are funded in twelve special schools. There are six special primary schools for deaf-blind students. Children with autism had twelve special schools and cerebral palsy is fourteen special schools. However, the children with severe intellectual disabilities do not receive any schooling (URT, 2014). There are approximately

seven special schools for the deaf in Tanzania with about 1000 deaf and hard of hearing pupils (URT, 2013). These schools are mostly boarding schools where the majority of the pupils live in housing on campus. The special schools are considered as providing the most favourable conditions for some children. In some areas of Sub-Saharan Africa and Tanzania special schools are still in use because the inclusion has been estimated to be too challenging for children with multiple disabilities or profound or severe kind of disability for example the school of deaf in Iringa, Mbeya and Njombe just few examples. Moreover, the people with albinism were placed on special school because of the traditional healers. Therefore, this approaches still co-existing even today in many countries.

2.4.2 Integration approach

The weakness of segregation raised the integration approach, whereby students learn on the same compound and different classes with their peers without disabilities, with the required support. Students with disabilities spend some time with regular classroom students but part of the day is still spent in special education (i.e., segregated environments). In this approach the students with disabilities who are not functioning well in general education classes are removed and return them when they are able to function academically and socially. Including students with disabilities when they area academically and socially ready is advantageous for the students with disabilities as well as their peers without disability as well as avoiding the disadvantage of these students with disabilities on feeling pressured to keep up with their peers without disability. The strengths of segregated programs is that students with disabilities may have the expertise and individualized attention of the special education teacher for part of their school day but they may do not experience the marginalization of being in a segregated setting full-time. Also, within an integrated setting, students without disability might experience the strengths of the students with disabilities as well as a greater understanding of what it means to live in a diverse society.

However, it may be questioned whether integrated settings actually deliver the goods when it comes to students without disabilities increasing their understanding of students with disabilities. Integration approach breaks down obstacles and negative attitudes; facilitates social integration and cohesion in school communities. In integrated settings the students with disabilities possibility to obtain higher achievement in academics. The integration had the disadvantages of inability to accommodate the learning needs of all students, pressure on limited resources and requires assistance by parents, volunteers or older children (Tungaraza, 2005). In Tanzania there is twenty-three integrated schools (eighteen for primary and five secondary schools (Polat, 2012) and these five integrated secondary schools (three is residential and two is non-residential) for students with visual disability. Therefore, the weakness of integration raised the current approaches of inclusive education, whereby

students learn alongside their peers without disabilities, with the required support.

2.4.3 Inclusive education approach

Inclusive education approach in Tanzania is not a new concept; it began being practiced in 1997. Tanzania as a member of the International Community has signed and ratified various UN conventions, e.g. the Universal Declaration of Human Rights (1949) and the UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities (1994). The UN Standard Rules as well as other international policy documents on Education for All (EFA), e.g. the Jomtien Declaration (World Conference on Education for All held in Jomtien, Thailand 1990) and the Salamanca Statement and Framework for Action on Special Needs Education (1994) clearly state that every child, regardless of the child's social, economic, cultural, linguistic, physical and health background, has to have access to and receive appropriate education in a neighbourhood school. This means that all children, including children with disabilities and children from other vulnerable groups should receive education within the regular educational system. This strategy of providing Education for All is operationalized in the concept of inclusive education. To achieve Education for All in inclusive educational settings is an enormous challenge for a country like Tanzania, as it is for any other country. According to the MOEVT (2008) analysis of special needs education in primary schools in Tanzania the vast majority of the children with disabilities are excluded from the educational system due to the following reasons: Few special schools and units available, long distances from home to special schools and units. Poor transport infrastructure particularly in the rural areas, lack of trained teachers (both regular and special education teachers). Unreliable statistics of the number of children with disabilities, and negative attitudes in the community regarding disability also mentioned.

In Tanzania, inclusive education started as pilot program and established in 1998 in two schools in Temeke Municipality, involving 20 pupils with disabilities. In 2002 a total of 7 schools and 259 pupils took part in the inclusive education pilot program. In January 2004 the project reached 36 primary schools in Mbeya region. Although the results from the pilot were not promising the implementation of inclusive education because of barriers has encountered including lack of funds for community sensitization and training of teachers, Poor supply of teaching/learning materials and specialized equipment, inaccessible physical environment in the schools and lack of awareness on the part of government officials responsible for education on various levels (Karakoski & Ström, 2005). Tanzania is at present offering primary education for some students with different disabilities including visual impairment, hearing impairments, mental retardation, physical impairments, autism and multiple disabilities in both special and integrated schools (Tungaraza, 2010).

Inclusive education in Tanzania is meant to broaden educational opportunities for children with disabilities and marginalized groups so they can realize their full potential (Massenga and Mkandawire, 2007). Inclusive education often has a particular focus on those groups who have been traditionally excluded from educational opportunities; for example, children with disabilities, in rural or remote communities, linguistic minorities, children from indigenous groups, nomadic children, those affected by HIV/AIDS (UNESCO, 2009a; URT, 2013) and those with special educational needs. Inclusive education is a process of attitudinal change; change of attitude at the community level has an impact on fostering enrolment, and at the school level has an impact on fostering acceptance and interaction (URT, 2009). Tanzania is among the countries that have shown a high commitment to offering education to all people. The 1977 Constitution and its amendments recognise the rights of persons with disabilities and prohibit all forms of discrimination. The new Draft Constitution has some provisions for disability (44). A person with disability has the right to education through special equipment and to participate in social affairs; use sign languages, written language by the aid of special machines or other methods that are appropriate; and to learn with persons without disabilities (inclusive education). In 2004, Tanzania ratified its first national Policy on Disabilities (URT, 2004). In Tanzania, National Policy on Disability, 2004 the government stated that people with disabilities had right to an education and employment opportunities. Children with disabilities also acknowledged having right to education and the right to participate in their community as active member. Within this policy, the needs of the people with disabilities are acknowledged but the government calls for help from the NGOs and International community (National Disability Policy, 2004).

The Person with Disability Act (2010) article 6 (a) emphasises the treatment of all persons with disabilities as equal, and fully entitled without any discrimination to equal protection and benefits of this Act; and Article 6 (b) also “prohibit all forms of discrimination on the basis of disability and guarantee the persons with disabilities with equal right and effective legal protection against discrimination on all grounds” (Persons with Disability Act, 2010). It also recognizes that inclusive education is a better option towards the achievement of the Education for All (EFA) strategy Tanzania plans to implement.

The inclusive education is useful because the children learning together in the same classroom, using materials appropriate to their various needs, and participating in the same lessons and recreation, that is inclusive education (Mkonongwa, 2014). In an inclusive school, children with disabilities do not study in separate classes; instead teaching methods, textbooks, materials, and the school environment are designed so that girls and boys with a range of abilities and disabilities including physical, sensory, and intellectual and mobility impairments can be included in the same class (Mollel, 2013; Mont, 2015). Inclusion is also essential because of including all peoples regardless of race, ethnicity, disability, gender, language, socio-economic status and any aspect of an individual’s identity that might be seen as different (Polat, 2010a).

Inclusive education in Tanzania should be integrated curriculum structure of basic education; curriculum content to be modified to meet special education needs and to allow for flexibility to suit the environment methodology. Professionals to have enough relevant knowledge and skills on special education needs, resources in terms of teaching learning materials are adapted/modified relevant to topic or category of learners' needs. Government to preparing seminars for teachers on inclusive education, monitor and evaluate the implementation of inclusive education and involve teachers in decision making to guarantee the achievement of better results in inclusive education (Mkonogwa, 2014).

Inclusive education started to change the system to fit the students instead of changing the students to fit into the system, and acknowledges learning from birth throughout life (Mont, 2015). Moreover, inclusive education acknowledges learning environments such as the home, community, and formal, informal and non-formal situations. Inclusive education also is a rights-based, dynamic cross-sectoral process which is constantly evolving within the local context and follows the SMD (ibid.).

Including the students with disabilities in regular classes may provide the opportunity to make friends and share the experiences and friendship with their same age peers, this lead to great acceptance by their peers within and outside school community. Moreover, provide a more stimulating environment different from special education classroom. Students with disabilities have more engaged on institutional time and effective exposure in academic activities and may lead to greater academic success (Mollel, 2013). In inclusive classes the students with disabilities may come across with the role models who can facilitate the communication, social and adaptive behaviours (URT, 2013). Including students in regular classes may enhance the self-respect and self-esteem because of connecting them with regular students and teachers. Students with disabilities may start to feel a sense of self-worth, they feel good about themselves, about their overall school experiences. Moreover, they begin to perceive themselves as an individual who can share some of the similar experiences and opportunities with the students without disabilities (Mkumbe & Tungaraza, 2008). Finally, the students with disabilities may make strong academic gains in inclusive schools with appropriate support if necessary.

There also the disadvantages including students with disabilities in regular classes such as majority of people have a notion that the students with disabilities included in regular class because of socialization which is not a primary goal of education without teaching their academic well. Some students with disabilities need special education classroom to maximum benefit of their education and others need small class size, limited distractions and individualized academic programmes so as to learn essential skills that they need to be successfully then them out of school. In inclusive class, the life may tend to be characterized by fear, frustrations, ridicules and isolation, also students can observe what their peers are able to do and what they are not able to perform, and the students with disabilities may tend to feel depressed,

overwhelmed and academically inadequate compared to students without disability. Sometimes the students without disabilities may tend to be teased or harmed the peers with disabilities, they may not feel safe (Mkonogwa, 2014). This happens when the students without disability are not ready to accept that their peers with disability are group to use their classmates once again and they may easily focus on them by harassment, name-calling or teasing. This may add stress and anxiety for students with disabilities and inclusive system being unsuccessful (Polat, 2010b).

There are numerous barriers to inclusive education in Tanzania, at the national, family, community and school levels. In school levels, barriers such as insufficient teaching and learning materials, lack of inclusive education among teachers, lack of support from the government, lack of collaboration between teachers and parents, few number of teachers at the school, inadequate funds in supporting inclusive education and negative attitude of teachers and parents, large number of students in classes (Mkonogwa, 2014) unfavourable physical environments, poor cooperation among teachers themselves and lack/ unclear of affirmative policy on inclusive education in the country (URT, 2014). Participation barriers are infrastructure, classroom learning environment, health, water and sanitation, and negative community or cultural practices.

In that regard, therefore, inclusive education in Tanzania faces challenges, including negative attitudes towards students with disabilities in schools and the surrounding society (Tungaraza & Mkumbo, 2008), poverty, lack of knowledge and skills to manage the teaching and learning of students with disabilities and a lack of awareness among parents and the community (Mollel, 2013). In order to serve and control the budget and resources, the development of inclusive education in Tanzania may need to focus more on the relationship among education systems, parents and communities for students with disabilities to develop their full potential (Mollel, 2013). Successful inclusive education depends on the community and its folk belief system, customs and values (Kisanji, 1995). Moreover, the culture, policies and practices in educational institutions need to be transformed to accommodate the differing needs of students and obligations of children with disabilities to remove barriers impeding that process of inclusion.

According to Lehtomäki, Tuomi and Matonya (2014), the challenges facing inclusive education in Tanzania include the unclear definition of inclusive education and thus greater clarification is needed for ministers, teachers, peers, parents and other educational stakeholders. This situation has led to the denial of the right to education among people with disabilities and facilitated poor perceptions of students with disabilities with regard to teaching for the effective implementation of inclusive education in Tanzania. Government policy and enrolment are the main foci of inclusive education in Tanzania, while the individual, school and classroom level are important in filling the gap between learning and achievement (*ibid.*). A lack of policy for students with disabilities in the Ministry of Education and Vocational Training in Tanzania also influences some students with disabilities' access to education (Krohn-Nydal,

2008). The responsibility for developing inclusive education in Tanzania remains with the government, which should tend to include people with disabilities in formulating and implementing national policies, plans and projects in order to cross-cut the needs of students. Strong national policies are needed to make the quality of education a high priority.

In Tanzania, teacher training and inclusive education face different challenges in the implementation of the programme. There is a shortage of pre- and in-service teacher training in the fields of special needs and inclusive education (MoEVT, 2008). It also estimated that a very few teachers have inadequate knowledge of special educational needs. Teachers also lack significant pedagogical skills and knowledge related to inclusive teaching and learning (URT, 2013). Additionally, there are experiential gaps in the skills and knowledge of trained specialist teachers. For example, only a few teachers who are specialized in teaching deaf students can use Tanzanian Sign Language and Braille machines for students with visual disability. The lack of teacher training in special needs and inclusive education persists because only the Patandi Teachers College provides it. Furthermore, the principles and practice of inclusive education are not measured in the Patandi College curriculum. For other institutions, the UDSM proposed special education courses; for example, Morogoro Teachers' College offers teacher training for secondary school teachers with a component of special needs education in psychology, and guidance and counselling (Mboya, Mbise, Tungaraza, Mbagi, Kisanji & Madai, 2008; MoEVT, 2008). The Open University of Tanzania has a special needs education programme, and Dodoma University also initiated a special teacher training programme in 2008. In relation to the private sector, Sebastian Kolowa Memorial University (SEKOMU) in Lushoto offers a Bachelor of Special Needs Education degree. Generally, the training capacity of the five institutions mentioned above is low in relation to current needs (URT, 2013).

Inclusive education is not currently mentioned in teachers' education curricula. There is inadequate fundamental special needs education in teachers' education curricula that focuses on general teaching only. Special teacher education emphasizes the education of children with disabilities (URT, 2008b). A limited provision of in-service training for teachers, tutors or schooling managers was observed. More personnel need to be involved in in-service training, as this is currently neither regular nor continuous. For the development of inclusive education, well-resourced, continuous in-service training at all levels is necessary (URT, 2013). The college infrastructure, human resources, materials and equipment are completely dissatisfactory in relation to the needs of inclusive teachers.

Currently, the pre-primary, primary and secondary school curricula are outlining the expected competences for each study component. The syllabus documents address and respond to the needs of learners with disabilities because they contain the contents of each subject, a proposed teaching approach and, to a limited degree, recommendations on how teachers can teach. The need to select teaching approaches that encourage learner participation is also stated

in the curriculum. This is an important basis for developing learner-centered, collaborative teaching and learning practices in schools. However, the learning and teaching materials have failed to follow the development of the written curriculum. There is a need to modify the competence-based curriculum, teaching and learning resources, and include special equipment to allow for both horizontal and vertical differentiation. Suitable assessment, planning and adaptation of the curriculum, the provision of appropriate teaching materials, and sufficient support and partnerships are essential prerequisites for successful inclusive education (Mollel, 2013).

An inclusive education system may also tackle challenges such as teachers' attitudes, rigid methods used in teaching and the curriculum, an inaccessible environment, and many repeaters and dropouts. Moreover, it might solve the teachers' and institutions' limited support for students with disabilities, as well as the failure to involve parents in planning and implementing the system. Furthermore, inclusive classrooms that lack teaching aids and equipment, along with poor quality teaching (Tungaraza, 2005; Kisanji, 1998b), including restructuring the culture, policies and practices within inclusive education to respond to the diverse needs of students.

Despite the above challenges, Tanzania decided to introduce the National Strategy on Inclusive Education (NSIE) 2009 –2017. The strategy identifies fourteen strategic areas of action that need to be strengthened to boost the implementation of inclusive education: The strategy stated that through legislation and policies, the presence, participation, and learning of all learners in inclusive settings should be reinforced. For affective implementation of inclusive education in all levels of education, there is a need to strengthen the institutional arrangements. Resourcing and financing for inclusion and educational support need to be re-examined and reformed. In order to promote differentiation and support learning we need to develop curriculum and learning materials which meet the diverse needs of the learners in inclusive education. Expand an inclusive assessment and evaluation system for learners and teachers. In order to increase the participation of vulnerable learners, there is a need to introduce educational support need assessment and develop effective intervention mechanisms. Educational support resource centres should be established to promote effective inclusive education, to revise teacher education curricula and diversify teacher education provision.

Provision of training on inclusive education is important for strengthening capacities of teachers' colleges. Provide opportunities for professional development for education administrators. Carry out awareness raising on inclusive education. In order to inculcate inclusive education effectively in school communities' use of Whole School Development planning approach is emphasized by the strategy'' (URT, 2013).

Despite the well-outlined theoretical strategies, in practice inclusive education in Tanzania is still considered in the context of individuals with disabilities. This is evident from Norwegian Agency Development (NORAD) review report on a desk review of inclusive education policies and plans in

Nepal, Tanzania, Vietnam and Zambia by Lewis (2007), which stated that inclusive education as a concept is rarely mentioned in the reviewed documents while discussion of special needs education is more common. There is a lack of clarity in the policies and plans regarding how these two concepts might differ or overlap (Mkonongwa, 2014). There is also commitment to educating some teachers on inclusive education, though this appears not to be planned as universal training for all teachers, and the reviewed documents suggest there may be a lack of clarity between the concepts of special needs and inclusive education within teacher training. The promotion of inclusive educational and learner-friendly school environments is vital to facilitate the diverse needs of disadvantaged groups.

2.5 Gender and education in Tanzania

Gender is a cross-cutting issue; with directly and indirectly influences different sectors. In education consideration of gender is crucial in designing and implementing education programmes that are inclusive to both male and female. Understanding of gender helps to remove the barriers that influence women's and girls' education (Edmonds, 2005). Gender Development in Tanzania is stated in the constitution of the United Republic of Tanzania (1977) which stated gender equality and equity and guarantees full participation of women and men in social (education), economic and political life. The Government is also implementing international commitments as stated in the United Nations Charter and on the Human Rights Declaration (1948), the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) (1979), the Convention on the Rights of the Child (CRC) (1989), Beijing Declaration and Platform for Action (1995), AU Solemn Declaration on Gender Equality and the Protocol to the African Charter on Human and Peoples Rights on the Rights of Women (2003) World Summit (2005) Resolution on Gender Equality and Empowerment of Women, Policy on Women and Gender Development (2000), SADC Declaration on Gender and Development (1999) Addendum on Prevention and Elimination of Violence Against Women and Children (1998), and the East African Community (EAC) Treaty (1998) (URT, 2001; 2014)

These international commitments have connection with the other National policies and strategies such as The National Strategy for Gender Development builds on the Tanzania Development Vision 2025, the Women and Gender Development policy, structural reforms, a National Strategy for Growth and Reduction of Poverty (NSGRP), the Millennium Declaration and Millennium Development Goals and Sustainable Development Goals 2016-2030. The National Strategy for Gender Development (NSGD) began in 2001, after the adoption of Women and Gender Development Policy (WGDP) (2000). The main purpose of the strategy is to achieve gender equality and equity in

Tanzania as stipulated in the national Constitution and the Women and Gender Development Policy (2000).

Despite efforts to implement these Declarations and Conventions, gender imbalances still exist in various aspects. Gender disparity is still an obstacle to education for all; education should break down discrimination, promote human rights, and engage with the issue of gender-based violence (UNESCO, 2011). Gender and disability are socially and culturally constructed and interpreted in different ways depending on cultural beliefs and society (Possi, 1998). Gender includes the socially constructed roles and responsibilities assigned to women and men in a given culture, which change over time. In education, gender disparity is a serious problem, because social and cultural factors play a more important role than sector policies and strategy in education development.

The provision of education as an equal system for women has so far been unsuccessful, even though it was the main agenda in many countries. Several measures have been used that were accompanied by policies to reduce and remove the gap between women or girls and men or boys with regard to accessing and participating in education. The positive results obtained have appeared in lower levels of education but not in secondary and higher education. Cultural and traditional beliefs have been pushing women and girls into a disadvantaged situation. Women and girls lack education awareness and also have poor knowledge of human rights education in Tanzania (Bhalalusesa, 2000). The social and cultural support available was stated by the females as being the main factor that determines their achievement in terms of education (Posti-Ahokas, 2014). In traditional society, women are paid less attention and not seen as potential citizens, while boys are given priority with regard to access to education, as well as more opportunities within the family and other privileges. This means that while baby boys are privileged within the family, baby girls are seen as needing dowry. Following her marriage, a female will leave her family and join her husband's family. Most Tanzanian ideology is based on sons getting married, as they will automatically increase the family size because of the patrilineal system within most Tanzanian families. This leads to many families making little investment in females' education (Bhalalusesa, 2000).

The main factors that influence gender in Tanzanian society include geographical location, exposure to alternative ways of being and family roles. Other factors are age, sex, cultural and religious beliefs and class (Possi, 1998). Gender relations in Tanzanian society are also mainly influenced by ethnic or tribal relations. For instance, in Mollel (2013) gender equality and equity in the Maasai communities are perceived differently from that in the Nyakyusa communities.

The school environment, social and family environment, personal characteristics and motivation influence women to progress (Okkolin, 2013). The main educational barriers for female participation in Tanzania involve the poor quality of the learning environment, irrelevant curricula, the long distance from home to school, the shortage of female teachers, discriminative practices

and institutional factors (Shighula, 2008). The challenges also include discriminatory laws and practices that inhibit girls' access to education, including the minimum age of marriage established by the Law of Marriage Act, early pregnancy and the domestic labour and gender imbalance at the post-secondary school level (URT, 2013).

Gender inequalities in higher education are attributed to lack of policy and affirmative action; also, the commitment is very low and there exist plenty of socio-economic barriers (Shighula, 2008). The dropout rate was higher for girls than boys because of the existence of a culture that priorities boys' education over that of girls. Girls were denied access to education or withdrew due to attending initiation ceremonies that provide training on marriage, gender roles in the household, farm work, early marriage and pregnancy, which cause females to withdraw from school (Bhalalusesa, 2003). Removing bad traditional practices and beliefs as well as attitudes that discriminate against girls' access, participation and success is urgently needed for females in Tanzania. As observed by Mhina (2005) in her study on social learning and women's empowerment in rural Tanzania, women were rarely involved in developing solutions to their problems.

Mhina (2005) states that late entry into education, early marriage; poor performance and high repetition were the factors challenging female education. There is no direct discrimination denying girls and women the right to educational opportunities, but there is some prejudice resulting from the structural, social, economic and cultural setup of the community that continues to put them at a disadvantage (Bhalalusesa, 2003). In Tanzania, the gender balance with regard to accessing education is still a problem because the efforts made to expand the accessibility in primary, ordinary and advanced secondary education and higher education do not appear promising. Unless the performance of women at the lower levels is increased, their representation in the higher levels of education will remain inappropriately low. Females experience violence in higher education, namely physical, structural, and symbolic, including psychological and everyday life violence. Consequently, women in Tanzanian universities learn within a highly antagonistic atmosphere, which does not suit their competencies that are doubted and often inequitably judged and treated. There is a need for a democratic environment that is conducive for intellectual development and growth in Tanzanian universities, not only for male but also for female students (Puja, 2003). There is also a lack of awareness that the right to education for female students is also important (Bhalalusesa, 2011). While mental status, relationships, cultural responsibility and economic power have a great impact on whether women succeed in higher education, the women's challenges such as frustration and dropout rates are due to a lack of institutional structures that offer academic and social support services, an absence of participatory pedagogical methods and bullying by lecturers (Mnyanyi, 2007). To deal with accessibility in schools, appropriate schooling environment practices, free of discrimination, that offer equal chances to girls and boys to realize their potential are highly emphasized

in the EFA global monitoring report. There is a misconception about women's and girls' education in family, society and schools, and many parents prefer boys to attain an education and actively discourage education for girls (Bajeneza, 2000).

Thus, women lack social and economic support from their families, relatives and peers. Therefore, a strong political will, the link between policy and practice, the integration of cultural traditions into the school curriculum and the need for human rights education are urgently needed to increase the access of women and girls to education (Bhalalusesa, 2011). Moreover, understanding the motives of females is important; for example, female students access secondary education because they wish to progress to higher education and formal employment, to develop themselves, to advance their lives, and to help others. The failure to provide feasible skills and strategies to females is stated as a barrier to the education system (Posti-Ahokas & Palojoki, 2014). The increasing participation of females in education is important because it provides opportunities in a modernized society regardless of race, gender or social class (Mbelle & Katabaro, 2003). The education policy seems to have succeeded at the lower levels of education to reduce the gender gap and change attitudes toward women. The improvement of policy at lower levels is essential for the development of the nation (Bhalalusesa, 2000) through the stimulation of a strong political will, policy connected with practice, the integration of cultural traditions and indigenous education with the school curriculum, women's empowerment training, the provision of human rights education and the creation of an enabling environment for women and girls. The influence of family, peers, educated seniors and religious groups supported the women to advance academically because they viewed female education as an essential element of the transition to adulthood and enhanced quality of life (Posti-Ahokas, 2014).

2.6 Women with disabilities and education in Sub-Saharan Africa

Globally, over a billion people (about 15% of the population) have some form of disability (WHO/World Bank, 2014). Moreover, 80% of persons with disabilities live in developing countries, according to the UNDP (2010). Being a woman with a disability in Sub-Saharan Africa is a triple burden, although having a disability and belonging to a poor family are far worse (Braathen & Kvam, 2008). The CRPD (United Nations, 2006) article 6 (a) states that women and girls with disabilities are subject to multiple discriminations, so in this regard, measures will be taken to ensure the full and equal enjoyment by all of human rights and fundamental freedoms. Measures are also needed to ensure the full development, advancement and empowerment of women with disabilities, for the purpose of guaranteeing them the exercise and enjoyment of

human rights. Education for women with disabilities also has a great impact on the community and supports all of the other key areas; better education for women with disabilities creates more choices for them. The first measure to support women is the declaration on eliminating violence against women with disabilities who belong to minority groups: indigenous, refugees, migrants, and remote communities, to mention but a few. The second is the Beijing Platform for Action that also recognized that disability is one of the barriers to women with disabilities' full equality and advancement. Several studies (Kelly, 2012; Maart, Eide, Jelsma, Loeb & Toni, 2007; Opini, 2009; Smith 2004) have shown that women with disabilities face poorer living conditions, poverty, reduced access to education, unemployment, and poor social relationships and health services.

Women with disabilities are vulnerable not only to discrimination but also to special needs (Maina, 2010). From the society and family experiences in Sub-Saharan Africa, having a child with disabilities, specifically a girl, is regarded as a terrible thing; nobody sees her as a human being and hence she receives less consideration and awareness (Hailemariam, 2006). For example, in censuses, some families record assets like livestock, arable farmland, residential property and their other children, but not their child with disabilities (ibid.). Therefore, their lack of attention, awareness and support from their relatives, peers and community as a whole lead women with disabilities to lead more challenging lives than their other family and community members. Moreover, the inadequate infrastructure, poor living environment and unemployment are the ultimate causes of the underestimation of women with disabilities in Sub-Saharan Africa. The root cause of their underdevelopment is closely linked to inadequate awareness and information related to women with disabilities and negative attitudes within the family and community members, who do not know what disability is and hence call them names (Kiani, 2009). Women with disabilities in Sub-Saharan Africa experience more difficult, poorer lives as well as greater discrimination in the home (Darker & Ampousah, 2003; Maart et al., 2007), a situation that begins in childhood because majority of families lack awareness about the potential of some people with disabilities. Thus, attitudinal barriers at the family and community levels exclude not only women with disabilities but also women without disabilities from decision-making processes, including access to education. Where they have an opportunity to contribute, less attention is paid to their opinions.

The community belief was that women with disabilities should stay at home, as they disturb others. Attitudinal barriers, reduced opportunities and less attention at many the family and community levels tend to exclude people with disabilities from accessing education (Abosi, 2007; Kiani, 2009; Maart et al., 2007). Addressing sociocultural barriers, raising family and community awareness, education, and advanced support services from the community, families and friends related to the right to education for all are essential (Opini, 2009). In that context, Braathen and Kvam (2008) emphasise that education is important to women with disabilities because it improves their confidence and

enables them to get good jobs, earn their own income, take care of themselves and be less reliant on men. The government should empower women with disabilities by equipping them with education and various skills in order to become independent, since at the basic, secondary and tertiary education levels, there are fewer women with disabilities compared to men and women without disabilities. If women with disabilities obtain an education, they will be able to live independently and can enjoy without discrimination (*ibid.*).

Majority of Sub-Saharan African countries, education for people with disabilities and access especially for girls is tend to be poorly addressed; for example, in Namibia, due to policy and attitudinal barriers, women's education lags behind. Maart et al. (2007) and Kiani (2009) found that women with disabilities from rural villages lived in poverty because they lacked education and healthcare due to attitudinal and environmental barriers. They also revealed that urban women with disabilities were limited to occupations like teachers, shopkeepers, craft sellers, crop sellers, phone operators and secretaries, while most of those in rural areas were unemployed, farmers and crop sellers, with negative attitudes being significantly greater in rural than urban areas. Insufficient skills development among women with disabilities in rural areas produces limited opportunities to access education and develop relevant skills for economic empowerment and employment that could lead to self-employment. Girls and women with disabilities who live in rural areas are at higher risk of being unable to access education compared to those living in the urban areas (Lorenzo, 2003).

The situation of women with disabilities being universally disadvantaged with regard to access to education compared to their male peers and women without disabilities leads to unemployment and increases their vulnerability both inside and outside the home. There is still a long way to go in terms of creating a sustainable, free environment that can enable women with disabilities to enjoy the self-esteem and self-advocacy to speak in public about their problems. For example, in Ethiopia (Hailemariam, 2006; Lewis, 2009), women with disabilities face difficult lives because of poverty, lack of access to education, unemployment, poor social relationships and inadequate health services. Braathen and Kvam (2008) found that in Zambia, women with disabilities experience marginalization, discrimination and exclusion from society because of their disability, and that people more easily recognize their disability than their humanity. Therefore, marginalization, poverty and disability were the main causes of women with disabilities' triple discrimination.

Research in South Africa has shown that educating boys with disabilities is regarded as a priority over educating girls with disabilities because of cultural beliefs (Nelson, 2007). This situation was fostered by the stereotypical image of men who later have to support themselves and a family. Thus, in South Africa, boys and girls with the same type of disability often receive a different kind of education (Lorenzo, 2003). Experience from Cameroon also indicates that women with disabilities live in poverty and most of them

experience difficulties in getting married, which is also the case in Tanzania, Malawi and Ethiopia. Non-disabled men did not wish to marry a woman with disabilities because of feeling shamed by society and because they perceived a woman with disabilities as a burden to them (Braathen & Kvam, 2008).

Women with disabilities in Malawi felt isolated, and revealed that men with disabilities were more accepted and respected in society and were given priority in education (Braathen & Kvan, 2008). Delayed treatment, sometimes taking two or three years, was also mentioned as leading to dropping out of school among students with disabilities as this made it difficult for these children to continue attending school (Kiani, 2009). Women with disabilities in Ethiopia have poorer educational backgrounds than men because of the parents' preferential treatment of boys compared to girls (Heiman, 2006). This situation led to relatively better employment opportunities for men with disabilities compared with their female counterparts (*ibid.*). In Ghana, social beliefs and a lack of essential equipment and materials increased the dropout rate among women with disabilities. Sociocultural beliefs resulted in protectionism and marginalization of women with disabilities (Nelson, 2007). In Uganda, women with disabilities face poverty, a lack of education, single parenthood and limited access to training (Lewis, 2009). All in all, women with disabilities in Sub-Saharan Africa face challenges such as inaccessible physical environments, lack of training in information communication technology (ICT), lack of special equipment and poverty. Other factors are social attitudes, legislation and policies for successful participation in education. Opini (2012a, 2012b) studied the motivation and Challenges of women with disabilities to join and pursue higher education in Kenya, but not Tanzanian, higher education.

Braathen and Kvam (2008) emphasize that education is important for women with disabilities, as it increases their self-confidence and helps them to get jobs and earn their own money, so they can take care of themselves and be less reliant on men. Therefore, the government should empower women with disabilities with various skills in order for them to be independent. Women with disabilities, if they can obtain an education, are able to live independent lives full of respect, possibly marry educated men, and receive understanding. It is also necessary to provide education for women because they are in danger of being sexually abused. Generally, the living conditions of women are worse than those of men. However, in Malawi some of the women with disabilities had been well taken care of and treated equally by their closest family and friends. Women need to be empowered through receiving an education (Braathen & Kvam, 2008). In many Sub-Saharan Africa countries, education for people with disabilities and accessibility tend to be less addressed (especially for girls and women) due to policy and attitudinal barriers.

2.7 Women with disabilities and education in Tanzania

It is important to understand the information on girls and women with disabilities in the lower levels of education to develop a clear picture of the enrolment trends and transition rates between males and females. By looking at the trend of enrolment of girls and women with disabilities (URT, 2012) at different levels, it is easier to understand their status in education. Moreover, the reviewed studies state that girls and women with disabilities in Tanzania failed to have equal access to all levels of education, particularly higher education (Possi, 1998; URT, 2012). Student enrolment trends especially for women with disabilities when compared with men with disabilities are decreasing as they progress to the secondary and higher education levels.

Generally, in Tanzania, women and girls with disabilities have a lower level of education, even though the Constitution of the United Republic of Tanzania (URT) (1977) and its amendment of 2008 under Act No. 6 state that, "girls or women with disabilities have the same right to education, particularly higher education, as any other Tanzanian citizen" (URT, 2008b). Tanzania is a signatory to the Convention on the Elimination of All Forms of Discrimination against Women (Chuwa, 2010) and education is important for all women, without excluding those with disabilities, which involves participatory approaches (URT, 2008a). Education is an engine for development and a lack of education for women with disabilities means that they are disadvantaged in terms of the labour market, personal development and being able to effectively contribute to national development. The empowerment of women with disabilities through education is essential because this can give them self-determination and identify their personal progress, including empowerment over their lives and control over their own futures (Bajeneza, 2000; Chuwa, 2010). Society has dehumanized women with disabilities on a practical level and hence women are excluded from education and development planning, and their voices are not heard in decision-making. Consequently, there is a need to move society's negative perception of women with disabilities away from the medical model approach, which individualizes disabilities and leads to the exclusion of women with disabilities in society (Macha, 2002a). Accessibility to education is a fundamental human right and a key to sustainable development among individuals in all aspects; to date, the provision of education for women with disabilities has remained in crisis despite the fact that education enhances human potential in the fields of character, skills, intellect and humanity.

Factors such as social isolation, exclusion, poverty and dependency increase the extent of being abused and excluded from social services, including education (Bajeneza, 2000; Possi, 1998; Wedgwood, 2007). Women are considered unnecessary, expected to be at home rather than at school, experience sexual abuse and the pressure of violence (Macha, 2002b; Mwalutambi, 1995). Most women have been hidden at home, experience stigmatisation and embarrassment in society. Society limits their access to

education, information, health services, social interaction and employment, due to spiritual values and traditional cultures. Societies lack knowledge and understanding about the meaning and cause of disabilities. Women with disabilities are recruited in nongovernmental organizations as an act of charity rather than a human right (Possi, 2006; 1998). Macha (2002b) noted that rural girls with disabilities are at a high risk of being sexually abused at school, on the way to school and in their residences. Additionally, Possi (1998) and Bajeneza (2000) reported that the life status of women with disabilities in Tanzania is worse than that of men with disabilities.

Studies indicate that many women with disabilities are left at home rather than being enrolled in school because of cultural factors (Mwalutambi, 1995; Bajeneza, 2000; Macha, 2002a). A girl or woman with a disability is less likely to attend school and more likely to be kept at home doing domestic home chores (Uromi & Mazagwa, 2014; WHO, 2012). The trend of registration shows more girls than boys with disabilities having the opportunity to enrol in pre-primary education. Overall, the enrolment rate in pre-primary school in Tanzania is lower compared to the primary education level. The majority of parents prefer to send their children directly to primary school without first attaining pre-primary education.

In Tanzania, most primary schools significantly increased their enrolment rates of pupils in general and pupils with disabilities in particular due to the Primary Educational Development Program (PEDP), which was implemented from 2002 to 2006 (first phase) and 2007 to 2011 (second phase). The major goal of the programme was to enrol all children from 7 through 9 years old in school regardless of their disabilities. The PEDP was established to ensure access and equity in primary education for all children. Due to the lack of clarity regarding the statistics in the first phase of PEDP, it is impossible to state anything definite about the number of children with disabilities enrolled in primary education, but the percentage of those with access to school is estimated to stand below 1% (URT, 2008a). This means that about 99% of the children with disabilities are excluded from education. The PEDP from 2007 to 2011 (second phase) was extended with the aim of including children with disabilities and special needs in primary schools. According to the out of school children study conducted by the Ministry of Education and Vocational in 2015 more than 34% of all primary school age children with disabilities are out of school. This means less than 70% of all primary school age children with disabilities in the country are in primary school. Generally, the proportion is low because of the low response of the community in sending children with disabilities to school. Moreover, the URT (2012) indicated that the total enrolment of children with disabilities in 2013 (1,575) was lower than in 2012 (1,648), and effective strategies are needed to identify all children with disabilities to ensure their participation in education.

The Secondary Education Development Program (SEDP) was established to expand the proportion of Tanzanian youth who complete secondary education with acceptable results. The vision of the programme was to reach 50% of primary school students entering secondary education. Additionally, the

SEDP promoted the enrolment of students with disabilities without specific stated or asserted objectives and strategies (Osaki & Njabili, 2003; URT, 2004). Only 5% of students with disabilities attended secondary school and less than 1% attended higher education in Tanzania (SIDA, 2014; World Disability Report, 2012). Students with physical disabilities constituted more than 50% of all students with disabilities and the number of girls with disabilities attending secondary school was less. There is a big gap between the number of girls with disabilities in primary education and secondary education, fewer girls failing to proceed to secondary education. In that regard, the findings by Kondo (1995) and Chuwa (2010) show that in Tanzania about 90% among of people with disabilities do not go beyond primary education. Moreover, the number of girls and women with disabilities accessing education has declined in pre-primary, primary and secondary education. The data show that more boys than girls with disabilities had the opportunity to access secondary education while in pre-primary and primary education more girls with disabilities were accessing education (URT, 2013).

2.8 Higher education in Tanzania and students with disabilities

Higher education in Tanzania enrolls graduates from advanced secondary education and equivalent certificates and diplomas. Most of the degree programmes at the bachelor's level take three years. The aim of higher education in the country is to facilitate Tanzanian citizens becoming well-educated, knowledgeable and well-versed with perceptions, abilities and expansion in the social, economic, cultural, scientific and technological fields (URT, 2011). Higher education enables youth and all people from any young to face the challenges of development that require immediate and long-term resolutions, especially with regard to eradicating poverty both at individual and national levels. Higher education can play a great role in poverty alleviation and is reported to be receiving policy and research attention in Tanzania and Ghana (Morley & Lussier, 2009; UNESCO, 2009; Morley, Leah, Lussier, Lihamba, Mwaipopo, Forde & Egbenya, 2010). The world's economic and social development depends on knowledge, skills and technology produced by higher education institutions (Mushi, 2012), which are essential in terms of skills generation, equipment and new knowledge provision. Higher education functions first to train people to attain specific and self-determining opinions, investigative and problem-solving skills and knowledge. Second, people should be trained in how to deal with the transformed global economy and international barriers; this is the major concern of most developing countries and, lastly, is a pre-requisite for equipping people with international knowledge and business skills, including scientific, technological, financial, production, commercial, information, communication and other related areas (Mushi, 2012). Higher education must prepare people to be able to face different challenges individually and nationally in both the immediate and long terms.

In any country, an increased proportion of highly-educated people may result in higher income for the country (Kochung, 2011; Mumba, 2009). In developed countries, the general enrolment ratio (GER) for higher education ranges from 40% to 60%. In middle income countries, this ratio varies from 20% to 40% (Mushi, 2012). The GER for most developing countries stands at 5% to 15% and the Tanzanian GER in higher education is 3%.

Tanzania adopted the Higher Education Development Program (HEDP) to achieve the intended goals, which need a strong political will and higher priority for budget allocation from the Ministry of Education and Vocational Training (MoEVT, 2010). For the past 5 to 15 years, Tanzania has been experiencing a remarkable increase in the number of students enrolled in universities and colleges because of increases in the higher education loan fund and number of higher education institutions. In 1995, Tanzania had only three universities: the UDSM, Sokoine University of Agriculture (SUA) and the Open University of Tanzania (OUT). Tanzania had 32 public and private universities and colleges, including 8 public universities, 3 public colleges, 11 private universities and 10 private colleges by the years 2010 and 2011 (TCU, 2010).

Tanzania has approximately 2,641,802 people with disabilities, which is equivalent to 5.88% of the entire Tanzanian population, per the national population and housing survey of 2012. However, the Tanzania national disability survey conducted in 2008 reported a total of 2,488,970 people with disabilities. According to the national disability survey, about 7.8% of the Tanzanian population had some form of activity limitation. The disability prevalence was reported to be higher in rural areas (8.3%) than in urban areas (6.3%). Of all people with disabilities, about half of them (47.6%) were illiterate. Moreover, approximately 41.7% of the people with disabilities aged 5 years and above, were reported to be un-educated (Tanzania National Disability Survey, 2008).

It is important to understand the information on girls and women with disabilities in the lower levels of education to develop a clear picture of the enrolment trends and transition rates between males and females. By looking at the trend of enrolment of girls and women with disabilities (URT, 2012) at different levels, it is easier to understand their status in education. Moreover, the reviewed studies state that girls and women with disabilities in Tanzania failed to have equal access to all levels of education, particularly higher education (Possi, 1998; URT, 2012). Student enrolment trends especially for women with disabilities when compared with men with disabilities are decreasing as they progress to the secondary and higher education levels.

As stated previously, women with disabilities were under-represented in the field of higher education, and indeed at all levels of education. A lower number of students accessing lower levels of education translated into an even worse situation with regard to higher education, especially for women with disabilities. In government and non-government universities in Tanzania, men with disabilities have more opportunities to access higher education than their female counterparts. Thus, in 2005 and 2006, women made up 31.2% of the

students in public universities and 38% in private universities, but the number of students with disabilities, particularly women, has been very limited (Morley, 2010). Moreover, in 2007 and 2008, 33.3% of women were enrolled in public universities and 42% in private universities, compared to 30.5% and 35% in 2010 and 2011, respectively (TCU, 2010). The percentage of women enrolled in non-government universities is higher (42.4%) compared to government universities (33.5%). Although enrolment in higher education is increasing, the number of enrolled women does not look promising.

The accessibility in higher education for the students with disabilities is still a big challenge because from 1979 to 2013 about 249 students with different types of disabilities were enrolled and received support from the UDSM. The numbers of women with disabilities fluctuate yearly, causing unpredictable enrolment rates in higher education. This is according to information obtained from the Special Unit of the UDSM, which has been the only university to enrol students with disabilities. Although the universities achieved higher enrolment, the number of women, particularly those with disabilities, does not look promising at the largest and oldest university, UDSM, because from 1978 to 2013, the total university enrolment of students with disabilities was 49 (20%) women and 200 (80%) men. Table 1 shows the trend in enrolment for 1979 through 2013.

TABLE 1 UDSM enrolment of students with disabilities from 1978 through 2013

Year	M	F	T	PH	BL	DE	AL	SD	M	Students on specific study programs
1979-83	11	1	12	-	12	-	-	-	-	Ed=8, Art & SS=4
1984-88	06	0	06	-	6	-	-	-	-	Ed=5, Art & SS=1
1989-93	31	3	34	26	6	1	1	-	-	Ed=23, Art & SS=9, Law=2
1994-98	35	5	40	34	6	-	-	-	-	Ed=17, Art & SS=19, Law=2, BSc=1, Eng=1
1999-03	43	14	57	45	8	1	4	-	-	Ed=34, Art & SS=15, Eng=2, Law=2, BSc=1, B.com=3
2004-08	41	12	53	40	11	1	1	-	-	Ed=32, Art & SS=14, Eng=3, Law=4, Com=3
2009-13	32	14	46	22	12	7	3	1	1	Ed=27, LLB=2, Com=5, Bsc=4, BALL 4, MA=4
Total	200	49	249	167	61	10	9	1	1	
%	80	20	100	53	30	4	3	5	5	

Source. University of Dar es Salaam special unit, 2014.

Note. M = men, F = female, T = total, PH = Physical, BL = Blind, DE = Deaf, AL = Albino, SD = Speech Disorder, Ed = Education, Arts & SS = Arts and Social Sciences, Eng = Engineering, BSc = Science, B. Com = BA of Commerce, LLB BA = Law, BALL = Linguistic and Literature, and MA = Master's degree.

In the thirty-six (36) years from 1978 through 2014, there were a total of twenty-seven (27) students with disabilities enrolled in postgraduate programmes, and eight (8) were women and nineteen (19) men. Seven women and fourteen men pursued master's degrees. Two men had a doctoral degree and no women graduated with a doctoral degree or even studied for one (Special Unit Report, 2014). Therefore, the overall trend toward achieving gender equity has had a positive but limited impact when applied to marginalized groups including students with disabilities. From pre-primary school to the postgraduate level, women and/or girls were more at risk than men and/or boys with disabilities in terms of accessing higher education.

While girls and women with disabilities have rights to education equal to those of their counterparts without disabilities, opportunities for education are unequal between the two groups. In circumstances where the government of Tanzania has tried as much as possible to provide equal opportunities for education between the two groups, the challenge of inequity has left women with disabilities out of the education system. For example, the Tanzania National Policy on Disability (2004) points out that the education system of Tanzania does not allow for equal access to education for girls and women with disabilities, and some parents still perceive women with disabilities as burdens and opt to not send them to school.

Therefore, in overcoming the barriers encountered the women including women with disabilities and to ensure they access and participate in higher education, the UDSM have policies such as University Gender Policy (2006) come from Women Gender, Development policy of 2002. Also there are strategies such as University Corporate Strategies of 1994. Moreover, there are programmes such as Institutional Programme (ITP), Pre-Entry programme, Preferential Admission Criteria for Female Students programme, Special Enrolment programme. Additional programmes are Pre-Entry for Female Science programme, Special Pre-Entry Engineering and Statistics Female, Female Undergraduate Scholarship and Scholarship for Postgraduate (Discussed on chapter 2.9). All these policies, strategies and programme aim at improving the accessibility of female students at the university, though more emphasis is given to women in general and not women with disabilities in particular (UDSM report, 2013).

In achieving gender equality and inclusiveness based on attitudes and beliefs at the University of Dar es Salaam have the following strategies: first, to support the available structures and processes that ensure the effective participation of women in all decision-making organs. Second, to strengthen the programmes towards gender mainstreaming in university processes and functions in line with national policies and enhance affirmative action for gender education, opposing violence against women, and attention to gender perspectives in the budgets. Third carry out gender focused research, fourth, create a conducive and facilitative engender environment, and; fifth ensure engendered admissions that focus on highly talented students (UDSM Vision, 2014). This year, 2016 the university special unit upgraded this unit to Special

Need Education Unit as a strategy of making the University inclusive. The unit deals with all matters related to studies for students with disabilities.

2.9 Challenges related to disability, policies and education

In Sub-Saharan Africa, laws, programmes, policies and services related to people with disabilities are tend to be progressively being developed to address the issue of access to education, training and equality. The majority of higher education institutions in Sub-Saharan African countries lack national, educational and institutional policies that elaborate how higher education should support students with disabilities. However, many of these policies concentrate more on barriers to access than changing the perceptions and attitudes of society, families, teachers and peers. For example, the Nigerian policy on disabilities emphasizes individuals with disabilities' acceptability in society rather than solving the problems of exclusion and denial of human rights within society (Garuba, 2003). An absence of enabling policies and legislation on the rights of people with disabilities tend to interferences hugely with the civil and educational rights of this group. In Kenya and Uganda, for example, the policies failed to reflect the actual practices in inclusive schools, and, vocational rehabilitation and training for work are scarce (Anderson, 2004; Choudhuri et al., 2005). These countries thus require intensive mobilization of resources and information dissemination before inclusion can be institutionalized (Garuba, 2003). The availability of clear, effective policies for students with disabilities in higher education would help to prioritize this group as a way of redressing the social and economic inequalities associated with policy (Matshediso, 2008). The literature (cf. Choudhuri et al., 2005) on the implementation of inclusive education emphasizes the comprehensive and effective policies, values, attitudes, sociocultural conditions and availability of teaching and learning tools. Tanzania is among the countries that have signed the Convention on the Rights of People with Disabilities in 1948 and ratified in 2009, as well as the UN Declaration on the Rights of Disabled Persons (United Nations, 2006) and the United Nations Standard Rules on the Equalization of Opportunities for People with Disabilities (1993).

Consequently, in Tanzania, there is good interplay between international and national policies that emphasise the growing participation of students with disabilities in all levels of education. In 1995, Tanzania approved the Education and Training Policy (ETP), which aimed to increase enrolment, equitable access, quality, expansion, optimum utilization of facilities and operational efficiency throughout the education system. However, the policy did not provide a long-term strategy for developing education for many students with disabilities. Moreover, the Tanzania Development Vision (TDV) aimed to achieve high quality livelihoods for all Tanzanians through Universal Primary Education (UPE) by 2015. There has also been the National Strategy for Growth and Reduction of Poverty (NSGRP) (2005), the aims of which included ensuring that

all children, including those with disabilities, orphans and other vulnerable children have access to education. Despite these and other major legal improvements related to the education of those with disabilities, many belonging to this group, particularly women, lack an opportunity to participate in higher education. The Higher Education Policy of Tanzania of 1995 and new higher education policy of 2015 both focused the students in general and have less emphasis on education of students with disabilities (URT, 2008b).

The other potential policy is the Women and Gender Development Policy of 2002, which aimed to remove all barriers that hinder women's access to education, gender mainstreaming in development and addressing gender equity and training to the limits of their abilities (URT, 2008b). At the UDSM, there was the University Corporate Strategic Plan (CSP) of 1994, the core function of which was to expand female students' enrolment. The UDSM also adopted the University Gender Policy (2006) to expand women's enrolment in higher education and monitor gender equity and equality issues. The policy was based only on gender in general and contained nothing specifically for women with disabilities who pursue higher education. The Institutional Transformation Programme (ITP) was also adopted to monitor and assess the procedures for achieving gender equity targets. Thus, the policies failed to take into account unequal access to higher education (Possi, 1996). In 1996 and 1997, the UDSM started its Pre-Entry Program (PED), which aimed to increase the enrolment of female students at the university in the field of science, and was later extended to engineering, economics and statistical programmes. In the same academic year, the UDSM formulated the Preferential Admission Criteria for female students (PAC), with the major purpose of facilitating the participation of qualified female applicants with good grades who had low scores in their matriculation examinations. Thus, the available policies were based on women in general, not women with disabilities.

Policies on disability, including the National Disability Policy formulated in 2004, have been focusing on the involvement of people with disabilities in productive work. They also aimed to increase and improve skills training for people with disabilities in settings that allow and accommodate trainers with and without disabilities. The national disability policy thus places limited emphasis on education. Unfortunately, the disability policy is too general and has failed to state specifically how to sustain the education of those with disabilities. Thus, the policies and educational programmes recognized the educational needs of girls and women, but the combined issues of gender and disability have gone unnoticed (Okkolin & Lehtomaki, 2005).

In 1978, Tanzania enacted the Compulsory Education Act of 1978, the aim of which was to incorporate such issues as access to education and equality (Possi, 1998). This Act, however, had a less significant impact on the education of children with disabilities. Although it was amended in 1995, it did not stipulate the provision of education for learners with disabilities (Possi, 1998). Tanzania also adopted the Education Sector Development Program, which involved the Primary Education Development Program's (PEDP) first phase

from 2002 through 2007 and the second phase from 2007 through 2012, as well as the Secondary Education Development Program (SEDP) in 2008. However, these programmes do not place a high priority on education for students with disabilities even though some measures related to this group are integrated within them. The SEDP, to some extent, places a greater focus on providing education for students with disabilities (HakiElimu, 2008). In general, these major educational reforms tend to have great potential for Tanzanian people with disabilities, but students with disabilities still need more emphasis placed on them (URT, 2008b).

