LIVED EXPERIENCES OF STUDENTS WITH VISUAL IMPAIRMENTS AT SIM UNIVERSITY IN ZAMBIA: A HERMENEUTIC PHENOMELOGICAL APPROACH

by

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A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy in Inclusive Education of University of Zambia and Zimbabwe Open University

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AUTHOR'S DECLARATION

I, **Francis Simui**, do hereby solemnly declare that this thesis represents my own work, except where otherwise acknowledged, and that it has never been previously submitted for a degree at the University of Zambia or any other university.

Signature_____

Date_____

CERTIFICATE OF APPROVAL

This thesis of **Francis Simui** is hereby approved as fulfilling the requirements for the degree of Doctor of Philosophy in Inclusive Education by the University of Zambia and Zimbabwe Open University.

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ABSTRACT

This study focuses on lived experiences of Students with Visual Impairments (SwVI) while pursuing their studies at 'Sim' University (Pseudonym) in Zambia. Anecdotal evidence from the university records showed that a significantly low number of approximately 0.001 percent of students with impairments in comparison to the recommended 15 percent by the World Health Organisation (WHO) were present at Sim University. Within the 0.001 percent, approximately 70 percent were classified as students with Visual Impairments.

The research objectives that guided this study were to:
i). Describe the lived experiences SwVI face at university.
ii). Explore enablers that empower SwVI achieve academic success at university.
iii). Explore disablers faced by SwVI at university.
iv). Develop a framework for interpreting lived experiences of SwVI at university.

A qualitative methodology driven by Hermeneutics Phenomenology research design was applied. In addition, purposive sampling technique was used to enlist seven SwVI to participate in this study. Participants volunteered to voice their lived experiences and clusters of themes emerged thereafter. The themes were generated using the '*Simui's Hermeneutics Crossword Analysis* (SHCA) framework, a product of the current study. Emergent from the lived experiences of SwVI was a host of enablers and disablers that represent their felt worlds while at Sim University. The silent voices expressed their felt vulnerabilities and triumphs, resilience and frustration, while pursuing their studies in an environment favouring and dominated by the sighted.

Amidst the disabling environment, five ingredients proved pivotal to SwVI's academic success namely: (i) positive attitude, (ii) family support, (iii) peer support, (iv) institutional support, and (v) beneficial partnerships. It is clear that the lived world of SwVI had more disabling than the enabling factors. With the exception of a positive attitude, the other four enablers pointed to the 'dependence syndrome' on the sighted that SwVI