Currently, the universities of Tanzania have adopted the Higher Education Development Program (HEDP) for 2010 through 2015, but this does not include specific measures for students with disabilities (Mushi, 2012; Mwaipopo, Lihamba & Njewe, 2011). Although Tanzania formulated and adopted international and national policies and strategies for equity and equality in education, the situation of women with disabilities in higher education remains a challenge because the policies have failed to meet their needs.

The Tanzanian government established the National Human Rights Action Plan of 2013 through 2017, which emphasises that challenges persist for those with disabilities, such as stigma and discrimination, a lack of infrastructure, inaccessible facilities, a shortage of assistive devices, limited livelihood opportunities and a lack of social protection and qualified teachers. A lack of early identification, inadequate protection, sexual abuse and harassment and the killing of persons with albinism based on traditional beliefs tend to have influenced people with disabilities to access education (URT, 2013).

2.10 Barriers to participation in higher education

Several challenges were mentioned by different studies to influence the participation of students with disabilities in Tanzanian higher education. Institutional, attitudinal and environmental barriers are the main influences on students with disabilities in higher education in Tanzania. Challenges such as the physical and social environments surrounding many people with disabilities in terms of cost, lack of time, transport and geographical isolation have been stated as situational barriers that hinder individuals' participation in education (Bagandanshwa, 2006a; 2006b). **Institutional barriers** are also stated in terms of learning institutions' situations that exclude or discourage certain groups of learners from studying. The situation can be an inconvenient schedule, cost of tuition fees, restricted settings, a lack of suitable and attractive courses to offer, university policies and practices that create confusion about the learning situation and a lack of information about the programmes and procedures that were highly emphasized (Tungaraza, 2010). Dispositional barriers such as beliefs, values, attitudes or perceptions inhibit participation in

organized higher education as well as the negative evaluation of the usefulness, appropriateness and pleasure associated with engaging in higher education. The challenges to accessing the curriculum and feelings of isolation were reported to hinder the deaf and hard of hearing.

The majority of higher education institutions in Tanzania are associated with **serious environmental barriers**, such as inaccessible toilets, a long distance from home to school without adequate transport, an inaccessible infrastructure and a discriminatory culture and belief system (URT, 2008b; 2013). The poor physical environment (roads, buildings, transport, ramps), negative attitudes (teachers, peers, specialists, readers) and support provided by peers and access to information Braille printing for blind students, sign language interpreters for students with impaired hearing and wheelchairs for students with physical disability discouraged the students with disabilities, including women with disabilities, to participate in higher education (URT, 2008). These factors also contribute to students with disabilities dropping out of school. The poor quality of the learning environment and inappropriate curricula, sexual harassment and discriminative practices in schools constitute challenges to students with disabilities. Moreover, policy level initiatives are directed towards the school environment rather than socioeconomic factors (Okkolin, Lehtomäki & Bhalalusesa, 2010).

Physical barriers affect many students with disabilities in higher education because most higher education infrastructure fails to consider students with disabilities. Most higher education is inaccessible and not adapted to cater to students with disabilities, starting from basic education upward. The buildings have no elevators, thin doors and slippery, water-logged toilets, which are uncomfortable for wheelchair users and students with visual disability (Mwaipopo et al., 2011). There are also challenges related to inaccessible higher education and classrooms, such as no preparation of Braille materials. A lack of special equipment and facilities also has a significant impact on children with disabilities and is closely linked to students' performance. The majority of higher education lack or have inadequate sign language or hearing aid provisions for deaf pupils and those with hearing disability, respectively, and likewise with Braille or large print text for pupils with visual disability, plus a lack of alternative formats of assessment. The majority of schools also lack technology, a supportive school environment, computers and educational software, although some schools offer glasses, walking sticks, crutches, white canes and wheelchairs.

The home environment is a primary socialization instrument that equips many students with disabilities with educational awareness and ambitions for the future. In many families, the parents make pupils with disabilities the last priority for everything, including the payment of university expenses. This group of students is also less involved in family discussions and decision-making. Students with disabilities need an encouraging home environment and positive attitudes because a sense of family acceptance will motivate them to be emotionally free. Moreover, the family's educational background is an essential

factor in the education of children with disabilities. Some families do not understand that children with disabilities need the same chances and privileges as the other members of the family (Kisanji, 2006). Poverty within the family also contributes to students with disabilities failing to access education. It has been noted that most of the families of students with disabilities are characterized by poverty, which leads to limited opportunities to access education (Macha, 2002a; Mbagha, 2002). Therefore, poverty within the family is an underlying factor in many issues for students with disabilities; for example, in Tanzania, poverty is among the main factors for many students with disabilities in particular women to dropout from the studies.

Many Tanzanian higher education institutions experience **inadequate teaching and learning materials**. It is further proposed that governments should provide facilities and materials that can cater to the needs of students with disabilities in inclusive schools (Kisanji, 2006). In most Tanzanian higher education institutions, the range of disability support services is limited and addresses the needs of only a few types of disability (Macha, 2002b). In Tanzania, students with visual disability are favoured more in terms of support than students with physical or hearing disability (Mboya, 2008). Due to problems related to national poverty, governmental instability, limited effectiveness and fiscal irregularities, it is unsurprising that accessibility to education for students with disabilities in many Sub-Saharan African countries is not a high national priority. The majorities of infrastructures, social facilities and educational programmes do not favour people with disabilities and disadvantaged groups.

The large numbers of students overcrowded in lecture rooms make it challenging to identify the learning needs of students in Tanzanian universities (URT, 2008b; Lehtomäki et al., 2014). Classroom overcrowding in higher education leads to poor recognition of the special needs of certain students with disabilities that can limit staff confidence about providing knowledge adequately. Due to this situation, teachers fail to apply and organize appropriate methods of teaching, such as student-centered methods, and to advance their teaching approaches for the enhancement of all members in the classroom (Croft, 2010). As a result, the divergence between men and women clearly continues to widen progressively at all levels of education in Tanzania, although it is much worse in higher education. The university's physical environment was less considered by the students with disabilities in Tanzania in terms of building classrooms and schools, offering Braille materials and teachers being prepared to teach blind students. In addition, there is a shortage of special teachers for deaf students, and the available teachers also lack sign language skills. A similar situation applies to students with intellectual disability and deaf-blindness (Maswanya, 2007), which is also the case in Namibia (Haihambo, 2008).

The lack of support combined with the reduced monitoring of their educational outcomes, including retention, completion and achievements or inter sectioning of their social identities, meant that students with disabilities in

higher education must depend on their peers' support both in Uganda and Tanzania. Thus, students with disabilities are underrepresented in higher education, where 7% to 10% percent of the population live with some forms of disabilities (Morley & Croft 2011; Morley, 2012a). Thus, it is suggested that there is a need to find ways to address the challenges in lower levels of education in order to enable students with disabilities to access higher education. The lack of transparency within the admission procedures and student loan entitlements also has a great impact on the education of students with disabilities (Morley, 2012b).

Overprotection, according to Mwaipopo et al. (2011), women and girls with disabilities are less likely to be qualified to attend higher education than males due to overprotection by parents, negative attitudes toward girls' education and the different treatment, expectations and reinforcements associated with girls. The reduced number of students with disabilities in higher education has also been caused by poor examinations results, after which they dramatically drop out in the transition to higher education. Moreover, the poor qualifications of students with disabilities also lead to their underrepresentation in higher education because the majority is not qualified to apply, as similarly observed in Ghanaian higher education. This has a great impact on reducing the number of students with disabilities applying for higher education (Morley & Croft, 2011; Tungaraza & Mboya, 2005). In addition to the inaccessible environments and policies that influence and create barriers to inclusion and participation in higher education, negative attitudes and behaviour can further result in negative treatment, low self-esteem and reduced participation in higher education (Mwaipopo et al. 2011). Such challenges as family discrimination because of disabilities contribute toward discouraging students with disabilities from participating in higher education (Morley & Croft, 2011). The lack of access to higher education tends to be more profound in rural areas where people with disabilities fail to attain even a basic education (ibid.). Furthermore, there does not appear to be any strong management information system of recording disabilities as a category of analysis in Tanzania and neighbouring Uganda's higher education (ibid.).

A lack of support, problems in accessing education, poor facilities, prejudice, socio-cultural exclusion and a poor understanding of the importance of education reduce students' participation in higher education. The absence of institutional intervention has caused students with disabilities to often rely on support provided by their peers. Even though the participation rates in higher education are growing, it is observed that a range of this social group remains excluded in many parts of both Tanzania and Ghana. It is argued that the lack of consciousness about marginalization and equality in terms of higher education has received less attention in low-income, developing countries (Morley & Croft, 2011). Their peers and the university staff are surprised to see someone with a disability doing something like delivering a good presentation. The students with disabilities in Tanzania experience discouragement and unhelpful and sometimes disruptive attitudes and behaviours from the

university lecturers who have influenced the education of the majority of students with disabilities (ibid.). Women with disabilities in higher education face negative attitudes from others when they attain low achievement that implies a lack of academic ability and poor preparation for higher education. Any kind of high achievement implies some kind of favouritism by the teachers. In that regard, the beliefs, knowledge and values of a certain community are likely to lead to either negative or positive perceptions or treatment of many people with disabilities (Morley, 2010).

The barriers to the contextualization of an inclusive education policy limit the number of students with disabilities in higher education (HakiElimu, 2008; Lehtomäki et al., 2014; Macha, 2002a). In addition, inaccessibility to information and CT hinders students with disabilities from accessing study materials in higher education (Ndume et al., 2008). CT for teaching and learning has a great impact on increasing the timely access of quality of higher education (ibid.).

The lack of modified teaching, discussion between students with disabilities and their teachers regarding their learning difficulties, and effective assessment strategies result in disadvantages for students with disabilities (Mkanula, 2003). A lack of technology, encouraging pedagogy, and self-advocacy among lecturers deters students with disabilities from participating in higher education (Kelly, 2012). Therefore, teaching and learning are critically problematic areas that need to be solved in order to provide effective learning experiences for students with disabilities. In order to ensure that higher education goes hand in hand with the goals and ambitions of students with disabilities, higher education needs to consider academic achievement rather than disability assessment. Positive attitudes towards the integration of students with disabilities in regular classrooms are urgently needed from teachers. Professionals must recognize students with disabilities at all levels of education. Moreover, for teachers to work efficiently, the government should provide them with special needs education training (Mkanula, 2003). Lecturers should change the pedagogy of their teaching to create educative spaces for students with disabilities who require accommodation and adaptation (Kelly, 2012).

Students with disabilities face challenges with regard to employment and communication in higher education about employment due to a lack of direction about the world of work and the shortcomings they face. Therefore, to address this situation, higher education institutions should create and develop effective means of supporting this change from academic life to work. Indeed, the emphasis on guidance and counselling interventions should include strategies related to how to explore careers, how to overcome the barriers related to employment, the provision of knowledge and skills about job-seeking to increase students with disabilities' rights and increase their potential (ibid.).

Additionally, **poor pedagogy among lecturers,** a lack of professionalism and the problem of favouritism have hindered students with disabilities from succeeding academically (Mkanula, 2003). A number of university and college

lecturers and tutors lack appropriate skills on how to use special equipment for students with disabilities (ibid.). The shortage of these materials has strongly affected teaching and learning, which has resulted in the poor academic performance of students with disabilities. Thus, adapting to e-learning in the education system and having well-designed assertive tools for students with disabilities is significant (Ndume et al., 2008). Further, it was revealed that students with visual and physical disabilities were not accessing education because the doors are too narrow for wheelchair users, the floors are slippery and there are no wheelchair accessible toilets (Tungaraza, 2010). This situation hinders the delivery of inclusive education and creates a situation whereby only a few people with disabilities can access formal education (ibid.). Students with disabilities do not have access to primary and secondary education due to overprotection, poverty, poor school environments and unemployment after completing their studies (Tungaraza, 2010).

The lack of reliable statistical data on people with disabilities around the world, including Tanzania, tends to be challenging, causing inadequate and ineffective implementation concerning people with disabilities. The Education Management Information system failed to include data for students pursuing higher education in Tanzania. Having high quality data on students with disabilities accessing higher education has the potential for sustaining human rights, equality and a better standard of living among people with disabilities. The failure to mainstream people with disabilities in government statistics, the use of divergent methodological surveys, violence, negative attitudes towards people with disabilities and poor infrastructure have led to a lack of statistical information. National achievements by people with disabilities have been scrutinized because policymakers, programme planners, service providers and other stakeholders can use this as evidence to support their activities and also avoid duplicating efforts. Among other factors, hiding some people with disabilities from the public has resulted in the URT lacking clear information and statistics about students and people with disabilities (URT, 2008a). Tanzania lacks information and statistics on the number of people with disabilities. However, no surveys have been conducted to gather the statistics, status and health of people with disabilities. That is why most people with disabilities are denied equal opportunities and participation with regard to different arenas like education (Tungaraza, 2005).

Given the challenges that women with disabilities are experiencing, as identified in the current chapter, a comprehensive system of gathering disability-related data is need. This is particularly important for informing higher education about the challenges currently being experienced by students with disabilities and the necessary measures to be taken against each of them. Data related to students with disabilities including women are urgently needed for developing and implementing higher education policies, promoting students with disabilities' needs and monitoring policies' effectiveness, aimed at making the higher education system more inclusive. The efficiency and effectiveness of the education system of any country depend on the relevance

and quality of the data available to inform the necessary enhancement of the education of students with disabilities (Mont, 2007). Quality data should involve a clear number of students with disabilities who are pursuing higher education, including the type and severity of their disabilities (*ibid.*). Moreover, the data should include the nature and extent of the barriers limiting the students to attending higher education and the factors that have enabled those who are in higher education to succeed to that point.

Identifying the needs of students with disabilities and understanding the barriers preventing their educational achievement is another aspect that needs to be emphasised (Mollel, 2013). It is also important to describe inconsistencies according to age, gender, disability and geographical location, identifying priorities for education reform and how best to distribute the budget to obtain the desired result (URT, 2008a). All of these factors depend on policy design and cannot be implemented effectively without data related to the number of teachers who receive training, the accessibility of higher education (including new accessible buildings), the number of students receiving special services, and the types of reforms taking place nationwide (Mont, 2007). Understanding the factors that hinder or facilitate the implementation if related to geographical regional attributes is one of the components required in the disability data. The process of monitoring data helps to determine the restricted access and obstacles to implementation that can support higher education to take corrective or supplemental actions to strengthen the environment. Having baseline data is essential for proper evaluation, for investigating the outcome and determining the effectiveness of higher education. Data are also needed to evaluate the long-term effects within higher education (*ibid.*). Until recently, the results of identifying many people with disabilities through quantitative data instruments were of poor quality and often inconsistent. Thus, disability is identified not as a medical condition or by a self-report of disability but rather by ascertaining the extent of functional limitations on basic activities (Mont, 2007).

In Tanzanian universities, especially the UDSM, students with disabilities were experiencing marginalization, disappointment, negative attitudes and problems with the admission process. The poor infrastructure might limit the enrolment of students with disabilities, and very few students with physical disabilities obtain qualifications because the physical infrastructure is inappropriate (Morley & Croft, 2011). In dormitories, three or four students are accommodated in the same room including students with disabilities, and are supposed to use the upper bunks of bunk beds without being allowed to swap beds with their able-bodied peers. Morley and Croft, in that regard, argue that there is a strong connection between the built environment and the barriers to learning. Moreover, able-bodied peers feel uncomfortable about interacting with students with disabilities, which leads to strong discrimination, as also experienced in Ghanaian higher education (Naami & Harvshi, 2012). Students with albinism are under-represented because they fear for their personal safety

and hide from the public or need protection and thus are excluded from educational opportunities in Tanzania (Morley & Croft, 2011).

2.11 Strategies used by students with disabilities to cope with education

Despite the challenges discussed above, the strategies reported to be used by students with disabilities to cope with education include being defensively blunt and rude to those who harass them, simply laughing and, when unable to access large classes, sitting outside in the corridor to listen to the lecturer. Another coping mechanism used by students with severe physical disability was to withdraw and live an isolated life, moving only between the classroom, library, dormitory and church. The students with disabilities also participated in group discussions, in spite of the confrontations with their peers. In order to cope with violence, the students with disabilities sought consolation from God, through crying and prayer and often discussing issues with their church leaders or ministers (Nyambula, Mbugua & Ongeta, 2013).

With regard to the teachers, they can provide more time for examinations, repeat details or content, sing or chant texts, and make various associations to enable all students to learn. Moreover, this can include using diagrams or sketches and oral or visual explanations that include graphs and highlights (Heiman & Precel, 2003). Teachers could use written techniques including summarizing, rewriting or index cards and time-pressured assignments to facilitate faster learning (*ibid.*). Strategies including the use of learning aids, personal planning and information, designated staff and resources are important for academic achievement. Others include the use of adaptive equipment, assistive technology, and pastoral support, as well as advocacy and consultation related to students with disabilities about the learning environment, programmes and services (Morley, 2010). Staff development in inclusive pedagogy and disability awareness and building an accessible environment are also crucial strategies.

Teachers' provision of extra time during examinations, using copies of notes and outlines, providing alternative types of examination, ignoring spelling mistakes, using computers were also stated by Morley (2010) as crucial strategies that would assist students with disabilities. Moreover, creating modified lectures, knowledge and skills based on lecture materials, summarizing study materials and support from peers and family are important strategies for enabling students with disabilities to overcome the barriers that they encounter (Heiman & Precel, 2003). To address the university environment the deaf students need to socialize with teachers, peers and community and developing bicultural skills so as to develop the ability to communicate with students with and without disability (Jambor & Elliott, 2005).

Understanding the diverse learning needs of students with disabilities can help to create more inclusive classrooms, where everyone can have a chance to learn and succeed (ibid.). Moreover, teachers should recognize learning styles and cultural assumptions that facilitate how to teach and what to expect from students with disabilities (Heiman & Precel, 2003). The preparation of multiple examples to illustrate or express the points and reflect on different cultures, experiences, sexual orientation, gender, etc., for inclusive learning, as well as the use of multiple methods including lectures, small group discussions, and collaborative learning to meet the diverse learning needs of students with disabilities, assist this group to move between abstract, theoretical knowledge, and gain specific experiences to expand learning to all (ibid.).

For students with disabilities, seeking social support, researching their disability, accessing and being acquainted with the services available at the university and choosing classes that are more compatible with their learning needs could lessen the impact of participation. Women were overcoming the challenges of studying and family responsibilities by merging their family and study activities, creating new social boundaries, prioritizing activities, sometimes postponing responsibilities, acting in context, and delegating roles and pre-planning activities (Phyllis & Ansah, 2012). Moreover, taking action, positively reinterpreting disability, accepting disability and denying challenges are the strategies used by students with physical disabilities (Hedrick et al., 2012; Pande & Tewari, 2011). In such a situation, the government should distribute enough funds, provide special teaching and learning equipment, and produce enough Braille textbooks to improve the teaching and learning environments for students with disabilities. School administrators should take the initiative in finding funds from different stakeholders to help solve the problem of inadequate teaching and learning materials for students with disabilities. Therefore, there is a powerful link between sufficient teaching and learning materials and the performance of students in inclusive classrooms (URT, 2013).

3 RESEARCH TASK AND QUESTIONS

Women with disabilities are under-represented in education even though the number of students with disabilities or special needs has significantly risen in many Organizations for Economic Co-operation and Development (OECD) countries during the last few decades (Ebersold, 2008). In many parts of the world, including Tanzania, the situation is still very challenging (UNESCO, 2011). The transitional rates of students with disabilities from primary to secondary are higher than those from secondary to higher education (UNESCO, 2011). This means that the number of students with disabilities is gradually declining at the higher levels (secondary and higher education). The education system caters to a very small percentage of people with disabilities, particularly girls and women (Human Right Survey report, 2012; Macha, 2002a; SIDA, 2014; Uromi and Mazagwa, 2014). Generally, women with disabilities are not fully integrated into higher education.

Access to higher education is a challenging situation for majority of people with disabilities in the world and in African countries. Although Tanzania has recognized the importance of education for women with disabilities, researchers have neglected to investigate the accessibility for women with disabilities in education. Only five studies were obtained from the literature review. Macha (2002a) researched gender, disability and access to education in Tanzania, and also (2002b) focused on visually women with disabilities and educational opportunities in Tanzania. Meanwhile, Bajeneza (2000) researched access to education for women with disabilities (blindness) in the Musoma region of Tanzania. Possi (1998) investigated the gender and education of people with disabilities in Tanzania, whereas Okkolin and Lehtomäki (2005) studied gender and disability-related challenges for education sector development in Tanzania. Tuomi, Lehtomäki & Matonya (2015) investigated the factors enabling a small number of women experienced in higher education in Tanzania. No broader quantitative or qualitative studies have been carried out so far to explore the accessibility of higher education for women with disabilities in Tanzania.

Previous studies have investigated the situation of students with disabilities in primary education, but seldom in secondary or higher education. Therefore, it is difficult to understand the individual needs, support and challenges encountered by women with disabilities in higher education. Moreover, very few studies have researched the students with disabilities in education and other social services in Tanzania. There is a lack of such studies in higher education in Tanzania, as only five studies have focused on higher education (Mboya, 2008; Tungaraza, 2010; Morley & Croft, 2011; Mwaipopo et al., 2011; Tungaraza & Mboya, 2005) or focused on disability and higher education in general. Moreover, other studies investigated inclusive education in Tanzania (Karakoski & Ström, 2005; Kisanji, 2006; Mboya et al., 2008; Okkolin et al., 2010). The study by Lehtomäki et al. (2014) further explored disability and education in general in Tanzania. Thus, knowledge about the factors that contributed to successful joining and completing higher education from the perspective of women with disabilities is largely limited, although women with disabilities is a group whose educational needs have been overlooked due to either gender or disability inequality (Macha, 2002b). Generally, although there is research on women, women with disabilities, who are most vulnerable in the field of education, have not been studied.

Understanding the factors that contribute to women with disabilities' participation in higher education on the bases of individual strength, social contribution (family), or community or economic support to meet their educational goals and develop their lives as well as to get better jobs, can all help promote the independence of this group. Additionally, knowledge could be gained on how these factors may be related to university development and system change in ensuring equity and equality. These factors tend to create awareness of people with disabilities', particularly women's, educational development and achievements. Understanding the challenges in higher education may facilitate a support system, because universities might work according to their needs and explore ways of meeting their diverse needs. Moreover, the study sought to provide knowledge on the personal strategies that women with disabilities have identified and used to overcome their educational challenges in order to succeed in higher education, as this area has been neglected by many researchers. Understanding their success resulting from the personal strategies created and how this is related to their educational achievements is important for other people with disabilities to adopt.

Despite the multiple challenges mentioned in the literature review that women with disabilities face at all levels of education, few of these women have managed to succeed in higher education. It is important to understand how these few women with disabilities have managed to succeed in higher education, in order to find appropriate ways and strategies for helping more women with disabilities to participate freely by successfully changing the system toward improving equity and equality in higher education.

The main purpose of the study is to understand the perspectives of women with disabilities in Tanzanian higher education. The study sought to

answer two broader questions: “How do women with disabilities at the UDSM participate in learning?” and “Which factors contribute to success in Tanzanian higher education from the perspectives of women with disabilities?” In short, what do women in Tanzania see as significant factors that contribute to their success in higher education? These broader questions had five sub-questions, including:

1. What reasons do women with disabilities have for seeking higher education, and who motivated them?
2. How do the women with disabilities describe the attitudes and cultural beliefs of their community about their participation in higher education?
3. What factors enabled the women with disabilities to participate in higher education?
4. What challenges do women with disabilities encounter in their educational careers?
5. What are the personal strategies identified and used by women with disabilities to overcome the challenges to succeeding in higher education?

4 RESEARCH METHODS

This section provides information about the data collection process in the field. Specifically, this chapter will discuss the qualitative approach and case study. Moreover, it covers the methods of data collection, which includes data collection procedures, piloting, semi-structured interviews and language used. Thematic data analysis and its significance and limitations are taken into consideration in this chapter, and the ethical issues considered in the study are clearly stated.

4.1 Research approach and case study

Qualitative research has become a more widely acknowledged research paradigm. Qualitative research often seeks a depth of information and attempts to gain understanding and insight related to the meaning that individuals give to their experiences. This differs from quantitative research, which frequently seeks to evaluate one objective truth by collecting comprehensive quantifiable data. Moreover, qualitative research is subjective and contextual, for this reason, qualitative researchers commonly use interviews and observations to obtain information. As in traditional forms of research, however, issues of quality are of concern to both qualitative researchers and practitioners (Shenton, 2004; Yin, 2011). This study employed a qualitative research approach. This approach enables the exploration of people's experiences, opinions and views in the natural setting using a variety of techniques such as interviews, observation and mainly verbal report findings rather than statistics (Chilisa & Preece, 2005; Maxwell, 2005). Nevertheless, the study provided first-hand information through discussions with women with disabilities. In that context, the qualitative approach enabled the researcher to obtain the respondents' experiences on the issue under study (Kothari, 2004; Seidman, 2013). The qualitative approach was chosen due to the following factors: first, in order to understand the phenomenon from the women's own perspectives, the

researcher needed to spend some time in the study area in order to create close relationships with the women being studied. Spending time on the campus facilitated the researcher's interaction with women as a way of gaining first-hand knowledge about the problem under investigation and a deeper understanding of why, how and what is going on in a particular context. Second, the theoretical underpinning of qualitative research assumes personal views or ways of perceiving and interpreting phenomena (Bogdad & Biklen, 2007; Richards & Morse, 2007; Yin, 2011). In relation to this study, it would be easy to gain a deeper understanding of the women with disabilities' ideas, opinions, feelings and actions to reflect on how and what enabled this group to succeed in higher education and what challenges they encountered in that regard. Third, this approach was employed because the data collection method (in-depth interviews) was well-suited to capturing individuals' experiences. Such data could be presented in descriptive and narrative forms, which allow explanations to be formulated. Through the qualitative approach, the richness and diversity of women with disabilities' experiences can be captured (Maxwell, 2005; Sommer & Sommer, 2002; Stake, 2010). Last, replicable findings, generalizability and achieving statistical power are not the emphases of qualitative research but, rather, comprehending the experiences of higher education. Therefore, through adopting the qualitative approach, the researcher hoped to gain more in-depth information that might be difficult to convey quantitatively (Best & Kahn, 2006; Seidman, 2013). Naturalistic settings, fewer boundaries and the open research process are among the key components of qualitative research (Conrad & Serlin, 2011; Merriam, 2009; Stake, 2010).

Moreover, the researcher was aware of the limitations of this research approach. Because of the small number of respondents and the use of a case study design, it generates criticism that this does not allow for generalization to a large population (Silverman, 2004). Apart from that, another shortcoming of the qualitative approach is that it is time-consuming; to overcome this, the researcher prepared the interview guide in relation to time. The researcher was very careful to ask additional questions and the interview discussion was effectively well controlled. It used intensive data collection methods to build the case (Best & Kahn, 2006; Merriam, 2009). The researcher carefully used the thematic data analysis to get the specific data in relation to the research questions.

Under the qualitative approach, there are various research designs available, depending on the nature of the research. Different scholars have shown various kinds of research design, such as case study, causal, cohort, cross-sectional, experimental, explanatory, historical and longitudinal design (Johnson & Christensen, 2008; Kombo & Tromp, 2006; Mason, 2007; Shuttleworth, 2008; Silverman, 2004). Moreover, the different types of case study include instrumental (understanding something more general than the particular case), intrinsic (understanding a specific case) and collective (multiple cases in one research study). Case study may use documents, interviews, observations, surveys and analysis as the main techniques for

quality data collection in the field. This facilitates the inclusion of several sources of data combined into a single source for triangulation (Conrad & Serlin, 2011).

In this study, case study (collective) was used because it involves the careful and complete observation of a social unit, such as a person, a family, an institution, a culture, groups and/or an entire community (Chilisa, 2005; Cresswell, 2009; Hatch, 2002; Johnson & Christensen, 2008; Stake, 2010). A case study is suitable for learning more about a situation or unfamiliar events that involve change. Furthermore, Freebody (2003) considers a case study to involve focusing on a particular instance of educational experience and an attempt to gain theoretical and professional insights by providing a full document of that instance that both the researcher and educators can reflect upon for educational practices. One case can be studied in detail, using whatever methods seem appropriate, while there may be a variety of specific purposes and research questions (Silverman, 2005; Merriam, 2009; Richard & Morse, 2007). The selected case study is the women with disabilities (people). In investigating a specific situation that has evolved over several few years, a case study is an important tool to use. This design makes it possible for researchers to study a particular problem in depth and undertakes a detailed contextual analysis of a limited event or condition and essential testing of the applicability of a certain theory or model to see if it actually works in the real world (Maxwell, 2005; Shuttleworth, 2008; Stake, 2010; Yin, 2003). Case study was used because it offers the advantage of focusing on how, what and why questions about a contemporary event. For example, what' and 'how' questions helped to identify and understand appropriate methods and strategies used by women with disabilities to access higher education and meet their educational goals and develop their lives. It also facilitated an understanding of the factors that contribute to women with disabilities pursuing higher education either through their individual strengths, social contributions or economic support from parents, peers, society and disability acceptance, and how these factors can be related to university developments and changes in society's attitudes. Moreover, it made it possible to examine the support needed by women with disabilities to succeed in higher education, as well as identify similarities and differences regarding their needs in relation to their disabilities. It also helped to examine the university climate as internal, and the social, culture, economic and demographic characteristics as external, factors. In investigating the trends and specific situations that have evolved over several years, a case study is an important tool to use.

Moreover, case study allows note-taking, a very powerful, focused tool for determining the social and economic pressure of the person under study (Shuttleworth, 2008). Subject and relevance are the key characteristics of a case study because of the concentration of critical analysis on a single case that isolates a small group for study. In data analysis, case study is based on opinion rather than statistics and designed to provoke reasoned debate (ibid.). Case study makes it possible to use examples in the narrative in order to make things

more concise and interesting, and to allow data to be collected in manageable form. Moreover, there is no right or wrong answer in a case study (Johnson & Christensen, 2008). A case study design supported the study to search for similarities and differences across multiple cases of database on age, kind of disability, status and degree programme (ibid.). Scientific disciplines such as social science, psychology, anthropology and ecology rendered a case study essential for exploring the specific situation, and were used to limit the very broad field of research topics and test the usefulness of the scientific theories and models (Bogdan & Biklen, 2007; Shuttleworth, 2008; Stake, 2010).

Despite the significance of a case study design, its limitations were also taken into consideration in the data collection, analysis and report writing processes. For example, Shuttleworth (2008) stated that, first; a case study provides more realistic information than purely statistical information. Second, it does not show the entire population, but only the narrow area under investigation. Third, it is impossible to generalize the information gathered to meet the desires of the whole population. Fourth, it is difficult to extrapolate the information to fit the entire population because it narrows down the research.

4.2 Research site and participants

This study was conducted at the UDSM Tanzania as indicated in figure 1. The Dar es Salaam region covers 1,397 square kilometres in three districts, namely Kinondoni, Temeke and Ilala, and has an estimated population of 4.5 million, with a growth rate of 4.3% (URT, 2014). Dar es Salaam is the largest city in Tanzania with a population increase of 5.6% per year from 2002 to 2012, and is the third fastest growing city in Africa (ninth fastest in the world), after Bamako and Lagos. The population is expected to reach 5.12 million by 2020. About 20% of Dare es Salaam's residents live below the poverty line (Poverty and Human Development Report, 2014). Dar es Salaam is also the educational centre of Tanzania. The city is home to many educational institutions, including fifteen universities. The university was established in 1964, soon after independence was declared in 1961. UDSM started in 1970 from the split with East African University which was comprised of Makerere University (Uganda) and Nairobi (Kenya). The UDSM is the oldest and second largest public university in Tanzania after the University of Dodoma. It is located in the western part of the city, and occupies 1,625 acres (6.68 km²) on the observation hill, and is 13 km (8 miles) from the city centre. The university has approximately 16,400 undergraduate and 2,700 postgraduate students (TCU, 2014).

The UDSM offers undergraduate, graduate programmes and certification programmes in different colleges and schools. The UDSM has six colleges, which are the Colleges of Social Science, Humanities, Natural and Applied Sciences, Engineering and Technology, Information and Communication Technologies and Agricultural and Fisheries Technology (Figure 1). Five schools are identified: The Schools of Education, Journalism and Mass

Communication, Business, Law and Science; there are also four institutes: Development Studies, Kiswahili Studies, Marine Science and Resource Assessment. The UDSM has three halls for students with disabilities (Figure 1). It also has special units with specialists and readers for supporting students with disabilities at the university. UDSM was purposively selected for this study because it was the first to enrol students with disabilities in Tanzania, in 1978 and 1979. It is also the oldest public university and was the first to implement inclusive education in Tanzania. It was therefore presumed that the university would have a larger number of women with disabilities enrolled as students than other universities. There are 16,209 students enrolled at the university which is the largest number of students at a public university (Mushi, 2012).

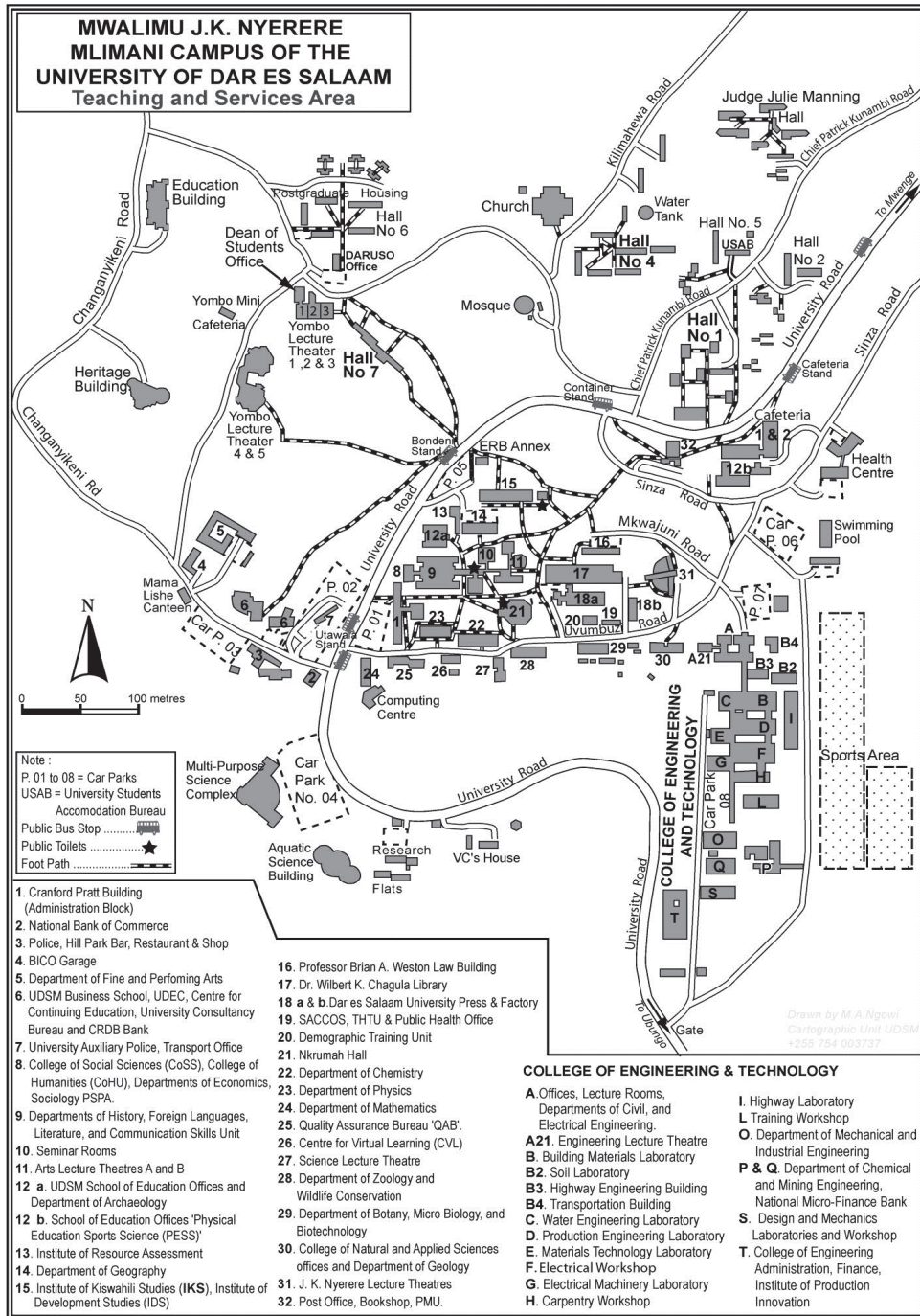


FIGURE 1 UDSM Map

The current study involved all women with disabilities who were studying at the UDSM, regardless of their type of disability, programme or background, because they were few in number, only twenty-two. Thus, all 22 women with disabilities who were pursuing a bachelor or master's programme at the UDSM were interviewed. Their names and contact details were obtained from the university of Dar es Salaam Special Unit. All participants voluntarily took part in the interviews. Four out of the twenty-two were pursuing a master's degree and eighteen a Bachelor's degree. It was considered important to assess their motivation in pursuing higher education, the challenges they have encountered, and their strategies for solving these. The participants were also expected to have important experience and skills related to accessing higher education despite their disabilities. Moreover, these women with disabilities pursuing a bachelor or master's programme were expected to be more mature and academically advanced. They could focus appropriately on assessing their opinions, attitudes and abilities regarding their participation in higher education and the importance of education for women with disabilities. They also had greater experience with the education system and processes in Tanzania than those in secondary education, and hoped that their experience could both affect their motivation and provide enabling factors to participate in higher education. In that regard, Kvale and Brinkmann (2009) stated that the quality of data is determined by the participants' knowledge, skills and subject matter. The age of the selected participants ranged from 22 to 36 years old, with most of them aged between 22 and 30 years.

The participants were scattered across four categories of disabilities: sixteen had visual disability, one with hearing disability and five physical disabilities and three students with albinism. More participants with visual impairment were found at the time of the field data collection to have been studying at the UDSM than those with other types of disabilities. The number of participants with hearing disability was the lowest to have been found at the UDSM. Out of sixteen participants with visual disability, as already stated above, three women (namely, Faraja, Happy and Lena) were both visually impaired (low vision) and albinos.

The study also wished to unveil the number of siblings with disabilities in the participants' families. Four participants reported having siblings with disabilities involving visual disability and speech disorders. For example, Anna, with visual disability, reported having two brothers with similar disability. The study also indicated that the majority of the women identified the key factors for their disability as inborn (born with) and acquired (obtained after birth with different cause). It was realized that the majority of women who were interviewed did not know the cause of their disabilities, especially those who had been born with them. Only Morini with polio had had a medical check-up which indicated that her disability was identified and diagnosed. The women with physical and hearing disability mentioned that they had acquired their disabilities. Fourteen participants who had acquired their disabilities mentioned polio, injections, measles, witchcraft, God's will and meningitis as the major

causes. These women stated that the causes of their disabilities were explained to them by their parents.

Eight participants reported having acquired disabilities between the ages of one and ten years old, five between the ages of eleven and twenty, one at the age of twenty-one and eight were born with disabilities.

Eighteen of the twenty-two female participants were pursuing a bachelor's programme, while four were pursuing a master's programme. Out of the eighteen pursuing a bachelor's programme, eleven were studying education, three businesses (commerce and finance), two sciences (one science and one science with education) and two social sciences (sociology and fine arts). All four participants' in postgraduate programmes were pursuing a master's in education. The participants were enrolled in different academic years; in 2008/2009, thirteen women were enrolled, five women in 2009/2010 and 2010/2011, but only four women were selected to join the UDSM. This suggests that the enrolment of the women in higher education was decreasing yearly. See appendix 5 for detailed information on each participant.

Fourteen indicated that both parents were still living, while eight had been left with a single parent because of divorce or death. Two participants, Rahima and Beatrice, were orphans living with relatives and guardians. In relation to education, the participants reported that, of their parents, fourteen (eight mothers and six fathers) were illiterate. These parents did not know how to write, read or count. Moreover, it was noted that eleven parents had only primary education (Standard 7). Of the participants, three (Morin, Selina and Jeni) reported that their parents had bachelor's degrees in various disciplines, while Vaileth's and Analisa's fathers had PhD and master's degrees, respectively. One participant, Magdalena, reported that her mother had a certificate in education and her father held a diploma in records management. Generally, it was noted that the male parents had a better education than female parents.

In terms of employment, nine parents were reported to have permanent formal employment. Seven mothers were housewives without formal employment. It was also noted that fourteen parents were engaged in subsistence farming in rural areas and small petty trades, and that the majority of the mothers were farmers working in rural areas with low income. Generally, it was noted that the majority of the participants' parents were illiterate. Indeed, most of the participants in the study came from families with poor educational backgrounds and low economic status, although they still managed to help their daughters to pursue a higher education. Appendix 6 describes the participants' parents' education and employment.

4.3 Method of Data collection

4.3.1 Piloting, semi-structured interviews and language use

The data was collected via semi-structured interviews. To ensure the quality of the interview guide for data collection, the pilot study was conducted in January 2011 and included three women with disabilities, two of whom had completed a bachelor's degree and one a master's degree from the UDSM. The researcher developed the research guide before undertaking the pilot study. The researcher formulated the interview guide, with open ended questions, understandable, and neither too broad nor too narrow, which creates direction and knowledge (Alvesson & Sandberg, 2013; Stake, 2010). According to Agee (2009) it is impossible for the researcher to design research questions in the field and it is recommended to prepare them beforehand (Agee, 2009). A pilot study should be undertaken relating to people who are representative of the group under research. In this case study, the instrument was the interview schedule (Gillham, 2000; Merriam, 2009; Silverman, 2005). All three women had graduated from the UDSM in 2010. Out of the three, two had secured employment as teachers shortly after obtaining their first degree (one teaching in a teachers' college and another in a secondary school) and the other was still waiting to get a post from the Ministry of Education and Vocational Training. The researcher visited the employed participants in their respective workplaces, asking permission from the college principal and headmaster before interviewing them. The researcher decided to select these participants who graduated immediately because the university environment, infrastructure and system (time) were not much changed. The researcher used face-to-face interviews not only to cross-check the consistency of the instrument, but also to determine how long the interview would take and how well the questions worked.

During the pilot study, information about sociocultural and economic factors, what support they needed, and their coping strategies were investigated. The information was transcribed and the feedback enabled the researcher to make necessary changes. The following were some of the changes made: combining similar questions and adding questions for women with disabilities who were married with children, all whom lived off campus. Also, it involved redefining difficult questions and rescheduling interview times. Gathering specific data related to the research purpose is essential for the provision of facts (Kombo & Tromp, 2006). This pilot testing facilitated cross-checking to see if everything worked, particularly the research instrument, and also assessing the effectiveness of the questions selected, and whether they were related to the research purpose (Kvale & Brickmann, 2009). It also helped to validate the questions, investigate any kind of bias, and monitor the context of the data collected. Additionally, it ensured that the research questions would be clear to all participants by clarity of the wording (ibid.). The questions, after

being cross-checked, were used in the actual research. Data were collected in two phases with semi structured interviews. The first phase was major data collection and the second phase was for missing data. Data were generated through semi-structured interviews. A semi-structured interview is a context in which an interviewer has a series of open-ended questions that guide a face-to-face social and verbal interchange between the interviewer and the interviewee (Denzin & Lincoln, 2008). Semi-structured interviews have the potential to explore the study participants' thoughts, beliefs, knowledge, reasoning, motivation and feelings (Johnson & Christensen, 2008; Kvale & Brinkmann, 2009). They allow the researcher to enter the other person's world, to understand his/her inner perspective and the meaning he/she creates from this (Conrad & Serlin, 2011; Mason, 2007; Miles, Huberman & Saldana, 2014; Silverman, 2004; 2006).

Open-ended questions allow flexibility and help researchers to obtain a complete, detailed understanding of the research topic under investigation (Kombo & Tromp, 2006; Stake, 2010). The researcher formulated the open-ended questions, which were scientifically and empirically well-confined, and focused (Alvesson & Sandberg, 2013). The research theme or topic guide was used to generate the information (see appendix 1) by following the arrangement of themes when asking questions of the women (Johnson & Christensen, 2008). This method is often used when similar information is desired from all informants. The proper way to obtain rich data is to interact with people, talk to them, listen and gain access to their stories and expressions (Creswell, 2003; Maxwell, 2005). The approach used made it easy to probe and design follow-up questions and gain a deeper understanding of the women with disabilities' experiences, feelings and perspectives.

Moreover, semi-structured interviews provided the in-depth views, perceptions, beliefs, attitudes and feelings related to the factors that enabled the participants to participate in higher education, as well as their challenges and the strategies they use to overcome them. Using semi-structured interviews made it possible to control the questioning and provision of historical meaning (Agee, 2009; Creswell, 2003). In addition, through face-to-face semi-structured interviews, it was easy to distinguish the sense from nonsense, irrelevant and misinterpreted information and offer corrections (White, 2009). Thus, the interviews prompted the participants to situate their individual narratives in the wider cultural stories related to their experiences as women, including their challenges, and embrace these stories in their discussions. Furthermore, the researcher felt comfortable and competent through rewinding the recordings of the conversations for clarification in discussion with them, labelling particular topics as irrelevant, pointing out misinterpretations and making improvements. Furthermore, the method helped the researcher to make the best use of the limited time available and interview different people more systematically. The use of semi-structured interviews made it possible to organize the time, set questions or themes, probe for additional data and engage the participants informally to explain events, opinions and insights. Semi-structured interviews

supported the researcher in investigating a wider variety of problems, research purposes and questions in a social way (Conrad & Serlin, 2011) than would have been the case with unstructured or structured interviews.

Furthermore, face-to-face social contact between the researcher and the participants (Kvale & Brickmann, 2009) helped the researcher to freely explain the purpose of the study and cultivate possible questions which expanded or widened the participants' participation and the generation of accurate data. The participants experienced greater freedom to express their ideas, perceptions, understanding and expectations in relation to the research objectives due to creating a relationship among themselves. This also allowed the use of various strategies of inquiry; it was difficult for the researcher to set aside her own experiences, insights, bias and projections in order to be objective (Conrad & Serlin, 2011).

The researcher was however aware of the limitations of using semi-structured interviews as a data collection method. First, it gives freedom to individuals to express their views fully and freely. Further, due to the use of open-ended questions which allow the participants to express themselves in detail and some probing questions based on the participants' responses, this causes some problems in data analysis because open-ended and additional questions generate a lot of information (Kombo & Tromp, 2006). Therefore, the interview form was simplified to make it clearer to the interviewee. The subject itself may discover new aspects of the theme that suddenly illuminate relationships of which they were previously unaware. The questioning process can thus bring about processes of reflection in which the meanings of the themes described by the subjects are no longer the same after the interview, and the interviewee's responses are sometimes ambiguous (Cresswell, 2013; Kvale & Brinkmann, 2009). The researcher aimed to clarify whether these ambiguities were due to communication failures during the interview process or something else.

Participants who had never previously had an opportunity to express themselves might not know what to do when they were interviewed. For instance, interviewing women who grew up in a violent household or had no external sources of support might be boring for the interviewees (Holstein & Gubrium, 2003). The researcher took care to use different information to ensure that everything was clearly expressed. Interviews provide indirect information filtered through the views of the interviewee in a designated place. The researcher's presence may also lead to bias in responses because people are not equally articulate or perceptive (Creswell, 2003; 2009). Moreover, the relationships among beliefs, opinions, knowledge and actual behaviour are not straightforward. Professionals say that interviews do not provide the whole picture (Gillham, 2000) hence adequate research particularly theorizing needs would also take that into account. The researcher could be biased due to being influenced by value judgments, personal perceptions, interests, beliefs and attitudes. This would cause some participants to become reserved and thereby withhold quality, accurate information. Moreover, the participants could decide

to make an impact on the researcher for some reason. Another problem is the possibility of the researcher overlooking the aims of the research due to the interview environment and starting to collect inappropriate information.

The second phase of data collection was conducted in 2012 at the University of Dar es Salaam. During the data analysis process, the researcher realized that some important information was missing and had impact on the research objectives for example first, why the women decided to study certain type of degree programme. This question interviewed all 22 women with disabilities. Second, the impact of having marriage and children while in studies, this question was specifically to those women who got married and having children while studying at the university. Third, the challenges they were facing to live out of the university (off-campus) because of having children. This question was specifically designed for the women living out of UDSM campus. Fourth, for those women with disabilities who completed bachelor degree and Diploma in Education and their situation on teaching environment, this question targeted the employed women with Master's Degree and Diploma in education. The data collection procedure and language used were the same as those used in the major data collection in stage one. Collecting the important missing data facilitated and provided an opportunity of having this quality data which resulted to valid and meaningful research.

Language also influences the research, where less familiarity with the local language may hinder the researcher from asking questions freely and frequently, which evokes longer narrations from participants. In this case, the participants may sometimes fail to answer the questions or share appropriate information during conversations. Sometimes, participants would fail to express their ideas because they felt shy or worried in front of the interviewer, while others dominated the discussions. However, the researcher minimized these limitations by setting a timeline for the interview process, directing the interview questions to participants who were shy and asking the questions accurately, using clear, simple language (Conrad & Serlin, 2011).

Kiswahili was the language used during data collection process. The interview questions were originally prepared in English but translated into Kiswahili, which is the Tanzanian official and national language. The interviews were conducted in Kiswahili because it was expected that both the researcher and interviewees would be able to speak the national language well with minimum difficulty. The translation was necessary to increase the validity of the questions, and there was also translation from Kiswahili to English. The initial translation from Kiswahili to English was done by the researcher and later sent to experienced translators at the Institute of Kiswahili Studies, UDSM, to assess its reliability and uniformity. It allowed freedom of expression and generated in-depth, quality information about the university lives of the participants. Gathering information in Kiswahili enhanced the reliability and validity due to the use of first-hand information. Gay and Airasian (2004) emphasize the use of language that is available to the participants because words differ in meaning for different people and the languages they use.

Moreover, they revealed that the implication of the words will be negative or positive in a different language and will interfere and control the discussion and relationship among the researcher and the participants. Silverman (2011) stated that language can shape meaning, create intersubjectivity and affect the ability of a willing person to create and maintain meaningful words. Therefore, using Kiswahili for data collection simplified communication and discussion, as well as raising more issues related to the study because the women were free to express themselves in their own language.

4.3.2 Data collection procedures

Initially, the researcher wrote a letter to seek permission from the UDSM to conduct a research at the university. The University of Dar es Salaam special unit was consulted, and specialists provided the names, degree programmes, years of enrolment and phone numbers of every woman with disabilities registered at the university. This situation facilitated the process of communicating with the participants. All 22 women with disabilities who were registered with the special unit were involved in the study. However, two members of this group who were not registered at the unit but were identified by other interviewees were also included in the sample. Information was provided about their places of residence, faculty, degree programmes and contact information. The researcher contacted the participants to confirm their information and when they would be available for the interview, as researchers should respect the participants' timetables (Conrad & Serlin, 2011; Johnson & Christensen, 2008). After agreeing on the time, the researcher made a preliminary visit to the participants' home, dormitory, or special study room for self-introduction. The visits were expected to break down any social barriers between the researcher and the participants. This was important because it simplified the actual process of the data collection. The preliminary visits also provided an opportunity to share the purpose of the study, particularly the importance of the research, the key issues or topics to be discussed during the interview process and the benefits that the participants could obtain from the research. Good interviewers need the ability to approach the selected participants in person and provide clear instructions (Kvale & Brickmann, 2009).

The participants were asked to check their timetables and arrange the date, location and time for the interview. Three days before the interview, the researcher communicated with the participants to confirm their availabilities, as well as the exact date, location and time for the interviews based on our previous agreements. The day before the interview, all of the materials were checked, particularly the updated version of the interview schedule. Also, the researcher evaluated the availability and workability of the equipment, including the digital voice recorder, spare batteries, sufficient blank tapes, electric cables, extension leads and notebooks. On the day of the interview, the researcher arrived an hour before the participant to make the necessary arrangements. Punctuality for the appointment was vital (Kvale & Brinkmann,

2009). All 22 women with disabilities enrolled at the university from 2008 through 2010 were interviewed. The time allotted for the interviews was 25 to 80 minutes, depending on the participant's information, the general areas under discussion and the year of study. Johnson and Christensen (2008) stated that one should make the interviewee understand what is being asked by providing sufficient time for the participants to answer and keeping the interview focused. It is important to avoid unnecessary issues and collect only data required for the research purpose (Kvale & Brinkmann, 2009). The interviews were carried out in different areas depending on the interviewee's choice, such as students' halls of residence, the researcher's office, the university's students with disabilities' study room, and the students with disabilities' examination room.

The interview questions were based on seven themes: first, the background and family characteristics of the women; second, the experiences of the participants before and after being enrolled at the university, and the women's perceptions of their own disabilities; third, the motivation and support that enabled them to participate in higher education; fourth, how the women accessed information concerning the higher education application and admission procedures; fifth, the educational level of their parents and its impact on the success of the women; sixth, how the women perceived the importance of education in their lives both as women and also as women with disabilities, and last, the women's future plans and how they envision their future occupation. For each theme, the questions for discussion were developed in order to obtain a comprehensive understanding of the perspectives of all informants. Open-ended questions were developed to guide the interviews. According to Kvale and Brinkmann (2009), good interview questions involve who, when, where and which questions and applicable in relation to the study. Every day, after each interview session and the completion of the fieldwork, the researcher and research assistant reflected on the interview process and wrote a summary of the key issues raised during the interview, the purpose of which was to obtain complete information.

A research assistant is an essential person in the entire processes of data collection, analysis and reporting. In this study, the selection of the research assistant was based on three important factors: educational background, research experience and title of research undertaking. On the educational background the researcher selected the research assistant who pursued a master's degree in psychology and conducted a study on disability and inclusive education. The researcher worked with the research assistant on the piloting stage and reporting. Before the pilot process began, the research assistant participated in a two days' orientation about the research purpose, how to tape the information, the number of women to be piloted and the research methodology, especially the research themes and subthemes. In the pilot phase, the research assistant helped to tape the information, take notes on key issues, and schedule the piloting of themes by focusing on the research purpose and the way the women replied. During data collection, the research assistant used a field notebook to write down essential information and

interesting stories obtained via the interviews and issues raised during the interview process. Moreover, when the researcher was asking the questions, the research assistant ensured that the interviews were fully completed and accurately recorded. This also helped to summarize the interview information, maintain the confidentiality of the research participants and keep notes on key information such as events and stories during the interview process. When the analysis of the data was completed, the research assistant was assessed as to whether the researcher had analysed what the women said and to add any missing information. Often, the researcher discussed issues with the research assistant when she faced challenges related to the interviews.

The seating was arranged to enable both the researcher and the participants to feel comfortable, each facing the other at a slight angle, to avoid the participants reading the next question or any notes prepared for the interviews, avoid confusion and ensure that the participants remained focused on the current questions. Additionally, non-verbal communication and a motivational voice were used to show that the researcher was interested in the information the interviewees were providing (Johnson & Christensen, 2008). The interviews were audio-taped so that the researcher could listen carefully to the responses later and be able to focus more on the women's body language as they spoke (Johnson & Christensen, 2008). All of the participants agreed to be taped. The researcher listened attentively to pick up any new or significant themes that arose, identify imperfect replies, follow the guidelines, and ask follow-up questions to gain clarity and depth of responses. Active listening helped the researcher to understand the participants' meaning, note the quality and trace any frustration, misunderstanding and boredom (Gray & Airasian, 2004). The use of a tape recorder also helped the researcher to stop and ask additional questions about each of the responses for more clarification and elaboration. It is argued that the use of different ways of probing the interviewees to answer the questions and clear and simple language are needed in the interview process (Kvale & Brinkmann, 2009; Punch, 2009).

All of the interviews were tape recorded and transcribed. In qualitative research, the researcher is interested not only in what people say, but also in how they say it. The researcher was more interested in audio-taping the interview than videotaping because this allows the researcher to make a more critical examination of what people say and to repeat the respondents' answers. Moreover, the tape recording helped the researcher to correct the natural limitations of human memory and the understanding that could be placed on what people say during interviews. It therefore helped to counter accusations that an analysis might be influenced by a researcher's values or bias as well as in keeping records and addressing the links between the noted and taped information (Seidman, 2013). Tape recording provides an opportunity for the participants to directly share their reality and provide creativity. According to Silverman (2005), tape recording does not tune out conversation, change the interpretation of meaning, slow down conversation, reduce the participants' concentration, leave the data open to new theoretical ideas or analytic

strategies, and simplifies the task of note-taking while asking questions and listening to the respondents' answers.

Moreover, using a tape recorder was considered important because, most of the time, the researcher focused on what the respondents were saying rather than writing notes. It allowed sufficient time to focus in detail and think about the next question and how to ask it in light of the respondents' previous responses (Cohen, Manion & Morrison, 2011; Denzin & Lincoln, 2003; Punch, 2009; Seidman, 2013). As a researcher, one feels free and relaxed to focus on the respondents as their facial expressions increase social interaction and conversation. It is also an indication that one is respecting the respondents. Furthermore, a voice recorder makes it possible to retrieve forgotten information, and makes the data available for use by other researchers (Cohen et al., 2011; Silverman, 2005). The researcher was not interested in using videotaping because it captures only what is observable rather than feelings and thoughts, focuses on what the camera user selected rather than what was happening in classroom, is very expensive and takes time to watch, review and edit (Bryman, 2012; Jewitt, 2012; Michell, 2008).

Despite the advantages of using videotape, it is difficult to interpret the information, which may be confidential, and the presence of an observer may be disruptive and affect the responses. The process is time-consuming and requires good equipment, usually a high quality tape recorder and microphone. The presence of recording equipment may be off-putting for the interviewees. However, at the end, the interviewees were given a chance to give their opinions of how the discussions had been carried out. If they were held in a noisy place, all of the information might be lost if the data are incomprehensible or difficult to transcribe (Bryman, 2012; Denzin & Lincoln, 2003), because of that fact, the researcher was careful to conduct the interviews in locations where extraneous noise was at a minimum.

During the interviews, the women with physical disability had no problems in answering the research questions. For the hearing impaired participant, when the researcher called her to arrange an appointment, she did not accept the call until the researcher decided to send a text message to her phone to introduce herself and request a meeting with her when she had time. She replied quickly to the message and agreed on a time to meet. For that interview, the researcher had to write down every guideline question; the woman read the questions and answered verbally, although this was time-consuming. The researcher did the same for any additional questions. This woman also had difficulties in pronouncing certain words so the researcher requested her to speak very slowly and carefully. When the researcher did not understand, the participant was asked to repeat her answer. It was difficult for the women with visual disability to read and sign the consent form, so the researcher gave them the freedom to use any means they considered useful. Five women asked their readers who had escorted them to the interview area to read the consent to them, and eleven trusted the researcher to read it on their behalf and the interviewees signed it. Trust between interviewees and

interviewer is essential (Johnson & Christensen, 2008; Loh, 2013). All of the women with visual disability used a fingerprint to sign the consent form (in Kiswahili, "*Sahihi ya dole gumba*"). During the entire process of data collection, the researcher was sensitive in exploring the similarities and differences with regard to what the interviewees were saying, as well as how and why, and focused on their gender, age, culture, status and experience in education (ibid.).

To close the interview, the researcher confirmed this trust by replaying the tape-recorded interview to the participants to be assured of the collected data's validity and reliability. This process helped the researcher to redefine any statements or issues that were unclear by adding comments and making changes. By listening to the taped interviews with the interviewed women, the researcher achieved greater control over the research procedure (Seidman, 2013). It was also checked whether all of the intended questions had been asked and the participants were then invited to share any final questions or comments (Shenton, 2004). Finally, the researcher thanked the participants for their assistance and valuable information. Conducting self-observation or reflection helped the researcher to make a conscious effort to assess the classroom, dormitories, buildings and university surroundings. Soon after the interviews, the researcher noted the most interesting and valuable points that had arisen and summarized the interviews. Moreover, after the interviews, the notes and recordings were checked for quality and completeness.

When the researcher had finished the data collection, a limited observation was undertaken in the form of assessing the classrooms, university surroundings, "dormitories", laundry rooms, toilets, library, and university of Dar es Salaam special unit to get an overview of the existing university infrastructure, services and general environment. The researcher took photographs of the university environment and visited the university special unit to check the special equipment and other teaching and learning materials for students with disabilities, making an observation checklist of all of the equipment available (see appendix 4).

Additionally, after completing the data collection process, the researcher travelled to six regions of Tanzania to widen up knowledge and observe the situation of gender and disability in education in Tanzania. The researcher visited secondary schools in Njombe (a special school for deaf students), Lugalo in Iringa and Korogwe Girls (an inclusive secondary school). The researcher also visited Mtwivila primary school (a special school for deaf students) and Katumba and Itigi primary school (an inclusive primary school and enrolled students with multiple disabilities) in Mbeya. The secondary and primary schools were visited in order to compare special and inclusive schools. The researcher had a chance to interview the girls with disabilities, observe the classroom teaching and facilities/equipment available for students with disabilities and the general surroundings, including dormitories. Moreover, the researcher conducted focus group discussions with the teachers and held discussions with the heads of the respective schools. The researcher also visited the University College of SEKOMU (Sebastian Kolowa Memorial University), in

Lushoto, Tanga region, because it was the second university in Tanzania to enrol students with disabilities after the UDSM. The researcher used the same questions to interview the four women with disabilities who were pursuing a bachelor's degree at the University of SEKOMU, and observed the surroundings and equipment. This information and observations were not included in this study.

The researcher also visited Patandi Teachers College in Arusha, a college that offers higher Diplomas and Certificates in Special Needs Education. The college is characterized by specialization in the category of visual, hearing and intellectual disabilities and information and communication technology (CT). The college provides basic knowledge and techniques on how to identify, assess and place children with special education needs. The college also teaches how to strengthen inclusive education to achieve an inclusive society which empowers the students with special needs education to receive education and utilize their capabilities. It is also the only college that prepares teachers of students with disabilities for primary and secondary schools in Tanzania. The researcher had an opportunity to discuss with the students, teachers and administration the curriculum, programme and attitudes about their profession. Generally, in all of the visited schools and colleges, the interview guide, classroom observation, checklist of special equipment and documentary review were used as the research instruments for the data collection. None of the information obtained from Patandi College and SEKOMU University was included in the study.

The visit was very useful to situate this study because the researcher realized that both primary and secondary school classrooms have large numbers of students, which becomes difficult for teachers to identify or easily categorise disabilities by type and gender, which is the same situation found in higher. In terms of accessibility and participation, all primary and secondary schools had critical shortages of facilities for students with disabilities. Some schools reported to have no facilities and other had broken or old facilities for students with disabilities. Most of the available facilities were meant for non-students with disabilities only. Patandi Teachers College also had critical shortages of material and equipment for teachers training. Even the available material and equipment like Braille books, typewriters and white canes were old and of low quality, and therefore unused. At SEKOMU, the researcher found separate toilets, dormitories and classrooms accessible to students with disabilities; there were also enough facilities and equipment for students with disabilities. In terms of gender in SEKOMU, the researcher found very few (only four) women with disabilities from the first year to the third year, which was a similar situation to that experienced at the UDSM.

4.4 Thematic data analysis

In this study the data were inductively organised and analysed through thematic analysis as in Braun and Clarke (2006). These stated that thematic analysis means organising the data by breaking them into manageable units, synthesizing them, searching for patterns, and discovering what is important and what is to be learned. This process of analysis allowed critical themes to emerge from the data and also reflected on the meaning of what the researcher heard, saw and experienced in the field with the women with disabilities who are pursuing higher education. Moreover, the researcher developed hunches about what the data collected meant, its implications and confirmed them in subsequent field works related with the course of data collection and reflection. Thereafter, the data collected through semi-structured interviews (open-ended questions) and observation checklists were subjected to thematic analysis.

In this study, thematic analysis was adopted because different studies have shown the importance of the analysis. For example, Bryman (2003) revealed that the thematic analysis method is essential because it allows detailed data identification, analysis, organization and description. Furthermore, (Braun and Clarke, 2006; Bryman, 2003; Fine, 2002; Roulston, 2001) revealed that this method provides a wide range of themes, ranging within a social constructionist epistemology, in which themes are identified as socially produced, but there is no discursive analysis, very much akin to the interpretive form of data analysis. Furthermore, the method highlighted the similarities and differences across the data set, made it easier to transcribe the data to an appropriate level (Matthews & Ross, 2010; Smith, 2006) and allowed a social and psychological interpretation of data (Creswell, 2003). Therefore, the thematic analysis is a flexible approach used across a range of epistemologies and research questions. Moreover, thematic analysis was selected because the method did not require any detailed theoretical or technological knowledge of approaches such as grounded theory and data analysis, which can also offer a more accessible form of analysis particularly for those at an early stage of their qualitative research careers (Smith, 2006).

Thematic analysis provides a clear sense of the extent and variety of each theme using a combination of story data as well as descriptive data (Braun & Clarke, 2006; Willig, 2003). Due to its flexibility, the method allows for a wide range of analytic options, which means that the potential range of things that could be said about the data collected is broad and gives the researcher the freedom to decide upon which aspects of the data to focus (Bryman, 2003). Thematic data analysis produces insights that answer specific research questions, as the research method of analysis should be driven by both the research questions and broader theoretical assumptions (Smith, 2006). This technique allows the identification, analysis and reporting of a pattern or theme within the data through phases; hence, it is a useful method for working within participatory research because it allows collaboration (Roulston, 2001). Because

of its flexibility, which allowed the researcher to decide which portion of the data to focus on, it was also easy to acknowledge the ways in which individuals recognized their experiences and related to their community. It was easy to summarise the large body of data into thick data as well as provide a direction on how to identify, analyse and report a sample or theme within the data. Braun and Clarke (2006) used six stages to analyse data, and this study conducted analysis as per the six stages as follows;

Stage 1: Familiarization with the data. The first step was to become familiarized with the data from the digital voice recorder during the interview discussions. This allowed the researcher to become familiar with the data by reading and re-reading the transcripts and obtain in-depth knowledge from the data and understanding their meaning, extent and themes. This stage involved reading the data in an active way, searching for meanings and themes. The researcher read through the entire data set once before beginning to code and identified possible patterns to be shaped. During this phase, the researcher started to take notes and mark ideas for coding. This began the formal coding process. In reality, the coding continued to be developed and defined throughout the entire analysis. To check the clarity and accuracy of the data, the researcher repeatedly read the data and checked the original audio recordings. The situation facilitated obtaining and looking for patterns in the meaning of interesting issues carried by the data. Every day after the interviews the researcher took time to read the data collected on that specific day and contrasted it with the previous interviews. This allowed the researcher to eliminate unusable information from the data.

Transcriptions of verbal data. During this stage the researcher transcribed the research data soon after the interviews. The process of transcription, while it may be seen time-consuming, frustrating, and at times boring, can be an excellent way to start familiarizing oneself with the data (Seidman, 2013). Further, some researchers even argue it should be seen as “a key phase of data analysis within interpretative qualitative methodology” (Bird, 2005, 227; in Yin, 2011), and recognized as an interpretative act, where meanings are created, rather than simply a mechanical one of writing down spoken sounds. Next, the researcher noted all nonverbal signals such as coughs, laughs, cries, sighs, pauses, outside noises, telephone rings and any interruptions that were recorded on tape. In the transcribing process, the researcher found three questions providing the same answer and decided to select the one that was worth coding and well-stated; the other two were discarded. Next, the researcher searched for ambiguous answers and found that all of the answers were well-stated. Thereafter, the researcher investigated conflicting data from the related questions, verified the answers and rejected any irrelevant questions that might negatively affect the study findings. Normally it took five to six hours to transcribe one interview.

The time required for this process varied from one interview to another, because the system of answering the questions differed from one participant to another, and the additional number of questions varied depending on how the

participant responded and how the researcher formulated the questions. The information also varied depending on the interviewee's academic level, type of degree programme and year of study. The bachelor's degree students provided less information than the master's degree students, and the first year students provided less information than those in their second and third years. At the master's level, the first year students provided less information than those who were finalizing their studies. The women who had obtained a diploma before starting university also added their experience from their diploma education. The women who had finished their diplomas and bachelor's degrees and had gotten jobs added more information from their work experiences. The information also differed in terms of the types of disabilities and experiences, home backgrounds and ages. Moreover, the women who got married, had children and were studying at the university also provided the experiences of schooling, marriage and care of the children. Thus, a huge amount of data was collected, consisting of 290 pages and 97,873 words. As the researcher has noted, the time spent in transcription was not wasted, as it informed the early stages of analysis, and allowed the researcher to develop a far more thorough understanding of the data through having transcribed it. Furthermore, the close attention needed to transcribe data which facilitated the close reading and interpretative skills that needed to analyze the data (Creswell, 2005). When the data was transcribed the researcher spent more time becoming familiar with the data, and checking the transcripts against the original audio recordings in order to assess the accuracy.

The researcher transcribed the interviews, which took approximately six months to finish, and obtained a great deal of information that was reduced to obtain the most significant, interesting and quality data in relation to the research objectives. The researcher approached the transcripts with an open attitude, seeking what emerged as essential and of interest from the texts. The researcher used brackets to identify interesting passages and easily point out what was important in the transcripts. Through reducing the materials, the researcher started to analyse, interpret and find the meaning within them. The researcher read through the huge amount of data generated in the field, followed by data editing and cleaning the irrelevant data. The researcher also went through the small units of data systematically, precisely, critically, analytically and carefully to find valid information. In this process, the data were reorganized and rearranged to make sense and be effectively and appropriately used. The reorganization and rearrangement focuses on the research objectives and questions.

Stage 2: Generating the initial code. This stage began when the researcher had read and familiarized herself with the data, and generated an initial list of ideas about what is in the data and what is interesting about them. This phase then involves the production of initial codes from the data. The researcher started to generate the initial list of ideas related to what was in the data and the interesting issues covered by the data. An important question on which the researcher focused was what counts as a pattern/theme, or what size does a

theme need to be? This is a question of prevalence both in terms of space within each data item, and prevalence across the entire data set (Braun & Clarke 2006). In order to highlight and collate the words from the text; the coding was done to identify specific features of the data captured and the key concepts. Next, the coding process was developed and redefined throughout the entire analysis (Matthews & Ross, 2010). The researcher worked with paper copies and later transferred the work to the computer, all of which was time-demanding. Making sense of the data made it possible to effectively tally and code the collected information. The coding process helped to generate the initial codes, which began when the researcher had read and familiarized herself with the data and generated an initial list of ideas about what was in the data and any interesting topics. The researcher formed the profile of individual participants and grouped them into categories that made sense by age, type of disability, year of study, degree programme, family status, work experience and marital status. The researcher identified individuals 'passages, grouped these in categories, and then started to study the categories for thematic connection with each one.

According to Matthews and Ross (2010), coding is the formal representation of analytical thinking that involves the generation of categories and themes. This step involved the production of initial code from the data such as content and semantics that appeared interesting. The researcher worked systematically through the entire data set, giving full and equal attention to each datum; this allowed identifying interesting aspects in the data items that might form the basis of repeated patterns (themes) across the data set. In this study the researcher used a manual coding system of the data by using highlighters to indicate potential patterns, or by using coloured pens to identify segments of data. The researcher initially identified the codes, and then matched them with data extracts that demonstrated that code, to ensure that all actual data extracts were coded and then collated together within each code. This involved copying extracts of data from individual transcripts and collating each code together in separate computer files or by using file cards.

Stage 3: Searching for the themes. The researcher began with this stage when all data were initially coded and collated; there was a long list of the different codes identified across the data set. This stage involved analysis at the broader level of themes rather than codes, sorting the different codes into potential themes and collating all the relevant coded data extracts within the identified data (Braun & Clarke, 2006). Basically, the researcher started to analyse the codes, and considered how dissimilar codes may combine to form a theme. Thereafter, the researcher started to search the relationships between codes, themes and different levels of themes by identifying the main themes and sub-themes. Initial codes formed main themes, whereas others formed sub-themes, and others were discarded. The researcher also analysed the codes and different codes combined together where necessary to form main themes and sub-themes. Creating good categories of main themes and sub-themes for analysis is the method to begin to read and think about the collected data in an

orderly manner (Freebody, 2003; Matthews and Ross, 2010). This facilitated a sense of the significance of individual themes. Once again, the researcher considered all the extracts in detail to assess whether the themes held as they were, or whether some need to be combined, refined and separated, or discarded. The coding to some extent depends on whether the interview themes were based more on data collected or theory-driven; in this study the coding was based on the data collected.

Stage 4: Reviewing the themes. In this stage the researcher developed a set of themes, which involved the refinement of those themes in relation to the research questions. Similar themes combine it and with broader one broken down into separate themes. This caused the researcher to re-read the entire data set to determine whether the themes functioned in relation to the data set and to code any additional data within themes that were missed in earlier coding stages (Miles, Huberman & Saldana, 2014). This was done by reading the huge collected data to assess the connection between the coherence patterns and the meaning carried by the data. The researcher tried to get fairly good idea of what the different themes were, how they fit together and what they told about data. The researcher grouped all of the selected categories under one main theme in a separate computer file. The researcher tallied the categories requiring the distribution of the responses of the total population, which helped to quantify the frequencies of the responses in the categories and, last, evaluated the utility and centrality of the data in order to determine and explore how the data were useful. Narrative stories, case studies and extracts that belonged to each theme were grouped together. Data within the themes were coherent and clear with identifiable distinctions between proposed themes (Creswell, 2009; Punch, 2009). The researcher read all the collated extracts for each theme, and formed a coherent pattern with a fairly good idea of what the different themes were, how they fit together, and the overall story they told about the data

Stage 5: Defining and naming the themes. Phase 5 began when the researcher had a suitable thematic map of the data for final improvement. This stage involved the process of identifying the real meaning of what each theme was about and determining the aspects the data captured by each theme. To obtain this, the researcher went back to the raw data collected in the field and in each theme, and organized the themes into a rational way that was internally consistent with the narratives. Thereafter, the researcher gathered data extracts for each theme, and organized them into a coherent and internally consistent with the research objectives (Punch, 2009; Seidman, 2013). This allowed for paraphrasing the content of the data extracts presented and easily identified what was interesting about the data and why (Miles et al., 2014). For each individual the researcher wrote a detailed analysis and identified the story that each theme informed and considered how it fit into the broader overall and research questions. The researcher considered the themes themselves, each theme in relation to the others and identified whether or not a theme included any sub-themes. Sub-themes are essentially themes-within-a-theme. Sub-themes support the structure of the large and complex theme and indicate the

hierarchy of meaning within the data. A detailed analysis for each theme was conducted and written in relation to the research objectives and questions. The researcher clearly defined the themes and tested them to see whether the scope and content of each theme could be described using few sentences. Each theme was given a title suggested by the names used in the data analysis. The names the researcher suggested were brief, effective, and directly presented the reader a sense of what the theme was about.

In this stage the researcher came up with five main themes. Theme 1: Reasons for the women with disabilities to attend higher education. Theme 2: Community attitudes about women in higher education. Theme 3: Enabling factors. Theme 4: Community and higher education challenges. Theme 5: Strategies created and used to overcome the challenges. Moreover, all relevant materials relating to a specific theme were combined together and the frequencies were used to count the interview responses. For example, in theme one, the researcher found 12 sub-themes; after refining other sub-themes combined together there were six sub-themes. The researcher checked the text, highlighting the key quotations and their interpretation and indicating the key themes in the margins. Thereafter, the researcher wrote a summary related to information from the main themes, sub-themes and the smaller themes within the sub-themes of the responses as a thematic tree and began to write a report.

Stage 6: Production of report. This final stage came when the researcher had a full set of themes and began to write a report. This stage is important and provided a concise, coherent, logical and interesting account of the stories the data stated (see chapter 4). It also provided sufficient evidence of the themes within the data to demonstrate the prevalence of the themes. Sufficient evidence of the themes was represented in relation to the data using prescriptions and arguments relating to the research purpose and questions (Braun & Clarke, 2006). The majority of the data was organized and presented in narrative form with broader descriptions in relation to the study context. Some of the information was presented as direct quotations in English and Kiswahili to facilitate understanding by national and international readers. The data were stored electronically through different emails as it was easy to interchange options and distribute them. The data presentation went hand in hand with the translation process because the data were in Kiswahili and translated into English.

Despite the advantages, thematic analysis in general suffers from disadvantages that were acknowledged during the data organisation and analysis. Most of its problems come from poorly conducted analysis or inappropriate research questions. Therefore, the researcher paid more attention to the whole process of analysing the data, focusing on the research questions to avoid confusion. The thematic analysis used within an existing theoretical framework and close investigative claims have limited interpretative influence from inadequate description (Smith, 2006).

The mismatch among the data, theory and analytic claims or research questions may lead to poor data analysis. Braun and Clarke (2006) emphasised

that a good thematic analysis ensures that the interpretation of the data is consistent with the data, research questions and theoretical framework. In order to be consistent, the researcher focused on the meaning of the data and its assumptions, implications, conditions and what participants said about the topic. Further, the researcher worked on the overall stories about the topic. Data collection questions (such as from the interview schedule) used as themes caused a problem because no analytic work had been carried out to identify themes across the entire data set and there was a failure to make sense of the patterns of responses. Therefore, the researcher used research themes as the key guidelines rather than a field instrument to prepare the research questions.

If the aspects of the themes fail to cohere around a central idea or concept (too much overlap between themes, low consistency and/or the themes lack internal coherence), this will lead to a weak or unconvincing analysis. Therefore, the researcher ensured that all aspects of the research themes and sub-themes were consistent with each other to avoid any mismatches. Therefore, the data were analysed including all of the analytic comments and any content that went beyond the specific content paraphrased to make sense of the data and clarify them to the reader.

4.5 Ethical issues considered in the study

Ethical questions are apparent today and increase the need for personal acknowledgment, accuracy and reliability of the research report. In this study ethical issues were considered important because they facilitate protection of the research participants, develop trust, promote the integrity and avoid misconduct and impropriety that may reflect on their institutions (Cresswell, 2009; Miles et al., 2014; Seidman, 2013). In each stage of this study, ethical issues were considered beginning with how to write the research problem (topic), the identification of purpose and questions and the data collection process (Cresswell, 2009; Kvale & Brinkmann, 2009). Ethical issues were also considered in the data analysis and report writing following the rules and regulations written by the UN in relation to disability, including the Convention on the Rights of Persons with Disabilities and the International Classification of Functioning, Disability and Health. In designing the research problems, the researcher identified a problem that had an important benefit to the individuals being studied and was also essential for other researchers needing information on gender, disability and higher education. The formulated research problem does not marginalize or disempower the study participants and should provide trust and respect among them (Punch, 2005).

In developing the research purpose and questions, the researcher expressed the research purpose, which was easily described and understood by the participants. Ethical considerations when collecting the data, data analysis and interpretation consist of acquiring research clearance, reception, debriefing, voluntary participation, protection from mental and physical harm, privacy and

confidentiality, anonymity, benefit, and cost (Johnson & Christensen, 2008; Kvale & Brinkmann, 2009; Mason, 2007; Miles et al., 2014; Silverman, 2011). The observation of research ethics was crucial from the beginning to the end of this study. At the planning stage, the researcher reflected on how the questions were likely to affect the participants' lives and the position of the researcher (Agee, 2009; Creswell, 2013). Good and reflecting research questions depend on developing, writing and re-writing the research questions (Creswell, 2013). It is important for the researcher to situate and clarify the purpose in connection with a field of study. In order to shape a research design and analysis, good field qualitative questions are important (ibid.). During the interviews in this study, the researcher focused on the women's experiences and what they thought about events and social relations based on their age, gender, disability and culture. The lives, experiences and perspectives of others helped the researcher to produce dynamic, multidirectional questions (ibid.).

Research clearance letter: As previously stated, prior to the fieldwork, a letter was written to ask permission and agreement from the university authorities (Vice Chancellor of Academics) to collect data from the UDSM (appendix 3). The letter stated the introduction, research topic, time for data collection and asked university administrators and the special unit to allow the researcher to collect the data in a campus. After obtaining the permission letter, the researcher went to University of Dar es Salaam special unit to obtain the women's names and contact information. Consequently, a research clearance letter was obtained to collect data from the UDSM.

Debriefing: It was also considered important to briefing the participants prior to their involvement in the study. This was fulfilled through providing them with enough information about the purpose of the study and the importance of the information that would be generated from the study (Creswell, 2009). The materials obtained from the participants would be kept in a safe place and would be found in the archives of the University of Jyväskylä, Finland, for reading. Moreover, the researcher highlighted the key information for participants which would be included in the dissertation, and all agreed the data will be discarded after ten years to avoid the data being used by other researcher who may misappropriate it. The participants were briefed about the time for interviews, the potential benefit of the study and discomforts and how they can work on them (Krishnaswami & Ranganatham, 2006; Miles et al., 2014).

Willingness to participate and withdraw: it was ensured that the entire process of the current study abided by ethical research principles, human rights and dignity, and national policies. The procedures for the data collection in the field were guided by the rules and regulations to which the researcher paid considerable attention (Seidman, 2013). Moreover, the participants' right to participate or withdraw at any time was respected in this study (Shuttleworth, 2008). Each participant was informed of all the features that could affect their willingness to participate, such as the purpose, procedures, risks, benefits, alternatives and limits of the confidentiality. The participants were informed

about the seven research themes and the nature of the questions, to give them time to think and decide whether or not to participate. The participants were also informed of the nature of the interview data collection method. Thus, they voluntarily participated and were free to withdraw from the study at any time; no one reported a desire to do so. A friendly relationship, being impartial to whatever the participants said, positive reactions and trusting each other were essential components for minimizing bias (Johnson & Christensen, 2008).

Informed consent form: The participants signed an informed consent form (see appendix 2) which explained the objective of the study, the confidentiality of the information they provided and that it was for the purpose of the research and not otherwise. This was done prior to participating in the study and they were also asked for permission to use their information for the research purpose (Kvale & Brickmann, 2009). The consent form was written using free language such as Kiswahili, which the participants were able to comprehend effectively (Seidman, 2013), and the researcher used both Kiswahili and English versions (see appendix 2). The information written in the consent form was effectively stipulated to potential participants, which increased their understanding. Additionally, they were asked permission for their interview to be audio taped and all participants agreed. Thereafter, all of the participants were allowed to read the agreement and sign it. The women with visual disability used their fingers to sign the form. The participants and researcher met before, during and after the interviews. The researcher gave the participants her phone number and email address in case they had questions or any concerns about the research. Participants and the researchers signed the form, and a copy was given to them, with the researcher keeping the original. All participants were over 18 years old and the researcher did not need to ask permission from their parents or guardians. A well-prepared informed consent form facilitates good data that may lead to an effective conclusion of the study. A weakly informed consent form will lead to ineffective data and mistrust between the researcher and participants as well as lead to hiding and protecting some information about the research (Miles et al., 2014). Openness, dialogue, an ongoing relationship and negotiation were sustained throughout the study to develop a sense of trust.

Privacy and anonymity of the information: These were also among the top ethical priorities in this research (Agee, 2009; Cresswell, 2009; Holstein & Gubrium, 2003; Johnson & Christensen, 2008; Kvale & Brinkmann, 2009; Miles et al., 2014). The confidentiality of the conversations was clearly stated in the agreement letter (appendix 2). The issue of confidentiality was extremely important because disabilities touch on the feelings, emotions and humanity of people (Miles et al, 2014). The women were worried about describing the actual situation in the university, fearing the reactions of administrators, specialists and teachers. The researcher assured the participants that the information provided would be kept in the utmost confidentiality and privacy and would be used only for the research purpose. The storage and distribution of the data were well-stated and specified in this study (Hatch, 2002; Punch, 2009). The

researcher carefully stored data to protect the anonymity of the respondents. The interviewer also contacted them one by one rather than as a group, and in a special setting that each woman chose. Some women with disabilities came with their readers and introduced them before the interviews began, at which point the readers went away to perform other activities. After the interviews, the readers were called to come and escort the women away. No money was paid to the women with disabilities for participating in the interviews.

Moreover, to protect their privacy and confidentiality, the participants were given pseudonyms (see appendix 6) that were used in the writing of the research report (Johnson & Christensen, 2008). The pseudonyms keep the participants free from any direct responsibility for the information they shared with researcher. Information which was considered to highly specific for a particular student and can expose the respondents' identity was screened. The pseudonyms/aliases provide enough security for their life because no one could have the real names of the participants

After the completion of data analysis, the findings and draft report was shared with the participants for verification if the written information was representing what they reported or if there are some added information. All participants approved the work. This process ensured the trustworthiness and quality of data I presented under this study.

Despite the researcher being a lecturer at the very same university from which the study was conducted, there was no effect on the quality of data because of the following reasons; first the women who participated in this study did not study at the department which the researcher was working (Adult Education), second, the researcher never taught the women who participated in the study. Third, the researcher and respondents did not know each other, and the researcher did not mention if she was working at the very same university but mentioned that she was a PhD student from Jyväskylä University, Finland and no one showed interest on the researcher's employment and profession. The use of good communication skills convinced the women to provide information without fear which was important for obtaining quality data and conducting the study.

5 RESEARCH FINDINGS

This section seeks to answer the broader questions related to how the women with disabilities participate in higher education and what enables them to succeed in their studies. In order to answer these two broader questions, the following sub-questions were developed and answered through this chapter: (1) what reasons do women with disabilities have for seeking higher education? (2) How do women with disabilities describe the attitudes and cultural beliefs of their community about their participation in higher education in Tanzania? (3) What enables women with disabilities to participate and succeed in higher education? (4) what challenges do women with disabilities encounter in their educational career? (5) what personal strategies do women with disabilities create and use to overcome the challenges in their educational career?

5.1 Reasons for accessibility and participation of women with disabilities in higher education

This section presents the findings on the reasons for women with disabilities to access and participate in higher education. Women with disabilities identified six reasons for them to seek and participate in higher education:

- Realizing the importance of education in women's lives
- Meeting women's goals and dreams
- Women's good performance in Form Six final examinations
- Economic change, educational and employment opportunities
- Changing society's attitudes towards women with disabilities
- The nature of the university and the degree programme

5.1.1 Realizing the Importance of Education in Women's Lives

Findings from this study showed that, the majority of women succeeded to higher education through hard work. The bad experience of the women with

disabilities on the life they had lived with their parents which was challenged by high level of poverty, illness, hunger and disappointments, made them to work very hard to get out of those life challenges. When they got the opportunity to go to school, they thought that was the only golden chance for them to get out of poverty, illiteracy, and illness. Thus, women with disabilities describe hard work, good collaboration with peers during studies and support from good hearted teachers have enabled them to succeed to higher education. Some of the participants described the disability itself as a motivation towards their hard work. Knowing that they had disabilities and that due to their disabilities they are stigmatized and thus, having difficulties in getting married, and developing business, the only option that was available for them in overcoming stigma and oppressions was to invest in education. For example, Magdalena had this to say:

“Because I am blind, otherwise I could have completed Form Six and do business as that was my ambition since childhood. But, when I became blind, I found studying was the only way to a better life. I guess that, without visual disability, I would not have got to university.” (Magdalena with visual disability)

“Kwa kweli ni kwa sababu sioni, sharti ningekuwa naona ningeshia form six na kufanya biashara kwani hii ndio ilikuwa matamano yangu tangu mwanzo. Lakini baada ya kuwa sioni nikaona hakuna njia ambayo inaweza kusababisha maisha kuwa mazuri zaidi ya kusoma. Bila tatizo la macho nahisi hata “nisingesoma hadi chuo kikuu.” (Magdalena, mlemaou asiyeona).

In connection with Magdalena’s views, the majority of women stated that their mothers were experiencing difficulties in their life and marriages, especially when their father died or retired. For example, Selina declared that, she wouldn’t like to become a housewife like her mother because of the difficulties she witnessed her mother going through after the retirement of her father. She explained that the situation had become worse because there was no income; they decided to sell the house to pay for their children’s school fees. They believed that education would enable them to gain a respect from the community, through their employment and their ability to run their own living. This was further connected with the increased opportunity for marriage, as the majority of men were interested on marrying a woman who is independent despite her disability. The women reported preparing themselves for their futures and married life through their participation in higher education. “After realizing that I had a disability, I decided to study hard, because without education I would not get help from anybody. I would think that I was going to get married, but that is not enough; I need to prepare for my own life, because getting married is not easy. In marriage, you may encounter some violence or get divorced because of disability.” (Selina)

Women with disabilities further described that because of their disability, they were afraid to get married and were worried that their husbands would mistreat them and divorce them at any time. Thus, to them marriage without education was considered as a pathway to gender violence which is associated by the disability. Education enabled them to gain confidence and enjoy their

marriage. For example, Faraja, a woman with albinism having difficulties in vision explained that her motivation to attain higher education was based on the experience of the lifestyle of one uneducated woman with a physical disability who got married, but her husband used to abuse her due to her disability and lack of education. This situation challenged Faraja to study hard to pursue a higher education after realizing that being educated before marriage was essential. Beatrice also indicated that women with disabilities should first get educated before thinking about marriage, because education expands the way of thinking and level of handling social, cultural, economic and technological issues in life.

However, some respondents reported that they were motivated by the possibility of changing their status from 'nobody' to 'somebody' through education. These women viewed education in relation to self-actualization and self-esteem, making women feel valued in society for their essential contribution to it. For example, Amina stated that; "Higher education afforded me a respect from everybody, to fit in the society everywhere and here at the university (as a representative for students with disabilities) in the meeting they give me chance to contribute, comment, suggest and establish the questions related to the students with disabilities".

The women with disabilities believed that they needed to perform wonders in their studies far beyond women without disabilities so as to overcome the oppressions, discriminations and marginalization within the family and the community at large. Some of them viewed that, through education, they had been able to change their primitive or non-progressive views of the cause of their disability into scientific facts. They narrated having changed from an indigenous to a modern ideology or from medical thinking to social thinking. For instance, Beatrice reported that, "before gaining the opportunity for education I was thinking my disability was caused by witchcraft after being educated the mind was opened up and I realized that my disability is because of scientific reasons." These women were able to define their disabilities and the corresponding scientific causes that had helped or might help them in handling their disability and its challenges because it gives confidence, freedom and good ways of finding solutions to reducing barriers such as segregation, which underrate women with disabilities in the surrounded community.

Furthermore, the women revealed that education contributed to the development of self-awareness and knowing their identity within the society, transforming from ignorance and illiteracy into literate, well-developed individuals. Some of them further acknowledged being exposed to different views and issues, such as social cultural ideas, which is very important for their development and success. Analisa said, "From higher education i have gained sufficient knowledge (social, economic and cultural) to share with my fellow women with disabilities and also I feel myself as looking different from the women I left in primary and secondary schools." These women also reported meeting with people who face greater challenges than they do and thus

learning how to interact and live within the diverse society. They acknowledged that without education they would still be clinging to negative feelings about their disabilities. According to some of the interviewees, their family and community members were now respecting them, involving them in decision-making, listening, allowing them to air their views and consulting them for advice. Families and community members were able to ask for the women with disabilities for guidance and counselling regarding siblings and nephews about the importance of education. These women described education as an indispensable tool for finding solutions to the rising sociocultural problems within their lives, as they were able to find better approaches to solving problems instead of blaming their disabilities.

The interviewees also revealed that education caused them to become stable and be able to defend themselves rather than being forced by the community. As such, they were also able to stand against the oppression, marginalization and segregation that took place in families and society. They saw that education gave them freedom of speech, acceptance and influence in society through being accepted and allowed to speak out. Others had the feeling that, through pursuing higher education, they gained confidence, power and the ability to live anywhere with anybody without fear, because education facilitated their understanding of who they are and what potentials do they have for their society. They were able to solve their family stress and change attitudes toward their positions in the family and society. For example, they could confidently talk in public and take part in decision-making at both the family and society levels. These women were able to contest and win leadership posts. Higher education also raised their ability to think critically and speak out in front of others without fear. Education helped to shape, change and provide chances of being visible to other students, which facilitated the women to fulfil their objectives. Like what Beatrice said: "when you became educated, you may get everything in life".

The reasons for participating in higher education were influenced also by visits to their former schools by alumnae with disabilities. They reported that these alumnae were highly valued and respected by teachers because they studied at university. These visits by alumnae promoted new attitudes, perceptions and motivations about higher education. They further revealed that, through the alumnae's visits, teachers used this opportunity to encourage and motivate the participants to study hard in order to become like the alumnae. Furthermore, they were motivated by their peers or colleagues who provided information about how to apply to the university and the importance of higher education, as well as encouraging each other to work hard for their betterment. The women who participated in this study believed that, without higher education, they would still be facing different social, cultural, technology and attitudinal challenges within their families and community:

"Schooling has helped me to fulfil my needs; I think that, if I hadn't had an opportunity to attain this education, I would have perished in the village and would have been brought to engage in sex and

probably get pregnant outside marriage. I would have not managed to get money for my clothes and other expenditure for my life.” (Suzana with visual disability)

“Elimu imenisaidia kukidhi mahitaji yangu nafikiri nisingesoma nisingekuwa hivi nilivyo. Ningekaa kijijini ningedanganyika na watu labda wangenipa tu mimba na kuniacha. Suala zima la usafi, nisingepata hela ya kuweza kununua nguo zangu na mahitaji yangu mengine ya lazima kwa ajili ya maisha yangu.” (Suzana, mlemavu asiyeona)

Four participants who were pursuing a master’s degree reported having been motivated to apply for higher education in order to improve and widen their knowledge and skills, and to improve teaching strategies in education and other professions. The women said that they applied for a second degree because they wanted to join the panel that prepares the education curriculum and provide advice with regard to students with special needs, including students with disabilities. The women also aimed to become administrators and specialists in different sectors. These women also reported to have been known worldwide and were able to cooperate with different people to fulfil their needs. The women also stated that higher education facilitated their understanding of their disabilities, the society’s perceptions about them, and what they were capable.

5.1.2 Meeting the women’s goals and dreams

The findings revealed that the majority of the participants studied hard to meet their goals and dreams. Generally, the women viewed their personal goals in terms of dreams, ambitions, visions and missions. Half of the participants reported they were dreaming of becoming professors, teachers, businesswomen, doctors and/or counsellors. Thus, their intention to fulfil their dreams made them study hard. According to the participants, these educational goals were important for their success because this increased their motivation to study hard and never give up. It reinforced the women’s desires to find different ways of pursuing higher education. The women revealed that having a firm goal was essential because it helped them to improvise some guidelines for education success. They also revealed that their personal goals inspired them to seek advice from friends who were studying at the university in order to learn about the available opportunities for accessing and participating in higher education.

The interviewees’ goals motivated them to find different means for reaching their goals. For example, Magdalena and Morin took the final Form Six examinations twice without success and later decided to find other means of getting into higher education, which is the mature age entry examinations, while one from the field of science entered via a pre-induction course. The Mature Age Entry and Pre-Induction Course are potential opportunities that many students with disabilities could use to participate in higher education, apart from the final Form Six Advanced Secondary Education Examinations. Three (3) women, namely Amina, Elikana and Upendano, reported that they dreamed of becoming university professors, thus, they are always fighting

toward that position. However, the women reported that low performance, poor motivation to pursue higher education and a lack of advice delayed or limited their motives. It was stated that having a career goal helped them to focus on what they wanted to study and to seek advice related to the future the course after graduation. Their career goals also helped the women to study courses that interested them because they knew the objectives of the course. This also increased their motivation and strength. The initial career goal information was obtained from parents, family, friends and neighbours. Cooperating and living with educated people also helped the women to determine and meet their goals.

Conversely, it was found that the teaching profession motivated women to pursue a higher education. Their desire to enter the teaching profession was increased by the teachers with disabilities who taught at their schools, and other students with disabilities who studied different levels of education that motivated them to aspire to higher education. According to them, they were encouraged by these teachers and students' achievement and believed that they could also manage to study and become teachers. This attitude toward the teaching profession motivated them to pursue higher education and study education courses. This also applied to the master's degree and undergraduate students who had a Diploma in Education. They indicated that, in order to meet the goal, seeking educational advice was important, especially for the programmes and professional careers they wished to pursue.

Women's Good Performance in the Final Form Six Examinations as the case of Upendano, Alinanuswe, Vaileth and Yuster revealed that they had been motivated to participate in higher education in order to get an opportunity to continue with a master's degree within and outside Tanzanian universities. However, at the university, some women were experiencing low performance which were reported to hinder their aspirations because their performance range tended to be between 2.8 and 3.2 in GPA, and very few had a GPA performance of 3.5, which is the minimum required for pursuing a master's degree. GPA means Grand Point Average, where First Class is 4.4 to 5.0, Upper Second is 3.5 to 4.3, Lower Second is 2.7 to 3.4 and Pass is 2.0 to 2.6. Analisa, Selina and Happy reported that their inner motivation and parents' work backgrounds pushed them to study for a Bachelor's in Commerce and Finance because they wanted to work as bankers. Banks offer high salaries, which is why they decided to apply for higher education.

Additionally, four participants needed to work at the university campus to encourage and motivate women with disabilities to work hard, and provide some guidance on how to perform on campus and thereby promote their academic achievement. One woman described working at the university as follows:

"I like very much to teach at universities. I would like to be among the University Lecturers or work in the special unit so that I can educate other women and encourage my fellow students with disabilities to work hard, but my Grade Point Average (GPA) of 3.5 will not allow it." (Yuster with physical disability)

"Napenda sana kufundisha chuo kikuu. Napenda na mimi kuwa mmojawapo wa walimu wa chuo kikuu au special unit ili niwe nawaelimisha wanawake wengine na kuwahamasisha wenzangu lakini performance yangu ya GPA 3.5 haijaka vizuri." (Yuster, mlemavu wa viungo)

Their dreams and goals were on supporting other women with disability. For example, almost half of the participants reported that they got the motivation to join higher education because they needed to support their counterparts in different social aspects, such as to provide support in terms of education provision, encouragement, awareness, guidance and counselling, and motivation which resulted from cultural beliefs and life challenges. These women also were motivated to create awareness of the importance of education to uneducated women with disabilities living in rural areas. The women needed to encourage and provide information and instructions for students with disabilities in secondary education about the importance of higher education and how they could access it. For instance, Happy said, "I am studying to support other women with disabilities who did not have access to education, to utilize the little available opportunities for education to ensure that they join in schools or university." Some of the women reported being motivated to study in order to support individuals who were facing challenges due to their disabilities and lack of education. These women revealed that when they acquired disabilities, they were affected psychologically and it took time to accept the situation, so they decided to work hard in order to assist others with similar problems. The women from the School of Education of the UDSM reported that they were going to teach students with disabilities, whom they would advise to ignore any form of discouragement which is often common in the societies they live.

Other women also intended that they could advise the students with disabilities on how to overcome the challenges to their educational environment using the women's experiences, where some indicated that they could show students with disabilities that education was important and would enhance their life more than anything else. These women also reported explaining to students that disability was normal, so they did not need to panic or feel bad. Moreover, the women also wanted to create awareness related to their basic human rights because of the limited knowledge that the majority of women with disabilities have, including providing advice to students with disabilities who were about to drop out of university because of diseases like HIV/AIDS or university or community life-related challenges. The women also stated that they cooperated with other students with disabilities, advising university newcomers, participants who could attend the lectures and women who wanted to give up their studies. Moreover, the women advised their counterparts who were failing to follow the university regulations properly, behaving aggressively and wanted to dropout from university in order to keep them within the university. However, the women with hearing and physical disabilities did not mention anything about cooperating with their peers or helping their counterparts.

The women also recounted providing guidelines and life tips to women with disabilities who were experiencing marital problems involving discrimination, oppression and divorce, because of their disabilities. The women, who were harsh and aggressive due to their home backgrounds and care, were highly regarded. These women acknowledged teaching their counterparts how to live, behave and socialize with their peers, teachers, readers and community at different levels of education because they have wider experience. On the other hand, the women emphasised that they were providing education to the family and society about their rights because they realized that the majority of Tanzanian families were still hiding and/or overprotecting women with disabilities. Anna had this to say:

"I am now a person who can educate and motivate others in a number of things. When someone has disabilities, she might not know her basic rights but, from where I have reached educationally, I know what my basic rights are in society." (Anna with albinism and visual disability)

"Kupitia mimi nitaweza kumwelimisha, kumuhamasisha mambo mbalimbali. Mfano yeye kama mlemavu anaweza asijue haki zake za msingi lakini hapa nilipofika najua nina haki gani za msingi katika jamii." (Anna, ulemavu wa ngozi na kutoona)

5.1.3 Women's good performance in the final Form Six examinations

The women also reported being motivated to join higher education as a result of their good performance in the final Form Six examinations. In order for the women to access higher education, they reported various criteria used by the university to enrol them. Thirteen women were admitted through direct entrance based on their final Form Six examination results. Four women were admitted to the university to pursue a Master's degree and three enrolled through equivalent qualifications (diploma). Moreover, two students were admitted through mature age entry examinations and pre-induction programmes (science).

Women with disabilities used the limited resources that were scarcity available at school more effectively to ensure that they met their intended goals. The women acknowledged that the results were unbelievable to them because the majority of students with disabilities were getting poor score points in Form six examinations and decide to attend a diploma before joining higher education. In Tanzania, when one completes Form Four (lower secondary education) with good credit one can pursue advanced secondary education (two years). After completion of advanced secondary education, three choices are available depending on the student's final examination results. If one's performance is excellent, one can participate in higher education (Divisions I and II). Those with average performance are able to obtain diplomas (it is that student's choice which diploma to study for, i.e. education, fishing, agricultural) or vocational education. The women acknowledged that few students went on to pursue higher education after completing a diploma. One had this to say:

"I thought it was valuable for me to go straight to university, because the majority of the women with disabilities do a diploma programme first before university, and sometimes may not manage to go to university. I thought it was important for me to utilize the opportunity as a challenge to other women with disabilities to do the same." (Upendano with visual disability)

"Nikaona hii nafasi niliyoipata bora niitumie kwa sababu walemavu walio wengi naona wanapitia diploma kwanza ndipo waje huku au wakati mwingine wanaweza wasifike huku. wa hiyo mimi nikasemaje, nije moja kwa moja ili niwahamasishie walemavu wengine." (Upendano, mlemavu asiyeona)

A few participants (namely Suzana, Yuster and Vaileth) had completed Form Six but their results did not allow them to apply directly for higher education. Lack of facilities, inaccessible education, physical environment and infrastructure were stated as causes for the women's low performance on their secondary education examination. Vaileth repeated Form Six examinations three times without success, because every year she used to get sick during examination period; the fourth time, she managed to obtain the minimum score points which afforded her the participation in a Diploma in Aquatic Life. Suzana and Yuster opted for a Diploma in Education when they finally achieved good credit; they then used the diploma credit to apply for higher education. The route to a diploma was stated by the women as delaying them meeting their intended goals and objectives. These women indicated that their ambition had been to access higher education and they had to get to diploma first as a way through to higher education.

The study observed two participants (namely Magdalena and Morin) who succeeded to pursue higher education through the Mature Age Entry Examination and a Pre-Induction Course in Science, respectively. The pre-induction programme was designed to increase the number of women in higher education. This programme provides an opportunity for students who finished Form Six with low score points (less than 4.5 credits) and was unable to access university education via direct entry. In the mature age entry and induction programmes, the student has to attend a six-week programme and pass the pre-entry examination at the end. Mature age entry is a programme that provides an opportunity for candidates who lack the required credit for direct entry to university. The applicants must be at least 25 years old, and should have completed secondary education examinations (Form Four) with three credits. A few of the participants reported having felt discouraged by the nature of the examinations, and having no idea about how to join higher education, but their good final examinations results had motivated them to do so. Maria stated, "I had given up but after getting Division II in the final national Form Six examination results I developed an interest and reflected on why I shouldn't go to university."

5.1.4 Economic change, employment and educational opportunities

More than half of the women with disabilities reported that their motivation to participate in higher education was to secure a well-paying employment and

enhance their educational opportunities. The majority of the interviewees indicated that employment was a motivating factor in their desire to pursue a higher education. Having jobs allowed the women to pay their university fees without having to ask their families for financial support. The analysis of the occupations of the respondents indicated that the majority of the women with disabilities were not yet employed and had just finished their secondary education.

Few respondents were convinced that having a higher education would enable them to obtain good salary than would a certificate or diploma. Investing in higher education and skills was considered a key driver of economic growth by the women. The investment in human capital development identified by the women is a key determinant of economic growth. Higher education is expected to promote economic well-being, with a particular focus on the quality of education. Higher salaries can help the women to manage and control their life and become independent people even if they are women with disabilities. High salaries allow the women to meet their diverse needs such as physical, attitudinal and psychological. It also enables women to access all the necessary services required for their livelihood. For example, Amina said, "I developed an interest in pursuing further studies after realizing the differences in salary between a university graduate, diploma and Grade III A graduates and noted that university graduates are better paid than the rest. Some of the women with disabilities recounted that getting a job and a better salary base were essential to them because they could change their lifestyles from being dependent on others to being independent, as well as raising their value and status in society. They would be able to get a good job, meet their daily basic needs and become self-reliant rather than depending on their parents, community and family:

"The education I am getting will help me to get a job, because without education you won't get a good job, one will end up doing some masculine work, which would be difficult for me, given my physical disability. This is why I am putting my efforts into my studies so that I can get a good job and manage my life as a woman with disabilities without depending on anybody." (Analisa with physical disability)

"Huko mbeleni itanisaidia nipate kazi kwa sababu bila elimu huwezi kupata kazi nzuri, utaishia kufanya kazi za mikono. kwa mfano siwezi kufanya hizo kazi za mikono ndio maana nimekazana kusoma na ukiwa na kazi nzuri utapata hela nzuri, utaweza kumudu maisha na kujitegemea kama mlemavu lakini mwanamke." (Analisa, mlemavu wa viungo)

5.1.5 Society's attitudes change and university degree programmes

Women with disabilities reported to have been motivated to apply for higher education to challenge and change the notion that majority of the people that women with disabilities cannot go directly to the university after completion of Form Six (advanced secondary education). These respondents reported to participate in higher education in order to change the perceptions, beliefs and attitudes of society, that women with disabilities are more backward than men in accessing education, especially higher education. Moreover, these women

participated in higher education to show their personal abilities to other women and society as well as to change society's attitudes about the provision of education for women with disabilities. The society has little knowledge or understanding about education for the girls and women with disabilities.

The majority of the women with disabilities in Tanzania are deprived access to education on the belief that they cannot make it in education. Hiding them inside affects them psychologically; they have no interaction with anybody, and live as if in prison. The society and family also feel it a burden to educate women with disabilities because of early marriage, pregnancy and children without fathers. Moreover, the Tanzanian society looks at women both with and without disabilities as weak or inferior and cannot perform in the same way as men with or without disabilities. By being women with disabilities presents double challenges such as being a woman, and at the same time having a disability. By undermining the potentials of these women, the community is posing triple challenges to these women: To overcome those challenges, women's education is important. The attitude change in the community as a result of the education of the women with disabilities can be evidenced by Beatrice who reported that: "Because I am educated the society is now giving me attention, respecting me and seeking advice from me. By being educated I have become difficult to men, as they cannot easily tell lies to me, because I have a self-understanding of what it means to be in a relationship. She continued saying, before getting educated, men were approaching me and calling with embarrassing sounds. Nowadays no one is calling me and I did not fear of men."

Morin decided to study higher education because the society continues to undermine women with disabilities with the notion that they are incapable, have no development, unsuccessful, and do not have plans and money for survival which made the society to fail to accept and involve them in decision making which cause the women to live in difficult life and environment and dependent life without supporting their needs. Education provided life direction, to work well, make good decisions and to facilitate meeting their goals.

The interviewees revealed that they at least showed their abilities to society, even if they were women with disabilities and facing different challenges. They reported having encountered different challenges in their education processes, but they mostly ignored or countered these challenges and continued with their studies. Through higher education the women learned how to approach social challenges in relation to social interaction. Some of the women stated that education made them a mirror for other women, both with and without disabilities.

"By being a woman with disabilities and obtaining an education, I have become a mirror to other women with and without disabilities. Because I have shown them that women with disabilities are capable, despite the challenges they encounter, which have to be ignored in order to move forward."
(Alinanuswe with visual disability)

"Kupata elimu kama mwanamke mlemavu nimekuwa kioo cha wanawake walemavu na wasio walemavu. Kwani nimeonesha kuwa ninaweza hata kama nina ulemavu, makwazo yapo na ni mengi lakini ni lazima kupuuzia ili uweze kusonga mbele." (Alinanuiswe, mlemavu asiyeona)

Other women reported that they decided to make more effort and struggle until they succeeded like men to participate in higher education. For example, Yuster stated that,

"As a Tanzanian, particularly African, woman, where many young girls are lagging behind in education, I decided to show society that women with disabilities are able and decided to demonstrate it through obtaining my degree, if men were able why not women? That is why I have come to university." (Yuster with physical impairment)

"Lakini kama mwanamke wa kitanzania hasa Kiafrika ambapo wasichana wengi wamekuwa nyuma hasa katika suala la elimu, niliona mimi nioneshe kama wanawake walemavu wanaweza, ngoja niongeze juhudi ili nipate elimu ya degree kwa nini wanaume waende halafu mimi nisiende? ndio maana nimekuja chuo kikuu." (Yuster, mlemavu wa viungo)

Five women reported that institutional factors, such as experience, facilities and study programmes motivated them to participate in higher education. The interviewees reported that the UDSM was the only available university in Tanzania to enrol students with disabilities. It was the UDSM that provided the programmes they wanted to study, which is different from other Tanzanian universities. Thus, the women with disabilities were expecting to get better facilities, equipment, care and assistance at that university compared to other universities. The women who were visually impaired reported having limited information about other universities that enrolled students with visual disability because their counterparts and informers also studied at the UDSM.

The women with disabilities also indicated the availability of appropriate programmes for their goals. They were comfortable with the programmes they were studying. For example, the interviewees who were studying education and had children at home reported the importance of a child development programme they attended at the university. They revealed using knowledge from this programme for the development of their children. The knowledge gained at the university was reported to be essential for them to handle their family and life development. Guidance and counselling and group differentiation programmes helped the women to study disability and education issues from a broader perspective, which was essential in enabling them to advise others who were suffering from psychological problems because of their disabilities. The group differentiation and disability programmes assisted the women in realizing that their disability was permanent and different from their previous perceptions that one day they might become 'normal' again.

The majority of the women who were studying education and education psychology acknowledged that the programme they were studying helped them to accept their disabilities and thus they felt normal and secure. This happened because they were taught about the meaning of different kinds of

disabilities, the scientific and natural causes of disabilities and what to do when one has disabilities. These women reported having changed their attitude in relation to the causes of their disabilities. They reported that the causes of their disabilities changed from witchcraft to science. Educational psychology programmes were reported to teach them how to handle and care for students with disabilities in schools. They reported that by studying education they developed knowledge that helped them to fit in everywhere because of the programmes they were studying, including educational leadership, educational foundations, curriculum and teaching (CT) and psychology. This implied that studying education could simplify the search for a job because of their multiple experiences.

All of this could help the women gain more experience and strengthen their teaching and interaction with different people. For example, Amina stated that a teacher could manage to work successfully as an administrator in a bank, a counsellor in a hospital or any field. She also reported that she could use the knowledge from the programme to help people who are experiencing depression, including children and women. She also reported being able to deal with social community issues because of the sociology and political science programmes. Analisa, Selina and Happy from the UDSM School of Business reported that they needed to study for a Bachelor in Commerce and Finance because it would be easy to become self-employed or obtain employment in different companies. These women indicated that even small sectors need an accountant or cashier, and also acknowledged that studying information and technology courses that deal with computer knowledge could help them to work more efficiently. Vaileth and Morin, who were studying for a Bachelor in Science, stated that if they could manage to perform well, it would be easy to get a job and scholarships outside the country to pursue further studies.

5.1.6 Summary

The women with disabilities indicated various reasons and motivations to participate in higher education. They understood the importance of education for their lives and reported it as a key factor in pursuing higher education. They stated that education is a vital instrument for life changes in their families and society. Education changed the women's status, helped them meet their life challenges related to disability and marriage and prepare themselves for their future. The women also participated in higher education because they wanted to meet the professional career goals and dreams they developed before joining higher education. Poverty and poor family education status also strongly influenced the women to participate in higher education, which they regarded as important because they wanted to support, encourage, create awareness, advice, and motivate their counterparts in social and economic aspects. They also wanted to teach their counterparts in different levels of education. Moreover, the good results they obtained from the final Form Six examinations and equivalent examinations helped them to pursue higher education. The Mature Age Entry Examination and pre-induction programme also opened up

the chance for women who were unable to access higher education through the final Form Six examinations and equivalent qualifications.

Securing a good job, economic advancement and opportunities for further studies also encouraged some of the women to pursue higher education, as did a desire to change society's perception, attitudes and cultural beliefs toward women and/or show off their personal abilities and family encouragement. University experience, facilities, degree programmes and appropriate courses reinforced the women's desires to pursue a higher education. Generally, the women with disabilities were internally motivated to pursue higher education.

5.2 Family and community views on women with disabilities in higher education

This section presents family and community perceptions towards women with disabilities' participation in higher education. Findings showed that, families and communities perceived them differently depending on the previous attitudes and beliefs towards educating women with disabilities. The majority of the women with disabilities (sixteen of the twenty-two participants) revealed a positive perception from their community and six revealed a negative one.

5.2.1 Role models and acceptance in society

The majority of the women with disabilities reported that their families perceived them as role models for their siblings. Their families and the community around them believe that, through their education, they can become socially and economically independent and change their values from low to high. The interviewees reported that their parents and families appreciated their achievement. The women's families indicated pride, pleasure and surprise at their achievements, and shared this achievement with other members of the community. The majority of women reported that their families were happy because they had previously been in worries about their daughters' education, given the fact that majority of these parents encountered a lot of disappointing remarks from neighbours and the community at large.

"Therefore, most of the time, the parents and community members use me as an example to other children, especially when they are in school and studying. Their parents would always remind them that their blind sister performed so well that she has progressed to university now, so why shouldn't they, considering that they were not blind, yet were not performing well." (Suzana with visual disability)

"Kwa hiyo mara nyingi sana walinitumia kama mfano kwa watoto wao, pia watoto wao wakiwa shuleni huwa wanawaambia yaani nyie anawashinda yule dada kipofu lakini amefika chuo kikuu, nyie mna macho lakini mnashindwa." (Suzana, mlemavu asiyeona)

Other women indicated that, in most families and the communities, they were the first women with disabilities to pursue a higher education. They indicated that their parents and families felt that their roles had ended, as after completing their degrees, these women would be able to secure employment and have independent lives. Some of the women indicated that their neighbouring families were also motivated to send their daughters with disabilities to school, as successful women with disabilities were seen as role models for other in the family, community and other lower levels of education where women or girls with disabilities were studying.

"My parents felt proud and happy; that is why they call me 'boss,' No one else in my family had reached higher education. In our clan, you can just count. My father said he got his degree as a mature student but I will graduate with my bachelor's degree at a younger age." (Analisa with visual disability)

"Wazazi walijisikia proud pia walijisikia raha na ndio maana nakwambia mimi wananiita bosi. Hakuna aliyefika chuo kikuu. Hata baba anasema yeye amepata degree akiwa mtu mzima lakini mimi nimepata at least nikiwa mdogo mdogo, kwanza hakuna aliyepata degree, ukoo wetu tunahesabika." (Analisa, mlemavu asiyeona)

A change in the perceptions of and attitudes towards women with disabilities, by their families and communities was also stated by the women. Fourteen participants reported a change from being undermined in the community to becoming highly valued people. The women reported that they had gained high respect in their families despite their disabilities. One woman reported that she was the only educated person in her family; the others, who did not have disabilities, had not managed to reach to a university level. This won her high respect not only from her family, but also her whole community. Other respondents reported that due to their education they were now involved in family and community meetings, and sharing their opinions, experiences, knowledge and skills. Particularly at the family level, nothing was done without seeking their views and comments. Other families were also reported to encourage and motivate their children to pursue a higher education, as they understood that education would help them to become socially and economically independent in the future.

Almost half of the participants accounted for different factors related to community attitudes. Being accepted as members of the community, being involved in decision-making and economic independence in the community and schools were described as some examples of the perceptions of the community toward educated women with disabilities. It was reported that the entire community surrounding them was amazed by their immense achievement in the field of education, especially the women with visual disabilities who had been able to pursue higher education. They were able to have their own money, good jobs and secure lives. Some of the members of their community had changed the notion that people with disabilities were unable to perform well and had started building trust in them. Moreover, a few of the participants reported that they had become role models for other learners

with disabilities and their peers. These few women recounted how upper secondary education teachers used them as examples in the classroom. The women reported identifying themselves to other students when teaching and explained how they succeeded. This was stated by six of the women with jobs. Regarding the attitudes and cultural beliefs, Alinanuswe had this to say, "Before joining higher education, people underrated and undervalued me because of a lack of recognized education but, ever since I came to university, everyone respects me, unlike in the past." Melina described her situation by saying, "In a real sense, my parents were happy that their daughter with disabilities was able to. Others were surprised that even a person with disabilities can study and attain a degree. The majority was surprised and felt educational motivation."

5.2.2 Difficult to make it, waste of money and an undervalued profession

A few of the women with disabilities reported that the surrounding community was unhappy because their 'normal' children, who also applied to the university, did not get admitted. Factors such as community attitudes and cultural beliefs related to joining higher education were also mentioned by the women with disabilities. For example, it was revealed from the findings that, the community members were asking questions such as, "Why are you pursuing higher education?" "Who are you going to be after higher education?" This suggests that the community failed to view the importance of these women with disabilities being at the university. This was experienced more often by women with visual disability than those with other disabilities. The women with visual disability reported experiencing discouragement from people who believed that they were unable to perform their work due to their visual difficulties. They believed that visually women with disabilities were always in need of help and, thus, even if they studied, they would not get a job.

In some instances, some community members did not believe that the women with disabilities were really undertaking their studies as required but were being favoured or corrupting the professors to get the required grades. Generally, the community viewed women with disabilities as too hard to educate, and thus they were required to stay at home or get married. Jeni stated, "While some neighbours were wishing me well in my education, others were not expecting me to pursue higher education. Some of the neighbours perceived my success as resulting from a favour or some form of corruption."

At least four participants (namely Magdalena, Alinanuswe and Anna) reported that when they succeeded to higher education, their parents received a lot of discouraging remarks from members of the community. For example, Alinanuswe and Anna mentioned that their grandparents had convinced their parents to take them out of higher education because they were wasting their money paying school fees for people who would end up getting pregnant before completing their studies, and are likely to become jobless. The relatives wanted them to get married rather than pursue further education, which was considered a waste of time and money. Grandparents and uncles also preferred

them to receive dowries rather than going to school. They reported that educating women in higher education was a waste of money because higher education was expensive. Parents experienced stress and negative remarks because of negative attitudes towards educating women with disabilities. Magdalena reported that her mother had been asked by her uncle to take her out of higher education since she would simply be ending up getting married and bringing no benefit to the family. He tried to convince her mother to send her brother to school instead, despite her brother's refusal.

"As an example, my uncle wanted me to marry his friend when I finished advanced secondary education. He was unhappy about it all and started to influence my mother to see no reason to educate a woman who had disability and who could not benefit from it. The man whom my uncle wanted me to marry was a witchdoctor and far older than me. My mother refused, adding that, even if I wished to marry that older man, I'd never leave school and she'd make sure I studied while living with that man." (Magdalena with visual disability)

"Mfano kuna baba yangu mdogo alipenda sana nilipomaliza sekondari (kidato cha sita) niolewe na rafiki yake. Kwa hiyo kitendo cha mimi kuendelea kusoma kilimuudhi, akaanza kumkatisha tamaa mama kwa kusema kwa nini wananisomesha mtoto mwenyewe wa kike tena mlemavu nisiye na manufaa yeyote wala msingi wowote. Mtu mwenyewe aliyetaka niolewe naye lilikuwa libabu liganga la kienyeji na mtu mzima sana na mvi na mimi ni mtoto mdogo. Lakini mama alikataa na akasema hata kama mimi nitakubali kuolewa na hilo libabu yeye hata kubali niache shule, atahakikisha nasoma na huku naishi na hilo libabu." (Magdalena, mlemavu asiyeona)

In a similar context, another respondent stated:

"My grandmother called and asked my father why he was educating me because of my disability and would get pregnant before completing my studies. She saw it as better for them to marry me off and get money rather than accessing education but my father did not listen to her. When I succeeded to higher education, my grandmother also told my father that he would not be able to afford the university fees. Accordingly, it was time for him to make me marry. My father insisted that he would sell the house in order for his daughter to go to university." (Alinanuswe with visual disability)

"Bibi yangu nilipofaulu kwenda kidato cha tano alimkalisha kikao baba yangu kwa nini ananisomesha mimi wakati ni mlemavu na nitapata mimba hata shule isiishe. Afadhali anioleshe ili apate mahari kuliko kunisomesha. Na nilipofaulu kuja chuo kikuu, akasema ada yote hiyo angepata wapi sasa heri niolewe. Baba akasema nitauza nyumba ili mwanangu asome." (Alinanuswe, mlemavu asiyeona)

Career choice was another issue that was reported by the interviewees to have received a negative response from the community. For example, a decision to study a bachelor's or master's degree in education was something that the majority of the community members were querying. They pointed out that even if they progressed to higher education, the community had negative perceptions about teaching as a career for women with disabilities. To that extent, those women with disabilities who were in favour of education had to change their careers and choose to study law, business, engineering, mass communication, sociology and political science. Teaching as a profession was considered unimportant and teachers were not respected, unlike in other

professions. For example, one participant who was studying for a bachelor's degree in education and psychology revealed that she always finds it hard to tell his friends which programme she was studying, because of the negative response she would get from the community. She would instead say she is studying psychology which deals with people's minds rather than saying a Bachelor of Education and Psychology. Moreover, the university community and peers were reported to believe that all women with visual disability were studying education and no other specialisation because of their prior background and experience:

"Local people are not literate enough; therefore, when they hear that someone is studying education, they disregard him/her. When they hear that someone is studying Law, Business, Engineering, Mass Communication, Psychology, etc., they support them and feel happy. Normally, I don't say I'm studying Education but Psychology. They ask me about the content of Psychology and I tell them it deals with people's minds and they view me positively and value me." (Baiya with visual disability)

"Watu wa mtaani hawana elimu. Kwa hiyo wakisikia mtu anasoma education wanaona si chochote si lolote. Wanataka useme unasomea sheria, biashara, enginerring, mass communication and saikolojia. Wanasema wow, wanafurahi sana. Mimi huwa sisemi nasoma ualimu huwa nasema nasoma shahada ya Saikolojia, wanauliza inahusu nini, mimi najibu akili za watu wanajibu wow, na wananiona bongela la mtu." (Baiya, mlemavu asiyeona)

Only two women with disabilities reported that the community had a notion that if they went to university, they would not get married. Participation in higher education was reported as placing the women's subsequent marriages at risk, especially in rural areas, because men were afraid of educated women. They got divorced because of being at the university studying when their husbands were uneducated.

5.2.3 Summary

The majority of the families have positive attitudes towards women with disabilities pursuing higher education. Women who were attending university were viewed by their families as role models for their other siblings. They changed from undermining to highly valuing them. The community perceived women pursuing higher education as role models in schools and as people with ability, becoming economically independent, accepted and involved in decision-making. However, their choice of career, attitudinal barriers and discouragement were stated to hinder their educational achievement, and many community members still failed to see the importance of the women participating in education instead of getting married. The community also believed that sending the women to school were risky and a waste of money and time. Thus, the community had a negative perception of the women with disabilities and their employment. Community attitudes and cultural beliefs had a great impact on the women's participation in education.

5.3 Factors which enabled women with disabilities to participate in higher education

This section presents the findings on the factors that enabled women with disabilities to access, participate and succeed in higher education. Various enabling factors were stated by the women based on their needs, requirements and the nature of their disabilities. The women revealed the following:

- The influence of family
- Self-acceptance and personal effort
- Teachers' instructions and assistance
- University facilities and procedures
- Peer support
- Financial support

5.3.1 The influence of families

Nineteen participants attributed their academic achievement to the positive influence of their family while three others reported disappointment in family members. The women acknowledged a support from their parents, acceptance of women with disabilities by family members, encouraging home environment and a positive attitude toward their education as essential factors for their participation in higher education. Women indicated that the parents' motivation and support both morally and materially had influence on their participation in higher education. The parents and family helped the women to develop effective goals, which encouraged them to develop future educational plans and explore realistic higher education options. Moreover, the women also were supported by their parents to select appropriate high school courses or subject combinations that meet higher education requirements. These women also reported that their parents collaborated with secondary and higher education staff to make decisions regarding programmes, services, and resources and helped the women to collect and maintain ongoing personal files that included studies and medical records. Some parents were very transparent about the confidence they had on women's ability to fit in a higher education setting and encouraged them to be independent in their studies and life skills. Encouragement from families was appreciated by the majority of the women. The women reported the acceptance by their parents and being encouragement by their home environments as essential elements of their achievement. They described how, in general, people with disabilities and particularly girls and women were facing exclusion and marginalization both at home and in the community, but their parents did not segregate them; they treated them equally to their other siblings and gave them priority in everything. One woman stated:

"The love, intimacy and kindness of my family members are the key to my success; they appreciated my education and helped to raise me as a woman with disabilities. My parents gave me the first

chance in everything; they minimized their support to others' in order to provide me with more opportunity to continue with my studies." (Upendano with visual disability)

"Upendo, ukaribu na ukarimu wa nyumbani na wazazi, kuipenda elimu yangu, kulinisaidia kuniinua kama mtoto wa kike niliye na ulemavu. Walinipa nafasi ya kwanza katika kila kitu, wengine walikosa au kupunguziwa mahitaji ili mimi niende shule." (Upendano, mlemavu asiyeona)

Related to this, another respondent noted:

"I feel good because, at home, no one segregates me. All value me and give me the first opportunity. I am a guide for everything in my family. They involve me in everything because they need my opinions because I am the first to obtain a degree." (Alinanuswe with visual disability)

"Najisikia amani sana kwani nyumbani kwangu hakuna anayenibagua. Wote wananithamini na wananipa nafasi ya kwanza, pia mimi ni mshauri wa familia na kila kitu wananihusisha na kutaka mchango wangu wa mawazo kwani ni wa kwanza kupata degree." (Alinanuswe, mlemavu asiyeona)

Other women indicated that their parents involved them in decision-making. The involvement of women in decision-making facilitated the knowledge sharing, which created mutual trust and a common understanding of the family's unique culture. For example, the women were given an opportunity to decide on behalf of other siblings in the family. Some of the women reported that their parents taught them how to differentiate between good and bad things for the betterment of their lives. Accordingly, this situation gave them the freedom to express their needs and challenges without fear. In relation to parents' acceptance, one woman stated:

"The most important thing to me is the acceptance I get from my parents and others, their expectations of me, at home, at school, my teachers and the community at large. I had anticipated that they would isolate me but found that this was not so." (Analisa with physical disability)

"Kitu ambacho ni cha msingi kwangu ni ile hali ya wazazi na watu wengine kunikubali jinsi nilivyo tofauti na mategemeo yangu, nyumbani, shuleni, walimu na hata jamii, nilijua watanibagua kumbe sivyo." (Analisa, mlemavu wa viungo)

The participants further reported that a positive parental attitude toward their education was essential for their participation in higher education. The women stated that a positive attitude acted as a possible way to avoid or reduce the impact of their disabilities and provided opportunities to make choices, develop their potential, become independent and play a full part in society. Some of the women with visual disabilities acknowledged that their parents had also learned how to use a Braille machine in order to help their daughters. Some parents were quick to send their daughters to learn how to use a Braille machine as soon as they developed their disability. The course on Braille helped the learners to cope with the school environment. The interviewees emphasized that students with visual disability at any level of education without knowledge of Braille faced many difficulties related to succeeding in their studies. Some of the women revealed that their parents had also secured some study materials, such as a programme syllabus, books and other materials. This was important

in helping the women with disabilities to keep up with other students at university. A few of the women reported that their parents had bought them equipment and materials, such as a Braille machine and paper, tape recorders, binoculars, eyeglasses and other university learning materials. These women viewed their parents' support as assisting them to perform well and apply to higher education. Moreover, the participants reported that some parents perceived progressively that sending women to school was important because they were building a foundation for their future higher education and education in general. Other participants also clarified that their parents had explained to them that they could live alone and encouraged them to study hard. One woman stated, "The most important support I obtained from my parents was their commitment to take me to school to become educated."

Five participants reported that the educational background of their family increased their motivation to study and participate in higher education, and pushed them to set objectives for continuing their studies at the university level. These participants reported that their families had set a rule about everyone being educated and performing well academically. Having good grades and being top in the class were encouraged by the family. According to these women, the educational competition within the families pushed them to struggle and succeed. Moreover, some of the participants also revealed that every member of their extended family had attained some form of higher education. This suggested that it was possible for the women to model themselves on these, attend school and succeed. Furthermore, the participants reported that the family members showed them the importance of obtaining good marks and working hard in order to access higher education. In that regard, the family members treated them like their other children and the women did not experience any discrimination. In addition, the participants reported that their families supported their studies by paying the university fees. One of the most effective means of ensuring women's academic achievement is to engage families in their education and develop a greater degree of parental involvement and encouragement than their peers without disabilities, in order to be assured of receiving the same level of instructions as the general student population. These women often face complex classroom challenges requiring special attention and active engagement from their families. Their families play a number of supporting roles, including acting as their advocates and as people who can provide valuable insight into their specific needs to instructors, who may at times feel pressured by trying to meet the needs of diverse groups of women. The four women from wealthier families or who had sponsors reported buying their own study materials and equipment to reduce the educational challenges such as lack of facilities. However, the women from poorer families tended to depend greatly on scarcely available resources, teachers and peers for their successful participation in higher education.

A few of the participants also revealed that they had been influenced by family friends whose daughters had disabilities, yet every family member achieved higher education. These family friends motivated the women to

struggle and succeed in higher education. Moreover, Alinanuswe reported how family friends motivated her and sent her to school after she became visually impaired and had initially dropped out of school resulting from a long course of medical treatment. She reported that her parents were frustrated because they had no idea about where and how their daughters could continue with their studies. It was the family friend who came to her home and told her about the educational opportunities available for students with visual disabilities. Her parents agreed to send her to school, as they could afford to support her, but the challenge was which strategies they could use to ensure that she continued with her studies. She concluded that, unless this family friend had told her about these educational opportunities, she would probably have been unable to continue with her studies. Other participants also reported that they wanted to succeed because their friends had proceeded to higher education and they wished to do likewise. The participants stated that they were motivated to use different strategies and approaches for success despite their struggles.

The participants reported that their parents' education and backgrounds were important. They made various efforts to educate themselves and ensure that their daughters became like them. Some of the women stated that their parents provided a diversity of educational motivation and support because they had wider knowledge, exposure and experience about women's education. According to these women, their parents were more open to explaining the importance of education to women in general, and other parents educated themselves about how essential it is for women to participate in higher education and gain better achievements. It was revealed that educated parents provided equal rights and support because they were employed with good salaries, suggesting that money was not a problem for such parents. Moreover, according to these women, their parents have sufficient knowledge about the community's perception of their daughters' education and its impact on their life development. This caused the parents to find different approaches and make efforts to ensure that their daughters with disabilities accessed quality education. Moreover, they described how other educated parents who had shared their schooling with the women with disabilities were perhaps more supportive because of their prior knowledge and experience. Meanwhile, parents who had never been to schools were likely to experience difficulties, at least at first, to understand and support the women's education. However, some of the women indicated that educated parents did not have any problem; what mattered more was the parents' motivation and knowledge about the importance of education in the lives of their daughters. These women further indicated that their parents were less educated and economically poor but mentally very strong in supporting and encouraging their daughters to study. These women also stated that other parents had an education and a good job yet were less motivated to educate their children. For other women, however, the poor educational backgrounds of their parents and the challenges they encountered encouraged them to participate in higher education.

Some of the participants also narrated the encouragement they got from parents when they failed their secondary school final examinations. They

explained that their parents urged them to retake the examinations and agreed to pay any expenses involved. Their parents' willingness motivated the women to retake the examinations and finally succeed in obtaining sufficient credits to apply for higher education. These women with disabilities stated that without their parents' positive attitudes and willingness, they would have ended with secondary education without proceeding to higher education. The participants also stated that their parents spoke to them when they left university and asked about their progress, performance and expectations after completing their first degree. Understanding their needs through discussions with them was reported by the women to motivate and inspire their studies.

Half of the participants reported that their parents inspired them to work hard for the future by using motivational messages such as, "No one will marry you without a degree," "There are many blind doctors in Europe and if you can perform well you could go to Europe to study and become a doctor." According to the participants, the parents' motivational words promoted their morale to work hard at their studies. These women indicated that their parents encouraged them to try things such as learning to cook and guided them when they went wrong. Moreover, some of the interviewees revealed that their parents encouraged them to face the different challenges encountered in higher education and to focus on their studies. All of this made them feel that they were cared for and loved by their parents.

A few of the participants indicated that their parents associated education with wealth, that while women could have a lot of money and property, all of which would come to an end education had no end, was essential, could support their lives, and could not be taken away. The participants from rural farming families indicated that their parents encouraged them by explaining the challenges they were experiencing in their agricultural activities. The parents said that farming was not easy, particularly for people who were not educated. Therefore, the parents encouraged their daughters that in order to overcome agricultural challenges, they had to work hard at their studies, focus on studying and ensure that they successfully passed through every level of education. This situation helped the women to work hard at their studies, where they accepted their disabilities due to the motivation and encouragement they were receiving from the parents.

Further, advice from the parents was reported by a few participants to have motivated them to pursue a higher education. According to these women, parental advice focused on the issues of moral behaviour, studies, progress, performance, professions and life in general. For example, some women stated that their parents used different strategies to advise them on how to control or prevent early pregnancy, prostitution, HIV/AIDS and early marriage and not drop out of school before accomplishing their goals. These women also recounted how no one could teach them about sexual and reproductive health education either in school or their community because there was little knowledge about women with disabilities. The women revealed that whatever challenges they encountered in higher education, their parents were the first to

be asked for advice. Some of the married women reported that they obtained guidance and counselling from their parents in relation to marriage and participation in higher education. The parents guided them to become settled and focus on their studies and success because they feared that their daughters would engage in love affairs with other men and leave their husbands. However, a few other women reported not having received any support from their parents since getting married. This situation was reported to motivate the women to focus and concentrate on their studies. For example, Suzana said:

My parents advise me to be faithful and not be tempted by men I meet with at university; they wanted me to remain contented with the husband I have despite his low education, and that I should not start looking for a well-educated husband simply because I am also educated. They advised me about diseases, that I should take serious precautions about those.” (Suzana with visual disability)

“Wazazi wangu wamekuwa wakinishauri kuwa mwaminifu na nidadanganyike na wanaume wa chuo kikuu. Wamekuwa wakinisitizia kutomwacha mme wangu eti kwasababu elimu yake ni ndogo. Nisianza kutafuta wanaume wengine kwasababu nimesoma na pia wamekuwa wakinishauri kuhusu magonjwa na kunitaka kuwa mwangalifu sana.” (Suzana, mlemavu asiyeona)

The married participants (namely, Maria, Faraja, Amina and Suzana) reported that their husbands support inspired them; they were provided with materials and moral support while their husbands motivated them to work hard and succeed. Their husbands also took care of the children while they were attending their studies. Suzana, Faraja and Maria, who lived off-campus because they each had a family, reported that their husbands were picking them from the university every evening after they finished their lectures, encouraged them to maintain their marriage and education, warned them to be aware of diseases such as HIV/AIDS and avoid prostitution, as this behavior could harm them and they would not be able to benefit from their education. For example, Suzana stated that;

“At the beginning of my studies, my husband was worried about my decision to go to university because some neighbors told him that, after a woman becomes educated, she’ll look for another educated man and leave her uneducated husband. So, he always warns me not to leave him after becoming educated.” (Suzana with visual disability)

“Wakati naanza masomo yangu mume wangu aliing’wa na hofu kutokana na maamuzi ya kujiunga na chuo kikuu kwasababu wajirani walikuwa wanamkatisha tamaa kumwambia nikisoma nitamwacha na kutafuta msomi mwenzangu. Kila wakati amekuwa akinisitizia nisimwache baada ya kupata elimu.” (Suzana, mlemavu siyeona)

Therefore, the fact that their parents accepted their daughter with disabilities encouraged them to continue onto higher education. Thus, a motivating home environment, positive attitudes toward women’s education as well as discussions between the parents and the women had a positive effect on educating women with disabilities. Parents’ motivation to educate their daughters, material support, advice and the family’s educational background were acknowledged as helping the women to succeed in higher education.

5.3.2 Self-acceptance and personal efforts

The majority (18 of 22) of the women stated that they accepted their disabilities in order to simplify their social networking and achieve their educational dreams and goals. A few of the women with disabilities had previously found it difficult to accept their disability. For example, Analisa said, "I did not feel comfortable about my disabilities because I wanted to be like others." In the participants' opinions, accepting their own disabilities was important and facilitated the socialization process in life in general. The women defined self-acceptance as the level of understanding who they were, where their strengths and weaknesses lay, how to motivate and overcome those weaknesses, know what they need and how they can acquire those needs. This allowed the women to be comfortable with the studies and increase their morale by performing well in each stage. The women stated that if one can build self-confidence, they can be able to live a life which is free from self-criticism, and focus on dealing with the challenges that affect their success in life. Being good in communicating and socializing, being able to speak in public and feeling good about oneself, staying away from fear were reported to be important. The women further argued that, self-acceptance means that people are happy with who and what they are, and keep up with their educational goals. These women concluded that self-acceptance is a required first step towards self-development because people need to see the truth about them, accept it and then decide whether or not they can change. The women also stated that lack of self-acceptance may cause low self-esteem, which meant denying who they are or being blind to what they really want. Second, they may push themselves to be what they are not, resulting in a challenged life. If a person feels that she is not living her own life, perhaps she has this problem. Third, someone may become a victim by believing what others tell them. There was a difference between the participants who had had their disabilities from birth and those who had developed them later in life. The participants who were born with their disability accepted and were more comfortable with the situation. Further, the women who acquired their disability as a child indicated acceptance and coped with their situations better than those who did so after the age of 12. Some of the women indicated that they accepted their disabilities yet felt uncomfortable about their situations from time to time. Sometimes, their disabilities hindered them from fulfilling their needs and achieving their dreams, such as performing well in their studies and getting a job.

The participants who accepted their disabilities narrated that this reduced the stress, tension and depression caused by their families and community, which strongly affected most of the students with disabilities. The women stated that accepting their disability does not mean they overcome the challenges of having disabilities rather they acknowledge the presence of their limitations and choose to live accordingly. The interviewees stated that failing to accept their disabilities would cause them to focus mainly on their inabilities instead of their capabilities. The women with disabilities who consider

themselves successful generally accept their disabilities as simply one aspect of who they are. The women refused to define themselves by their disabilities and recognized that they are not responsible for their disabilities; instead, they take responsibility for their own happiness and success. For example, Beatrice stated that stress about her partial deafness caused her to become totally deaf. After she accepted the situation, she started to sense voices and now hears at least very low sound waves. She added that accepting the situation was very important for every student with a disability who wanted to succeed in education and in life in general. These successful women were able to restate negative qualities or characteristics related to their disability in positive ways. The women stated that developing a positive attitude about disability takes time, practice and commitment; how one views her disability can influence her self-esteem and self-confidence. The women said accepting the disability may help to address any negative feelings they may have, affirm their strengths, value, differences and identify some positive aspects of having a disability. Analisa also believed that accepting the disability helped her to do well in her studies, stating, "Nowadays, I am studying and not sleeping, but before I lost interest in studying because I did not accept my disability, Now, I've accepted my disability to reduce unnecessary stress and also perform well in my studies."

The participants further expressed that the acceptance of their disability helped them to ignore the challenges, reduce stress caused by their disability discrimination and attitudinal barriers they met and thus concentrate on achieving their goals. For example, they described how after getting a chance in higher education, they changed their minds, focused on their futures and felt more comfortable. The women needed to develop strong self-identity and a positive self-concept because empowering the women to fight for their rights originates from a clear understanding of the self, first as a person and secondly as a member of a group of people in similar circumstances. The actualization of the self-concept would also enable one to fight for individual rights apart from group rights. The women acknowledged that studying and working together with other students with disabilities enabled them to realize that others shared similar conditions and challenges, which made them, feel secure. Some of the participants also reported that they accepted their disabilities because, after all, their conditions were permanent and could not be changed. Therefore, they decided to forget about their disabilities and instead work hard to succeed in higher education:

"I feel normal, because there is no other way I can change my condition. I have accepted my disability and this helped me to study more easily; otherwise, I couldn't study." (Happy with visual disability)

"Mimi najisikia kawaida kwa sababu sina jinsi yeyote ya kubadili na nimeikubali hali hii ya ulemavu niliyonayo ili niweze kusoma kwa raha kwani bila kujikubali ni taabu sana kielimu." (Happy, mlemavu asiyeona)

In a similar context, another participant had the following to say:

"I have accepted my condition and feel normal; my self-acceptance has helped me to succeed in my efforts to strive for educational achievement." (Anna with albinism and visual disability)

"Mimi nimejikubali na naona hali ya kawaida, pia hii hali ya kujikubali imenisaidia sana katika kufanikiwa kimasomo." (Anna, mlemavu wa ngozi na asiyeona)

A few of the interviewees reported that they found it difficult to accept their disabilities, which they considered unique and therefore easily identifiable. These were mainly women with physical disability and a few with visual disability. According to these women, their disability caused them to fail to achieve their educational goals. They desired to continue with a postgraduate programme after they finished their first degree, but their performance was too low and did not allow them to continue. The women attributed their low performance to the effects of their disability. Therefore, the women identified that it is difficult for women to cope with and overcome limitations, both practical and emotional, that are caused by disability without acquiring knowledge and gaining experience in tackling obstacles, meeting challenges, and engaging in activities that develop problem-solving strategies.

The women also identified the importance of personal effort and commitment to their success in terms of doing well in their coursework and examinations, attending classes, participating in group discussions, and obtaining course handouts and summaries of lecture notes. Several participants stated that because of their personal effort and commitment, they had all of the materials necessary for all of the programmes they were studying. Additionally, creating and following a personal study timetable motivated their performance at all levels of education. It was revealed that they succeeded in higher education because they worked hard while struggling to obtain proper advice from different people about the meaning of education for women with disabilities and because they had clear educational goals. Some of the women were searching for materials from the internet and cooperating and discussing with their teachers, readers and peers, all of whom were important components of their successes. They acknowledged that personal effort and working hard were essential for any student with disabilities who wants to succeed, which also inspired their family, institutions, teachers, community, government, nongovernmental organizations and peers to support their education.

These women noted that even when people wished to support them, without their own personal effort and commitment, their efforts would be worthless. The more committed the women were the more effective they were in influencing others. If a group acts with determination and commitment, great numbers of people will pay attention. The women narrated that committed persons are the ones who don't take discouragement seriously and don't give up. They set an example for those who don't have the confidence or experience to go through hard times and hold out for the rewards of success. The women cooperate at a higher level when they share commitment, which fosters friendship, expectations and caring. Commitment is essential to an effort for a period of time, and the women were able to identify what they needed to know

to be more effective, try things out, make mistakes, and then figure out a strategy that works. Therefore, the participants indicated that being at the university was an outcome of the efforts and commitment they had made at the lower levels of education. Generally, personal efforts were reported by the interviewees as creating an appropriate educational environment for them to perform well and succeed in their studies. The following extract represents the opinions of some of the women:

"I think my own efforts and commitment from my heart and understanding why I am studying is what has enabled me to reach the point where I am now. Otherwise, I couldn't manage because the situation I had been experiencing was very difficult. So I tried not to give up my studies, made more effort, used the difficult situations I experienced in my studies as a challenge and worked much harder to reach to my destined goal." (Elikana with visual disability)

"Jamani mimi kwa kweli naona ni juhudi yangu na nia yangu iliyo moyoni pia na kujua kwa nini ninasoma. Kwa kweli nisingekuwa na nia mazingira yalikuwa magumu sana ujue. Kutokata tamaa na kuongeza jitihada kwani mara nyingi unapoonza mazingira ni magumu watu wengi hasa walemavu wanawake ndo wanapokataa tama. Kwa hiyo mimi hali ngumu niliona kama challenge au bridge ya kunivusha ngambo ya pili na mafanikio, hali ambayo sio rahisi kwa mtu mwingine lazima awe na utambuzi wa juu." (Elikana, mlemavu asiyeona)

5.3.3 Teachers' instructions and assistance

The majority of the participants revealed that their university lecturers had skills and knowledge of teaching students with disabilities. However, a few of the participants indicated that primary and secondary school teachers had limited skills and knowledge of teaching and were also less flexible than university lecturers. The participants stated that some university teachers were skilled in using interactive teaching methods, and finding and providing material support both inside and outside the classroom. According to the participants with visual and hearing disability, they were asked by their teachers to sit in front of the classroom because the classes contain a large number of students. This also helped the teachers to identify the students with disability and made it easier to distribute materials to them:

Seating far behind the classroom, would make it difficult for the lecturers to identify us because the lecture rooms are very large and correspondingly contain many students. Thus, having a seat at the front of the class helps us easily to get handouts from the lecturers and hear them well. Also it is easier for me to ask a question in case I have not understood. The lecturer may also invite to their office to explain what was not clear [during the lecture]." (Alinanuswe with visual impairment)

"Pia kukaa mbele kunasaidia kupata kipaombele kwenye suala zima la ugawaji wa materials. Walimu wengi wamekuwa wakitupa sisi kwanza ndio wengine wanafuata hata tukikosa wamekuwa wakituita ofisini na kututafutia hayo materials waliyogawa. Sambamba na hilo ukikaa mbele ni rahisi kusikia lecturer na rahisi kuulizwa swali pale ambapo sijaelewa. Asipoeleweka ananiita ofisini na kunieleweshwa." (Alinanuswe mlemavu asiyeona)

These participants also said that seating closer to the lecturer made it easier to hear the lecture and ask questions in case of failure to understand. These women

indicated that sometimes, the lecturers devoted extra time to support them, which gave them a chance to ask questions and widen their understanding. According to the interviewees with visual disability, the lecturers gave them extra time to complete their assignments, course work and examinations compared to their peers. This helped them to concentrate and submit good assignments, which earned them good grades. The participants also revealed that the lecturers assisted them in setting up tape recorders in the classrooms and that sometimes the teachers spoke louder or slower and made eye contact to help them. Some of the women said that the lecturers spoke aloud what they were writing to support and create understanding for the students with visual and hearing disability. Moreover, it was stated that the lecturers always cared about and assisted the hard-working learners more than the lazy ones. These women advised the other women with disabilities to work hard if they want support from the lecturers.

According to the interviewees, their lecturers supported them by providing mostly handwritten handouts, while putting notes on hardware such as memory sticks to facilitate their learning. These women copied notes onto their own memory stick and sent them to specialists for embossment (Braille). Some of the women stated that the lecturers assisted them in photocopying handouts and other materials to facilitate their studies, and when they missed a handout in the class they would get the lecturers' personal notes to photocopy. According to the participants, the teachers advised the women on the programmes, techniques for success and the importance of education in their lives as women with disabilities.

Furthermore, some of the interviewees argued that there was a difference between the lecturers who had received training on special education and those who had not in terms of teaching and providing support. It was found that the special education teachers were supportive in terms of creativity and innovativeness in teaching as well as in searching for study materials, and that they also cared about their students and gave them encouragement when needed. The participants indicated that a large number of non-professional teachers were teaching at the university in different faculties and departments, and that these differed in their teaching and support approaches.

Morin and Vaileth, pursuing science degrees, stated that their lecturers motivated them to study science because the majority of students, especially women, were not motivated to study science and business courses. According to these two participants, they were told by their lecturers that if they could manage to perform well in their science degree, it would be easy for them to get a scholarship for further studies and in finding a job. These women also indicated that their lecturers assisted them by explaining the science drawings, pictures and models to facilitate their learning and found out how they could perform well in practical laboratory work. Sometimes, they also found people to help the women. Positive teacher/student relationships draw women into the process of learning and promote their desire to learn. Therefore, the lecturers' supportive and encouraging classes, the provision of study materials,

advice and collaboration with the women were counted as significant factors that helped them to participate in higher education. These women stated that without their lecturers' support they would have dropped out otherwise failed at higher education. The women stated that improving women's relationships with lecturers is important, positive and has long-lasting implications for women's academic and social development. Merely improving women's relationships with their lecturers will lead to gains in educational achievement. Those women who had a close, positive and supportive relationship with their lecturers had a greater possibility of attaining higher levels of achievement than those students who were in conflict with their lecturers as they did not get enough support.

5.3.4 University facilities and procedures

Few of the women with disabilities reported having received support from the university, and the majority reported several challenges related to the university. The women explained that they had progressed to higher education based on their successful applications and admission, as well as the availability of equipment, readers, and accommodation. While the majority of the women with disabilities reported that the application form was straightforward, nine reported challenges during the application process. Thirteen participants indicated the importance of overcoming the challenges related to filling out the application form, the admission procedures and managing to start a new life at university. The participants revealed that they had succeeded because of the support they had received from their peers, alumnae, family and parents, who provided them with information related to the application procedures, went online to fill in the forms and did the photocopying. They also guided and advised the women about what and how to study in relation to their types of disabilities and degree programmes. According to the participants, these people also helped to deposit application fees in the bank and submit the application forms. The visually women with disabilities indicated that unless they had obtained information related to the application deadlines and other support from different people, they would not have ended up at the university, as the application form was complicated and demanded a lot of information. In terms of filling in the forms, the women with hearing and physical disability indicated that they had no difficulties. However, a few of the women reported that they failed to state their disabilities on the application form because they feared they would not be accepted into their chosen degree programmes.

The majority of the participants with visual disability stated that they travelled with family members, such as a spouse or sibling, who assisted them to participate the orientation week. Others got support from peers who were studying at the university and living in Dar es Salaam, because the admissions occurred while the senior university students were on vacation. Suzana and Lena used readers during the admissions process:

"I did not experience any serious trouble because, upon my arrival, I was given a reader who helped me to fill in the form, while paying for my accommodation was handled by my husband who also accompanied me on the admission day. After I had finished the admission process, my husband left." (Suzana with visual disability)

"Sikuhangaika sana kwa sababu nilipofika tu nikapewa reader akanijazia sehemu kubwa tu. Kulipia chumba, malipo yote mume wangu ndio alinisaidia, kwani nilikuja naye. Alihakikisha kila kitu kimekamilika ndio akarudi nyumbani, walinisaidia sana mume wangu na reader." (Suzana, mlemavu asiyeona)

Nearly half of the participants argued that they had experienced a good start to their new university life, which was important, while twelve of the women encountered challenges related to starting university life. The women revealed that at the university they had live independently because they were no longer guided by their teachers and parents as it used to be when they were in lower levels of education. Other women said that at the university they had new responsibilities, such as planning and deciding about their perspectives and aspirations for the future. They had already developed the skills to differentiate right from wrong. Some of the women realized that because they studied at the university the community members at home expected them to behave differently, and more like adults. They also stated that they were happy to be at the university because the environment was freer compared to the tight controls they had experienced during lower levels of education. They were free to use a phone, radio and television and could go anywhere without asking permission. This situation caused women to feel secure, satisfied and to embrace adult life. However, some of the women with visual and physical disability reported having experienced more barriers during both the application and admission processes as well as in starting university life.

Apart from their successful transition from secondary to higher education, the women stated the availability of equipment to be another essential factor in their participation in higher education. The women with visual disability identified equipment such as Braille paper, embossers, magnifiers, Perkins machine, Braille machines, radios, tape recorders and typewriters. Others included white canes and motion alarm detectors to support their walking. The university arranged a designated location for their examinations rather than working in the same classroom with their peers because the Braille machines are noisy and might disturb their peers. As Maria stated, "The University has helped us by providing a special room allocated for examinations with assorted items for use in examinations."

The women with low vision indicated that they could receive examination papers and details of assignments in large print. The participants with physical disability reported the availability of local transport on campus, such as three-wheeled motorcycles that the women called Bajaj (see figure 2) and manual wheelchairs. After completing their studies, they would return these to the university. They had a great impact on walking at home, finding a job and performing activities because it would have been easy to use a Bajaj to reach class, get a job and access difficult places. However, it is difficult for a Bajaj to

enter upstairs classes even if there is a lift. The women suggested using an electronic wheelchair other than a Bajaj or a manual wheelchair. Figure 2 shows an example of a Bajaj used by a student with physical impairment at the university.



FIGURE 2 Three-wheeled motorcycle (Bajaj) as a means of transport for the women with disabilities

The women with hearing disabilities reported that she did not get any support from the university. Generally, the participants showed that the availability of facilities and equipment was important for studying securely on campus and achieving better academic results. Despite the availability of such equipment, the women also reported a shortage or even a lack of facilities at the university.

The majority of the women with visual disabilities described the importance of readers for their academic achievement. According to the women, the readers were employed by the university to academically support students with visual impairments. They also revealed that each student with visual impairment has two readers. One of them works only as a reader, whereas the second is also a student at the university in the same programme as the woman she supports. Previously, the women were free to select a reader they liked and trusted, but now the university appoints the readers. The women pursuing a bachelor's degree reported that their readers supported them for five hours per day, while for the master's degree students it was seven hours per day. This support was valued mostly by the students with visual

impairments and they reported having missed this opportunity in the lower levels of education:

“Readers are of great help, because when we are approaching the examination period, it is difficult to get fellow students who can read for you for maybe two to three hours. Readers are the ones who read the notes for us and search for internet materials.” (Alinanuswe with visual disability)

“Readers ni msaada mkubwa sana kwani kipindi cha kukaribia mitihani ni vigumu kumpata mwanafunzi mwenzangu ili anisomee masaa mawili au matatu zaidi ya hawa readers. Readers wanatusomea notes na kuandika, kututafutia materials kwenye internet, kwa ujumla wanashughulika na academic issues.” (Alinanuswe, mlemavu asiyeona)

As such, the readers were regarded as the eyes of the women with visual disability. The readers were reported to assist the women in finding books from the internet or library, reading notes, finding other materials for assignments and guiding them to their university lectures. Thus, motivated, hard-working readers were needed for the purpose of reading academic work, searching for materials and time management. The readers’ support related to time management helped the women maintain their study pace with their peers. The participants also viewed that readers should be employed at the beginning of their studies and that the readers’ salary should be paid on time. This would motivate the readers to do their work appropriately.

In acknowledging the importance of readers, it was argued that it was difficult for their peers to support these women for extra hours because of their own assignments and other personal engagements. During the examinations period, the women also encountered difficulties studying and discussing issues with their peers who were also preparing for exams, so the women mostly used readers. Other women with visual disabilities took the view that the university should allow readers to attend lectures for the purpose of writing summary notes and becoming familiar with the topics under discussion. This opportunity was reported to simplify the explanations and discussions between the women and their readers, thereby minimizing the time needed for explanations and dependence on their peers’ summary notes. Others without visual disability reported that the university paid more attention to students with visual disabilities than to those with other disabilities, including students with physical and hearing disabilities.

A few of the participants with visual disabilities outlined the importance of university specialists in terms of instruction, advice and orientation to using equipment in relation to their academic achievements. According to these women, specialists oriented them to the university environment and provided information about the university timetables, including classes, examinations, course work and facilities. These women revealed that the specialists cooperated with the university’s administration, teachers, faculties and departments to ensure that the women succeeded in their studies. While others reported that the specialists told them how hard it was to find their study equipment in the university administration because of the low budget allocation, these women stated that specialists advised them to attend all

lectures, copy all notes from their peers, attend all examinations and submit all course work because of the shortage of books and materials. Through specialists, the participants reported receiving academic instructions and orientation on how to use some of the equipment and facilities.

A very few of the women with visual disabilities revealed that, having a university rooms of their own was an essential factor in their participation in higher education. These women reported that having their equipment in their own room made them feel secure about their equipment, such as tape recorders and Perkins and other Braille machines. The participants feared that if these were to be accommodated in the same rooms as their peers, the use of the machines could disturb others and cause conflicts. According to these women, living alone in their rooms provided the opportunity to make good friends who they really trusted to study together in their rooms. Moreover, the women with visual disability were free to arrange things in their rooms without anyone else changing the position of their furniture, which helped them to remember the layout of the room and move around easily. Moreover, having a private room helped the women to avoid conflict with their peers due to the rearrangement of furniture and the theft of their machines:

“You will have to write overnight, so you keep on banging your machines while listening to the recording, so sharing a room with somebody can create great inconvenience, and we prefer being alone. When we are alone, we feel better because there is security, and thus our property such as tape recorders, Perkin’s [Braille machines], and many other things which belong to the university are secure. If you are staying with somebody, and it happens that any of these items are lost, you might blame him/her which will lead to unnecessary conflict.” (Elikana with visual disability)

“Utaandika usiku unagongagonga mashine zako, unasiliza radio unaongea na tape recorder kwa sauti. kwahiyo kukaa na watu kwa kweli ni usumbufu mkumbwa, hilo la kuwa pekee yetu kweli tunawasifu. Tunapokaa peke yetu tunajisikia vizurri kwasababu kuna security, hivyo vifaa ni mali ya chuo una tape recorder, perkins na vifaa vingine vidogo vidogo ukikaa na mtu au akaja mtu akachukua utanza kumlalamikia unayekaa naye na kusababisha ugomvi na mimi naona hili liendele kufanyika.” (Elikana, mlemavu asiyeona)

However, the women with hearing and physical impairments reported sharing rooms with their peers. In summary, apart from successfully addressing the challenges within the application and admission processes, the availability of facilities such as special equipment, readers, accommodations and special units influenced the women’s participation in higher education.

5.3.5 Peer support

Half of the women revealed that social interaction with their peers played a vital role in achieving good academic results, while the other eleven women stated that they had experienced various challenges from their peers. The women reported that meaningful relationships between women and peers increased their appreciation and acceptance of individual differences, as well as increased understanding and acceptance of the diversity of needs. These women also stated that peer support strengthened respect for both and

prepared them to master activities by practicing and teaching others, which resulted in greater academic outcomes and appropriately met needs with greater resources for everyone. The participants pointed out the importance of their peers in terms of socialization, the provision of study materials and group discussions. The interviewees emphasized that their academic achievements depended greatly on how they socialized with their peers; the more they socialized, the more they benefited from their peers' companionship. For example, the visually women with disabilities reported that their peers assisted them to search for study materials on the internet, find books from the university library and take summary notes during lectures. The women with disabilities believed that it would be very difficult without their peers' help, as they depended on it for most academic issues. The participants revealed further that their peers read out their notes while they typed them up in Braille. The women also indicated that their peers provided them with the latest information in relation to academic issues involving new study materials found on the internet, any news concerning women with disabilities and programme selection. According to these women, cooperation with their peers was essential when, faced with a lack of facilities, they would fail to meet their goals and assignment deadlines. Using the embossing machine was time-consuming because the university has only one machine that is old and in great demand during examination preparation or group assignment periods.

The women with disabilities indicated that their peers provided them with an opportunity to study together in groups, where they discussed difficult topics taught in class. The participants thus described the importance of networking and being active and contributing to group discussions, as opposed to remaining silent during group discussions, which would not show their teachers and peers their abilities, identities and potential. The women with disabilities stated that they needed to show off their experience and skills in order to be accepted by the groups, which caused their peers to change their attitudes and see the women with disabilities as able people. Some of the women with disabilities pointed out that, due to their personalities and contributions to group discussions, their peers got to know and started to support them. By completing tasks successfully during the study group discussions, the women proved equal to their peers in academic performance, which helped them to be valued and assisted. The interviewees also emphasized the importance of finding study materials for informal group discussions as influencing their peers to appreciate the women's contribution to the group and their abilities to do tasks. However, some of the women with disabilities reported participating in group discussions because of inadequate support from the university.

The women with disabilities reported participating in informal group discussions because, as women with disabilities, they needed to be free of social and cultural barriers. Some of the women indicated that in the study groups, their peers encouraged and motivated them to work hard on their studies, which they found to be central to their successes. For example, peers were

reported to advise women to participate in group discussions because they could gather diverse knowledge, and the discussion groups were reported to facilitate women to study comfortably as well as strengthen their relationships with their peers. The study groups inspired the women with disabilities to develop a spirit of tolerance within the university community, which gave them a sense of acceptance and capability. For example, a woman with a hearing disability used her peers as her ears as they listened in classes on her behalf. She also appreciated the importance of peer support, because her peers helped her to take lecture notes in class. During group discussions, her peers would speak facing her directly so that she could lip read what they were saying. However, the woman with a hearing disability did not have any equipment or sign language interpreter to facilitate her studies in the class. The women with physical disability stated that they were at a greater advantage in terms of participating in group discussions because the nature of their disabilities did not limit them from forming relationships and socializing with their peers. The women with disabilities also created their own group discussions to facilitate their studies. They indicated that it was easy to cooperate because they were living in the same dormitories and also had special classrooms provided by the university. To participate in discussions and sit for examinations assisted the women's successful participation in higher education.

A very few participants with visual disability reported that this group of students cooperated with each other or with other women with different disabilities. The collaboration involved sharing equipment, information, advice and programmes. For example, they shared a tape recorder when they were in the same course, sat together, transcribed lecture notes into Braille and distributed the notes among themselves. The participants also stated that, if anyone received new information including changes to the university timetable, new handouts, books or notes, she circulated these to the others. Moreover, they created their own policy of studying together and sharing everything, particularly the participants in the same programmes, as Elikana stated, "There is much cooperation among us. Our policy has been to study together and share all of our materials, particularly the materials on the programmes that we share."

The women declared that they did not always need assistance from their peers and that at times they actually assisted their peers to succeed, both socially and academically. According to the interviewees, their male peers were more supportive than their female peers at the university in terms of showing them the classrooms and dormitories after evening lecture hours, contrary to the prior expectation that their female peers would be more supportive than the males. The women reported that in addition to their peers assisting them to succeed academically, they also fetched them water, found food for them at the refectory, went shopping with them and cared for them when they were sick. Sometimes, they exchanged life experiences, challenges and encouragement. Thus, socialization with peers, having study materials, group discussions and cooperation with peers helped the women to participate in higher education.

For example, Rahima stated that: “Three quarters of my learning journey has been covered by my peers, because I learned how to collaborate with them. Sometimes, a teacher can get into the class to teach but you don’t understand him, so if you socialize with other students, they will help you. For example, at the university, we help each other through chatting. In this way, they can tell you what the teacher meant when he taught a certain concept. They can tell you what it meant.” Their peers sometimes failed to assist the women because they were busy and felt exhausted. This made it difficult for the women to get support, particularly when they had a crucial issue that required assistance. Some of their peers were afraid of the women and refused to discuss anything with them. In that regard, the women with disabilities did not know how their peers perceived them. Moreover, some of the peers were unsupportive as they refused to lend them lecture notes but instead pretended that they had not taken any, although they shared these widely with their peers without disabilities to copy.

5.3.6 Financial support

The women with disabilities highlighted the importance of the financial supports for their studies which they received from different sources. The majority of the interviewees, especially those studying for a bachelor’s degree, reported that they benefited from the fund support provided by the Higher Education Loan Board (HELB). The loan covered their university fees, living costs and study materials and twenty of the interviewees had obtained a loan. The participants stated that the loan was very useful for them while in higher education, unlike in the lower levels of education where the fees were cheaper and far easier for them to afford. The women acknowledged that even though they had performed well in the final Form Six examinations, without a loan they could not have progressed to higher education because of the expenses involved. Other participants reported that even though the support was insufficient, they were thankful for the little they were getting because without these loans they would have remained at home due to poverty, culture, their gender and disability. Moreover, some of the women reported revising their budgets in order to meet their diverse needs.

Only a few participants reported receiving fund support from their families, and the majority of the women with disabilities were not receiving this but had to depend on their HELB loans and husbands. In order to facilitate their daughters’ studies, their parents were reported to be engaging in petty trade or selling animals and crops. Some of the women, who received insufficient loans, indicated that their parents had to provide the missing amounts for their tuition fees. The parents’ agreement to provide the missing university costs created a supportive study environment and provided comfort and motivation to study. However, Analisa, who did not receive a HELB loan, received money from her parents, who had to sell their house in order to support her university studies.

Four women with disabilities reported receiving a grant from the Belgium Technical Cooperation (BTC) to pursue their postgraduate studies at master’s

level. These women were happy because the master's degree was too expensive in terms of university fees and living costs and the government did not provide fund to support this level. The interviewees also revealed that the master's degree was more costly, involving fees, living costs, study materials and research costs. The women acknowledged that without the BTC support it would have been impossible for them to pursue such a degree. Moreover, the participants stated that even though they were employed and received a salary, they could not have managed to pay the expenses from their salary alone, which was quite low.

Amina, Faraja and Yuster reported benefiting from the Tanzanian government through District Educational Offices (DEOs) in primary and lower secondary education. The DEOs had paid their school fees and travel costs to school and back home during vacations. The participants stated that the district support was essential for them, as it laid the foundation for applying to the university. These women stated that without such support they could not have proceeded to higher education because of their family's poverty. Amina stated, "Leaders from the District provided a car from home to school and back again when I was at primary school. I think that, without this support, I would never be here because my family situation was not good."

However, the participants explained that getting support from the district was quite difficult because it was a struggle to access it. Delayed school fees, the DEOs' unfriendly language and withdrawal of assistance before completing their studies were stated to challenge the women. The women with disabilities also reported that they had to visit various places because they needed evidence from village leaders about the status of their families, death certificates and proof that their parents were unable to help them financially. Obtaining a death certificate in rural areas challenged the women and delayed the support of the DEOs, which caused the women to start their programme late, and in turn interrupted their academic progress. Some participants reported that:

"When I started secondary education, Forms I-VI, my fees were being paid by the district education office. I got this support because my parents were unable to pay and my relatives had multiple roles. My parents suffered a lot to make this happen because a lot of evidence in documents from my village was needed. Actually, the district education office helped a lot to reach this level." (Faraja with visual disability)

"Nilipoanza sekondari kidato cha I-VI msaada zaidi wa kulipiwa ada nilipata halmashauri ya wilaya ya Temeke (Dar es Salaam), lakini wazazi wangu walihangaika sana wakati wa kuutafuta, walizungushwa na kutakiwa vithibitisho kuonesha kwamba kweli wazazi na walezi hawana uwezo. Kwa kweli halmashauri walinisaidia sana na ndio maana nimefika hapa." (Faraja, mlemavu asiyeona)

Additionally, another participant stated:

"After my father died, I spent a long time looking for someone who could fund my studies when I started advanced secondary education but God is great, and the village members' meeting wrote to the District Education Officer to explain my financial challenges, as did I myself. They agreed to

support my A level secondary education and I managed to complete my studies.” (Yuster with physical disability)

“Baada ya baba yangu kufa nikahangaika sana kutafuta mtu wa kunisomesha wakati nimefaulu kujiunga na kidato cha tano. Lakini Mungu si Athumani, wanakijiji wakaandika barua na kupitia muhtasari, wakapeleka kwa afisa elimu na mimi nikawa nimeituma kule Halmashauri ya Kibondo, wakakubali kunisomesha A level nikasoma nikamaliza.” (Yuster, mlemavu wa viungo)

Moreover, five women reported that they received a scholarship from different countries, including England (tourist), Canada (individual support), Italy (CBR), Germany (CAFED) and the Netherlands (Roman Catholic Church missionaries). They benefited through different organizations such as religious groups, community rehabilitation and female campaigns funded by foreign countries. The participants argued that these scholarships were essential, as they laid the foundation for applying to the university, without which support they could not have accessed higher education because of their family’s poverty. For example, Suzana worked as a translator for Belgian tourists and through them found support for her studies. She explained:

“I received sponsorship for my Forms Five and Six studies through the Bwigiri rehabilitation center, where I met tourists from Belgium who had visited the national parks as well as the center. They needed a translator from Swahili into English, which I did this during their visits to the market and shops in Dodoma. As we were walking to the shops, they asked me how I managed to study. I explained how hard it was to succeed academically because of my family’s poverty and so they decided to support me by paying all of my expenses for Forms Five and Six and my Diploma in Education. Therefore, my parents, council, and sponsors from England played a role in helping me to get where I am today.” (Suzana with visual disability)

“Ufadhili form five na six pia diploma nilikuwa nimeupata pale Bwigiri Rehabilitation Centre nikawakuta watalii wamekuja pale Bwigiri kwa ajili ya kutembelea mbuga za wanyama. Pia walitembelea kitengo cha walemavu ambao hawaoni kilichoanzishwa pale Bwigiri kinaitwa Bwigiri Rehabilitation Centre. Mara nyingi wamekuwa wakinitaka nitembe nao madukani kwa sababu hawaelewi Kiswahili, wakawa wananihoji ninasomaje, nikawaelezea shida zangu wakakubali kunisomesha form five na six. Wakati naenda Dodoma mjini kufuatilia matokeo yangu ya form six nikapitia bwigiri nikaona wamekuja wapya wale wamemaliza mkataba, nikazoeana nao nikawaeleza shida yangu nikapata sponsor mwingine kutoka England akanilipia ada ya diploma. Kwa hiyo wazazi, halmashauri, na wafadhili kutoka Englandi ndio walionisaidia kufika hapa.” (Suzana, mlemavu asiyeona)

Magdalena, whose bachelor’s degree was sponsored through the Campaign for Female Education (CAFED), explained her situation as follows;

It was sheer luck, because I had no fund support for my studies but, shortly after I arrived, I was wandering here and there and had not registered due to my financial problems, I met a teacher whom I do not remember exactly and told me to see the CAFED (Campaigning for Female Education) sponsorship announcement for women from Iringa, Ruvuma and Morogoro. I went to see the advertisement and went into the office, where I explained my situation. They gave me a form to fill in, to which I attached what was needed and I finally got the opportunity. This opportunity was just by chance because only ten were picked out of the more than a hundred applicants, including me. All of us who were selected were from a poor home background and belonged to the mentioned regions.” (Magdalena with visual disability)

"Kwa kweli nilikuwa na bahati kwani nilipofika hapa chuo nilitakiwa kulipa pesa ya ada, kujiandikisha and matibabu. Nilishindwa kujiandikisha kwani nilikuwa sina mkopo na sina hela yeyote. Nilikuwa nazunguka ofisini nikakutana na mwalimu mmoja wala simkumbuki akasema kuna tangazo la ufadhili kwa ajili ya wasichana wanaotoka Iringa, Ruvuma and Morogoro. Project iliitwa CAFED (Campaign for Female Education) nikaenda kuliona hilo tangazo, nikaingia kwa wahusika nikajieleza, wakanipa form nikajaza nikaweka viambatanisho wanavyohitaji. Just by chance kwa sababu tuliomba zaidi ya 100, tukachaguliwa wasichana kumi na mimi nikiwemo ambao tuna maisha magumu na tunatoka katika wilaya hizo na mikoa hiyo." (Magdalena, mlemavu asiyeona)

Another woman stated:

"When I was in secondary school, I got a scholarship from a Canadian called Chesi, who was supporting thirteen students at ordinary and advanced level studies from Forms Four to six. This support was very useful because he paid for the students' bus fares, escort assistants, pocket money and materials. He certainly reduced the huge burden on my family." (Amina with visual disability)

"Nilipokuwa ngazi ya sekondari nikapata mfadhili huyo wa Kanada aliitwa Chesi. Huyu ndiye aliyekuwa anatumia wanafunzi kumi na watatu. Alitusaidia sana kwa sababu aligharamia nauli ya mwanafunzi na msindikizaji kama naenda shule na kurudi nyumbani kila likizo form one hadi four, form five na six na diploma. Alinilipia pia ada na pocket money alinipa. Kwa kweli alipunguza mzigo mkubwa sana kwa wazazi wangu." (Amina, mlemavu asiyeona)

Maria reported obtaining a Perkins machine from a nongovernmental organization (Under the Same Sun). The machine, which simplified her studies at the university, was too expensive for her family to afford. Maria added that many students with disabilities lacked special equipment, such as Braille and Perkins machines, which caused them to feel unmotivated to study, to perform poorly and sometimes drop out of the university. Consequently, the women indicated that financial support from parents, husband, HELB and scholarships were the enabling factors for their participation in higher education.

5.3.7 Summary

In summary, the findings revealed that the majority of the women reported that their families, self-acceptance and personal effort had a great influence on their successes. A few of the women acknowledged peer and financial support as important factors of their educational achievements. The influence of family was described in terms of the acceptance of women with disabilities. Additionally, an encouraging home environment, positive attitude toward women's education, parents being transparent and discussing issues with the women, motivation from the parents, guidance and counseling and family educational backgrounds were also mentioned as essential to the women's successes. Most of the women with disabilities reported receiving equal treatment to their siblings without disabilities. Not only did the parents help the women to succeed, but the support of their husbands was equally important.

Self-acceptance and personal effort helped the women to achieve their goals and create a suitable environment in which they might perform well. Personal efforts were important as were motivating parents, families, teachers

and peers. Also, openness toward the women's needs and the challenges they faced helped them to obtain study directives, employment, financial support and educational opportunities from different people and educational institutions. Moreover, supportive, interactive lectures, study materials and collaboration with the teachers influenced the women's participation in higher education.

Participants with visual disability indicated the need for more facilities and support, than other participants. Overall, women with disabilities felt that they were more supported at the university than it has been the case in lower level of education. The woman with a hearing disability received little special support and equipment from the university, while the participants with visual disability and a few of those with physical disability experienced more challenges in the application and admission processes and in starting university life. The women reported benefiting from their peers through socialization, study materials and group discussions. All of these factors were crucial to their academic achievements and successful participation in higher education. In addition to their academic achievements, the study group discussions helped the women to build both their social relationships and their confidence. The participants also changed and developed new attitudes regarding how they interacted during the study group discussions.

Financial support from their families, scholarships and governments were described as important factors in enabling the women to pursue a higher education. Their families' economic backgrounds and levels of education attained influenced the women's educational opportunities. The women from rich families reported that they owned various study materials and the women from poor families reported depending on the university's facilities and equipment. Therefore, both internal and external factors are important for the women's participation in higher education.

5.4 Challenges encountered by women with disabilities in their educational careers

This section presents the findings concerned with the challenges encountered by women with disabilities in their educational careers. The women reported various challenges based on their educational experiences that can be categorized as follows:

- Marginalization of girls and women with disabilities in society
- University life and studying
- Financial challenges

5.4.1 Marginalization of girls and women with disabilities in society

The majority of the women with disabilities reported that, they faced various challenges related to accessing education, including from their family, society and the educational institutions. It was revealed that they were being discriminated by society due to different factors. In relation to the family, the participants stated that their parents knew nothing about educating women with disabilities, thus, getting limited support from their parents. Unlike the majority of the parents who were positive about the education of their children, some few parents believed that educating women with disabilities was unimportant and, were unsure what kind of job their daughters would get or which discipline they should study provided that they have disabilities. The women stated that most parents lacked experience of what would be the next step after they completed their primary and secondary education. The parents' lack of information about higher education made them think that their daughter with disabilities had no opportunity to go beyond primary education. The interviewees also stated that some parents forced the women with disabilities to get married or stay at home without sending them to school.

The limited knowledge of most of the parents about the opportunities available to women with disabilities impacted the women's participation in higher education. Some of the participants indicated that often their parents felt disappointed by the women's poor examination results at the secondary level, and therefore refused to keep them in education. The women revealed that their parents occasionally protected them and failed to send them to school because of the community's perceptions and the extensive support they needed from their parents. The parents also perceived that women with disabilities could not receive sufficient support in school and that school life was a struggle. The lack of educational priority and motivation for the women with disabilities, unequal rights within the families, segregation and discrimination were among the challenges that this group faced in most families and communities. Elikana had this to say:

"...the DEO responded so aggressively that I did not feel well at all. He said, should we educate this person, would she pass the exam given the fact that she is blind? Aren't we misusing the government's resources? Just misuse the government resource as easy as that, without countable outcomes? This could be a big loss to the government, let her go home and wait for marriage."
(Elikana with visual disability)

".....DEO alijibu vibaya kiasi kwamba sikujisikia vizuri kabisa kwa kusema Ahaa tumsomeshe huyu atafaulu kweli mtu mwenyewe kipofu haoni situnaharibu tu mali ya serikali, tumalize tu fedha ya serikali bila mafanikio itakuwa hasara mwache tu akakae nyumbani aolewe." (Elikana, mlemavu asiyeona)

Some of the participants indicated that at the lower levels of education they felt underrated, inferior, insecure and in need of protection. They were ill with the difficult conditions and were becoming desperate. They further reported that their peers and others in their community mocked them when

they saw them studying. It was reported that this situation caused them to feel bad and worried about meeting their goals. The participants declared that a poor understanding of the importance of education in their lives and other disability challenges, resulting from both the community's and their parents' attitudes, affected their participation in studies. Upendano had this contribution:

"I was on a commuter bus from the university to a certain point in the city. I was about to disembark when the bus conductor called somebody to come to the bus and collect the luggage. Can you imagine, somebody calling you luggage? Am I a bag of flour? So this behaviour made me feel so annoyed by the community surrounding me." (Upendano with visual disability)

"Nilikuwa nimepanda daladala natoka chuo nikawa nashuka sehemu fulani, unaona eeh! Wakati nataka nishuke konda akamwona mtu chini ya gari, akamwambia njoo uchukue huu mzigo. Hivi we fikiria mtu ananiita mimi mzigo kwani nimekuwa kiloba cha unga. Sasa hii tabia inanifanya nijisikie vibaya sana na hii jamii." (Upendano, mlemavu asiyeona)

Some of the interviewees revealed that the cultural practices they encountered discriminated against them in certain social aspects, including education. Much of the discrimination was reported to be experienced by the women from rural areas, where there were many cultural and traditional barriers against people with disabilities. Generally, the challenges that the women with disabilities experienced led to other complications, involving flirting and abandoning their studies. Others ended up with unplanned pregnancies.

Only six of the twenty-two women were married, and these were the women with visual disability. Some of the women with visual disability and all of the women with physical and hearing disability were single, despite their ages. Rahima and Lena reported that they had divorced because of their disability soon after starting at the university, partly due to their husbands' disappointment with their family members and society in general about the women's participation in higher education. The women stated that their husbands felt inferior because of their low educational background and also that they were ashamed of living with a woman with disabilities, so their husbands left. These women also experienced attitudinal barriers originating from their husbands' families when they married due to their disability and education. Their husband's families discouraged marriage to a woman with disabilities. Two women reported that their in-laws felt disappointed that their husband had married them because they were perceived as unable to do household chores and their husband had to take care of them. Thus, it was reported that their disability and education influenced their chances of getting married and that they spent longer finding a spouse, which caused them to marry later in life. They stated that while it was easy for men with disabilities to marry women without disabilities, the reverse case was rare. They reported that men with disabilities got married much earlier compared to them because society viewed them as weak and unable to perform any kind of work, including parenting and household chores. They also reported that men

perceived them as burdens because they often needed assistance and that their husbands thought that any children they had would also have disabilities.

Therefore, the study noted that the women faced difficulties in getting married because of their cultural orientation and discouragement from society. The women with visual disability showed indignation about marrying a man with this disability rather than one without a disability because they shared the same backgrounds, status and feelings. The women also showed an interest in having children, and trusted the support from their children more than that from other people.

Some of the women lacked the minimum qualifications to apply directly to higher education because of the challenges they had encountered during the lower levels of education. They decided to pursue a diploma as a way of obtaining the grades required to progress to higher education. This situation sometimes led to environmental challenges, low motivation and a lack of information about higher education, due to their isolation. Moreover, it was revealed that the teachers at the lower levels of education did not provide them with any information related to higher education. Those who succeeded in progressing to university revealed that it was due to the efforts of their families and friends who searched for information and made it available to them. Thus, some of the women described how they had had no idea how to proceed after completing their primary and secondary education. Consequently, they reported knowing little about the criteria for applying for higher education.

5.4.2 University life and studies

Fifteen of the participants reported experiencing challenges related to the university application and admission processes as well as starting university life. These challenges were related to the facilities and equipment, the lack of a guidance and counseling unit, readers, peers, teachers, the application and admissions procedures and university life. The majority of the women with disabilities indicated that the application form was loaded with too much information over many pages, which was expensive to print. The form thus took a long time to read, understand and fill in, so they required advice and an assistant, who required payment. The participants with visual and physical disability reported challenges related to selecting certain programmes, such as engineering, mass communication and technology, nursing, medicine and science, because of their disabilities. For example, the participants with visual disability indicated that in order to complete the application, they needed assistance from very precise and trustworthy people who knew them well, in order to avoid jealousy and other challenges. For example, Suzana noticed that the person she chose to fill in her form had selected a programme she did not wish to study and also changed her A grade to a B and her B grade to a C. Suzana added that had she failed to send the form to her husband to proofread, she would not have been admitted to the university or would have been studying a programme unrelated to her chosen profession. In this situation the

participants acknowledged the importance of having someone trustworthy to proofread the application form before submitting it.

The women also reported the university grading and selection criteria as other challenges experienced during the application process. They saw the university grading system as unfair because it used the same criteria for women with and without disabilities, without considering their backgrounds. They proposed that the university should take into account their previous learning environments and the challenges they had previously faced. In addition, the lack of choice of programmes was also a challenge the women faced in secondary education; the interviewees with visual disability had been unable to study mathematics or science, for example, which limited their subsequent choices of degree programmes. Thus, they proposed that rather than using the same selection criteria, the university should consider special treatment for women with disabilities in order to motivate them to apply. In selecting a degree programme, the women indicated that the university allocated them to courses for which they did not apply, which resulted in some of them studying for a career they had not selected or spending time changing programmes after starting at the university. Sometimes, they failed to change programmes. One participant stated:

"The biggest problem is that they sometime allocate you to a programme that you did not select. For example, I chose education, but was given a place in archeology, which includes visiting museums. It is difficult for me to observe, write, and understand because I cannot see. This situation is challenging for me." (Secilia with visual disability)

"Tatizo kubwa lilikuwa unaweza ukachagua course wao wakakupa course ambayo hukuchagua. Mfano mimi nilichagua education wao wakanipa archeology, Ina mambo ya kwenda kwenye makumbusho, hali ambayo inaniathiri kwa sababu hata nikienda makumbusho niambiwe niandike nilichokiona nitaandika nini." (Secilia, mlemavu asiyeona)

Some of the women with disabilities also narrated the difficulty in persuading someone to act as trustee for their student loan application. The loan application form demands that the referee declare their property, such as a house and/or land, and attach a salary slip. This caused difficulty for most of the women with disabilities, whose employment after completing their degrees seemed uncertain. Hence, their ability to repay the loan was questioned, and some people feared they would end up repaying the loan on the women's behalf. A few of the women with disabilities described how they hesitated to disclose their disability on the university application form as they were afraid that it would affect their chances of admission. However, other participants thought that identifying their disability on their application form would enable the university to prepare suitable equipment, study materials and readers for their use in advance, but this was not the case.

The interviewees also experienced some delays during the admission process. The participants reported a lack of proper communication, information and accommodation during the admission process. They did not receive any support to take care of practicalities such as paying their admission and

accommodation fees upon beginning their studies. According to the women, there was little clear information and few guidelines provided about university costs such as tuition fees, health insurance, faculty requirements and accommodations. The poor organization and distribution of the admissions letter was also reported to challenge the women with disabilities, as they did not get the information in time to collect their admission letters. As a result, they did not have enough time to prepare for their studies. These women did not understand where they could register because the admission procedures were unclear. They further argued that during admissions week, no one was available to provide them with information about the admissions procedures. These women with disabilities needed someone to guide and instruct them because the environment was new; the participants with visual disability reported experiencing more challenges than the other participants during their first week at the university.

In addition, the lack of university accommodation was indicated by the interviewees as a further challenge for them. For example, during admissions week it was reported that these women came from different regions, often located far away from the university. They travelled with an assistant but they did not have any one to accommodate them. This situation caused the participants to spend money on hotels, food and travel. As soon as they got a place at the university, the participants wanted to travel directly to the dormitories from home in order to reduce unnecessary costs. A few participants with physical and visual disability also reported being accommodated far away from the university campus. They used a shuttle bus to commute to and from the university, but the buses were too small and tended to be overcrowded, so sometimes the women were late for or even missed their lectures.

The majority of the women with disabilities also reported experiencing challenges during the transition phase of leaving home and starting university life. These included missing their former friends and making new ones, budgeting, feeling homesick, and coping with complicated environments, and different foods and behaviour. The participants experienced difficulties in planning their lives and budgets because previously their parents had supported them in these aspects.

“How to budget also challenged me because I was given the money for the whole semester. I kept asking myself how I could make it last that long. It was hard to divide it by the number of days I would spend at the university because, if it ran out, there was no-one I could turn to for extra money. I realized that I needed to be careful.” (Happy with visual disability)

“Suala la kutengeneza bajeti lilikuwa gumu pia kwa sababu nilikabidhiwa hela ya semester nikawa najiuliza nitafanyaje au nitatumiaje ili itoshe. Kigumu ni katika kulinganisha na kuangalia kiwango cha hela na muda nitakaokaa chuo, kwani ikiisha mapema siwezi kuomba popote, natakiwa niwe na matumizi makini.” (Happy, mlemavu asiyeona)

In that regard, they reported that planning their studies carefully would ensure they got high grades in their classes. Making new friends was also a challenge for the participants as they missed their old school friends and it was

difficult for them to make new friends. The participants reported that their former friends from secondary school understood them very well and could easily give them support and cooperate with them. In that situation, new friends within sufficient background knowledge about disabilities had little understanding about these women's needs and challenges. For example, it was reported that it was difficult for some of their new friends to lend them their books and summary notes because they did not trust them. The women with a visual disability also may have needed more time to read printed material or be able to read at all without using special computer software or equipment. Many blind women prefer material in an electronic format and use a screen reader. It is important for core reading materials to be identified well before the women start higher education.

Nearly half of the participants identified a lack of computer skills as another obstacle to their successful participation in higher education. According to the participants, a lack of these skills can lead to lower grades. In particular, the participants with visual disability reported the need for a screen reader computer programme, including desktop icon labels, documents, and content and toolbar menu items. An appropriately equipped computer also speaks aloud what is on the screen. The participants with visual disability stated that when they got a computer with a sound programme they had to work out how to use it as no computer training was offered that was specially designed for people with visual disability. The participants with other types of disability also indicated their needs for appropriate computer skills. The women reiterated that it was more important to have computer skills in higher education than in secondary education, in order to reduce their reliance on their peers, readers, and teachers, and be able to find their own notes, references, and other online learning materials. They sometimes became bored due to a lack of access to sufficient reference materials, which caused them to score lower grades in assignments and examinations.

The lack of computer knowledge and skills and local internet access affected the women not only academically, but also in terms of the university application process. This study revealed that a lack of computer skills affected the participants with visual disability more than those with other types of disabilities. Additionally, the participants needed more support to complete their application forms and, because they lacked computer skills, they hired internet cafe workers to help them download the university application form in exchange for payment. These participants declared that their poor computer knowledge made the university application process very expensive and time-consuming, and that computer skills were essential for every aspect of their university lives. The majority of the women with disabilities indicated the need for computer training to improve their knowledge and simplify their search for online learning materials. They insisted on the importance of computer knowledge because everything at the university required the use of computer. For example, Rahima commented:

“Computers are an important facility. Once you have one, you need to take the initiative in learning how to use it, because no one can accept that a blind person can learn how to use a computer. Your fellow students will take your hand and say ‘This is a mouse’, ‘This is a keyboard,’ etc., so you must find time and learn at your own cost how to use it. Once I have all of the equipment, I will study comfortably. Having facilities that help me to take notes will facilitate my studies. It has been difficult due to high costs. To afford to buy that equipment you must have a job and an effective economic strategy. You can also try your luck by asking a sponsor to buy you the equipment.” (Rahima with visual disability)

“Computer nayo ni muhimu lakini ukipata lazima ugangamale mwenyewe kujifunza hakuna mahali popote ambako unaweza kwenda wakakubali kuwa hivi usiyeona unaweza kujifunza computer. Wanafunzi ni wengi watakupapisisha kuwa hii ni mouse, keyboard nk. Kwa hiyo lazima ujifunze kwa muda wako na gharama zako kwa hiyo vitu vyote nikiwa navyo basi nitasoma kwa raha. Nikipata vitu vya kuniwezesha kupata notes inakuwa rahisi lakini sasa imekuwa ngumu kwani gharama ni kubwa, na ili niweze kuafford lazima uwe na kazi yako na strategy nzuri ya uchumi, at least au umebahatisha mfadhili akununulie.” (Rahima, mlemavu asiyeona)

The lack of modern facilities and equipment such as note-takers, computers, Braille books and machines, magnifiers, Perkins, wireless internet connections, tape recorders, detectors and white canes were mentioned by the participants with visual disability as major challenges to their success. For example, participants with visual disability indicated that the lack of a note-taker and modern Braille machine caused them to miss some lecture notes. The situation forced the participants to depend more on their peers’ summary notes, which were written according to their peers’ level of understanding and could not be easily adopted, as the women sometimes failed to understand them. For example, one of the respondents commented:

“Without a note-taker, a blind student cannot take notes during lectures and, since they can’t take notes in class, they will have to obtain a summary from their peers who have taken notes according to their own way and understanding. You find yourself copying things which you don’t understand or which have been wrongly interpreted. A lack of reading facilities for blind students is a major source of their poor academic performance. If teachers do not make efforts to solve our problems, they will continue to make us suffer.” (Upendano with visual disability)

“Usipompa note taker hataandika darasani atachukua summary za mtu mwingine ili aandike. Lakini mtu anachukua summary kulingana na uelewa wake unajikuta unakopi vitu hawivielewi au unakopi kwa makosa au visivyokuwepo au havikumaanisha hivyo. Usipokuwa na vifaa vinaoyoweza kumwezesha mlemavu wa macho kusoma bado ufaulu wake utakuwa mbaya na walimu wasipotilia mkazo matatizo yetu na wenyewe watakuwa wanaendelea tu kutuumiza.” (Upendano, mlemavu asiyeona)

The absence of modern equipment such as electronic wheelchairs and local transport on campus were also mentioned by some of the participants with physical disability as affecting their studies. For example, wheelchair users were unable to attend lectures when it was raining because no one would volunteer to push the manual wheelchairs in the rain. This often caused wheelchair users to miss lectures while their peers attended them. These women with disabilities stated that electronic wheelchair support could help them to access the classrooms, especially during the rainy season, instead of

remaining behind in the dormitories while their peers attended the classes. Other women with disabilities indicated that electronic wheelchairs would help them to meet their needs while on campus and reduce their dependence on their peers. Moreover, Beatrice reported the absence of modern hearing machines such as loudspeakers and sign language specialists. This participant indicated that hearing machines were essential because they help to send signals to the hearing aid system that enable a hearing impaired person to hear certain sounds. She stated that loudspeakers and sign language specialists were important requirements for her academic achievement in higher education and other environments, without which she could end up with poor grades or failure.

A shortage of facilities was reported as one of the factors for their poor academic performance in higher education. The participants argued that they applied to the university with the expectation that they would have sufficient modern equipment compared to their previous educational experiences, but the reality was very different. These women stated that life was better in the lower educational levels than in higher education in terms of accessing facilities. The following example represents the women's opinions: "I started university with the notion that there would be sufficient modern facilities compared with the lower levels of education, but I experienced the opposite. There are better facilities even in secondary school than here." (Alinanuswe)

Some of the participants pointed out delays in obtaining learning equipment. They were studying without equipment while their peers were enjoying classes. The delay in accessing learning equipment meant that they had to complete their course work or examinations without notes or handouts to support their studies. According to the participants with visual disability, they were forced to simply listen in class without being able to take any notes. It was thus difficult to memorize and remember everything. The delayed provision of materials meant that the participants had to deal with a large number of notes in less time, as it took them longer to write them up, which ate into the time available to engage in background reading to support their course work and examinations. They also failed to concentrate because they were lagging behind with their notes. This situation resulted in their poor academic performance, so the women stressed the need for the university to prepare facilities and equipment for them on time.

Due to their lack of access to education and the curriculum, the women experienced difficulties in selecting and studying appropriate courses and professions. Six of the women with disabilities had to change their career plans due to their disabilities. The women with visual disability had expected to become, for example, medical doctors, journalists, businesswomen, science teachers, linguists (Kiswahili) or lawyers, but their disabilities proved the biggest impediments to their plans. The interviewees reported that because of their disabilities, they decided to opt for alternative professions. They also argued that the limited number and types of subjects available to them to study at secondary level also challenged their academic pursuits. They did not study

any science subjects other than biology, and even then they only studied the theory of biology and not the practical issues. The participants stated that usually, studying science programmes includes studying physics, chemistry, mathematics and geography. They were not studying the above mentioned subjects because of the lack of specialists and suitable technology for translating drawings into Braille. Therefore, this situation limited their choice of higher education programmes and hindered the women from fulfilling their goals. The following statement reflects this situation:

“For example, I’d like to be a medical doctor, but I cannot fulfill my wish. I have a different job, which I never expected to do, because of being visually impaired. We did not study science at secondary school, except for biology and then only the theory. The science combinations need physics and chemistry, which are difficult for us because of the drawings, lab practical and also they need specialists.” (Suzana with visual disability)

“Nilikuwa napenda kufanya kazi ya udaktari, lakini tayari nina kazi nyingine ambayo sio matarajio yangu. Kwa sababu ya ulemavu wa macho hatusomi science kuanzia sekondari, tunasoma somo moja tu biolojia na kwenye mchepuo wa sayansi wanataka Fizikia pia kemia ambacho ni kitu kigumu kusoma hayo masomo jinsi yalivyo na pia yanahitaji mtu anayeona. Kwa wasioona kuna michoro na practicals ambayo ni ngumu kuyaunda.” (Suzana, mlemavu asiyeona)

Due to their supportive home environments, eighteen of the women stated that they were comfortable with their disabilities, while four wanted to be like other students and felt inferior because they looked different. The latter group stated that because of their disabilities, they were easily identified among their peers and society, who aggregated them because of their disabilities and failed to see their potential. Later, the participants stated that due to their disabilities, they lacked certain equipment, which affected their academic achievement as they had to change their future plans. Poor examination results caused by the unsupportive university environment were factors that significantly influenced the participants’ academic performance. They also aimed to continue their studies after completing their first degree. The women indicated that without their disabilities they could have been performing better than they were, and that their uncertainty about their academic success was painful and one reason why they felt uncomfortable about their disabilities. Moreover, some of the women felt uncomfortable when asked about their disability and marveled or stared at the way she walked. Beatrice explained, “I feel very bad when I am walking in the street and find that people are talking about me, looking at me, and pointing at me as if I weren’t there.”

The women also stated that the nature of their visual disabilities limited the amount of support they would get because they appeared to be physically normal. They failed to receive assistance such as closer seats in class and lecture notes. The interviewees had to sit at the back of the class, and their teachers and peers viewed women with disabilities as lazy and therefore did not give them lecture summary notes. The women with visual disability reported that the lack of facilities related to their disabilities affected not only their studies but also their lives in general. They argued that due to a lack of special equipment and

suitable technology for most of the things they wanted to do, plan or perform, they needed a second person to be present to read and direct them, which deprived them of their privacy and made them wonder if their personal information was being kept confidential. Some of the women indicated that, even when reading letters, the Bible, Quran or other books, they needed assistance, which hindered their sense of freedom, privacy and security. If the interviewees had facilitative devices, they could perform all of these actions unaided. They also reported that the lack of technology available to compensate for their disabilities limited their ability to go shopping on weekends, as they needed assistance to do this and had to pay for it.

Furthermore, the majority of the participants reported being limited by their environment as a challenge related to accessibility and adaptation, especially the women with visual disability and some of those with physical disability. The university surroundings, classes, library, toilets and technology were described as too complicated because of countless hills, stairs, fences and bridges. This environment caused some women to take longer to reach the classrooms because often they got lost and/or had to walk slowly and carefully. They indicated that because of environment-related challenges, they frequently required an assistant to help them to access the classrooms; otherwise, they got lost and missed the lectures. For example, some of the participants with visual disability reported that they had to start using a white cane at the university because of the inaccessible environment. Elikana stated, "The university planners did not consider how handicapped students can move around easily. I personally didn't use a white cane before. I just started using it here at university because of the stairs which are located almost everywhere."

The women with visual disability also reported that peers used maps to get to know the environment. If their peers wished to go somewhere, they consulted the map to see which way to go, but the women with visual disability were unable to do this. Classes were arranged in such a way that they needed to change classrooms for each lesson, and they used various routes to achieve this. The participants revealed that they often got lost because the university campus is complex and full of different paths, so it was hard for them to master the environment and remember which paths were accessible for them to reach their destination. Moreover, some classes were located upstairs, which was hard for them to reach, especially for the wheelchair users and women with visual disability. Other university buildings also did not have elevators.

The participants argued that some classrooms (for example, Lecture Theatres 1 and 2) had fixed seating, which made it difficult for them to get closer to the teachers. This situation challenged the women in terms of following lectures and writing summary notes. It was also difficult for them to ask questions and get hold of the materials that were distributed. The distance between the various classrooms also challenged those with physical and visual disabilities due to their inability to walk quickly or run. The participants sometimes failed to reach the next lecture room on time and often found that the teacher had already begun the lecture. These participants arrived tired and

had to catch up with note-taking as the teacher continued to teach. This situation made it difficult for them to concentrate and affected their academic performance. The women indicated that having to walk faster took up a lot of their energy and strength. Finalizing the remaining notes in the evening took time, which cut into the time they had available for sleeping. The participants wished that an internal transport system was available or that all classes were held in one room, to avoid the need for them to move around so much. The following comment reflects the women's opinions about the need to move from class to class:

"I try to walk as fast as I can, but my legs hurt and I don't manage to get there in time. For example, it takes me 10 minutes to walk quickly to Nkurumah Lecture Hall from Hall 7. Sometimes the lecturer had already started teaching when I arrive and I miss part of the lecture." (Melina with visual disability)

"Huwa najitahidi kutembea to the maximum ninavyoweza lakini naumia sana pia nashindwa kucover. Mfano kutoka Hall 7 hadi Nkurumah natembea dakika 10 tena kwa haraka wakati mwingine natembea dakika 10 nafika darasani mwalimu ameshaanza kufundisha na nimekosa sehemu ya kipindi." (Melina, mlemavu wa viungo)

The women with visual disability found it difficult to find not only their classrooms but also the refectory and dormitory, so it was challenging for them to memorize the route. The participants explained that in the lower levels of education they were in the same classroom for every subject. If they had to change classrooms, the other one was close by and their surroundings were free of obstacles. Some of the women with disabilities argued that the university environment was worse than that of their previous schools, as reflected in the following comment:

"The university environment is more difficult to master than any other environment I have experienced before. Most areas of the campus are hilly and there are stairs everywhere; the classrooms are located far apart compared to those in the secondary school and Diploma College I attended. The programme classes are distributed across various, widely-dispersed classrooms, and you must move from one room to another for each class in Nkrumah, Yombo, and then engineering (see figure 1). Changing classroom plus the nature of the pathways have made it very difficult for me to master the environment." (Suzana with visual disability)

"Chuo kikuu mazingira yake ndiyo magumu kuliko sehemu zote, mazingira yake sehemu kubwa ni milima, na kila unakokwenda ni ngazi na madarasa hayapo systematic tofauti na nilikotoka sekondari na diploma. Ukitaka kusoma somo fulani unanza Nkurumah, ukitoka Yombo tena Engineering. Kwa hiyo kubadilisha madarasa ukijumlisha na njia kila wakati unabadili inafanya vigumu kushika direction nakujua nipite wapi na kulingana na ngazi zilizyo nyingi. Mimi kama mimi ninapoteza kabisa hata uelekeo kuwa nielekee sehemu gani. Hii hali ya kubadilisha madarasa leo huku kesho kule hata nikiambiwa darasa sikumbuki tena." (Suzana, mlemavu asiyeona)

The participants with visual disability also indicated that in order to locate their classrooms and dormitories, they had to find a guide. They had expected that their female rather than male peers would help them to move from class to class or when returning home in the evening, but this was not the case.

The women indicated that their rooms at the dormitory were located upstairs so it was difficult for them to reach, due to their disability, and that there was also a lack of water. At times, the water supply to the upper floors ran out and the women had to carry buckets of water from downstairs up to their rooms, which were often situated on the third or fourth floor. This was very difficult to do because of the steps and nature of their disabilities.

Inaccessible toilets and a lack of sanitary equipment were also reported by the women as challenges associated with their university lives. They indicated that they shared toilets with the entire university campus and dormitories, and these were often wet and slippery. The conditions of the toilets in the dormitories was emphasised; the toilet seating was not good for them, especially for women with visual disability who, whenever they wished to use the toilet, had to ask their peers to check what state they were in first. The women with visual and physical disability, particularly wheelchair users, were more at risk in these scenarios than those with other disabilities.

On the other hand, the women with visual disability and some of those with physical disability encountered barriers in accessing the library, including the short loan periods in operation. Both categories of women indicated the challenges associated with the fact that the library was located upstairs. Moreover, the women with visual disability reported that the lack of books available in Braille from the library affected their studies and performance in class, as they had to depend on someone to read to them and provide explanations. This situation was reported to affect their ability to produce summaries, as some readers omitted key words in the books because they did not understand them. The participants indicated the need to read the books themselves, as this would give them an opportunity to learn how to create summaries. Therefore, they felt that the university environment did not help students with disabilities to study successfully.

With regard to discrimination and attitudinal barriers, nine respondents reported that they felt discriminated against by certain of their peers who, for example, refused to discuss anything with them and placed unnecessary conditions on the women's borrowing of their summary notes. Their peers would lend them their exercise books for one or two hours while they would allow their peers without disabilities to borrow them indefinitely. Despite the fact that the participants were reported to benefit from their peers, they indicated that sometimes their peers exploited them for their own benefit. The interviewees described experiencing discrimination in discussion groups, when some members responded more to questions asked by their counterparts without disabilities, and avoiding or ignoring those asked by the women, while other peers sometimes avoided them altogether, refusing to accept them into their discussion groups and falsely claiming that their groups were already full. Sometimes, their peers indicated that they were not part of the discussions, when in fact they were. Some of the women also reported feeling segregated during class discussions, reporting that their peers were uncomfortable about being in the same group with them, and regarded them as failing to make any

contributions at all. These peers were reported to undermine and devalue the participants and fail to involve them in the group discussions. The following exemplifies the women's situation:

"For example, as a person with disability you can ask someone without disability to join you in a discussion and she/he will claim to be tired. However, if invited, she/he will agree to discuss issues with a student without disabilities. This has been irritating and making me feel bad. I've been wondering: what's wrong with me?! I've been considering myself as nothing in this world and helpless. Furthermore, if you ask to borrow an exercise book to copy the notes from it, it is lent for one or two hours only and sometimes they refuse to give it at all but, when asked by non-students with disabilities, they lend it to them for as long as they wish." (Alinanuswe with visual disability)

"Kwa mfano mlemavu unaweza kumuomba asiye na ulemavu mfanye majadiliano anasema amechoka. Lakini akija asiye mlemavu anaenda kujadili nae, nimekuwa nikijisikia vibaya sana na kimekuwa kinaniuma na kujiuliza kwani mi nikoje! Nakujiona si kitu na kujiona duni sana, pia ukiazima daftari ili uandike notes wanakupa saa moja au mawili wakati mwingine wanakataa kabisa lakini akija asiye mlemavu anampa bila masharti ya muda." (Alinanuswe, mlemavu asiyeona)

Furthermore, some of the women with visual disability also reported their peers' attitude towards their examination grades. Their peers believed that the women with disabilities were being favored by the teachers, which led to poor relationships and a lack of cooperation with their fellow students. The following example indicates the women's opinion about this:

"When we get high scores in exams, our peers think that we are being favored by the teachers; that our teachers just want to help us to pass because they think we are incapable of it and so disregard us as incapable academically, leading to poor social relations between us and the and the sighted students." (Upendano with visual disability)

"Wengine wanapoona tunafanya vizuri wanasema tunapewa makasi, tunakuwa favoured na walimu au wanatupitisha tu hatukukuruki kama wanaoona wanavyoteseka. Kwa hiyo moja kwa moja inajenga dharau na dharau inaleta mahusiano mabaya kati yetu na wanaoona." (Upendano, mlemavu asiyeona)

Sometimes, their peers were afraid to help the women, assuming that by doing so they might also acquire the disabilities. For example, some peers avoided physical contact with them, as they feared that they might go blind if they touched or held hands with a blind person. Their peers even asked the readers how they managed to support the women with visual disability. This fear and hatred also resulted in a lack of cooperation between these women and their peers. The following examples illustrate this:

Sometimes, you might experience difficulties with the stairs, almost falling down, but people won't help you out of fear that they might also become handicapped. Our peers hate us and ask the readers how they manage to work with us because they fear us. This attitude creates a social gap between us and our peers. When they feel scared of us, are we not human beings? Are we animals? (Upendano with visual impairment)

"Mtu anakuona unataka kuanguka kwenye ngazi anasema nikimsaidia mtu mwenye ulemavu na mimi nitakuwa mlemavu. Wanatuchukia na wanawauliza wanaotusomea (readers) kuwa

wanawezaje kukaa na wale watu, kwani tunawaogopa na kitendo hicho cha kutuogopa kinajenga mahusiano mabaya na sisi. Kwani ukituogopa sisi, kwani sisi sio watu? Sisi wanyama vipi? (Upendano, mlemavu asiyeona)

Lena added that:

"I have only a few friends at the university who are willing to be close to me. They do not even want to come near us. I do not know why. When you want to study with them, they refuse. There are only a few who invite you to interact with them." (Lena with albinism and visual disability)

"Mmm!! Marafiki hapa chuoni wanaopenda kuwa karibu na mimi ni wachache sana. Wengine wana tuogopa hata kutukaribia, ukitaka kusoma nao hawataki, yaani sijui wanatuonaje, ni wachache sana ambao niko karibu nao kusema kweli." (Lena, mlemavu wa ngozi na asiyeona)

A few of the women with visual disability indicated experiencing attitudinal barriers related to toilet use and sharing food. It was stated that their peers refused to share food with the women with visual disability due to a belief that they used their hands to detect the toilet and then failed to wash them properly afterwards, which made the women feel offended. Moreover, it was also revealed that when the janitor came to the dormitories and asked who had left the toilet in a mess, their peers could tell him that it was the women with visual disability because they could not see the toilet bowl. Elikana stated:

"The hostel toilets are usually dirty. If the students without disabilities leave them in a mess and the cleaner comes to ask about this, the non-students with disabilities say that it was the students with visual impairment because they can't see the hole [in the toilet floor], actually everything wrong is attributed to the students with visual impairment." (Elikana with visual impairment)

"Mara nyingi mabwenini vyoo vinakuwa vichafu na wanaoona wakichafua wanasema ni sisi tusioona. Kwahiyo wafanya usafi wakija bwenini wanashout nani wanaochafua vyoo? hebu punguzeni uchafu, wanaoona wanajibu wasioona ndio wanaochafua vyoo kwasababu hawaoni shimo yaani kila kibaya wanahesabu wasioona." (Elikana, mlemavu asiyeona)

The lack of a guidance and counseling unit at the university was also reported by the women as a serious challenge that affected their studies and achievements. Educational barriers existed related to selecting the best degree programmes and managing university life and the environment. Other women needed advice on how to simultaneously combine marriage, caring for their children and keeping up with their studies. Some of the participants needed advice on how to change degree programmes and launch academic appeals, as well as protect their rights at the university. The women stated that without a guidance and counseling unit, it was hard for them to perform well because of cultural, gender and disability-related challenges within their families, institutions and society in general.

Furthermore, the women with albinism (namely, Faraja, Happy and Lena) reported that their studies were affected by the hot weather. It was difficult for them to attend lessons or return home in the afternoons because of the sunshine. Sun block was expensive and sold in special shops or shopping

centres; they identified a shop called 'Under the Sun Shine' that sold lotion suitable for their skin, but this was very expensive. They reported that they were supposed to use sun block to protect their skin. According to these women, the sun burns their skin and causes wounds. This group also reported a fear of being physically assaulted, which affected their studies, and so they were afraid to attend lessons, walk or stay alone at the university because of the danger of being killed, several cases of which have happened in upcountry and rural Tanzania. This situation affected their studies because they did not trust anyone. They lived insecure lives and had to walk everywhere in the company of one or two peers. The following portrays the women's situation:

"My condition impacts on my life, especially the issue of walking in the sunshine. I need to protect my skin with an umbrella or use sun block whenever I want to walk about during the daytime. Moreover, we are afraid to walk alone because of the chance of being killed and our bodily organs being taken for witchcraft purposes. This situation is stressful and hinders our freedom and to live and study in peace." (Faraja with visual disability)

"Hii hali niliyonayo mimi inaniathiri maisha yangu katika suala zima la kujishughulisha juani. Mfano shuleni kama kuna shughuli za nje mfano kulima siwezi, nikitembea lazima nijifunike mwamvuli, nipate mafuta ya prevention kuhusu sun shining hapo inakuwa nafuu. Pia suala jingine tunaogopa kutembea peke yetu kwani watatuua na kuchukua viungo vyetu kuvitumia kiuchawi. Hii hali inatutesa na kutunyima uhuru na amani kwa kiasi kikubwa na inatuathiri kimasomo." (Faraja, mlemavu asiyeona)

The women acknowledged that some of their peers failed to support them, even though some felt very concerned about them. However, some of the interviewees reported that their peers who helped them were their close friends from lower levels of education. The women attributed the failings among some peers to a lack of education regarding the needs and challenges of many people with disabilities. Some of the women revealed that their peers sometimes failed to greet them and at times mocked them when they got lost or were about to walk into walls, hedges or fences. Other women reported that their social interaction with peers was limited because it took them longer to get to know them. Sometimes, their peers were unable to support the women when they were sick because they were busy and had their own lives to lead.

Nearly half of the women with disabilities reported challenges with their teachers, and it was reported that teachers at the lower levels of education had been more supportive than the university lecturers. The following statement from reflects this view: "I thank those teachers who taught me at lower secondary schools were of great help to me. I won't say anything about the university lecturers because we do not interact: they arrive, lecture and leave."

They pointed out that their teachers did not have time to follow anything up; they simply arrived in the classroom, delivered their lecture and left. The university teachers were reported to provide limited assistance to some of the women with disabilities and even when the women asked them directly for help, the teachers' responses were discouraging. Some of the participants added that the university lecturers believed that women with disabilities expected to

be favoured, which discouraged them from asking for their help and demotivated them. For example, one participant from the College of Science reported experiencing this in relation to undertaking laboratory work. The participants also stated that until the lecturers consider their needs and problems at the university, they will probably continue to perform poorly in their studies.

The teachers' style of teaching was a further challenge for the women with disabilities. For example, one woman with a hearing disability reported that some teachers did not write any notes on the chalkboard but merely read them aloud in a low voice, while others taught with their back to the class, making it difficult for students with hearing disability to lip read or use sign language. As such, the students with hearing disability had a higher risk of failing than the other women. Furthermore, some of the women with visual disability revealed that the teachers gave out handwritten rather than printed notes, which made it difficult for them to convert them into Braille or photocopy them on an embossing machine. The women reported having to spend a long time recording, listening to, transcribing and photocopying the lecture content using an embossing machine. They argued for the need for teachers to prepare printed notes which could easily be sent to the embossing machine. One participant commented:

"We are hampered by the old type of instruments we use in the classroom which is difficult to take to the embossing machine. To a large extent, the teachers also provide hand-written handouts or sometimes we have to gather materials from the internet. The most common learning materials used at this university are books. For me, learning is very difficult because I have to record the lecture in class, listen to it back at the hostel, transcribe it and print notes on the embosser. This is really difficult, because it takes up a lot of time or we need a reader when one is tired." (Amina with visual disability)

"Hasa vifaa tunavyotumia madarasani humu hakuna software inayotolewa na mwalimu, ni handouts ambazo ni hand written na nyingine inabidi tukachukue kwenye internet. Sehemu kubwa ni vitabu. Sasa vile mimi nimerecord darasani mwalimu anachozungumza inatakiwa nije tena huku hostel, nisikilize ile kanda niingize kwenye mashiné ya kuprint-, Kwa siku una handouts tatu au nne, muda mwingine inabidi reader akusomee paper wakati huohuo umetoka darasani umeshachoka, hali ni mbaya." (Amina, mlemavu asiyeona)

Some of the women reported experiencing frustrating words from their lecturer when submitting their work. This made some women afraid to express their needs and describe the challenges they were facing, which made them hate some of the lecturers. The frustrating words caused isolation, lowered engagement, little motivation and sometimes dropping out among the women. These women stated that encouraging lecturers' words enhanced their academic achievements; they became more motivated and improved their learning and performance. Positive lecturers and relationships are crucial and had a positive impact on women to successfully participate in higher education. Lecturers discouraging words decreased the engagement and the ability of the women to work harder, and caused an inability to accept teachers' orders and cope with stress. Positive teacher/student relationships enabled the women to

feel safe and secure in their learning environments and provided support for important social and academic skills. Teachers who supported women in the learning environment resulted in positive impacts on their social and academic outcomes, which are important for their long-term paths in education. Therefore, frustrating words made the women lose the freedom to share some of their challenges with their lecturers, which further hindered them from achieving their goals. The following quotation exemplifies this opinion:

“Lecturers should be close to students who are blind and should help us, because there are times when you consult a lecturer for help only to be told that many people with disabilities are always looking for sympathy. Such responses dishearten, annoy and discourage me from seeking their help.” (Magdalena with visual disability)

“Walimu wawe karibu na wanafunzi tusioona na watusaidie kwani mwingine unaweza kumwendea akasema hawa wanapenda huruma huruma tu, na hii wanasema mbele ya wanafunzi wenzetu. Kwa nini usikasirike na saa zingine kauli zao unaweza ukafa moyo mapema kabisa.” (Magdalena, mlemavu asiyeona)

The women stated that a few of the lecturers sometimes teach until the very last minute or even spill over into the time allocated for the following class, which creates a serious challenge for the women with visual disability and some of those with physical disability. These women may be unable to walk fast enough to reach the next lecture, which might be located in a distant lecture room, on time. These participants reported missing some classes or arriving late after the lecturer had already started. As a consequence, they were likely to miss some important points, fail to find a suitable seat, and/or miss some of the lecture’s content. These women also argued that arriving late for a lecture made it more difficult to understand the concepts and take full notes.

Six of the women with disabilities mentioned challenges related to readers, who were often not committed to their work or able to assist the women properly because they were there purely for the salary. They often arrived late and were not very motivated to assist them if they had not received their salary on time. This also caused the women to sit for university examinations with incomplete written or summary notes. Some of the women revealed that sometimes their readers failed to respond to phone calls or arrive as arranged, which caused the women to feel bored. The following comment summarizes the women’s opinions about the readers:

“Sometimes, the reader disturbs me a lot because I phone her up to ask her to come and assist me but she doesn’t arrive on time. I don’t have summarized lecture notes when exam time comes round. I answer my examinations questions based on what I heard during the lecture. Readers do not arrive on time to help me to prepare and read the notes.” (Faraja, with albinism and visual disability)

“Kwa hiyo wakati mwingine reader nasumbuana naye sana, napiga simu aje anisaidie haji. Kwa hiyo mimi nakosa notes na imefika kipindi nafanya mitihani pasipo kuandika notes. Kwa hiyo najibu kulingana na nilivyosikiliza darasani lakini nakuwa sina summary ya kuandika kulingana na nilivyosikiliza darasani. Nakuwa sina summary ya kuandika kulingana na readers hawaji kwa kunisomea kwa muda unaotakiwa.” (Faraja, mlemavu wa ngozi na asiyeona)

5.4.3 Professional development and family concerns

Seven women with visual disability reported challenges related to marriage, childcare and higher education. They described being banned from living in the university dormitory once they had children as a general regulation for all female students. These women felt that it was unfair to treat them the same as women without disabilities. They stated that they lived off campus because their children might disturb their peers' concentration and they themselves might spend too long taking care of their children rather than studying. Sometimes, their nanny resigned or ran away, and the women had to stay home to take care of their children, which caused them to miss classes. Some of the participants indicated that sometimes their children had not slept all night for various reasons, so the women felt exhausted and found it difficult to concentrate on their studies next day and would fall asleep in class.

Other women with disabilities sometimes postponed going to class because they had to take their children to a hospital or clinic. This situation was reported to affect the participants' performance and concentration. Other participants argued that housework also affected their studies and sometimes they missed lectures or arrived late. In the afternoons, they needed a break in order to go home to feed their children. This situation caused the women to miss some lectures. Moreover, some of the participants reported having little knowledge about how to combine childcare with their studies, leaving them wondering whether to drop out or postpone their studies for a year in order to care for their children. According to these women, off-campus life was insecure and full of challenges because of their disabilities. They suggested that the university should consider their disabilities and find ways to accommodate them on campus, as living off campus not only caused education-related problems but also challenges related to expensive accommodations, electricity, water, transport difficulties, etc. According to these participants, they sometimes missed evening lectures and discussions because of transport problems or having to take care of their children. Occasionally, the women wanted to remain at the university to discuss issues with their peers or engage in private study but failed to do so because of the situation described above. Moreover, the women found it difficult to study alone at home because of their multiple roles.

Consequently, the women stated that often their young children lived with their grandmother (i.e. the participant's mother) back home, while they lived in the university dormitories because they were afraid to lose their room there. These women indicated that they were unable to cope with the costs and challenges associated with living off campus because of their disabilities and poverty. As such, the women reported living apart from their children younger than one-year-old, and sometimes feeling homesick and bored because they wanted to see their children, which affected their focus on their studies for days. Sometimes, they wanted to speak on the telephone with their children who could not even speak yet. Moreover, they reported going to visit their

children almost every weekend, which was expensive and interrupted their study timetables. Thus, most of the time they felt unsettled because they were thinking about their children, and any call from home caused them great anxiety. The women acknowledged that studying and family life were difficult to combine, but the experience of and their trust in the person taking care of their children helped them to focus on their studies. The women suggested that the university should consider their disabilities and find proper ways to accommodate them together with their children. Moreover, some of the women reported that pregnancy caused them to perform poorly in their studies, as they had to spend a lot of time in hospital or at a clinic, occasionally failing to attend university examinations as a result. Moreover, it was stated that even if they were in hospital, their minds were often at the university, thinking about their studies.

5.4.4 Financial challenges

The majority of the interviewees reported challenges resulting from family poverty. Financial challenges were reported to result from their parents' low income caused by the subsistence farming economy in rural areas, family size, and a lack of employment due to their parents' low level of education. The women viewed that family size, parental level of education, employment and family sources of income impacted greatly on their participation in higher education. They also indicated that sometimes their parents failed to buy them equipment such as wheelchairs and Braille machines, or pay for their school fees, transport costs, uniforms, study materials, and pocket money. This situation caused some women to remain at the university during the three weeks of vacation because they could not afford the bus fare to return home. Their extended stays at the university made most of these women feel tired, bored and/or unable to concentrate on their studies. Some of the women had difficulty in accessing higher education because of their parents' poverty and extended families. In terms of family size, nine participants came from families with between one and five children, while eleven came from families with five to ten children. Melina and Beatrice came from polygamous families with 10 and 13 children, respectively.

Therefore, the participants came from extended families with more than five children each. Because of their extended families and poverty, some of the women delayed starting the next level of schooling after completing one level. However, it emerged that one or two years after they had missed the opportunity to study, some of them managed to get support from religious missionaries or other campaigns. Suzana reported that foreigners supported her financially because she worked as a translator for them. It was reported in this study that these women required more support than offspring without disabilities, and that therefore the cost of educating them was higher because their parents had to hire someone to assist their child with disabilities and buy special equipment for her. Even though the women with disabilities showed an

interest and motivation to study, no one could financially support or assist them to access education.

Almost half of the participants reported that family poverty contributed to them registering late for higher education. Moreover, some of the women with disabilities had to take out loans from lending organizations to pay their remaining university fees. Poverty was reported as highly affecting the women with disabilities' ability to access higher education because, in order to be admitted to university and get accommodations, each student had to show a bank payment slip to the admissions and accommodation offices that indicated that all university expenses (for six or twelve months) were covered. They could not register without a bank slip. Beatrice shared the following experience about the registration costs:

"I was queuing for university registration, and did not have a pay slip for the registration fees. I told the registrar about my hearing disability but was told there was no room for excuses; the only thing they wanted was the bank paying-in slip." (Beatrice with visual disability)

"Nilijipanga kwenye mstari wa kujiandikisha. Nilipofika nikajieleza kuwa mimi nina tatizo la kutosikia, akasema mimi ninachotaka ni stakabadhi ya benki sio maelezo." (Beatrice, mlemaou asiyeona)

The women with visual disability in particular reported that the government loan was insufficient to buy study materials and cover their living costs while at the university. They reported having more needs than their peers without disabilities, but they received the same loan amount. For three months, the women studied at the university without Braille materials, and the photocopier was broken, so they were forced to pay for photocopying services off campus, which was time-consuming. Additionally, they reported that due to the shortage of water, they had to pay someone to bring them water or food. If they needed to visit local shops or markets, they needed another assistant, because the readers could only provide academic assistance. If they wished their readers to help them to go shopping, they had to pay them for that service. In most cases, it was difficult to find someone who would escort them in shops or markets for four to six hours without payment.

The participants reported that the HELB and BTC support were targeted at covering the general expenses of students without disabilities, and failed to consider the special needs of women with disabilities, who incurred extra costs. For example, the participants who were studying for a master's degree needed readers to assist them and collect data in the field, but the university failed to cover the cost of research assistants.

The women faced challenges related not only to accessing education but also other matters such as banking, recognizing bank notes and coins, finding a partner and dating, writing letters and reading messages without assistance. It was argued that that the former bank notes and coins used in Tanzania, which were of different sizes and also contained Braille symbols, were easier to identify than the current ones, and so the women were more easily cheated. They also mentioned requiring assistance with buying larger items such as

furniture and clothes. According to the participants, their personal assistants also helped them, based on their own interests.

The women who were pursuing a master's degree reported experiencing discrimination in various areas, including searching for jobs and loans to support their studies because of the nature of their disabilities. The women with visual disability stated that they were discriminated against when applying to work as administrators or office workers, and for jobs which required the ability to write. They reported experiencing barriers because they were unable to perform certain kinds of work and required assistance, so employers did not welcome them. It was also reported that employers did not value them as workers because of their disabilities. Additionally, some of the interviewees revealed that they had experienced discrimination and many difficulties with regard to obtaining loans, as the loan providers did not trust them and demanded a lot of evidence and support from different influential people such as their employers, village leaders and others who could support their applications.

5.4.5 Summary

This section summarizes the findings related to the challenges revealed by this study. Overall, the women with disabilities' parents lacked information about education, particularly higher education, and this lack of knowledge about the educational opportunities and chances available to women with disabilities had a strong influence on the women's participation in higher education. Cultural beliefs, gender and disabilities were reported to equally hinder women's participation in higher education. The lack of understanding of the meaning of education in the women's lives also hindered their studies. Women's discrimination and segregation at home, in their communities and schools caused them difficulties that led to their failure to meet their goals. Parental poverty was also reported by the women as a challenge to their educational paths.

The lack of predetermined goals, the absence of information about disabilities and guidance and counseling services challenged the women. Their poor performance and lack of facilities challenged the women in the lower levels of education. Once at the university, the participants indicated experiencing difficulties in disclosing their disabilities. The grading system and selection criteria were also considered unfair for women with disabilities, as even the application process was considered complicated and expensive for this group. With regard to the admission process, the women lacked clear information and guidelines, including information on accommodations and services available. Upon moving to the university campus, the participants faced challenges associated with making new friends, which caused them to miss their former friends from school. The new environment was also a challenge to the women, and they experienced difficulties in budgeting for their lives at the university.

The majority of these women also acknowledged their lack of computer skills and modern facilities, as well as the delays associated with obtaining study materials at the university. Moreover, inaccessible classrooms, toilets, library, and dormitories as well as the lack of sanitary equipment were also stated by the participants to have negatively affected their studies. Furthermore, the participants reported experiencing attitudinal barriers and poor relations with some of their peers, plus limited assistance, a low level of interaction and poor teaching styles and attitudinal barriers from the lecturers. Some of the participants pointed out that their disabilities influenced their career development, employment, learning approaches, and academic performance, which prevented them from progressing to further studies.

5.5 The women's personal strategies for their successful participation in higher education

All of the women were motivated to study hard and find ways to participate in higher education. This section presents the findings concerning the strategies they created and employed to overcome the challenges associated with their participation. These strategies include:

- Attending more than one group discussion
- Socializing
- Personal effort

5.5.1 Attending more than one group discussion

The majority of the participants confirmed the significance of holding university-related study group discussions, given the challenges associated with the lack of facilities, the inaccessible environment and large class sizes. There was also a lack of electronic wheelchairs, local transport, loudspeakers and sign language specialists in classes. The women stated that study group discussions that were small in number, between four and six participants, were effective for the reasons that too many members often socialize too much and cannot cover as much material as in smaller groups. Four to six members in study group discussions made it possible to minimise socialization and maximise individual contributions. The women revealed that the study group was comprised of members with the common goal of earning good grades. Some of the participants were dedicated to succeeding in higher education due to completion of assigned reading, taking extensive notes, and clearing up confusion by asking questions and contributing to the group. This depended on the subject matter; sometimes it is advantageous to select group members with unique talents or knowledge. The women acknowledged they studied in environments without disturbance and areas where group members

communicated freely because University libraries did not contain group study rooms.

The study group discussions took two to three hours because the group members wanted to socialize more. However, some of the women viewed that study group discussion sessions that took place in under an hour tended to be rushed and uncreative since only a few areas under discussion could be discussed. The women were meeting regularly with a study group and organized study group discussions at the same location and time, which facilitated the accessibility of the women with visual disability. Before meeting for study group discussions, each individual member was given time to properly prepare materials for discussion. The women situated the study group at the same time each week, following an agreed timetable that allowed the participants to fit it into their permanent schedules of the entire year.

The participants stated that forming study groups for discussion is a very effective strategy for enhancing learning, because in groups we share our unique insights and learn from each other. Group members can also teach confusing concepts they understand to other group members. Study groups are particularly effective for completing the lectures, developing presentations and preparing for exams. The participants revealed that their group members could help them to find the study materials recommended by the lecturers. According to the women with disabilities, the study group discussions were comprised of many people from different backgrounds with plenty of knowledge about the relevant topics, and they felt able to ask about any difficulties they were experiencing and receive in-depth feedback from the other members of the discussion groups. The women with visual disability indicated the importance of study group discussions in relation to the difficulties they experienced in accessing the library and the lack of books in Braille, which meant that they needed someone to read for them. In this regard, one woman remarked:

"Here, at the university, without group discussions, I could never succeed because there are no Braille books in the library, which means that I need someone to read for me. Without participating in the group discussions, therefore, how can I advance? Through these discussions, I am getting a lot of study materials brought by my peers from the library search." (Upendano with visual disability)

"Chuoni hapa nisipokuwa na discussion siwezi kufanikiwa maana library lazima vitabu nisomewe na vitabu vyenye maandishi ya wasioona hakuna. Kwahiyo nisipoenda discussion nitafanyaje? Kwani kupitia majadiliano napata vitu vingi walivyoenda kuvichimba huko library." (Upendano, mlemavu asiyeona)

These participants indicated that participating in study group discussions was helpful because they benefited from the knowledge that their peers obtained through reading the books in the university library, although it was demanding in terms of the time and nature of their disabilities.

Moreover, other women expressed that the group discussions enabled them to create their notes and summaries:

"During the discussions, I summarize anything I regard as significant material, which helps me to remember it. I am in discussions nearly all the time and this has helped me to get this far. I never miss the classroom seminars because in these we discuss previous topic questions and summarize very useful notes. Discussions and seminar presentations help me to summarize the whole lectures because obtaining Braille notes takes a long time." (Faraja with albinism and visual disability)

"Tunapo discuss nachukua summary ya vitu mbalimbali kwa hiyo vinanisaidia kukumbuka. Discussion ndo ninayotumia kila wakati na ndo imenisaidia kufika hapa nilipo. Nahakikisha sikosi kwenye seminar kwani humo tunajadili maswali mbalimbali ya topic zilizopita nanote vitu vya msingi ambavyo vinanisaidia. Discussion and seminar zinatusaidia kupata summary kwa sababu notes wanachelewesha kutuandikia." (Faraja mlemavu wa ngozi na asiyeona)

Thus, this helped the women to recall the issues discussed and apply the information during examinations and assignments. Some of the participants said that they selected one or two peers to ask questions after the group discussions that they had failed to ask during them.

Some of the participants indicated they attended more than one study group discussion. It was argued that attending various discussion groups benefited them more, because they obtained diverse knowledge and materials for the purpose of comparison. Through participating in different groups, some of the women reported sharing their views and opinions, which improved their academic communication with various peers. According to the women with disabilities, they managed to learn more about the strengths and weaknesses of their group members, which helped them to work more effectively with them. The women with disabilities also indicated that participating in diverse groups helped develop a harmonious spirit and sense of belonging. Some of the women revealed that participating in diverse study groups fostered communication and understanding among different people, and also constructed a self-image for the successful attainment of their goals.

The women with disabilities stated that study groups provide an excellent means to compare class lecture notes. Comparing notes allows students to fill in any information or important concepts they may have missed during lectures. Study groups are used for sharing talents, since everyone has individual talents and unique insights, and group members can learn from each other. Study groups provided the participants with an opportunity to benefit from the talents and knowledge of other group members. The participants described that participating in a study group discussion is a great way to give and receive motivation and support from fellow students and group members. If a student becomes sick or is unable to attend class, he or she can get notes from members of the study group. Study group discussions facilitated covering more material, which made it possible to focus on more concepts, since multiple people can review more material than one person alone. Many groups decide to assign topics to individual group members to research and study and then provide a summary for the group. This strategy allows the participants to learn much more in a much shorter time than if they were to study each topic on their own. The women stated that studying with a group is a great way to liven up study sessions. It can be very monotonous and draining to spend long hours alone in

the library. Joining a study group and studying in a group environment make learning much more fulfilling and enjoyable. Other women reported making more friends due to participating in the group discussions.

For some participants, presentations and discussions were important in helping them to overcome challenges. The women with disabilities stated that at the university they were able to participate in two or three lectures and one seminar group presentation session per programme per week. For seminar group presentations, the programme lecturers divided the students into small discussion groups and provided questions for each group to discuss. Each smaller group had its own seminar room and assigned discussion day. These small groups also had their own questions to present and discuss. According to the participants, these small discussion groups provided opportunities to ask questions. The participants reported that they did not get an opportunity to ask the lecturer questions when the class was large, but that these classroom presentations enabled them to review previous lecture materials.

Through classroom seminars and small group discussions, they were able to note down essential points related to the previous lectures and have an opportunity to ask questions. Participating in the presentations also gave them an opportunity to present on their assigned topic and answer questions posed by other group members. The women stated that this enabled them to widen their knowledge about the lecture topics and study them in a detailed way that simplified their studies. Some of the women stated that in a seminar group discussion, meeting at scheduled times can keep the active participants from procrastinating. In addition, individuals in seminar discussions are less likely to delay or put off assignments, because they understand that other people are relying on them. In seminar group discussions the women believed they understood information more efficiently and learned faster working within a group versus working alone, because working alone involved a lot of time wasted puzzling over complexities. However, when the participants worked in seminar group discussions, they had the opportunity to explain concepts, review material, exchange ideas, and disagree and/or reason with one another about why one person's answer differs from another. Thus, one can seek clarification and learn faster working in seminar group discussion settings and gain personal skills.

In seminar group discussions the women reported meeting with peers with different perspectives. Each peer had different qualities and ideas to offer to the seminar discussion while studying by yourself you only have your own perspective; in seminar discussion, participants received various viewpoints which assisted them in reaching their own conclusions. Moreover, the women stated that listening and asking questions provided more food for thought in developing critical skills. Joining a seminar group discussion provided the opportunity to observe a wide variety of study methods and incorporate them into their routine. Note-taking and organization skills are two major study components that improved through seminar discussions. Other women stated that studying alone is boring and monotonous, while a seminar group

discussion brings on a positive social aspect; talking it over with a group can help make it a little more enjoyable. Some of the women revealed that seminar group discussions minimize test anxiety. Test anxiety is an uneasiness experienced before, during or after an examination because of concern, worry or fear. Some of the women found that anxiety interfered with their learning and test taking to such an extent that their grades were seriously affected. Being in a seminar discussion with motivated classmates is often helpful. The majority of the participants agreed that seminar discussions improved their performance on tests and in classroom discussions.

The participants reported that seminar group discussions enhanced their personal and professional skills which developed as a student, person and professional and encouraged members to think creatively and build strong communication skills. Improving communication skills, gaining expert knowledge, networking with other students, renewed motivation and confidence were also stated by some of the women as essential when participating in seminar discussions. Some of the women stated that seminar presentations allowed them to present their arguments and ideas clearly, to be open to other points of view and to become good listeners. This developed their interpersonal skills such as dealing with conflicting opinions among group members and working together to accomplish the targeted assignments and receive a wider range of knowledge in a specific field of study. Through seminar presentations, the women met with new people who offered encouragement, solutions to common problems and advice on how to handle academic and social life challenges. These relationships can continue into professional connections even after the seminar is over. Those participants who participated in seminar discussions felt more confident and comfortable about reaching their academic goals. Overall, most professional careers require collaboration with colleagues, and seminar discussions are excellent practice in preparation for the work world.

Generally, the study group discussion is an effective strategy because it motivated the women, encouraged active learning, and developed their key critical thinking, communication, and decision-making skills. However, some of the women said that without careful planning and facilitation, the study group work can frustrate them and feel like a waste of time.

5.5.2 Socializing

Half of the participants mentioned the importance of close relationships with their peers as a strategy for overcoming their difficulties. The women with disabilities who demonstrated appropriate social behaviour experienced positive peer and teacher relationships, increased participation and achievement in higher education and other social environments. The women stated they received more time for individualized learning. Socialization caused direct interaction between women and peers, which promoted active learning. Peers reinforced their own learning by instructing the women. The women felt more comfortable and open when interacting with peers. Peers and women

shared a similar discourse, allowing for greater understanding. Their peers helped them to overcome their educational as well as other life challenges. According to the participants, their peers helped them to obtain notes, find materials online, and buy clothes and other important things for their lives. The participants with visual and hearing disability indicated that they relied on their peers in class, who wrote the notes and allowed them to borrow books, thereby enabling them to create their own summary notes. The women added that networking effectively with their peers enabled them to access all of the study materials, which facilitated their studies and involved asking questions of their peers.

Moreover, socialization allowed the participants to initiate and maintain positive social relationships with peers and readers, contributed to peers' acceptance and satisfactory school adjustment and facilitated the women to cope effectively with the larger university environment. The participants' emphasis that students with disabilities who demonstrate poor social skills have a higher rate of low academic achievement and are referred by teachers as students with special needs more frequently

On the other hand, some of the participants with visual disability described how, even though they felt close to their peers and readers, sometimes they felt ashamed to ask for assistance because their peers were busy with their own studies. One participant with a visual disability reported that she always asked God to give her the strength to show tolerance and love towards all, including peers who ignored the challenges she encountered during her educational path, believing that love for people made collaboration and working with them easier. Even if she was confronted, she kept calm and continued to collaborate with others, particularly her peers and the rest of the university community. She also reported being involved with her peers who performed the best in class because she believed that they understood and possessed essential knowledge. Other participants reported that their peers came to collect them for the discussions because it was difficult for them to locate them and/or arrive on time. One revealed:

"It is better to become close to people, especially your peers, because when you study alone you never succeed at anything. For example when I need to read a book, I must find an assistant to read it for me. Socializing and living well with my peers helps my studies to go smoothly." (Upendano with visual disability)

"Pia njia pekee ni kujisogeza kwa watu yaani marafiki kwani ukiwa peke yako huwezi kufanya chochote. Mfano nataka kusoma kitabu fulani lazima nitafute mtu fulani ambaye anaona ili anisomee. Kujisocialize na kukaa na watu vizuri ndio kunakofanya vitu vingine visonge mbele." (Upendano, mlemavu asiyeona)

Moreover, some of the women with visual disability reported that readers were essential for their success. They indicated that they were closer to their readers and arranged a special timetable for their studies, which included specific times for searching for materials, reading and writing notes:

“To ensure that my studies go smoothly, often, I am closer to my student reader. I make sure we have clear timetable for my assistance. If the reader is busy with her own studies, because she is also a student, I find peers who are in a mood to help.” (Anna with visual disability)

“Ili kuhakikisha masomo yangu ninafanikiwa huwa nambana sana reader, mnapanga ratiba muda fulani aje anisomee. Ukiona reader naye amebanwa kwani pia ni mwanafunzi inabidi ninantafuta rafilki ambaye unaona ana moyo wa kukusaidia.” (Anna, mlemavu asiyeona)

Almost half of the participants (10 of 22) considered it important to openly express their needs and challenges to their teachers, parents, peers and the community. According to the women, openness helped them to access support from individuals, organizations and institutions. Through expressing their needs and challenges, they reported obtaining support, including guidance and counseling. They also received financial support, employment and educational opportunities. These women indicated that expressing their needs helped people to find different ways of assisting them. Sometimes, these people introduced them to their friends, who came forward to help them. Other women reported expressing their needs to and successfully obtaining money from the church to cover the final portion of their university expenses. For example, Upendano failed to apply for higher education because she did not receive the information about the application process in time. She decided to go to the university administration with her certificates and explain what had happened; finally, she was given an opportunity to participate in higher education. She explained:

“Then I decided to go and see individuals and explain that I would be unable to afford the university fees or to cover my various needs. I was able to go to every person and explain my needs without fearing what response I would get.” (Upendano with visual disability)

“Hapo niliamua kuanza kwenda kumfuata mtu binafsi, najieleza kuwa sijalipa ada au nahitaji hiki, pia nilikuwa na uwezo wa kwenda kwa mtu na kumweleza shida yangu bila kuogopa au kujali majibu.” (Upendano, mlemavu asiyeona)

Others reported engaging in providing education awareness to the peers and community regarding their disabilities. The interviewees with visual disability reported providing education to people and peers who abused them. Some of the participants reported teaching their peers and community about the importance of educating and supporting them as women with disabilities. Other women indicated that they were entitled to be accommodated within the university dormitories but failed to obtain a place, so they decided to visit the accommodation officer and explain the problems, after which they managed to get a room on campus. The women indicated that had they remained silent, no one would have understood their needs, problems and benefits.

5.5.3 Personal efforts

The women reported the importance of finding study materials on their own and trusting their own notes. Half of the participants also reported finding

materials online and in the library as well as summarizing their notes by themselves. Other women reported trusting their own notes and reading effectively. These participants stated that they listened attentively to the recorded lectures, created summaries, and then reread their notes. Sometimes, they used these notes as a basis to ask their peers about issues they did not understand:

"The noteworthy thing I am doing is to read on my own carefully and, if I don't understand something, I seek out someone on my programme and ask them to explain it. This is my approach to studying, especially when I have all of the classes as Braille notes. Another important strategy is to attend every class, undertake close follow-up in class, and obtain all of the notes assigned by the teachers." (Anna with visual disability)

"Kikubwa ambacho huwa nafanya mara nyingi huwa nasoma mwenyewe kwa bidii na sehemu nisioelewa namtafuta mwanzangu ambaye tunasoma pamoja hiyo course na kumwuliza na kunielewisha. Nasoma kwa namna hiyo hasa nikishakuwa na notes zangu za Braille za masomo yote. Lakini kitu cha msingi kingine ambacho huwa nafanya ni kufuatilia darasani na kuhakikisha napata notes zote." (Anna, mlemavu asiyeona)

Other women reported that they reviewed the handouts from previous lectures in order to make connections with upcoming lectures. They stated that this strategy helped them to understand and recall previous topics. The participants also reported reading about the topics several times until they could recall the information. This repetition helped them to understand and remember the topics, particularly at examination time.

Listening attentively to the lectures, creating summaries and sitting at the front of the lecture rooms were reported by the women as further strategies they used to overcome barriers to studying. Attending lectures and noting down some of the key issues helped them to make comparisons with the summary notes from their peers and lecturers. Some of the women indicated that they compiled all of the study materials and concentrated on reading earlier to prepare well in advance for examinations and assignments, because they needed more time to read and understand the topics. Moreover, the women with visual disability started compiling the materials early because it was a long process to get the handouts in Braille. They also indicated that one of the main strategies they used involved attending every lecture without fail in order to obtain all of the notes, which they translated into Braille in order to prepare for the coming examinations. They started reading and then attended discussions. Reading the summary notes and understanding the content was reported by the interviewees as simpler than the process of searching for materials, as Faraja stated, "I read my notes intensively and ensure I get all of the lecture notes because reading is easy. When I read, I am certain to understand well because I have attended the group discussions and have summaries of them."

According to the women, they arrived at the lecture room early to avoid missing the beginning and also to ensure that they could get a seat close to the lecturer in order to understand better. The women also avoided a backlog of

unwritten notes piling up and being forced to ask their peers to teach them. These women also reported reading books and online materials on the topic under discussion to expand their knowledge and develop skills that build confidence and self-esteem.

Some of the participants reported frequently using their teachers' guidance and advice as another strategy to overcome their challenges. According to the women, they followed the lecturers to their offices after classes to discuss their challenges and desires. Through revealing their special needs, the women with visual disability were able to receive their examination papers and assignment instructions in large print. The participants stated that they had to use every effort to ensure that the lecturers knew them by sight, which simplified their lecturers' support. Other interviewees reported sitting at the front of the class in order to hear and understand better. The interviewees also discussed various topics with their lecturers after class. To ensure that they had all of the notes, some of the women reported giving their notes to their lecturers to review so that they missed nothing.

Some of the participants revealed that they sought advice from their lecturers about social and academic issues, including first, how they could succeed with the insufficient equipment and materials; second, if they felt tired and wanted to postpone their studies for a while, what procedures they could follow; third, when they got pregnant, how they could manage their studies; and, fourth, how they could combine family life with their studies. The participants reported that they asked their teachers and counselors for advice, as a result of which they successfully overcame the learning barriers. Some of the women indicated that they had asked their lecturers to provide them with their own teaching notes. Frequently, the lecturers provided printed copies of the lesson notes that were then sent to the university of Dar es Salaam special unit for photocopying using the embossing machine. This reduced the amount of time and work required for recording, transcribing and embossing. These women reported that they used their lecturers' support effectively.

Moreover, the women stated that they felt at ease in seeking advice from faculty administrator and specialists regarding their studies. They asked advice from the faculty administrators and specialists in the university of Dar es Salaam special unit about how to manage their studies without the expected equipment and facilities. According to these women, the specialists advised them to use all means possible to obtain the study materials and work closely with their peers. For example, one participant commented:

"I have been quick to ask for advice from my lecturers, whom I see can help me easily, or from the specialists in the special unit. For example, if the study materials and equipment were delayed or I felt tired of studying and needed to rest for a while. The lecturers and specialists provided me with strategies for borrowing and exchanging lecture notes and books with my peers. Sometimes you feel tired [of studying], you think of postponing the [academic] year, they give you advice." (Elikana with visual disability)

"Nilikuwa mwepesi kuomba ushauri kwa mwalimu ambaye kweli naona huyu nikimwendea atanisaidia kunipa ushauri, au wataalam wa special unit. Mfano kama vifaa havijatika naenda

nauliza sasa nitasomaje mwenzenu? Basi na wao wanaanza kunipa techniques za kusoma tumia njia hii, mwenye material haya unachukua mnabadilishana na kusoma, wakati mwingine unahisi kuchoka unatamani uahirishe mwaka wanakushauri.” (Elikana, mlemavu asiyeona)

Suzan added:

“When the lecture is over, I follow and ask the lecturer to give me his or her notes and I am given the handout or it is transferred to a memory stick (flash) and sent to the special unit to be printed in Braille.” (Suzana with visual disability)

“Mimi nikitoka darasani namfuata mwalimu ananipa notes zake za kawaida au ananivekea kwenye flash yangu napeleka unit wanaembose.” (Suzana, mlemavu asiyeona)

In a similar context, another participant stated:

“We usually tell our lecturers which parts we did not understand during the lecture. They then explain these to us. Truly, the teachers are supportive, especially when we ask them for help, even though at the beginning it was hard for them to believe that we cannot see, because most of us have eyes that appear normal.” (Anna with visual disability)

“Huwa tunaenda kumwambia mwalimu kama kuna sehemu hatujaelewa halafu anataelekeza. Kweli walimu tukienda kuomba msaada wanaonesha ushirikiano sana. Hata kama mwanzo inakuwa vigumu kuamini kama kweli hatuoni kwa sababu macho ya walio wengi [wetu] yako kawaida.” (Anna, mlemavu asiyeona)

Budget modification and borrowing special equipment were also reported by the women as strategies they used to overcome their university-related challenges. Six participants reported using their own means to overcome economic challenges by modifying their budgets, such as reallocating or reducing their other needs. Amina stated:

“Economically, my budget and expenditure are tight, due to the amount of money I get and the period I must cover with it. I can never buy much; just the important things, like accommodation and study materials.” (Amina with visual disability)

“Kiuchumi nimekuwa nikipanga kibajeti unaangalia na hela uliyopewa huwezi ukanunua vitu vingi. Accomodation na vifaa vya kimasoma ndio muhimu.” (Amina, mlemavu asiyeona)

Five of the women with a job reported using their salary to overcome their economic challenges, such as Rahima, who said,

“Therefore, I use my salary to meet my expenses at the university because, after finishing my first degree, I got a teaching job.” (Rahima with visual disability)

“Kwa hiyo mshahara wangu huwa unanisaidia kwa kiasi kutatua matatizo madogo madogo. Kwani baada ya kumaliza degree ya kwanza niliajiriwa kama mwalimu.” (Rahima, mlemavu asiyeona)

The women with disabilities also reported obtaining additional financial support from their families (parents, extended relatives and siblings), because their student loan was insufficient to meet all of their needs. To overcome the

shortage of facilities, some of the participants stated that they hired a Perkins machine from off campus, which they had to pay for every month. This facilitated their studies and enabled them to meet the deadlines. Other participants reported seeking assistance from special primary schools in order to use their special equipment, such as Perkins and other Braille machines, to emboss their assignments into Braille notes.

Strategies such as becoming familiar with the environment and walking faster also helped the women to participate in higher education. The participants with physical disability reported that because of the great distance between classrooms and the short amount of time allocated between classes, they were forced to walk very quickly in order to reach their next class on time:

"I walk faster using a lot of energy because every day has its own class. This makes me complete the remaining assignments of today and the previous day. Therefore, I need to squeeze my timetable and reduce my sleeping hours. Sometimes I sleep for four hours only. I recommend we use only one classroom [for all studies]." (Morin with physical disability)

"Natembea, natumia nguvu nyingi sana kwa sababu kila siku na masomo yake. Kwa mfano kitu nilichotaka nifanye jana, inabidi nifanye leo na cha leo inabidi kifanyike. Kwa hiyo ndio tu inabidi tubanane hivyo hivyo, kulala inabidi ulale masaa manne kwa siku huku nikiwa kwenye masomo nifanye nini basi ndio hivyo tu. Ningekuwa nashauri darasa liwe moja tuwe tunasomea pale pale." (Morini, mlemavu wa viungo)

In this context, another participant stated:

"I am trying my level best to mix with those students who have been taking notes from the beginning of the lecture and then I write down the lecturer's important examples or key words. Sometimes, after the lectures have ended, I summarize my lectures notes and write them up on the same day." (Melina with physical disability)

"Huwa ninajitahidi kujichanganya na watu ambao wamewahi darasani, naandika notes mwalimu anapotoa mifano au anapoelezea content fulani, au akimaliza naazima daftari namalizia lile eneo nililokosa. Lakini mara nyingi huwa najitahidi kumaliza siku hiyo hiyo." (Melina, mlemavu wa viungo)

The participants with visual disability provided information about their strategies in relation to mastering the academic environment. Some of the participants reported that they used to go to the classroom earlier than others in order to familiarize themselves with the classroom environment. They got training during the orientation week on how to use a white cane to explore the campus, which was completely new to them. Other participants stated that familiarizing themselves with the environment was an essential factor in studying and performing well at the university. The women with disabilities reported that mastering their environment was crucial, because they could not walk anywhere without this knowledge. To overcome this situation, some of the women reported successfully using eyeglasses and white canes to find places without an assistant, which also reduced their dependency on others. Moreover, a few of the women with visual disability revealed that being at the university helped them to gain the confidence to walk about and master the

physical environment. They indicated that they previously had been unable to cross the road or perform many other activities because they believed they needed an assistant to do so. According to the women, some of the readers failed to turn up at the agreed time, which forced them to overcome their challenges unaided. They reported being familiar not only with the environment of their lecture halls and dormitories but also that of the mosque, church, market and hospital, which was significant for them. The following example illustrates this:

“Therefore, mastering the environment is essential for visually-students with disabilities. When I had mastered the environment, I stopped being so dependent and asking for assistance. It’s hard for me to forget the university environment because the map is in my head, and I understand it from all sides, like the education library and dormitories.” (Lena with albinism and visual disability)

“Kwahiyo kumudu mazingira ni kitu cha muhimu sana kwa asiyeona. Pia nilipoyajua mazingira nilipunguza utegemezi wa kuomba kusaidiwa. Sitaweza kusahau mazingira ya chuo kikuu na ramani iko kichwani na ninajua huku wapi na huku nini kama maktaba ya education na bwenini.” (Lena, mlemavu wa ngozi na asiyeona)

The effective use of their time both at the university and at home was stated by the women to facilitate their studies. Three of the women who were married and lived off campus reported using their time properly and fully while on campus because they considered it challenging to study and concentrate when at home. They struggled to attend classes and find the right materials to study at home. These women also indicated that, they managed their time effectively at home. They reported waking early to read and, when they felt exhausted, they started on their housework:

“When I have studied and feel exhausted, I decide either to take a rest or do some housework. When I’ve finish the housework, I sleep until the rest of the family has fallen asleep and the place is calm. Then I wake up to study.” (Amina with visual disability)

“Ule muda nikishachoka kujisomea naamua kujifanyia kazi za ndani au baada ya kupumzika naanza kufanyakazi za ndani. Ila nikishatoka hapo nalala na nikiona wote wamelala kumetulia naamka kujisomea.” (Amina, mlemavu asiyeona)

Some of the women also reported that they ensured that all of their studies were completed on time. Moreover, the participants with visual disability who had children reported making special arrangements to complete their housework, including cooking, washing clothes, and bathing the baby, in order to combine their study timetables with their family responsibilities. The women stated that in the evenings when the rest of the family was asleep and all was quiet, they were better able to concentrate on their studies. These women stated that they did most of the housework themselves and did not depend on nannies or their husbands.

5.5.4 Summary

The main purpose of this section was to understand the strategies that the women created and applied to overcome the challenges associated with their university studies. These strategies were important in helping them to overcome the challenges they encountered. This study indicated that most of the women had developed their own strategies in order to solve their problems, particularly those with visual disabilities.

The study findings show that attending group and classroom discussions and presentations were among the more common strategies used on campus to solve problems. The inaccessibility of the library, the large class sizes, the shortage of facilities such as Braille books and articles, loudspeakers and sign language interpreters pushed the women to participate in the group discussions.

Some of the women with visual and physical disability stated they participated in more than one group discussion to widen their knowledge and for comparison purposes. Classroom seminar presentations were indicated by the women as crucial because they were able to ask any questions that they had failed to ask during the lectures that had been answered by their peers during the group discussions. The women also revealed that networking effectively with their peers enabled them to obtain a full set of study materials which they could read, and then ask questions of their peers.

Finding study materials, reading their own notes, and using the teachers' and specialists' guidance were mentioned by some of the women with disabilities as strategies they used to solve the challenges associated with their university studies. The women with visual disability in particular mentioned openness and awareness creation strategies as helping them to obtain support for their studies. Moreover, the women stated that they modified their budgets in order to overcome the financial challenges related to their studies.

Renting equipment, familiarizing themselves with their environment and walking faster between lecture rooms were reported by the women with visual disability and some of those with physical disability as helping them to solve their environment-related challenges, including the shortage of facilities. The effective use of their time both on campus and at home was mentioned mainly by the married women with children and others as essential for meeting time constraints and merging their academic and family responsibilities. Therefore, this study observed that creating and using strategies were indispensable to the women with disabilities in facilitating them meeting their university-related challenges.

6 DISCUSSION

This chapter discusses the findings of the study and reflects on the methodology, outcomes and future studies. The chapter starts with a general overview of the research aims and research questions, followed by a discussion and reflections on the research approaches and research outcomes, ending with recommendations for practice, policy and directions for future research.

The main purpose of this study was to investigate two key questions: First, how do the women with disabilities participate in higher education? Second, what factors enable them to succeed in their studies? Specifically, the study sought to answer the following:

1. What reasons do the women with disabilities have for seeking higher education, and who motivated them?
2. How do the women with disabilities describe the attitudes and cultural beliefs of their community about their participation in higher education?
3. What factors enabled the women with disabilities to participate in higher education?
4. What challenges do women with disabilities encounter in their education career?
5. What are the personal strategies identified and used by women with disabilities to overcome their challenges to succeeding in higher education?

The discussion is informed by the literature, field work and theoretical framework, which guided the study. The chapter is organized according to the above highlighted research questions.

6.1 Reasons for studying higher education

There are several reasons why one would want to attend higher education. Women with disabilities in Tanzania are equally motivated by many reasons to participate in higher education. This sub-section describes all reasons that helped women to excel from primary through advanced secondary education and consequently the university level despite their disabilities. These reasons include: the realization of the importance of education, the desire to achieve their goals and dreams, and their good performance in advanced secondary education. Other reasons include society's changing attitudes and the degree programmes available. Respondents showed that their interest in attending higher education developed from the motivation they got from friends, parents, teachers who taught them at lower levels and the presence of role models.

6.1.1 Change of the women's lives through education

The realization of the importance of education and the right to education were the key factors that motivated the majority of the women to pursue higher education. UNICEF (2007) argues that the full realization of the right to education is not merely a question of access, but refers to the holistic realization, which encompasses access to education, educational quality and the environment in which education is provided. The findings from this study also indicated that the majority of the women with disabilities were not only motivated to access education, but also to develop the necessary skills that would transform their lives. Women with disabilities understand and acknowledge the impact of education in the development of their social mobility at the family, institutional and community levels. This understanding has been a key to their success in education, as they were able to ask for their educational right from their family and the community.

Having learned from their peers and having the opportunity to pursue higher education, women with disabilities realized the need for them to participate in higher education as others were doing. According to UNICEF (2007), the main goal of education is to give people the power and capabilities to change their own lives, improve their own communities and influence their own destinies. Women with disabilities felt that by pursuing higher education they would be able to change their status from 'nobody' to 'somebody.' Evidence from Morley and Croft (2011) and Smith (2012) showed that the desire to attain status and become 'somebody' motivated students with disabilities, including women with disabilities, in Tanzania to pursue a higher education. Smith (2012) argues that the participation of students with disabilities in higher education can transform them into important people and provide them with the social interaction skills that promote a better life. For women with disabilities, education is a tool for enhancing their well-being and welfare because of the social capital it holds. Higher education is important in promoting the self-esteem and self-actualization of persons with disabilities. As reported in Opini

(2012a) and Smith (2012), education is worthwhile and provides a sense of self-worth, competence, autonomy, identity and self-sufficiency. This study revealed that to the majority of the respondents, higher education is considered as a tool for dealing with cultural, social and economic barriers that otherwise undermine their potential. Similarly, a study by Opini (2012a) and Smith (2012) in Sub-Saharan Africa has shown that the majority of women with disabilities were studying to combat their undermined positions in society.

Many of the women with disabilities were coming from very poor families, and only few of them managed to reach higher education. One of the reasons that enabled them to penetrate through a number of hindrances was their urge to escape from extreme poverty. The realization that education is a key to their lives and that by being educated they would escape extreme poverty and live better lives were among the factors that motivated them to work hard and succeed in higher education. It is indisputable that women with disabilities used their disability as a blessing and encouraging factor in proceeding to higher education. While studies (Jonsson & Wiman, 2001) show that the costs of educating a child with disabilities are nominally higher than those of educating a child without disability, the findings from this study show that to the majority of women with disabilities, the cost was not an important determinant of their participation in higher education. As noted by Jonsson and Wiman (2001, p. 2), "one reason that the education of children with disabilities tends to be underemphasized is that people look at costs and benefits of educating children with disabilities in an incomplete way." The participants revealed that poverty stimulated them to pursue a higher education with the aim of escaping from it and gaining the capacity to support their siblings and parents. This implies that the women saw the importance of education as one of the means of improving their livelihoods.

Moreover, women with disabilities indicated they had experienced stigma, rejection and dependence from the community, which all together contributed to low self-esteem (Mnyanyi, 2007; URT, 2008a). In return, this acted as a motivating factor for them to pursue higher education. The stigma and marginalization due to disability helped them to give more priority to education, considering it as a tool for independent living. Some of the respondents thought that if they did not have disabilities they probably wouldn't have attained higher education.

For example, in the study by Morley and Croft (2011) it was revealed that persons with disabilities in Tanzania were experiencing a lot of constraints, such as misrecognition, disappointment, segregation and threats due to their disabilities. WHO (2011) elaborates that inaccessibility to education is connected with disability.

6.1.2 Life goals and dreams

The findings of this study further found that women's life goals and dreams promoted their successful participation in higher education. These goals could be long-term and might facilitate the quality of their educational involvement

and commitment to the learning process. Goals and dreams can control and direct an individual's actions. Personal goals constitute the first step toward success and help learners to find different strategies in order to reach their targets. This implies that goals provide guidelines to success, including educational success, and foster advice-seeking, consideration of the selection of which degree programme to pursue, and knowledge about how to undertake the courses. Parents and teachers are the key actors in promoting the goals of the women with disabilities. As revealed by Opini (2012a), family encouragement and support, especially from parents, peers, friends and teachers, are essential in motivating the women to pursue a higher education. However, the literature has shown that in Sub-Saharan Africa women with disabilities fail to pursue their goals and dreams because there are no role models, communication of expectations, direct instruction or socialization by parents and teachers within the family and learning institutions (Opini, 2012b).

The study further revealed that some of the women decided to pursue higher education because they wanted to support their counterparts in different social aspects. These were particularly women from low income families who had the opportunity to attend schools through help from charity organizations. Social responsibilities made them work hard and set their goals of attaining the highest possible level of education so that they would be able to support their families. As revealed by Morley (2012b), social responsibilities of the majority of students with disabilities can act as a motivation to pursue higher education.

Some of the women with disabilities' motivations to participate in higher education were their urge to secure employment, change their salary scale and utilize the available educational opportunities. A study by Morley (2012b) showed that students with disabilities are motivated to pursue higher education because of economic independence, employment, improved life chances and career aspirations. While the majority of the women's interest was to secure employment and have better earning, findings from this study have revealed that only few of them had secured permanent employment, particularly those who were pursuing a master's degree or diploma in education. The women who reported to have secured permanent employment were teachers. This indicates that the women with disabilities were more likely to be accepted in the teaching profession than other fields. Opini (2012) observed that higher education enabled women with disabilities to access wider opportunities for obtaining paid employment, which would help them to improve their standard of living. In the context of Tanzania, post-secondary education enhances social mobility and empowerment and creates self-respect. Thus, educating women is essential for individuals and for society in general, because the women can reduce their dependence and enhance their economic status.

6.1.3 Performance in advanced secondary education and presence of role models

Good performance in the national advanced secondary education examination was another factor that motivated some of the women to pursue higher education. Well-structured family and community support, as well as supportive school environments were keys for the women with disabilities to graduate with flying colours, which enabled them to join higher education. Those who reported to have passed examinations were mainly graduates from inclusive schools and their education was supported by charity organizations such as nongovernmental organisations, churches and missionaries. The learning environments which was so unappealing to them that their final examination results were received as a surprise, set up a special motivation for them to join in higher education. This is in line with Opini's (2012a) findings that girls with disabilities need to perform better than their counterparts without disabilities before pursuing a higher education.

Findings from this study revealed that visits to schools by former graduates (alumnae) with disabilities who were pursuing higher education motivated these women to work hard. Women were excited by the achievements that their peers with disabilities were able to make despite their disabilities. The presence of role models such as the alumnae with disabilities made them regain their confidence and determination and reformulate and set new goals for education. The alumnae were highly valued and respected because they were studying at university and so encouraged these women to study hard. Women with disabilities reported that by meeting and talking to alumnae they were automatically inspired to become like them in the future. Discussions with those who successfully pursued higher education enabled the women to understand the university application process and the importance of higher education, which also encouraged their future development plans. In connection to this, women with disabilities had an opportunity to learn about the degree programmes that the University was offering and the marketability of those programmes. Being exposed to the University application and learning processes stimulated the women with disabilities to aspire to higher education.

Apart from the visits to school by students who were already studying at the University, students with disabilities were regularly seeing other persons with disabilities who were successful in their lives. The first models for their hard work and commitment for studies were the teachers. In many places where students with disabilities were able to interact with teachers with disabilities, they became motivated to work hard. The majority of the students with disabilities were aspiring to become teachers because the most commonly seen successful persons with disabilities were teachers. Evidence from the field showed the majority of the respondents who participated in this study were studying education programmes (aspiring to become teachers). This shows how a teacher is an important role model to the students.

6.2 Enabling factors for women's participation in higher education

Gaining admission to a university is not sufficient to keep a woman with disabilities in higher education through completion. More efforts and enabling factors were to be established at the University to enable women with disabilities to cope with the changes of pedagogy and learning approaches that are used at the University. Findings revealed that women with disabilities were influenced by several factors including the community's perceptions and support, influence of home environments, self-acceptance and personal efforts, the influence of lecturers and peers socialization, the availability of disability-friendly learning materials and the availability of financial support.

6.2.1 Community perception and support

The perception and encouragement of the community towards women with disabilities and were some of the most effective stimulants to their success in accessing and participating in higher education. In most African communities it is common that women are given the lowest priority in education. However, in communities and families where a woman is valued and given the same opportunities as men in education, they are able to successfully excel in higher education. As revealed in the findings, various factors facilitated them to access, participate and succeed in higher education despite the challenges they were encountering. Some of these factors included positive community perceptions towards the women with disabilities. Hall (2002), Weir (2004) and Alden and Hickley (2005) commented on the impact of positive community perception and self-acceptance in the achievement of many people with disabilities in education. They further argue for the influence of family and personal efforts in the liberation of women from the challenges they encounter in their education careers. It is common that some community members tend to treat people with disabilities with positive attitudes, while others treat them negatively. There are those who believe that women with disabilities have the same ability as other women to perform various activities, while some believe that women with disabilities are unable. These differences in perception may be attributed to the social, cultural and economic backgrounds of the families of the women with disabilities. Kisanji (2006) observed that the majority of families do not understand that children with disabilities need the same chances and privileges as the other family members. Instead, they treat them as people who are incapable of following a lesson in the classroom. Another study by Macha (2002a) has revealed that positive perceptions of family and community members are among the most stimulating agents to the success of persons with disabilities. In this study, family and community members were frequently mentioned by the majority of the participants as enabling factors for their participation in higher education.

It was noted in this study that the majority of the families to which students with disabilities belong are characterized by poverty. Poverty was reported to limit opportunities to access education (Mbagu, 2002). Poverty and disability caused many of the community members to believe that women with disabilities would not get anywhere with their education. To many of the community members, using financial and material resources to educate women with disabilities was a risk and a waste of money and time. While these negative perceptions tend to be based only on the community's beliefs about people with disabilities, they are of no value and are unnecessarily hindering women with disabilities from participating in higher education. Studies by Possi (1998) in Tanzania, and Hailemariam (2008) and Matshedisho (2007) in Sub-Saharan Africa, call for urgent positive changes in the attitudes and cultural beliefs of families, education institutions and communities tend to help people with disabilities access and participate in education without limitation. Similarly, the SMD (Oliver, 1996; Shakespeares & Watson, 2002) advocate for family and the community positive attitudes towards people with disabilities so as to create a barrier-free environment that would enable them to freely participate in higher education.

6.2.2 The influence of home environment

Participants in this study recognized and appreciated the influence of encouraging home environments as one of the major factors in their success. In Sub-Saharan Africa, the lack of an encouraging environment, including the lack of attention, awareness and support from family, peers and the community have been common (cf. Kenosi, 2000) and have contributed to the majority of women with disabilities experiencing challenges in accessing education (De Klerk & Ampousah, 2003; Hailemariam 2006). Possi (1998) stated that parents' encouragement and motivation for the education of their daughters with disabilities are keys in the promotion of their autonomy. Morley and Croft (2011) go beyond family influence to advocacy at the family and community levels as important components in the success of the education of students with disabilities, including female students with disabilities. As such, De Klerk and Ampousah (2003) and Kenosi (2000) call for advocacy to raise family and community awareness, education, and advanced support services from family and friends, as well as adjust the physical and psychological environments and funding procedures for the benefit of students with disabilities.

This study also observed that the majority of the women with disabilities who managed to attain higher education did not experience exclusion, marginalization or child preference in their families. They were treated in the same way as their siblings, including the opportunity for education. These findings are contrary to those of Kiani (2009), Possi (1998), Maart et al., (2007) and Abosi (2007), which reported that the majority of people with disabilities in higher education experienced segregation and discrimination from their families and community members. Marginalization and attitudinal barriers are likely to undermine women with disabilities, make them feel inferior and

insecure, or even cause the majority of them to drop out from their studies. Thus, the inclusion of women with disabilities, as reported by the majority of the participants in this study, might be a lesson for families who exclude and marginalize girls and women with disabilities. An encouraging home environment and positive attitudes toward women's education might have a positive impact on women with disabilities' pursuit of higher education.

6.2.3 Self-acceptance and personal efforts

The majority of the women with disabilities who participated in higher education reported to have accepted their disabilities and considered them as one part of their lives. This helped them to reduce stress, tension and depression. It also enabled them to meet their goals and simplify their socialization with different people at home, within the community and within higher education. This is not something that one can easily do, but it requires conditioning, counselling and guidance from parents, friends and teachers. The more the women with disabilities felt accepted by others, the more they accepted themselves. This further helped them to ignore the challenges, discrimination and attitudinal barriers they were experiencing from a few people and concentrate on reaching their goals. Disability acceptance activates inner motivation to learn, encourages the internalization of education and increases self-confidence and personal development. As presented in the current chapter, the women who had had disabilities from birth accepted them more easily than those who had acquired them later in life. Similar information was also reported by Opini (2012b) in a study conducted in Kenya where the majority of those who easily accepted their disabilities were able to adapt easily to new environments. This calls for attitudinal changes at family, society and institutional levels, where every member of the community tends to feel responsible to provide necessary support and socialization to people with disabilities. The establishment of guidance and counseling units in schools might be among the strategies that can be used to develop self-acceptance by students with disabilities.

In circumstances where there is no support available from the community surrounding the women with disabilities, personal effort in studies was the only weapon left in their hands. According to Stodden and Conway (2003), personal effort creates a sense of tolerance, discipline and motivation to pursue benefits. Realizing that neither the family nor the community had trust in their academic capacity, women with disabilities opted to work hard. In the essence of rejection and neglect, women with disabilities considered hard work and commitment as the only available tools for their success. They worked hard, even harder than those who were without disabilities, and performed well in their studies. This was an important reinforcement for them to add more effort to their studies (cf. Heiman, 2006). Stodden, Jones and Chang (2002) argue that effort and commitment are keys in encouraging the internalization of education and increased self-confidence in women's studies. Collaboration and socialization need to be strengthened between the women and their families,

teachers, readers, peers, special units, faculties and departments to access necessary support at universities. Families, teachers, peers, society, the government and nongovernmental organizations are supposed to provide educational support, depending on the women's effort and commitment to study.

6.2.4 The influence of lecturers and peer socialization

The findings revealed that lecturers' influence and encouragement through advice and cooperation with the women with disabilities were essential in facilitating their participation in higher education. Notably, lecturers with a good mastering of their lessons were highly instrumental in the learning of the women with disabilities. Women could easily follow the lessons and understand what was being taught only if the lecturers were able to use a variety of teaching methods and had the ability to analyse or describe concepts by using different methods. Lecturers who were able to pay attention to the women with disabilities while teaching, use interactive teaching approaches, provide reading materials after lessons, and grant extra time for the women with disabilities to record lectures were considered heroes in the success of women with disabilities. Vogel et al. (1999) argue that allowing additional time to prepare for assignments and examinations was deemed important because this offered the women with disabilities extra time to record quality notes, which could simplify their review processes and thus lead to good performance in their university examinations. In their study, Vogel et al. (1999) revealed that in most cases lecturers were reluctant to provide extra materials such as hand-outs, poorly administered assignments and revise the system of examinations.

This study further revealed that lecturers who undertook some training on special needs education had a sense of humour with women with disabilities unlike those without specialized training. Notably, lecturers who had received special education training were far better in terms of the provision of support, creativity, innovations in teaching and in the provision of study materials that were relevant to the needs of women with disabilities. This observation calls for a more comprehensive approach to preparing university lecturers to provide necessary learning opportunities according to learners' needs. This implies that the employment of lecturers should take into account their knowledge of varying learners' needs such as those with disabilities. Considerations should be made to either provide in-service training to lecturers at the university or hire lecturers who are already conversant with the situation.

Peer socialization was the most important tool for the success of the women with disabilities at the University. Peers were very crucial in sharing learning materials that were not easy to find in the classroom, supporting women with disabilities in group discussions and accompanying them in revision of assignments. Although women with disabilities were able to socialize well with most of their peers, they specifically chose to collaborate with those who were performing well academically. Peers can possess the necessary knowledge and skills that are crucial to the learning of women with

disabilities. The study realized that positive attitudes of peers were important for the women with disabilities to develop trust and enhanced their confidence in their studies. Studies done in Sub-Saharan Africa emphasise the need for persons with disabilities to engage in social networking with their peers, especially in preparation for examinations (David, 2011; Morley & Croft, 2011). Jacklin and Robinson (2007) argue that the availability of friends in a university course can help students with disabilities to succeed in higher education. For example, women with disabilities were engaging in social networking with peers not only in academic but also in social and political matters, which were very important for the women's lives and educational development (cf. Smith, 2004).

The women with disabilities collaborated not only with their able-bodied peers but also with other women with disabilities. Those who were in the same degree programme were more likely to collaborate with the women with disabilities through sharing notes and group discussions. The availability of supportive peers made women with disabilities prefer learning in groups to learning individually. As argued in Morley and Croft (2011), women with disabilities had a feeling of being understood by their peers. This understanding between the women with disabilities and peers without disabilities was useful in creating a free social and cultural environment, in which they could express their needs without fear or doubts. The support and cooperation they received from peers strongly protected them from dropping out of the degree programmes they were pursuing or failing their exams.

6.2.5 Provision for learning materials and financial support

The majority of the respondents felt that the learning environment at the university was more appealing than that of pre-university levels. Women with disabilities have different needs; there are those with visual difficulties and others with hearing difficulties and other physical challenges. These varying forms of disabilities require different kinds of support and assistive devices. The university was commended for the provision of all the necessarily assistive devices such as recorders for those with visual difficulties, hearing aids for those with hard hearing, and many other supports such as the availability of a person to help in reading notes, and a translator of Braille printouts into a computer and vice versa. The availability of study materials and assistive devices, a supportive special unit, disability specialists and readers were reported to be essential for the participation and learning of students with disabilities at the university. Several researchers from Sub-Saharan Africa and others using the social model of disability (cf. Matshedisho, 2007; Morley & Croft, 2011; Thomas, 2000; Stodden & Conway, 2003; Vogel et al., 2008) reported that an enabling environment, such as accessible lecture halls and other forms of support, can enhance the learning of women with disabilities.

This study realizes the importance of financial support in enhancing the participation and retention of women with disabilities in higher education. Women with disabilities from well-to-do families and able to cover the cost of

living at the university were more likely to complete their studies than those who were unable to cover their living costs. Other sources of financial support enabled these women to cover their university expenses such as university fees, accommodations, meals and study materials. Financial support from families, the HESLB and scholarships from overseas and local governments and the BTC enabled these women to attend higher education smoothly. Internal and external financial support was important in enabling these women to access and participate in higher education. Given the fact that financial assistance is of great importance to the survival of the women with disabilities at the university, it is paramount for HESLB to ensure that all students with disabilities are receiving 100% loans, as indicated in the HELB's policy. Scholarship providers should also consult university financial guidelines and sometimes extend these scholarships according to the needs of the women. With proper financial support, women with disabilities can concentrate on their studies and meet their diverse needs, including buying important equipment that facilitates their academic achievements. Weir (2004) found that family and peer support were very important for the education success of women with disabilities.

6.3 Challenges encountered by women with disabilities

In their endeavour to access higher education, women with disabilities encountered various challenges that mostly emanated from cultural, social and traditional practices of the communities in which they grew up. The study found that although women with disabilities had successfully participated in higher education, they had gone through numerous challenges that affected their general lives and studies. Some of the challenges they encountered included an inaccessible environment, marginalization and attitudinal barriers, institutional challenges related to the transition from secondary to higher education, society's negative attitudes, inadequate teaching and learning materials, inadequate technology, inequality within the family and poverty. Tungalaza (2005), Kiani (2009), the Disability and Millennium Development Goals Report (2011), WHO (2011) and URT (2013) have argued for families, communities and institutions to provide necessary support to students with disabilities so that they are able to overcome challenges and successfully participate in higher education, and thus enable countries to meet the EFA goals by 2025 and the Millennium Development Goals by 2025 and Sustainable Development Goals of 2016-2030.

6.3.1 Attitudinal Barriers

The study noted that the majority of the participants had experienced marginalization and attitudinal barriers in society before joining the university. The lack of educational priorities and motivation for women with disabilities

and inequality within the family were among the challenges that this group faced prior to pursuing higher education. Attitudinal barriers, reduced opportunities and attention at family and community levels were reported to exclude many people with disabilities from accessing and participating in education in Sub-Saharan Africa (Abosi, 2007; Maart et al., 2007; Kiani, 2009). Women's discrimination, segregation and devaluation at home, in the community and within the institutions caused them to experience difficulties in meeting their expectations and dreams. This experience is well noted in the SMD which states that majority of the people with disabilities were not disabled by their bodies, but by societal attitudes and environments that had great influence on their successes or failures (Oliver, 2006; Shakespeare, 2009). Physical, psychological, environmental and sociopolitical interventions are the keys to progressive change (Watson, Roulston & Thomas, 2012).

This study has revealed that many of the women with disabilities have experienced environmental and social challenges, some of which are discrimination, labelling and marginalization by peers during both formal and informal group discussions. Persons with disabilities were avoided in many of the socialization activities such as eating together, studying together and even sharing ideas in a group. Strict conditions have been reported to be imposed by peers when the women with disabilities borrowed their lecture notes. Similar observations have been reported in other Sub-Saharan Africa countries where Hailemariam (2006), Braathen and Kvam (2008), and Lewis (2009) report that women with disabilities have been experiencing marginalization, discrimination and exclusion because of their disabilities. Marginalization and discrimination of any kind cause women with disabilities to feel lonely, unloved and undermined. This is reflected in their studies when they feel uncomfortable learning, and in the university environments from which they are segregated because of their disabilities. The situation results in poor cooperation and social interaction between the women with disabilities and their peers in Tanzania (Morley, 2012a; Morley & Croft, 2011), leading to poor learning and performance in their studies. Positive attitudes, encouragement, support and cooperation are crucial to the success of persons with disabilities, as they create a sense of acceptance and confidence (Mboya, 2008). As stated in the social model of disabilities, physical, attitudinal, communication, social and environmental barriers have to be transformed to make them friendly to majority of people with disabilities and enable them to participate in society on an equal basis (Tregaskis 2002; Tugli, Klu & Morwe, 2014; WHO, 2006).

The negative attitude towards students with disabilities was not only experienced from peers but also from some lecturers. Marginalization by some lecturers was seen by women with disabilities as more serious than that of peers. The situation caused some of the women with disabilities to feel unsupported and unloved. Tugaraza (2010) and Morley and Croft (2012) report that the most devastating situation for many people with disabilities is when the person they trust most doesn't trust them in return. Abosi (2007), UNESCO (2008) and Miles and Singal (2010) reported that in Sub-Saharan

Africa the majority of teachers are not trained to teach students with disabilities and some students dropout because of teachers' negative attitudes and stereotyping. Likewise, the current study found that the majority of lecturers did not receive any kind of training in special needs education or how to teach and support students with disabilities at the university. Similarly, Morley (2012) indicated that poor pedagogy of the lecturers, a lack of professionalism and favouritism hindered the women's academic achievement. Moreover, some of the lecturers and tutors lacked appropriate skills in using special equipment for students with disabilities (Tungaraza, 2005; URT, 2013), which equally affected the quality of teaching and provision of necessary support for the education of women with disabilities.

Gender stereotypes which exist in the community were also a barrier to the success of women with disabilities in their higher education endeavours. Stereotyping of women and with disabilities was a serious setback to their academic achievement. Many African societies invest in boys more than girls in terms of education and preparation for a better future lives. Some parents who had made a decision to send their children with disabilities to school were being discouraged and sometimes ridiculed by neighbours for sending females to school, let alone their female children with disabilities. Some annoying statements and comments were repeatedly uttered by community members to either the women with disabilities themselves or to their parents in their presence. Such remarks and comments about their disabilities and gender were highly demoralizing to women with disabilities and put them off from their efforts to attain the highest possible education level. In other Sub-Saharan countries, Braathen and Kvam (2008) and Heiman (2006) reported that the patrilineal system is causing the majority of communities to favour boys over girls in education. The SMD advocates for strengthened equality and equity in providing education at the family level. It also advocates for communities to provide equal rights, suitable facilities and opportunities for social change (Albert, 2004; Anderson, 2004; Shakespeare & Watson, 2002).

6.3.2 Institutional barriers

The study noted the existence of institutional challenges which have been affecting the smooth participation and learning of the women with disabilities. Some of these challenges include the complex admission system, which involves many registration processes for first entry to the university. For example, Tungaraza (2010) observed that in accessing higher education, persons with disabilities are encountering challenges related to access to information and the physical environment, as well as levels of awareness. Women and other persons with disabilities at the university do not get clear information about the services available to them. As reported by Abosi (2007), Maart et al. (2007) and Opini (2012b), the concern in most of the Sub-African countries has been the absence of structures and systems put in place inconsideration of the needs of students with disabilities. Supporters of the SMD such as Tungli et al., (2014) advocate a barrier-free learning environment

for persons with disabilities. Lack of transparency in admission procedures and securing of loans for higher education (Morley, 2012b) were among the setbacks to the success of women with disabilities in higher education.

Moreover, lack of proper communication, information and guidelines for service areas for women with disabilities are among the negative experiences (cf. Tungaraza, 2010). For example, it is reported in this study that the university at which the women with disabilities were studying was seriously challenged by the shortage of dormitories to accommodate all the students. Women with disabilities were desperately in need of accommodations so they could live close to the university and be able to easily travel from the dormitory to the classrooms (cf. Tungaraza, 2010).

Overcrowded classrooms were a big challenge not only to the learning of women with disabilities, but also to the lecturers who were unable to locate where the women with disabilities were sitting or standing. An appropriate teacher to student ratio in the classroom is important in enabling the students with disabilities to learn effectively and for the lecturers to meet the diverse learning needs of this group. In Sub-Saharan Africa, including Tanzania, it has been reported that all levels of education, including higher education, are characterized by overcrowded classrooms and, as a result, teachers are unable to apply and organize appropriate teaching methods such as learner-centered methods and advance their teaching approaches for the enhancement of all members of the classroom, which finally results in poor academic performance by students with disabilities (Croft, 2010; Hailemariam, 2006; Heiman, 2006). According to Hollenweger (2011), effective teaching and learning methods and provision of services are determined by teaching and learning environments, personal abilities and activity factors. Due to overcrowded classrooms, students with disabilities faced difficulties. Sometimes, they missed the chance to occupy the front seats and had to sit at the back, which led to difficulties in coping with the lectures. This could result in low performance and cause discontinuation or repetition of the year of study. Tinklin and Hall (1999) also found that overcrowded classrooms and a lack of seating and standing space posed challenges for students with disabilities in higher education in Tanzania, and had a great connection to and impact on the achievement of women. Therefore, the SMD emphasizes creating environments that can allow students with disabilities to learn comfortably without any barriers (Oliver, 2009; Shakespeare & Carson, 2002).

The lack of guidance and counselling unit was also reported as a setback to the success of women with disabilities in higher education. A guidance and counselling unit would be of great help to women with disabilities, particularly in orienting them with the environment and providing them with strategies to counter the challenges they faced at the university. In this regard, a guidance and counselling unit would be of great importance in orienting the strategies for exploring their careers, learning to overcome barriers related to employment, providing knowledge and skills about job-seeking and finding relevant programmes. The lack of this knowledge was likely to lead to

emotional stress resulting from unresolved thoughts about the issue. The SMD discovered the context of equal power, access, participation and the social resources available for students with disabilities in all arenas (Oliver, 1996).

This study observed the provision of inaccessible education following the lack of study materials at the university that was discussed in terms of a lack of computer skills and related facilities, the absence of modern special equipment and delays in the provision of study materials for students with disabilities, particularly those with visual disability. This is in line with the SMD which defined disability in educational context as a mismatch between learners' diverse needs and their learning environment (Tungli et al., 2014), including in higher education (Tungaraza, 2010; URT, 2013). For example, the lack of computer skills was reported by the majority of the participants as directly affecting their ability to access most of the online materials, which made them highly dependent on their peers, readers and lecturers' lesson notes. To support the idea, Ndume et al. (2008) stated that computer technology allows individuals who are blind to access print materials that they otherwise would have depend upon others to access for them. The study noted the high cost of computer courses especially for those with visual disability because most of the training centres were unable to accommodate the participants. Moreover, as in other aspects of Sub-Saharan higher education, there was a lack of sign language for students with hearing disability, accessible toilets and elevators for wheelchair users (Haihambo, 2008; Chanika, 2010) in Tanzania (Maswanya, 2007). The participants believed that if they gained sufficient computer skills, they could study comfortably at university and enhance their academic performance. The shortage of study materials was also observed by Mkanula (2003), HakiElimu (2008), Abosi (2007) and Miles and Singal (2010) in Sub-Saharan Africa.

The study also revealed a shortage and/or lack of modern facilities to assist the women with disabilities' in learning. Modern wheelchairs, ramps and local transport were mentioned by the women with physical disability as essential for their academic achievement, managing the classroom and reducing their dependence on their peers, but these were missing from the university. The lack of teaching and learning materials for women with visual disability was reported to perpetuate their poor academic performance. In line with this, Macha (2002a) also argued that the majority of educational institutions in Tanzania, including higher education, lack teaching and learning materials, special equipment such as Braille machines and textbooks, typewriters, and reading and writing materials. Hall (2002) also reported that access to technology was given a high priority by women with disabilities in higher education.

A lack of specialists and inadequate technology for translating drawings into Braille symbols influenced the previous career goals of some of the women with visual disability, who had decided to study a career that would accommodate their disabilities. It also impacted their selection of degree programmes and courses. For example, it is difficult for women with visual

disability to study degree programmes such as engineering, mass communication and technology, nursing, law, medicine and science. Moreover, the situation also led to the limited availability of secondary education courses. In that regard, therefore, the government should find specialists and appropriate technology for all levels of education to create wider choices and there by enhance the chances of these women meeting their goals. The social model of disability stated that the right to access education is important to everyone despite their differences (Tungli, et al., 2014).

In this study, a lack of modern hearing aids, sign language interpreters in class and knowledge on how to use and understand sign language was reported as a further potential challenge to the participants with hearing disability. The successful participation of women with hearing disability in higher education depends on the availability of loudspeakers, sign language knowledge and sign language interpreters. Mboya (2008) also observed that certain disabilities were not given priority by universities, especially the UDSM, particularly with regard to students with hearing disability. Moreover, Possi (2001) noted that it was difficult to enrol students with hearing impairment disability because the UDSM lacks special equipment and techniques to support their learning. This situation is similar in all levels of education in Sub-Saharan Africa, as reported by Morley and Croft (2011).

6.3.3 Environmental barriers

The inaccessible physical environment was reported as a key challenge in higher education that has an adverse influence on women's progress in education (Tugli, et al., 2014; WHO, 2006). Inappropriately structured lecture rooms, long distances between lecture halls, the presence of stairs to classrooms which hinder the use of wheelchairs, buildings without elevators, narrow doors, and fixed class seating were among the serious hindrances to these women, particularly those with hearing and visual impairments. A similar experience is reported by Hailemariam (2006) in Ethiopia, where universities and other learning institutions are constructed without due consideration of the needs of students with disabilities. Lorenzo (2003) observed that in the majority of educational institutions in Sub-Saharan Africa, the environment was difficult to access and was not adapted to accommodate students with disabilities, from basic to higher education levels.

The inaccessible library and brevity of the loan period for books constituted other challenges to learning which were reported by the women with disabilities. The lack of Braille materials, such as books, journals, articles and magazines also challenged the women with visual disabilities who wished to utilize the library. Some of the women with physical disability also found it difficult to access the library because of the steps and the fact that some of the library's rooms were located upstairs (cf. Tinklin & Hall, 1999). Consistent with the SMD, one would argue that the women with disabilities in the current study were not affected by their disabilities but rather by the inaccessible physical environment, teaching and learning facilities (Carson, 2009; Oliver, 1996).

Evidence from URT (2008a) indicated that the doors in most of the educational institutions in Tanzania are too narrow for wheelchair users and the toilets are difficult for students with disabilities to use because they are slippery. The inaccessible physical environment, facilities and teaching and learning materials had great impacts on the participation, inclusion, and hence the advancement of women with disabilities in higher education. According to the SMD, institutions need to change the environment to make them inclusive and avoid any possibility of excluding many people with disabilities (World Disability Report, 2011).

6.4 Strategies created and used to overcome the challenges

Despite the challenges encountered, findings suggest that women with disabilities remained active and continued to participate in higher education. This could be attributed to their identification and use of various strategies to deal with the challenges they encountered in higher education, including attending as many group discussions as possible, participating in small group class seminar presentations, and making their own efforts to find study materials, trust their own notes, read effectively, attend and listen properly to the lectures, make their own summary notes and sit in the front of the classroom during lectures. The participants also reported that some lecturers provided them with lesson notes, extra time for examinations and guidance. For the effective provision of quality education, knowledge and attitudes of teachers are important environmental factors (WHO, 2011a; WHO, 2011b).

Few, if any, would deny the value of attending group discussions and small group class seminar presentations, as well as personal efforts as essential strategies for learning, not only for women with disabilities but other students. These strategies provide a valuable platform for students to raise questions and obtain feedback from their peers, hence maximising their learning opportunities. However, this might depend on the extent of support from their peers and teachers. The provision of extra time during examinations and using copies of notes were essential strategies that the lecturers could use to facilitate the participants' learning (Morley, 2010). Attending as many group discussions as possible was reported by the majority of the women as a leading key strategy they employed at the university. Group work and group discussions offered women with disabilities the opportunity to engage in more in-depth discussions with peers, sharing information and knowledge about a course they are collectively enrolled in. Being a member of a study group where everyone actively strives to learn and remain on task can be very advantageous to one's academic achievement. If a student was working on his or her own, there would be a lot of time wasted puzzling over difficulties. In contrast, when students work in groups, they have the opportunity to explain concepts, review material, exchange ideas, and disagree and/or reason with one another about why one person's answer differs from another's. Thus, one can seek clarification

and learn faster working in a group setting while gaining personal skills. This strategy is valuable and supportive; therefore, peers and teachers should support the women effectively in both formal and informal group discussions. This calls for well-organized study group discussions and presentations at higher learning institutions to enable students with disabilities to meet their learning goals.

Familiarization with different assistive devices was another approach that was adopted by the women with disabilities. Devices such as eyeglasses (spectacles), white canes and wheelchairs were among the assistive devices that served the needs of women with disabilities at the university. Women with disabilities, particularly the women with visual disability, reported and were observed familiarizing themselves with their environment with minimal difficulty. Familiarization with the environment was essential in enabling the women to smoothly participate in higher education. The SMD stated that institutions should create an environment that allows all students with disabilities to participate freely in their learning (Oliver, 1996). Familiarization with assistive devices and the environment helped them reduce their dependence on peers.

Proper use of time both at university and at home was stated to be an effective way of dealing with study timetable and home chores. Some women who were married and had family responsibilities reported they used their time quite effectively to ensure that no time was being wasted (cf. Heiman and Precel, 2003). The study indicated that the women attended all lectures and collected all the necessary learning materials to use at home. They carefully managed their time to ensure a good balance between housework and their studies, and they normally used the quiet of night time when everyone was asleep for studying. Phyllis and Ansah (2012) indicated that in order to meet both their study and family responsibilities, the women with disabilities merged their family roles and studies, created social boundaries, prioritized their activities and delegated roles. They also sometimes postponed their responsibilities and pre-planned activities.

In order to overcome attitudinal barriers, women with disabilities openly expressed their needs to their families, peers, teachers, institutions and community, as also reported by Vickerman and Blundell (2010) and Bourke and Burgman (2010). They also told their family members, peers and communities in general that their disabilities did not mean inability, and the fact that if enabled, they had the ability to carry out the same activities as those without disabilities. This finding, however, differs from those of Vickerman and Blundell (2010), who observed that in Israel, fighting was one of the strategies employed to overcome attitudinal barriers. The SMD emphasises that colleges and other higher education institutions should ensure that the academic environment is barrier-free, which includes being free of attitudinal barriers, and allows everyone to study (Oliver, 1996, Sign, 2011).

The study noted that sitting at the front of the class was another strategy used by the women to solve the situation of overcrowded classes, and that it

also made it easier to identify students with disabilities, especially when materials were being distributed. It was also easier for the students to hear the lecture and ask questions. This approach contrasts with the one reported by Nyambula et al. (2013) who observed that in overcrowded classes, students with physical disability had to sit outside in the corridor and listen to the lectures from there. To meet the classroom challenges, the study realized that the women were effectively employing the teachers' guidance and advice. They made efforts to ensure that their lecturers knew them by sight, which made it easier for them to receive support. In this regard, lecturers should collaborate well by developing friendships with the women with disabilities and being good listeners to their needs.

Generally, the strategies created and used by the participants were essential in helping them to overcome the environmental, personal and organizational challenges they encountered in an effort to improve their academic performance. If these strategies could be used effectively by the women with disabilities, with the support of their peers, lecturers, family and community at large, this would maximise their accessibility, participation and hence educational achievements in higher learning institutions and beyond.

6.5 Practical implications of the findings

The findings of this study draw specific interest to the factors that have in many ways influenced women with disabilities to excel in higher education despite the innumerable obstacles to their endeavours. It is drawn from this study that there is no single factor that can determine the successful transition from lower grades to higher education and, later on, retention of the women with disabilities in universities. Findings from this study pointed out four main points which are considered paramount for the women with disabilities to not only access, but also participate and remain in higher education. The four points have guided the conclusion of this study. Community and family attitudes towards women with disabilities, accessible and adaptable learning environments and lecturers and peer support are among the factors that have been put forward in this study to have a direct influence on the accessibility and participation of women with disabilities in higher education.

6.5.1 Community and family attitudes towards women with disabilities

When women with disabilities experienced support, encouragement, care and respect from their surrounding communities and families, they became confident and positive about themselves and their surrounding environment. The sense of being trusted and depended upon was a fundamental motivation for their hard work and commitment in their studies. They wanted to be the way the community thought they could be, and did not want to let down those who had placed trust in them. This kind of impression is not only apparent to

women with disabilities; it is a behaviour that everyone needs in order to succeed in his/her undertakings. However, the impact of positive attitude and support is magnified when the behaviour is demonstrated to women with disabilities, because the majorities of them are desperate about their conditions and have no hope for their futures. When majority of people with disabilities feel welcomed and respected in the community, they feel part of it, and work hard to fit best in the particular community.

Parents should encourage their children with disabilities, and give them special attention and support for their success, taking into account the fact that it is equity and not equality that will enable women with disabilities to make a step ahead of others. Parents, communities and institutions should realize and appreciate the fact that educating women with disabilities is the best investment to make. Once educated, a woman with disability will be able to make her own living, become less dependent on others and thus not regarded as a burden to anyone. The woman with disability will only become a burden and a useless person in the community if she is ignored, disregarded and denied her right to education. Awareness rising among community members and family is paramount in ensuring that every member of the community is taking full responsibility for supporting women with disabilities in their pursuit of higher education. An inclusive approach, in which all children are treated equally and given similar opportunities with special consideration to women with disabilities, can help to develop a discrimination-free generation. This change should begin at home. A supportive home environment is important in enabling the women to access, participate and succeed in higher education. Parents should accept their children with disabilities and give them equal opportunities in making decisions that influence the social, cultural and economic conditions of the family. It was revealed in this study that when women with disabilities experience good care and support from the family, they become as powerful, competent and capable as those without disabilities. Parents and community members should aim at developing the capacity of women with disabilities socially, culturally and economically. Attitude change that begins at the family level is paramount in changing the mindsets of people outside the family, from believing that women with disabilities will end up being beggars to investing in them as potential leaders and good community members.

As revealed in this study, women with disabilities were challenged more by social marginalization than anything else. Since there were some families and community members who were using women with disabilities as a source of income by taking them around to beg, the society started treating women with disabilities as sheer beggars. The notion that majority people with disabilities are simply beggars is among the many negative attitudes of the community that need to be dealt with seriously and strictly. Society should not regard women with disabilities as beggars seeking help on the streets, nor assume that everyone who uses a stick to walk needs assistance. This change needs to begin with the families to which women with disabilities belong.

However poor a family may be, it needs to value the dignity of many people with disabilities, by providing them with all the necessary support, including education, to enable them to gain a better standard of living. Consequently, the women should be involved and participate in social, economic and cultural issues, including business, politics, development, education, administration and employment. Businesses should try to employ qualified women with disabilities in office work in order to exploit their effectiveness and performance. Moreover, women with disabilities themselves should accept their disabilities in order to succeed in education. The establishment of a guidance and counseling unit and having counselors in society at both the lower and higher levels of education is essential in enabling the women to accept their disabilities and study and perform well.

6.5.2 Accessible and adaptable learning environment

In order for women to achieve their goals and dreams, institutions, teachers and family members need to understand the needs of women with disabilities. Different sectors need to work together to prepare effective curriculum materials which can help the women to obtain a proper education and meet their goals. The institutions should empower these women through agency and advocacy programmes to ensure that their needs are well understood by their teachers, peers and institutions.

This study has reported the inaccessible learning environment at the university which creates serious mobility and learning barriers to women with disabilities. However, the problem of inaccessible environment is not only a challenge in universities but also in lower grades, such as secondary and primary education. Inaccessible environments and infrastructures have been serious obstacles to participation in and successful completion of school by most women with disabilities. Many of the learning institutions including universities do have narrow pathways with stairs which are very difficult to use for students with disabilities, particularly those who are using wheelchairs. Likewise, institutions have narrow classroom doors and poor hygiene systems, particularly toilets, making the environment uncomfortable for many people with disabilities. Universities and other learning institutions need to renovate and reconstruct the challenging environment, focusing on the removal of stairs or building of ramps, improved drainage, trenches, fences and removal of holes surrounding the university. Rehabilitation of the learning institutions to make them more inclusive to students with disabilities will simplify the mobility of many of them within the learning institutions. Moreover, a need to renovate toilets, classrooms, enlarge doors and windows, as well as increase provision of support systems for students with disabilities, particularly women, is inevitable if institutions want to be inclusive. There are mobility-related challenges both on and off campus, and there is no transport system between the university lecture halls and the surrounding environment. Therefore, an accessible and adaptable learning environment is needed to enable physically and students with visual disabilities to participate fully and move quickly between venues,

dormitories, the refectory, etc. The link between inaccessible transport and disability leads to exclusion from educational rights and creates inability and disempowerment. Moreover, internal transport for the women with physical disabilities is needed because of the long distance between the various lecture halls. The distance between lecture halls takes them so long to travel between one lecture hall and the other, that the majority of them miss part of the lecture, thereby causing a backlog of notes.

Inaccessibility to information and communication technology was another hindrance to the women's achievements in higher education. The use of technology would have been a means for the women with disabilities to smoothly learn even the most difficult topics. Technology that uses the combination of sound and text would help many people with visual disabilities, whereas those that use texts and moving pictures (videos) would help people with hearing disabilities. Technology can also simplify the work of those with physical disabilities, particularly those with a single hand, or with both hands handicapped, to easily use it for typing and reading. Accessibility to new technologies and facilities such as computers, modern facilities and equipment such as note takers, computers, Braille books and machines, magnifiers, Perkins machines, software, wireless internet connections, dolphin converters, tape recorders and white canes) is essential to women's academic achievement, especially those with visual disabilities. Universities should have a good plan for obtaining these facilities and equipment early in the semester to facilitate the learning process of the students with disabilities. Purchases of the equipment and modern technology should consider the number of students and their types of disability, as they have already been identified on the application form. Similarly, the faculty's requirements should be distributed to the students on time. A sense of belonging and understanding of the timetable and examination dates can be easy for persons with disabilities if there is good access to information and communication technology. Sound arrangements for obtaining information and services should be put in place by the university, and students with disabilities should be informed from the beginning about the presence of a university special unit and the support provided. Some of the women were unaware of the availability of a special unit and services for students with disabilities because the university is a complex entity.

In responding to the widely reported challenge of water-logged toilets and the lack of sanitary equipment, universities need to construct separate toilets for women with disabilities to avoid contamination. The available campus shared toilets are watery and slippery and their construction did not take into consideration students with disabilities, particularly those who are using wheelchairs and those with visual disabilities. Toilet renovation programmes need to be implemented in all learning institutions. Most of the old constructions in the country excluded children and adults with disabilities who require some special settings from being well accommodated. While Tanzania has a national disability policy which strongly advocates for the rights to education of many people with disabilities, little has been emphasised on the environment in

which students with disabilities have to learn. Some efforts need to be put into either review of the policy or development of the guidelines and standards which all schools and learning institutions will have to meet before they are registered and allowed to enroll children. The policy should focus on identifying those students who find it difficult to carry out basic activities across a core set of functional domains such as which students have difficulty seeing, hearing, walking, using their arms and hands, learning, communicating and behaving in class. It is also important to identify not just whether they face problems in these areas, but also whether their difficulties are moderate or more significant and whether the learning institutions are accommodating these difficulties.

This study indicated that in order the students to get admission at the university suppose to fill an application form. The students with visual disabilities were facing some challenges on finding people whom they trust and fill the form appropriately, because some people filled the form differently which caused the students with visual disability to fail on assessing higher education while they have qualification and those number of people who met with this challenges is unknown. Moreover, these students they need money to pay those people who supported them and sometimes they failed to get support of filling the form and discouraged to apply and remain at home with qualification. On my opinion, application form should be on two ways, one should be normal and the second on Braille form for students with visual disability. This may facilitate the process of reading and filling the form, reduce the expenses and time factors.

Within the form of application, there is a sub-title about the students to disclose their disability without clear instruction on why they are suppose to write the disability and for what purpose. The lack of clarity of this subtitle some students failed to write because they afraid to miss the chance. This students were at risk to dropout from the university because they don't have any support, I found two women during data collection and I directed them to the University special unit currently Special Needs of Education unit. I suggest the TCU to add some words or sentence for example requesting to identify your kind of disability for support and services arrangement before starting the studies. Moreover, the special needs education should be open-up through posters in everywhere especially the week of orientation and make sure all students with disabilities were being informed and registered.

The Universit Special Need Education unit, it is easy to obtain the information of students with disabilities registered at the university, year of study and degree programme by gender and difficult to be informed about the academic progress (who failed and passed), dropout, discontinue, completion rate on each year and employment rate after graduation. This information is important for planning, designing, evaluation and research purpose.

In loan application form, the students with disabilities encountered with challenges on selecting the proper degree programme because some courses had loans and other courses not. This caused majority of the study to select

wrong courses because of loans. The students study out of their goals and dreams and expectation and plan. This had great impact on the learning process because they were studying without motivation or effort because they did not see the future and in work career performance after graduation their ineffective because they're not able to transfer the knowledge they obtained. For example, on this study majority of the women with disabilities reported to studies unexpected degree programme. Therefore, if the country wants to have proper and effective man power, the HELB need to restructure the way of providing the loans, may be they can distribute the loan on each degree programme like previous years, this can facilitate to meet the learning goals and meet the diverse learning of all students with and without disabilities. There might be some students were not accessing higher education because the degree programme was selected were not their priority. Moreover, the loan form should also be written on normal words and Braille to make easily for students with visual disability.

The study found that readers were not important for the women with disabilities in higher education only but also in lower levels of education for effective learning and teaching and for better achievement. Many students dropped out in lower levels of education because they lacked readers or guider because they were not able to study without Braille, sign language, lauder speaker, any one to guider the school surroundings. That is why the number of students with disabilities are not promising and also difficult to meet the idea of inclusive education. Government should have plan of introducing the system of each student with visual disability to have a reader from all levels of education.

Moreover, this study reported that majority of the women with visual disability started to learn how to use Braille machine at the university level while this knowledge is important to be taught from pre-primary, primary and secondary for better achievement. Due to limited information may be some students dropped out because of lacking the knowledge on how to use Braille machine. This Braille machine is an engine for the learning of students with visual disability. Therefore, government should consider the training of teachers on how to use this machine and teachers also would teach the students.

This study also reported that students with visual disabilities needs security of their facilities and equipment, therefore the university accommodation office were supposing to consider the students whom were staying with these students when allocating the rooms and the whole university community to secure this facilities and equipment. Also albinism needs protection because we're afraid to walk and stay alone in the university campus because of traditional healers. The university administration should have clear strategies and plan on how and what measured they can use to protect these students because stress and fear had great effect on their success and achievement.

The women interviewed by the researcher they did not need only professional education but also socials and behavioural skills, adaptation,

economic and life skills, HIV and reproductive training for their sustainable development. Majority of the students with disabilities were not taught at home and inadequate or not available in school too. These skills are essential may facilitate the students with disabilities in particular women with disabilities to enjoy their life. Therefore, the government and nongovernmental organization may arrange how to support those skills or to have special programme in educational institutions concerning the mentioned skills. Moreover, awareness to the family and community is important.

The reasons mentioned by the women with disabilities in the previous chapter which facilitated to access and participate in higher education are similar with the other students without disabilities, but the WWD to meet those factors it can take long time and struggle with different challenges on the way around. Women without disabilities were facing with double challenges such as being a woman and living poor life (poverty) while the women with disabilities were triple disadvantaged because of being like above reason and disability condition. The reason of changing society attitudes and perception is essential because still majority of the women with disabilities were not accessing and participating in education in Sub-Saharan Africa and Tanzania in particular due to the factors such as oppression, discrimination and marginalization in the family, community and institutions. This change of attitudes should not be emphasized on higher education only but should start from the pre-primary, primary, secondary and vocational education training (VET) because had great influence to the women with disabilities achievement and their life development. Some of the women failed to apply for vocational education training because most of the students graduating in vocational living challenging life or poor life. Therefore, VET in Tanzania responsible to create the learning environment which are barrier free and which may meet the diverse learning of students including students with disabilities to study freely. VET read to better life and salary because the knowledge provided is direct based on work

6.5.3 Lecturers' and peers' attitude change

Discrimination and attitudinal barriers of their peers and lecturers were also stated by the women to influence their studies and achievements. Peers should change their misguided notions about students with disabilities and women with disabilities in particular. Peer cooperation and interactions were needed for the participants to succeed because some women merely listened without writing anything down. The women with disabilities' successes are highly dependent on the level of cooperation and interaction with their peers. Given the inaccessible learning environment from the classroom to the surrounding environment, a woman with disability can hardly live without depending on others for help and support. Inaccessible facilities, a lack of assistive devices, mobility challenges and physical infrastructure were additionally prohibitive to the independence of majority of students with disabilities at the university. Dependency can make the women feel inferior in the learning process, and the

lack of assistance can delay them from meeting their goals and dreams. Disability is not inability and, by redressing the accessibility and adaptability issues as well as the environmental challenges, ensuring the availability of teaching and learning facilities and assistive devices can enable the women with disabilities to live unaided. The university may provide necessary rehabilitation and capacity programmes to encourage independent living may help to eliminate and minimize their dependency both within and outside the institution.

To avoid discrimination and attitudinal barriers, teachers should know the women and be aware of the needs, barriers, problems and challenges they encounter in learning. Higher education learning institutions should provide in-service training to lecturers on how to assist, interact with and teach an inclusive classroom. It has been noted in this study that the majority of lecturers were teaching a whole semester without identifying or even taking into account the presence of students with disabilities, particularly women. Moreover, this training should be provided annually, as the university employs new staff every year. Lecturers need to know the number and types of disabilities in the classroom so they can provide materials and equipment, conduct follow-ups and solve their academic challenges. Moreover, the provision of handouts and lesson notes and allowing extra time for students with disabilities can facilitate learning among women with disabilities. This is particularly important during examination days and when there is an assignment due. The option to receive examinations in large print was ranked as very important by the women with low vision. Similarly, a person experienced in disability that can read Braille and use sign language can be put in place to help with the translations or interpretations of some documents such as maps.

In this study the women indicated that self acceptance played significant role on performing well in all levels of education. This self acceptance depends on how the family, lecturers, peers and community perception and attitudes. Positive perception read to success and negative resulted to limited achievement. In this study mentioned acted as source of self acceptance of the women with disabilities and very few were against. In reality, in Sub-Saharan Africa including Tanzania majority of the family, teachers, peers and community were among of the source of stress and frustration of women with disabilities. More stress makes the women with disabilities to focus on challenges rather than concentrating with the studies. Therefore, awareness creation is important for the effective learning.

6.5.4 Quality data on disability and higher education

Education Management Information System (EMIS) in Tanzania should include reliable and accurate data about students with disabilities in higher education, which are currently lacking. The number of teachers who receive training, the accessibility of higher education, and the amount of special equipment and materials should be established. In identifying students who are either receiving or in need of special services is vital, in understanding the gaps in

service provisions to students with disabilities in higher education. Accurate, reliable data are essential to assist the educational reform efforts and to guide decisions on all levels by understanding the diverse needs of the women with disabilities for planning, monitoring and evaluating the educational facilities. Data are also needed for policy planning, resource mobilization and allocations, and targeted interventions for students with disabilities, particularly women with disabilities. Data are paramount in policy design, understanding the number of students with disabilities and other special needs within the education system and the challenges they are facing. Identifying the needs of these students and understanding the barriers hindering their education are essential for their success. It is also important to describe the variability according to age, gender, disability and geographical location, because barriers and outcomes can differ based on those characteristics. In short, the EMIS can produce data that are essential for identifying the priorities for educational reform and how best to distribute the budget in order to obtain the desired results, then monitoring the actions taken, and finally evaluating the results of those actions.

The number of teachers who received training, the accessibility of the university and materials, and the number of students receiving or in need of special services are all important in understanding the factors that hinder or facilitate the education of women with disabilities. The process of monitoring data helps to determine the scale and scope of restricted access and obstacles in the implementation that can support the policymaker to take corrective or supplemental actions to strengthen the policy. Having baseline data is essential for the proper evaluation and investigation of the outcomes and determination of the effectiveness of the policies. Data are also needed for the evaluation of the long-term effects of policies for sustainable support programmes. The evaluation should assess the educational attainment of all children with different backgrounds and characteristics. This includes enrolment, attendance, and advancement to the proper grade, graduation and test scores. Concrete EMIS data can help to assess all of these indicators. The data are needed at all levels of education, including colleges and the informal education system (adult education) for monitoring and evaluating the efforts made to educate all children, including children with disabilities. These issues would be realized in practice by rehabilitating the schools and universities to make education inclusive. To formulate inclusive policy and to review the inclusive strategies to make sure the students with disabilities are well included and learn.

Training tutors, lecturers, teachers on special needs education so as to have enough expertise on education about education for students with difficulties. Providing pre-service and in-service training to teachers so that they can respond effectively to diversity in the classroom; adaptation of teacher training syllabuses to include teaching strategies in inclusive classrooms with diverse student populations.

Awareness rising to the family, community, peers and lecturers the important of education to the students with disabilities and the attitudes and

perception change. Most families they blame that educating children with disabilities is expensive, it is not true because it is cheaper to educate students with disabilities rather than living with him/her without education and taking care. Education contributes to getting good jobs, being married and becoming independent.

The things to work on for different stakeholders are by conducting a stakeholders' workshop analysis which will include the University of Dar es Salaam community, Ministry of Education and Vocational Training (MoEVT), Special Needs Education Department, the Higher Education Students Loan Board (HESLB), Commission for Tanzania Universities (TCU) and nongovernmental organizations that deal with education (e.g. TEN/MENT, HakiElimu, TGNP). The workshop might aim to discuss the findings of the study and explore solutions to the situation of the women with disabilities and strategies for how to pave the way forward, based on the findings, for the community and the lower levels of education. A meeting with students with disabilities who are studying at the University of Dar es Salaam might be conducted to share with them the strategies and enabling factors for their success within the university environment.

Follow-up research might be undertaken because, during the data collection, the women were asked about their plans for the next five years and how they see their future. The majority of the women anticipated getting a good, well-paid job and a good life, with possessions like cars, high quality houses and children. All of the women showed an interest in and expectations about obtaining a Master's degree. Moreover, regarding their vision of the future, majority of the women felt uncertain about their future life because of their community's cultural beliefs and attitudes and employment. The majority of their colleagues faced challenges related to employment and a few of them felt happy about their coming life because education is for everything. Some of the women were interested in contesting for political leadership to fight for the rights of many people with disabilities. Therefore, there is a need to conduct a continuation study to assess if their expectations were fulfilled, especially with regard to the employment of these women after completing their degree and what challenges, if any, were encountered that deviated them from their expectation.

Country-wide projects are needed because the early identification and intervention of disabilities and their causes have been shown to be a challenging area for families and communities because, out of 22 women, only one was diagnosed with a disability. Moreover, during the field data collection at the University of Dar es Salaam, the study did not find any students with intellectual disabilities but, following the survey visits, members of this group were identified, particularly in Mtwivila (Iringa), Katumba (Mbeya) and Korogwe Girls (Tanga) Secondary Schools. A needs assessment project is thus needed.

Enabling factors and strategies should be disseminating across higher education in Tanzania, in universities like SEKOMU and the lower levels of

education, and an awareness campaign about the importance of higher education for students with disabilities, particularly women, should be planned and executed.

6.6 New knowledge gained from this research

The study provided the reasons the women with disabilities participated in higher education. This information is novel, to the researcher's knowledge, because no similar studies have been carried out previously on women with disabilities in Tanzania, and little elsewhere in Africa. There was similar study conducted in Kenya by Opini (2012); there were others in developed countries. The study provided important information about the factors that enabled the women to participate in higher education, among them self-acceptance and self-motivation to achieve their dreams and goals. This information is also new in Tanzania, as previous studies on disability have not identified self-acceptance and self-motivation as factors that can enable students with disabilities, particularly women, to excel in higher education. The findings from this study are quite useful to families, communities and institutions in Tanzania that wish to use this study in dealing with the barriers towards students with disabilities in Tanzania and Africa in general which hinder them from participating in higher education. Thus, this fresh knowledge about the enabling factors may enhance gender equity and equality in higher education, as emphasized in the Millennium Development Goals and, currently, in the Sustainable Development Goals (2016-2030).

Moreover, the study listed the challenges that are still limiting women with disabilities from participating freely in higher education, as comparably emphasised by the SMD (Oliver, 1996). These challenges were based on three categories, which included people's attitudes (devaluing, discrimination and prejudice), institutional (inaccessible environment, transport and study materials) and organizational (no policy of disability and education practices and procedures). This information is essential for helping to transform people's attitudes as well as the institutional and organizational set-ups. In this context, the previous studies neglected either disadvantaged or marginalized groups as a whole or critical aspect of their educational endeavours. Moreover, the women with disabilities had special needs and challenges compared to their counterpart males and females without disabilities. This group could not access education because of the cultural beliefs within their families and communities; consequently, they were socially, culturally and economically excluded due to their backgrounds. This means that it is important to assess the challenges that persist in accessing, participating and succeeding in higher education. Tungaraza (2010), Mwaipopo et al. (2011) and Morley (2012) noted the challenges for students with disabilities in Tanzanian higher education in general but did not specify the situation of women with disabilities. The women with visual disabilities were more at risk in terms of numbers enrolled in higher

education, facilities and support than the other women. These women were at risk due to the application and admissions process, starting a new life in higher education, the university environment and attitudinal barriers within higher education.

The study investigated the strategies that these women created and used to overcome the diverse challenges associated with their families, communities, institutions and organizations with regard to their access, participation and success in higher education. The study realized that the women created and used very strong strategies which supported them to remain at the university and make progress; for example, participating in more than one informal group discussion, socializing and their own efforts. The women's motivation and goals fostered them to find different ways of meeting their goals. This information is important because it indicated that the women truly understood the significance of education in their lives. Moreover, these strategies were likely to be used at least as a start by other students who wanted to succeed academically. The previous studies that focused on this area researched women in general or students with disabilities at the lower levels of education, and no studies in Tanzania focused on the strategies of women with disabilities with regard to higher education. Therefore, successful access, participation and progress in higher education depend on how strong these strategies are, and other students can absorb and use them to counter the disability challenges they encounter in education.

The research widens the information about the chances or opportunities available regarding participation in higher education. Such opportunities as direct entry, equivalent qualification entry, mature age entry and pre-induction programmes were mentioned by the women as ways to access higher education. Knowledge of these was likely to open up more opportunities for them. The study also researched how the women accessed the university, and found that the majority of them were admitted through direct entry, which means that they performed well in their final Form Six examinations. This implies that the women were talented and able to compete with their peers without disabilities. Therefore, women with disabilities need more support at the lower levels of education in order to develop their self-confidence, meet the criteria and achieve admission to higher education. This study also emphasized the students with disabilities to accept their situations to enhance their social, cultural and economic engagement with society.

The successful transition from upper secondary education to higher education depends on a strong performance in the final Form Six examinations, a successful application and admissions process and managing to start a new life at university. Participation, retention and success in higher education was influenced by the women's realization of the importance of education, and having personal goals, family support, motivation and strategies that enabled them to tackle the educational challenges within education institutions.

This study also found that the successful women mainly came from rural areas, where negative cultural beliefs about women are common. These women

also lived a poor life because of the subsistence economy practiced by their parents. They also came from extended families with poor educational backgrounds but still attained a higher education. An extended family consists of two or more families living together in the same household. When practiced at its greatest potential, it offers stability and success to all family members. The involvement of grandparents and other extended family members in nurturing and raising children can also offer support to the parents. Other adult members of the extended family can offer childcare assistance as well; reducing the cost of childcare services. The total effect of family background on educational success originates in the immediate family, the extended family, and in interactions between these two family environments.

The study reflected that only two women were studying business and science programmes, both with physical disabilities. This means that the women with visual disabilities were at risk because they were failing to study science subjects at the secondary school level, particularly physics, chemistry and biology practical and commercial subjects.

The study provided information about the challenges related to early intervention, the identification of disabilities and the cause of disabilities. The majority of the participants were unaware of the cause of their disability; only one participant, she had her disability medically diagnosed while others spoke of witchcraft or God's will as the cause of her disability. The parents failed to identify the disability of their daughters and what to do after having the daughter with disability. This problem of identifying disabilities is a challenging issue in many countries in developing countries including Sub-Saharan Africa and Tanzania. For example, Mont (2015) stated that the majority of developing countries identify the types of disability only by using children in the most severe categories, such as blind instead of vision impaired. Some countries identified the type of disability by using specific conditions for example albinism, autism, epilepsy and cerebral palsy with purpose. The type of data causes some difficulties on provision of support or in planning process. Similarly, in Tanzania the categories are blind, deaf, crippled, mental retardation, dumb and albino. The clear identification of disabilities and its type is important; for example, a person with albinism has a problem of skin and vision (total or low vision), and the scope and level of vision and hearing impairments vary. All these children's needs are different and should be identified in education institutions (universities and schools).

Majority of the participants of this study had not been involved in early intervention of their disabilities. Many of the families who realized their situation stayed at home or engaged in witchcraft. The early intervention services are useful and intend to provide families who have children with disabilities or delays with support and resources to maximize the child's abilities, while respecting family decisions and cultures. The early identification had three goals. First, a service plan should be developed as early as possible after the child's diagnosis. Second, should have heavy involvement by families in the development and execution of the agreed upon plan. Lastly, a structured

plan that provides clear, effective and measurable goals is highly needed. Services are provided at the state or local level, and often can be arranged through the local school system. The earlier a child receives services to address the effects of hearing loss, the more time there is to influence positive learning outcomes. Early intervention services also have a significant impact on the parents and siblings, infant or young child with disabilities. The family with the child with disabilities often feels disappointment, social isolation, added stress, frustration, and helplessness. The compounded stress of the presence of child with disability may affect the family's well-being and interfere with the child's development. Families with children with disabilities are found to experience increased instances of divorce and suicide, and the child with disabilities is more likely to be abused than child without disability. Early intervention can result in parents having improved attitudes about themselves and their child, improved information and skills for teaching their child, and more leisure time for leisure and employment. Parents with children with disabilities also need early services so that they may better provide the supportive and nourishing environment needed by the child.

A third reason for intervening early is that society will reap maximum benefits. The child's increased developmental and educational gains and decreased dependence upon social institutions, the family's increased ability to cope with the presence of child with disabilities, and perhaps the child's increased eligibility for employment, all provide economic as well as social benefits. When the participants were enrolled in school, teachers also failed to identify their disability because of limited knowledge.

The study also provided important information about the value of being educated both as women and as person with disabilities, because the women with disabilities changed status (becoming accepted, valued and respected), acted as role models and became involved in everything, especially decision-making at various levels, soon after they started to study higher education. They had not been accepted, valued and respected before, so higher education acted as a catalyst which enabled them to enter every arena of family, institutions and community, which resulted in enhancing their social and cultural freedom. The study found that the women had developed strategies to solve the challenges they faced at university. Consequently, they needed more support from the university, their peers and specialists. Generally, women with disabilities' access to and participation in education depend on society's positive change, enabling policies, the university environment and family support. These will make an enormously positive contribution to improving access to higher education by students with disabilities in general and women with disabilities in particular.

It also outlines the key issues regarding the access and full participation of women with disabilities in higher education. Understanding the meaning of access and participation was important because these are the key concepts for the social inclusion of women with disabilities in education, particularly in higher education. Successful access and participation depends on the

curriculum, a proper policy of disability and education, and environmental challenges. In Tanzanian higher education, particularly in the UDSM's educational environment, the physical environment, infrastructural design, facilities, curriculum, support systems, services, teaching pedagogy as well as the institutional culture and practices acted as barriers to women with disabilities. From the social model of disability perspective, the responsibility of the UDSM is to modify the university environment to meet the needs of all students with disabilities so that they can participate more fully in all academic activities. Furthermore, the social model of disability includes the recognition of the human rights of persons with disabilities. Hence, at the UDSM, the academic lives of women with disabilities would be easier if the institutional barriers were removed by providing a barrier-free environment that is user-friendly for all, as stated by the social model of disability. There is also a need to impose policies and laws that can prohibit negative practices, such as attitudinal barriers, discrimination and cultural practices.

This study found that access depends on first, the successful transition from secondary to higher education, which was found to be based on the students' strong performance in the final Form Six examinations. Second, it also depends on successful application and admission procedures, and starting a new life at university. Third, the internal and external motivation to study is essential, without which nothing can happen, even with family and society's support. Fourth, challenges acted as reasons why the women study, drop out or perform poorly. Having goals and creating strategies to combat their challenges helped the women to participate in higher education. Therefore, instead of remaining a stumbling block, these challenges provided the motivation to create and use strategies to attain the intended goals. Some of the women identified challenges as enabling factors which inspired them to pursue a higher education. Enabling factors sometimes are shown as strategies and motivations to study higher education. Thus, the accessibility of the women with disabilities' higher education depends on the learners' motivation, such as aspirations, interests, talents, ideas, skills, learning environment and curricula in higher education.

In this study realized that participation of students with disabilities depends on the university environment, including the physical environment, policy, technology, university curricula, inaccessible communication and socialization (university administration, peers, teachers and specialists), marginalization, attitudinal barriers, appropriate methods of teaching, adequate learning materials and special equipment. The provision of all of these could provide the women with a free, comfortable environment in which to study. Moreover, accessibility in education depends on enabling factors and the strategies that the women created and used to overcome their challenges. Social and cultural practices and beliefs have been shown to have less influence on the participation of women after being selected to participate in higher education, unlike the situation in lower educational levels.

Focusing on the challenges encountered women with disabilities in career development realized that the education system provided in Tanzania failed to meet the diverse learning of the students with disabilities in all levels of education. For example, the participants in this study stated that university lecturers are supportive but majority of them had limited knowledge and strategies on how to support students with disabilities. Similar the primary and secondary teachers were not attending in-service training and inadequate programme on teachers' college about students with disabilities. Inadequate knowledge of teachers on how to identify students with disabilities in classes like the students with visual disability sometimes had normal eye. Moreover, less knowledge on naming, identifying and applying in class the special equipment and facilities to facilitate learning. Teachers were not able to identify the support needed by the students with disabilities in connection with the type of disability. In order to have effective inclusive education or equality in education there are need to remove all barriers related to teachers and encourage team teaching between special needs teachers and teachers without. Encouraging home environment stated by these participants is not realistic because the sample is small to generalize the information, and majority of the women in particular women with disabilities are experiencing exclusion, harassment, marginalization and oppression situation in many Sub-Saharan Africa including Tanzania. Many women with disabilities may face harassment at home, schools, on the way to school and home and community at large.

The study concludes that realizing the importance of education was shown to influence the majority of the women to pursue a higher education, and therefore the provision of quality education is important. Exploring the needs of the women with disabilities is also essential for designing an educational system and infrastructure. A supportive home environment was also stated by the women as a key enabling factor for their success in higher education. The creation of projects or programmes to support and increase their families' income levels is essential for easier investment in higher education for women with disabilities because the majority of the families suffered from poverty. At the university, physical and environmental factors highly challenged the women to participate more fully in their studies, so reconstruction and rehabilitation are urgently needed to enable the students to achieve their goals. Since having various informal group discussions supported the women to obtain wider and more diverse knowledge, the university community should assist the students with disabilities through discussing issues with them, especially with the women with visual disabilities, because inadequate equipment and materials caused them to depend more on their teachers and peers. Generally, it is evident that the Tanzanian government does not have a proper or appropriate policy for students with disabilities that allows them equal access and participation in higher education. Due to these factors, the environment and retention rates of women with disabilities differ at all levels of education.

6.7 Trustworthiness of the Study

The issue of trustworthiness is essential for the research to be accepted and the knowledge to be received as suitable for use in various means and ways, such as criteria problems which are seen to have major difficult and important barriers facing social educational research. Because of the differences between the qualitative and quantitative research methods, the traditional quality criteria of reliability and validity used with quantitative methods might be inappropriate for use with qualitative methods (Lincoln & Guba, 2013; Morrow, 2005). Internal validity is traditionally related to whether an instrument measures what a researcher intended it to measure. Reliability and validity are important components that any researcher should consider when designing a study, analysing the results and judging the quality of data results. In any study, whether quantitative or qualitative, the commonality is that both investigate for the common result, which is truth, and the truth depends on the type of approach adopted by the researcher. Reliability and validity in qualitative research seeks replicability of the study, and valid assesses whether the instruments of data collection are accurate and measure what are intended to measure. With a qualitative study, the researcher who conducts interviews and observations is the research instrument and is extremely sensitive to the context (people, place, and environment) in which data are collected. Cresswell (2009) stated that in order to ensure internal validity the strategies such as triangulation of data, member checking, long terms and repeated observation at the research site, peer examination; participatory modes of research and clarification of research bias should be employed. Lincoln and Guba (2013) categorized the process of measuring trustworthiness into two: internal validity, which comprises credibility, member checking and peer review, and external validity, which comprises generalization of the study, transferability, reliability, member checking and peer review. Shenton (2004) suggested four criteria that can be used to measure the trustworthiness of the findings in qualitative research. These criteria are mentioned as credibility, transferability, dependability and conformability.

Credibility: Is about the truth value which determines whether the researcher has confidence in the truth of findings for the participants and the context in which the study has been undertaken. Credibility also measures whether the research findings capture what is really occurring in the context and whether the researcher learned what he or she intended to learn (Lincoln & Guba, 2013; Shenton, 2004). Many qualitative researchers tend to use the term credibility instead of internal validity (Pitney, 2004). The trustworthiness can be increased by maintaining high credibility and objectivity by having adequate engagement in the research setting, so that recurrent patterns in data can be properly identified and verified (Morrow, 2005; Shenton, 2004). The credibility focused on several measures used to establish credibility of qualitative findings: first, to conduct research according to the rules of qualitative research, and

second, asking the participants to confirm the data they presented (member checking). Triangulation of data collected is another way of measuring credibility in qualitative research. The major focus here is whether the participants consider that their words match with what they have actually stated and provided if the tape recorder has been used (Pitney, 2004). Credibility in qualitative research depends on the ability and effort of the researcher's (Yin, 2011) ability to follow orderly research procedures and minimise careless work.

Credibility of the findings is obtained from the discovery of human experiences lived by the participants. To obtain the experiences of the participants, this study's researcher had to undergo prolonged engagement for the purpose of developing connections with the respondents and building trust among them. This allowed for concentrating on the characteristics and elements that were being studied. This provided sufficient scope and depth of the collected data (Creswell, 2009). The researcher assumed the presence of multiple realities and attempted to accurately represent them. Because the data were collected in a social environment, this allowed the participants to express their opinions, understanding and views about the study topic independently and freely.

The present study demonstrated clearly essential orderly qualitative procedures and processes throughout the study (major principles and procedures). These principles and procedures were reflected in the ability to choose and stick to the research design, methods and procedures and ethical considerations that match up with the goal research's design. The field work descriptions demonstrate that the researcher was fully present physically, emotionally and cognitively during data collection and other research activities in the field, which resulted in valid and reliable data guided to the research's objective analysis, presentation and discussion of the findings to construct this thesis.

In the process of data analysis, the researcher included the action of going back and forth to transcripts and voice recorder tapes which aimed to understand the meaning of data in detail and easily merge with the research questions. To increase the credibility of the data, the findings were presented with quotations from the interview discussions with participants and observation checklists. In this context the researcher believes that these issues should allow those who read this work to judge the extent of credibility which the findings and presentation used. The researcher worked to control bias in the process of selecting the participants, and interviewed the entirety of the women with disabilities who registered in the university's registry or admission book and were registered by the university special unit. To triangulate the data, the researcher used face-to-face semi-structured interviews and direct observation, which compensates for individual limitations and obtains in detail the information about the attitudes and behaviour of the participants. Moreover, in this study the researcher used verbatim quotes separately and within paragraphs to verify the specific data participants supplied or informed

(Shenton, 2004). To simplify the level of understanding, the researcher used the quotes in English for international readers and Kiswahili for Swahili readers in Tanzania and other countries.

The researcher interviewed a wide range of participants (22 women) to measure to provide exact pictures of the needs, behaviour and experiences of the participants. To secure credibility in the honesty of the participants when collecting the data, the researcher explained in detail about the opportunities to decide whether to refuse to participate in the research, and the data obtained were from the participants who voluntarily and willingly decided to take part and offer data in the fields. Member checks are important and participants should be asked to read the transcripts of dialogues in which they participated. The researcher frequently had debriefing sessions with superiors, who are responsible for the work in a more supervisory capacity; this facilitated drawing attention and helped the researcher to recognize her bias and preferences. The researcher also used feedback from peers, colleagues and academicians. The researcher used reflective commentary because it is important in evaluating the research and developing the effectiveness of the techniques used and employed. Moreover, reflective commentary was used to record the researcher's initial impressions of each data, as patterns emerged in the data collected and theories generated, as well as monitoring the researcher's own developing constructions. In this study, the researcher collected the data in the field work over six months with the aims of gaining deeper understanding of the topic, direct observation of the equipment and facilities available for students with disabilities and the functionality of the university's surrounding area to get a clear picture of the university. The participants were contacted first to present the research purpose and arrange timetables and again during the data collection process of interviews and after data collection to verify what they reported or said. This facilitated triangulation of the information from the semi-structured and direct observations to collect quality data. This study used multiple sources of techniques such as semi-structured interviews, direct observations and thematic analysis and voice taping to triangulate the data.

Transferability, applicability: are concerned with measuring the extent to which the findings of one study can be applied to other situations (Bryman, 2012; Morrow, 2005). Shenton (2004) stated that in a positivist work, the results of the research can be applied to a wider population. In qualitative data it is impossible to demonstrate that the findings of qualitative research are specific to a small number of particular environments and individuals and conclusions are applicable to other situations and populations. Transferability of the data in other situations depends on the degree of the relationships in the study. It is challenging for the researcher to specify the transfer of the findings and can only provide sufficient descriptions for a reader to use in assessing whether the findings can be applied to the new situation. This transferability emphasises five issues to be measured; first, the number of organisations under investigation by the study and where they are based. The second focuses on any restrictions or barriers in the type of people who contributed the data, the

number of participants involved in the field work, data collection methods employed and the length of the data collection sessions. The third measures the time period the researcher spends in the field for data collection to ensure that sufficient contextual data about the field work is provided to enable the reader to make such a transfer. In order to assess the truthfulness of the data findings to people in other settings, similar research employing the same methods conducted in different environments and with different participants could well be of great value. Fourth is the emphasis to analyse the data from multiple settings and find common themes among them that would suggest to the readers that the findings are indeed applicable to their environment. Fifth, collection of data from many different settings and research design should be observed and considered.

In this study, the researcher investigated the UDSM in Dar es Salaam, Tanzania. All 22 women with disabilities who are pursuing bachelor and master degrees were involved in the study. The information shared is considered reliable because the participants were exposed to the Tanzanian education system as they passed from the primary to the university level. The researcher provided detailed information related to the research procedures which included research design, data collection methods and procedures for data collection, research sites with the evidence of a map, participants and their experiences, their professions and the women's parents' education, professions and work as presented in the methodological chapter. This provided the reader enough information on which to base a decision on whether the findings are or are not transferable to other situations or groups. The researcher also tried to provide detailed data on the research stages from the very beginning to the final thesis production of the context within which the study was conducted, the conceptual framework, methodologies employed and procedures for data collection. Detailed descriptions about the research site with a map and the various stages of thematic data analysis, presentation and discussion are also well stated. The study involved the women with disabilities with varied backgrounds such as disability, gender, age, economic status, location and qualification. The researcher engaged herself in the data collection and six months were taken to collect the data in the field. Detailed findings about women with disabilities and their experiences in education, in particular higher education, were provided. The provision of rich descriptive data in a context of participants determining for themselves whether the results speak to their situation (Shonte, 2004) enhanced the findings of the study to be used in a greater range to applied and other similar situations (Seidman, 2006). Thus, the detailed information expected to expose the reader to the real study environment and facilitated determining the degree of similarities and differences between the study site and other contexts and ability to determine the transferability of the findings. Therefore, the researcher clearly described and documented the research procedures and thematic data analysis step by step to allow other people to review and understand. Therefore, the reader should scrutinise the work and evidence used to support the findings and

conclusion (Yin, 2011). Such situations resulted in critiques to support it and facilitated the modification of the study.

In the generalisability of the study findings context, it is understandable that generalisation of the findings from qualitative research is impossible or unwarranted (Lincoln & Guba, 2013). The reasons are that the qualitative study relies on small samples and purposive sampling employment. It is also difficult to generate the findings because the qualitative findings depend on individuals' perceptions and experiences which differ from one person to another; also, the data can be transferred to other similar contexts by the reader. Although other scholars discussed that generalisability is no strict impossible in doing qualitative research and stated that generalisation is possible and essential (ibid.). Maximum variation sampling, particular study sites or groups of a large population and sufficient and detailed research contexts may make the findings generalizable. In this study the researcher felt difficulties to generalize the findings because the sample is small and purposive sampling used. The findings also based on single unit such as women with disabilities and the University of Dar es Salaam only. The information obtained was originated from the women with disabilities perceptions and experiences which differ from one another in terms of background, age, life status, culture and location.

Dependability/reliability measures the consistence of how the research findings can be produced, or how the researcher's observation is tied to the situations of the study. In addressing the issue of dependability more directly and accurately, the process within the study should be reported in detail, thereby enabling future researchers to repeat the work, if it is not necessary to gain the same results. The operation detailed the data gathering by addressing what was done in the field and reflective appraisals of the research by evaluating the effectiveness of the process of inquiry undertaken and measured the closer ties between credibility and dependability in research design. These perspectives assume that concepts under investigation will not change or be altered. Dependability based on in-depth analysis of the research methods and procedures was used in the study. The audit trail contained the raw data gathered through interviews and observation checklists.

To create the dependability, the researcher provided detailed information about the research methods, research design, data collection procedures and quotations from the participants in English and Kiswahili for both international and national readers. The researcher provided her methodology in a self-critical account of how the research was carried out, including what was done, when, how and why (Creswell, 2005; 2009). Detailed coverage allows the reader to assess the extent to which proper research practices have been followed, so that the reader can develop a thorough understanding of the methods and their effectiveness, such as the research design and its implementation, as in what was planned and executed on the strategic level. The researcher provided clear descriptions and discussed the steps taken for the entire research process of development, and reports of the findings (Creswell, 2009; Yin, 2011) and their categories. The process involved supervisors who evaluated the accuracy of the

study to see whether or not the findings' interpretation and conclusions were derived from and grounded in the data. This study was also carried out by sending the report to some fellow students at Jyväskylä and UDSM doctoral students, senior researchers, disability and gender specialized persons and supervisors, who agreed that the entirety of the research (data, findings and interpretation) was consistent. Moreover, the researcher crosschecked the raw data as soon as she finished each interview as well as the transcribed data shared by the participants to create consistency of the findings obtained with the participants. In the stage of presenting and discussing the data, the researcher also embarked upon contradicting perspectives from the participants (Creswell, 2009; Seidman, 2013), which suggested that to increase the credibility of the study the researcher should present negative information that runs counter to the theme. The research instruments were created in English and translated into Kiswahili, the official language that is widely spoken and understood in Tanzania, which created better understanding for the participants. After the field work, the data in Kiswahili was again translated into English by experts in Kiswahili, the linguistic departments of the UDSM and other PhD fellow students whose input the researcher found necessary. The researcher then finished by presenting contradictory evidence that made the findings more realistic and valid.

Confirmability is a type of a qualitative researcher's concern regarding objectivity. Measuring the confirmability of the research may facilitate ensuring that the results of the findings are the result of the experiences and ideas of the participants rather than the ideas and preferences of the researchers (Miles et al., 2014). Confirmability measures the extent to which the researcher admits his or her own predispositions and beliefs underpinning the decisions made; the methods adopted should be acknowledged with the research report. This also should measure why one approach is favoured when others could have been taken, and explain and admit any weakness in the technique actually. Detailed methodological descriptions enable the reader to determine how well the data and constructs emerging from it may be accepted (Morrow, 2005). Confirmability allows an observer to track the research step-by step via decisions made and procedures described. In this process two issues are important such as the data-oriented approach showing how the data that eventually led to the formation of recommendations was gathered and processed during the study (audit trail) and the second issue of focusing on the theoretical approach, which should be understood in terms of the whole of the duration of the research.

In this study, the researcher presented the research approach, design, process and why it's important. The researcher also discussed the interview guide and theme development data in combination with a pilot test and criteria for trustworthiness on data collection and findings. The preliminary analysis and interpretation of the information was accomplished by sharing with the research assistant, participants, and doctoral students from Jyväskylä, the UDSM and outside universities. All these facilitated ensuring that the results of

the findings are the result of the experiences and ideas of the participants rather than the ideas and preferences of the researcher.

Triangulation: Is allowed to examine the evidence used to construct coherent justification for the research themes, which is useful in enhancing credibility of the interpretation of the findings (Yin, 2009; Miles et al., 2014; Seidman, 2013). In triangulation, the data are collected using several tools from different participants which complement each other. In order to obtain more valid, reliable and diverse construction of realities, triangulating the data is important. Triangulation may be used to reduce the effect of bias by the researcher, underpinning decisions made and methods used.

In this study the researcher formulated the themes based on the convergence of several sources of data (interviews, observation and checklist) from the perspectives of the participants. This procedure has the power to add the validity, rationality and diversity to the study (Creswell, 2009; 2013). The researcher used different and mixed themes to make sure the themes interprets the findings clearly. The researcher asked the students to identify the materials and equipment their using at the university, its availability, accessibility and the quantity. After interviewing the students, the researcher visited the university special unit (currently Special Needs Education Unit) to observe the real situation with checklist and the information received on checklist observation used to compliment with the information obtained on interviews. The themes also asked about the situation of lecturer rooms, dormitories and the university surrounded environment, later the researcher went to the students' dormitories where the women were living, lecture rooms and walked around the whole university to witness the situation and the information captured supported the interviewed information. All these strategies helped to triangulate the data from one another.

There is a great deal of debate about what constitutes such issues as validity and reliability in qualitative research. There are many qualitative researchers who believe that trustworthiness is not established by more strategies and indeed that those strategies have limitations (Morrow, 2005; Shenton, 2004). Some researchers provide critiques of the use of transferability, credibility and dependability as quality criteria because they do not consider them appropriate. Therefore, following the chapters discussed in this study, the researcher is confident that the trustworthiness of this study is highly established and achieved, as the research activities and procedures are transparent and the methodologies are full of evidence-based study.

6.8 Methodological reflections and suggestions for further research

During the data collection period, the researcher encountered some challenges at the UDSM. The pre-arranged interview times sometimes clashed with the

women's class timetables. This meant that some of the participants had to be interviewed after class hours in the evening, when they felt tired and probably provided less information than they would have had they felt less exhausted. Moreover, other interviewees suggested that the interviews could be held in their dormitories; unfortunately, the dormitories were noisy, with a lot of music and the interviewees' peers constantly coming in and out of the room. Following the ethical considerations and confidentiality guidelines, the researcher agreed with the participants to find an appropriate place in the open under the trees, far away from the noisy dormitories, and then continued the interview.

Family roles also interfered with the fieldwork process, because during the interviews, some of the women had to take care of their babies at home or in the hall because they were little and crying (one was only three weeks old) while the interview was in progress. The researcher either stopped the interview for a while or arranged to finish it later, in line with the women's study timetable. This situation led to delays in the completion of the fieldwork.

Furthermore, some of the questions asked hurt some of the participants, particularly questions related to their experiences on their educational paths and how they successfully progressed from one level to another. In describing this experience, some women began to cry as they recalled the community's attitudes and the attitudinal barriers they had faced on their educational paths. However, the participants trusted the researcher and expected her to solve their problems. The researcher made it clear to them that she was not going to solve their problems, but she encouraged them and advised in finding proper measures to address the current problems. The researcher also tried to explain that the data collected is for research only. She encouraged the participants to take those challenges positively and think of the possible solutions for their achievement and become role model to other women with disabilities.

The researcher sometimes conducted interviews by writing to the women because the interview method was less appropriate for the students with hearing disabilities than a questionnaire. The use of a written interview proved time-consuming because the researcher was supposed to write down the questions and the interviewee would read and answer them. It was realized that an open-ended questionnaire would be more effective for use with the interviewees with hearing disabilities, who could supply appropriate and valuable data via this means. In the beginning the researcher tried to use lip reading and the participants had no knowledge on lip reading and later the researcher tried to write precisely one question after another and carefully read the feedback. If the researcher failed to understand the response, she carefully asked a follow-up question (probed) until they succeeded to finish the guide and proceeding questions. The timing of the data collection process was not optimal because the women were taking tests and preparing for the university examinations at the end of the first semester, and was therefore tense and had less free time to speak. Thus, the researcher learned that better quality data might have been collected if this process had occurred at the beginning of the

first or second semester. The researcher provided the freedom to the participants to check their time table and set an appointment with a specific date, day and time to participate in the interview, and they did. The researcher also reminded the participants one day before interview to confirm the date, time and hour and to check if there was any changes, majority confirmed participation as agreed. During the interview the researcher was trying as much as possible to make the participants feel at ease. The researcher was keen on the interview starting time and finishing as agreed. The researcher was very careful to advice the selected discussion environment with the participants by providing the reasons why the environment is not conducive like noise area.

The data collected also concerned the application and admission procedures. Had these women been interviewed soon after they had applied and been admitted to the university, the researcher might have obtained richer data, as many details could have been forgotten in the interim. The researcher tried to remind the participants what was written in the application form, and the challenges they encountered during the process and the participants recalled those challenges. Sometimes the researcher asked possible questions to be included in application form and the challenges they encountered to answer those questions. The researcher later printed out the application form and gave them to read; the form facilitated the participants to recall the challenges and responded. All these strategies facilitated the participants to respond to questions experienced during that time.

While planning the data collection, the researcher did not include classroom observation, and realized that the women faced challenges related to the poor pedagogy of teaching due to the overcrowded classes. Observations could obtain live experiences of the situations, resulting in richer data that would complement the interview information rather than relying on interviews only. In the field, the researcher encountered challenges related to the data collection method with the first year students because they had less experience in university life and had some forms of fear; if the researcher had used the questionnaire, it would probably have been possible to obtain richer information. The researcher used several strategies to make sure the quality data were collected. First, was to make the respondents feel at ease and establish a rapport between the researchers the respondents started with discussions which are different from the research question such as how do you feel today, etc. Second, the researcher ascertained the respondent about the observation of high level of confidentiality. All respondents were rest assured that, neither their actual names nor their identity will be attached in the final reports. Third, the researcher twisted the questions in different ways until they get the concept and provide feedback. More follow-up questions were created for easily understanding, filling the gap and for provision of clear and appropriate response. Moreover, the researcher did not introduce herself as a lecturer at the University of Dar es Salaam but just a PhD student, this increased their confidence and response rates. These strategies facilitated the research to obtain quality data for the report.

The researcher expected to obtain information about disability and education in Tanzania (the enrolment, facilities and equipment, in service training of teachers, dropout, achievement etc) at all levels in a reference referred to as Basic Education Statistics in Tanzania (BEST). Unfortunately, the researcher obtained the information related to students with disabilities from pre-primary to secondary education and the general enrolment of students without disability in higher education, but failed to obtain any information about students with disabilities in higher education or any data specifying the enrolment of students with disabilities in higher education. In that case, the government needs to reconsider the statistics on students with disabilities in higher education. Higher education currently falls under the Ministry of Education and Vocational Training (previously it was under the Ministry of Science, Technology and Higher Education). This changing situation caused difficulties in obtaining the information and data. Therefore, the researcher had to meet with university special unit coordinators, admission office, Ministry of Education and Vocational Training (Special Needs Education Department), SHIVYAWATA, and Information Centre for Disability. The researcher discussed with professors and doctors specialized on disability and education, also got their research papers and books.

During the interview process, the women had much more to say than the researcher expected, and a lot of follow-up questions were asked. To the researcher's knowledge this seems to be the first research of its kind. The women were also eager to continue studying for a master's degree, and so had many questions about procedures and funding. This resulted in the collection of a mass of data and the use of more time, due to the various speeds at which the respondents spoke and the nature of the questions under discussion. The women used the researcher as a role model, asking about the strategies used to reach the PhD level and the whole process of application both within and outside Tanzania. The women also were interested to know how the researcher managed to combine her studies with her family commitments, so the interactions between the researcher and most of the individual women extended beyond the planned time but left behind a motivated spirit. Once a while the researcher was interrupting the respondent and trying to bring them back and make them focus to the question. After the interview the researcher asked the respondent to set an appointment to discuss issues that they raised in the interview but were out of the interview questions. The researcher met with ten women for further discussion and different questions were asked for their success.

The research topic and research questions were new. No study has investigated the area of accessibility and participation in Tanzanian higher education before that focuses on the perspectives of women with disabilities. For example, no previous studies have investigated exactly the same topic and specifically focused on the reasons, enabling factors and community perceptions about higher education. This resulted in challenges, such as difficulty in finding literature, especially for the literature review chapter. It was

inadvisable to cite these in the PhD dissertation and therefore the review was limited to published papers and PhD dissertations on this topic. However, the researcher selected a few appropriate master's degree studies and used them because of this scarcity. Moreover, the researcher tried to find studies from other countries to support the research and overcome the barriers.

Further studies might focus on the following areas: first, future research should use quantitative or mixed methods, because in this study only the qualitative design was used and only one institution was involved in providing diverse information about the educational experiences of women with disabilities. This study was based on women only, so it was difficult to make generalisations about all students with disabilities. Suggestions for further research should include women both with and without disabilities or students in general both with and without disabilities, in order to obtain their views about how they have managed to access and succeed in higher education, and then make cross-comparisons.

This study investigated the reasons to study higher education's enabling factors and challenges based only on the perspectives of the women who succeeded to pursue higher education in Tanzania. It did not take into account women who failed to access or complete (dropped) higher education. Future research might explore the challenges facing those women who did not manage to access or complete their higher education. Further studies may need to extend this study to investigate dropout of the students with disabilities in a specific period of time in all levels of education and the reasons for dropping out and how they can get opportunities to continue learning in higher education and other levels.

Moreover, other research should focus on transitions from higher education to work, meaning the employment opportunities for women with disabilities after completing their bachelor or master's degrees as follow-up research and how these women can obtain the opportunity of employment. This idea is important because women with disabilities in Tanzania experience challenges with regard to gaining employment in different sectors, and only the educational sector (teaching) provides direct employment for students with disabilities. Also, gaining employment should help them to implement the knowledge they have acquired and meet their daily needs. Other studies may focus on classroom observation in higher education, despite the large number of students, to investigate how the lecturers conduct the lectures, and are meeting the diverse learning needs of learners, especially students with different kinds of disabilities.

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APPENDIXES

Appendix 1

Interview themes used for women with disabilities

1. Background and family characteristics

- Place of birth, age, marital status, children,
- Education background and occupation
- Parents and siblings (age, work, education, alive)
- Siblings with disability
- Year of study and degree program
- Reason and decisions to study the course at the university?

2. Disability and individual perception

- Age of onset and the reason for the disability
- Attitudes and feeling about disability?
- Disability and its influence in education progress and achievement
- Experience of being a woman with a disability in Tanzania?

3. Socio-cultural factors related to access to and participation in higher education

- Factors contributing toward the women's successful higher education studies (socio-cultural factors)
- Support needed by the women at the University of Dar es Salaam
- The most important support women obtain from the university
- Difference between the lower level of education and higher education

4. Accessibility to information and motivation

- Motivation to study higher education
- Who motivated the women to progress to higher education?
- Channels of information and motivation concerning applying for higher education
- Comment about the application and admission procedure and starting a new life at the university

5. Barriers to accessing higher education and strategies

- Challenges encountered by the women in terms of accessing and participating in higher education
- The strategies the women used to overcome the challenges to their successful participation in and access to higher education
- The reasons for the low accessibility of women with disabilities in HE
- Suggestions for improving the number of women with disabilities in higher education

6. Community and family attitudes and relationships

- Attitudes and feeling toward the relationship with the family and community
- The attitudes of family and society in relation to being in higher education
- Parents or guardians' support for higher education

- Parents' education and its influence on their access to education
- Parents/guardians' influence on their access to education
- Feelings about the parents' treatment by their siblings

7. Importance of Education and future occupation

- Understanding the meaning and importance of education
- Understanding the women's expectations after finishing their studies
- The need to continue with their studies after finishing this degree
- Knowledge about the important factors that can help them to continue learning
- How do you want to see yourself in 5 years from now, and what they felt about this.

Appendix 2

Form ya kukubali/ kukataa kushiriki kwenye utafiti(Kiswahili version)

Mtafiti: Magreth Matonya

Cheo: Mwanafunzi wa digrii ya uzamivu

Chuo: Jyväskylä, Finland

Kitivo: Education

Simu: +255758 349195

Utangulizi

Habari za leo/ Shikamoo

Ninayo furaha kubwa kukutana nawe siku ya leo. Mimi ni mtafiti kutoka chuo kikuu cha Jyväskylä Finland, Idara ya elimu. Ninafanya utafiti kuhusiana na wanawake walemavu waliofanikiwa kufika chuo kikuu. Lengo langu kubwa ni kuangalia ni vitu au njia gani zinakusaidia wewe kufanikiwa hapa chuo kikuu. Kama unakubali kushiriki nitakuuliza maswali mbalimbali kwa mfano ni changamoto gani unakabiliana nazo ktk kusoma hapa chuoni? Mbinu gani unatumia kukabiliana na changamoto hizo? Kwanini uliamua kusoma chuo kikuu?na nini malengo yako baada ya kumaliza elimu ya chuo kikuu?

Kama unakubali kushiriki basi mazungumzo yetu yatakuwa ya mdomo, na yatachukua muda wa dakika 45 -60 (saa moja). Pia kushiriki ni hiari na unaweza kujitua muda wowote bila kipingamizi. Hakuna gharama yeyote utakayolipwa/ au kulipa kwa ushiriki wako.Pia utafiti huu hauna madhara yeyote kwako kwasababu habari hizi zitatumizwa kwa siri ya hali ya juu na zitatumika kwaajili ya utafiti tu na katika uandishi majina yako halisi hayatumika. Kama una swali kuhusiana na haki zako za kushiriki unaruhusiwa kuuliza wakati wowote. Ili kuwa na usikivu mzuri na uelewa wa yale unayoyaeleza ninaomba kutumia kinasa sauti wakati wa majadiliano yetu.

Makubaliano ya kushiriki

Mimi nimesoma na kuelewa maelezo ya hapo juu. Ninakubali kwa hiari kushiriki katika utafiti huu unaofanywa na Magreth Matonya. Ninaruhusu habari zangu nitakazozitoa zitumike kwaajili ya kufanikisha utafiti huu tu. Pia ninakubali mtafiti aweze kutumia kinasa sauti wakati wa mazungumzo yetu. Jingine kwa hiari na kwa sauti yangu nimekubadili kubadili jina langu na ninaruhusu litumike kwaajili ya kuelezea habari nilizotoa kwenye utafiti huu.

Tarehe Jina la mshiriki Sahihi

Tarehe Jina la mtafiti Sahihi

Tarehe Jina la msaidizi Sahihi

Consent form for accepting or refusing to participate in research (English version)

Name of researcher: Magreth Matonya

Status: PHD Student

Faculty of Education
 College: University of Jyväskylä, Finland
 Phone; +255758349195

Introduction

How are you today

It's my pleasure meeting with you today. I am a researcher from university of Jyväskylä, Finland, faculty of education. I am doing a research concerned with disabled women who managed to reach higher education level (university). My great concern is to understand the factors that enabled to reach this level of education. If you agree to participate I would like to ask you questions like; which challenges do you face at the university? , How do you tackle the challenges? , Why did you decide to join university? And what are you ambitions after finishing this level of education?

If you agree to cooperate then our discussion will be face to face (verbal), and it will take 45min-1hour. Participating is optional, so you can withdraw anytime without any barrier. There is no cost you will incur and no payments will be made to you. This research will not affect you negatively because information provided will be kept in privacy; they will also use for research basis and during publicizing real names won't be used. If you have any question concerned with you cooperation rights you are allowed to ask at any time. For the intension of greater attention and deeper understanding I would like to use a voice recorder during the interview session.



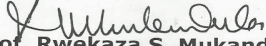
PARTICIPATING AGREEMENT

I..... have read and clearly understood the above instructions. I have willingly agreed to participate in the research carried out by Magreth Matonya. I allow the information I will provide to be used in order to prosper the research. I allow the researcher to use a voice recorder. Also I willingly agree on changing my name so that the information provided could support the research.

<u>Date;</u>	<u>Name of participant</u>	<u>Signature</u>
<u>Date;</u>	<u>Name of researcher</u>	<u>Signature</u>
<u>Date</u>	<u>Research assistant</u>	<u>Signature</u>

Appendix 3

Research clearance form

 <p>UNIVERSITY OF DAR ES SALAAM ADVANCING KNOWLEDGE, CREATING FUTURE 1961 2011 CHUO KIKUU CHA DAR ES SALAAM</p>	<p>UNIVERSITY OF DAR-ES-SALAAM OFFICE OF THE VICE-CHANCELLOR P.O. BOX 35091 ♦ DAR ES SALAAM ♦ TANZANIA</p>	
<p>Ref. No: AB3/12(B) Date: 17th January, 2011 To: The Regional Administrative Secretary,</p>		
<p>UNIVERSITY STAFF AND STUDENTS RESEARCH CLEARANCE</p>		
<p>The purpose of this letter is to introduce to you Ms Magreth D. Matonya who is a bonafide student of the University of Dar es Salaam and who is at the moment conducting research. Our staff members and students undertake research activities every year especially during the long vacation.</p>		
<p>In accordance with a government circular letter Ref.No.MPEC/R/10/1 dated 4th July, 1980 the Vice-Chancellor was empowered to issue research clearances to the staff and students of the University of Dar es Salaam on behalf of the government and the Tanzania Commission for Science and Technology, a successor organization to UTAFITI.</p>		
<p>I therefore request you to grant the above-mentioned member of our University community any help that may facilitate her to achieve research objectives. What is required is your permission for her to see and talk to the leaders and members of your institutions in connection with her research.</p>		
<p>The title of the research in question is "Accessibility to Higher Education in Tanzania: Experience of Women with Disabilities".</p>		
<p>The period for which this permission has been granted is January, 2011 to June, 2011 and will cover the following areas/offices: Deaf Schools (Njombe and Kihesa).</p>		
<p>Should some of these areas/offices be restricted, you are requested to kindly advise her as to which alternative areas/offices could be visited. In case you may require further information, please contact the Directorate of Research, Tel. 2410500-8 Ext. 2087 or 2410743.</p>		
<p style="text-align: center;">  Prof. Rwekaza S. Mukandala VICE-CHANCELLOR </p>	<p> VICE CHANCELLOR UNIVERSITY OF DAR-ES-SALAAM P.O. BOX 35091 DAR-ES-SALAAM </p>	
<p>Direct +255 22 2410700 Telephone: +255 22 2410500-8 ext. 2001 Telefax: +255 22 2410078</p>	<p>Telegraphic Address: UNIVERSITY OF DAR ES SALAAM E-mail: vc@admin.udsm.ac.tz Website address: www.udsm.ac.tz</p>	

Appendix 4

EFA goals focused by the study

Fifth goal:

To achieve gender equality and improve the quality of education

Millennium Development Goals focused by the study

Sixth goal

To promote gender equality and empower women

Seventh goal seven

To ensure environmental sustainability

Sustainable Development Goals 2016-2030

Fourth Goal

To ensure inclusive and equitable education and promotion of lifelong learning opportunities to all

Fifth Goal

To insists on the achievement of gender equality and empowerment of all women and girls

Appendix 5

List of special equipment found in special unit, University of Dar es Salaam

Equipment	Availability	Status
Electronic Note Taker	15	Not enough
Laptop Computer	11	5 not working
Braille Embosser (Braille printer)	3 (old fashioned)	Not enough
Magnifying glass	80	Enough
Close Circuit Projector (television)	4	Not enough
White Canes	100	Enough
Typewriters	15	Not enough
Wheelchairs (Motorized 2 , manual 5	7	Not enough
Perkins Braille	16	Not enough
Obstacles Detector (mini guide)	6	Not enough
Talking Dictionary	17	Enough
Digital Voice Recorder	3	Not enough
Clutches pair	7	Enough
Hearing Aids	3	Not enough

Appendix 6

Women's with disabilities' perceived cause of disability and age of onset, 2011

Chosen names	Age	Kind of disabilities	Perceived cause of disability	Perceived age of onset	Degree program in university	Year of enrolment in university	Year of study during interview
Alinanuswe	27	Visual	Unknown	Birth	BA with Education	2008	III
Amina	32	Visual	Witchcraft	9	MA(Education)	2008	III
Anna	26	Visual	Unknown	17	B.Ed (Psychology)	2008	III
Analisa	22	Physical	Witchcraft	Birth	BA (Commerce)	2010	I
Baiya	23	Visual	Meningitis	6	B.Ed in Psychology	2008	III
Beatrice	26	Hearing	Shock	18	BA with Education	2008	III
Elikana	34	Visual	Measles	10	MA (Education)	2008	III
Faraja	24	Visual	Unknown	Birth	B.Ed in Psychology	2008	III
Happy	22	Visual	Unknown	Birth	BA in Finance	2010	I
Jeni	23	Visual	Inheritance	Birth	BA with Education	2009	II
Lena	25	Visual	Unknown	Birth	BA in Fine Arts	2010	I
Magdalena	22	Visual	Unknown	11	BA with Education	2009	II
Maria	27	Visual	Unknown	Birth	B.Ed in Psychology	2008	III
Melina	36	Physical	Injection	2	BA in Sociology	2008	III
Morini	32	Physical	Polio	2	BA in Science	2009	II
Rahima	32	Visual	Witchcraft	9	MA (Education)	2008	III
Secilia	32	Visual	Unknown	10	MA (Education)	2008	III
Selina	22	Physical	Injection	12	BA Commerce	2008	III
Suzana	30	Visual	Measles	9	BA with Education	2009	II
Upendano	26	Visual	Unknown	Birth	BA with Education	2009	II
Vaileth	24	Visual	Unknown	Birth	B. Ed (Science)	2010	I
Yuster	28	Physical	God's will	Birth	BA with Education	2008	III

Note. BA= Bachelor Degree, MA= Masters of Art Degree, B. Ed= Bachelor of Education.

Appendix 7

The parents' education and employment as reported by the women

Chosen names	Parents' education		Parents' employment	
	Mother	Father	Mother	Father
Alinanuswe	No education	Not known, D	Petty trade	Petty trade
Amina	No education	No education	Farming	Animal keeper
Anna	STD IV	STD IV	Housewife	Farming
Analisa	Form VI	Master's Degree	Teacher (primary)	Engineer
Baiya	STD VII	STD VII	Housewife	Printing
Beatrice	Not known, D	Not known, D	D	D
Elikana	No education	No education	Farming	Farming
Faraja	STD VII	STD VII	Housewife	Petty trade
Happy	STD VII	Not known, D	Farming	D
Jeni	Diploma	Bachelor Degree	Master mark	Contractor
Lena	No education	STD VII	Petty trade	Print
Magdalena	Certificate	Diploma	Medical store records	Engineer
Maria	STD VII	STD VII	Housewife	Petty trade
Melina	No education	Not known, D	Farming	D
Morin	B.A in Business	Not known, D	Director TTCL	D
Rahima	Not known, D	No education	D	D
Secilia	No education	No education	Farming	D
Selina	STD VII	Bachelor Degree	Housewife	Marketing officer
Suzana	No education	No education	Farming	Farming
Upendano	Not known, D	No education	D	Farming
Vaileth	STD VII	PhD	Housewife	Doctor
Yuster	No education	Not known, D	Farming	D

Note. STD IV = Standard Four, STD VII = Standard Seven, Form VI = Secondary Education Form Four, TTCL = Tanzania Telecommunication Company Limited, D = Deceased.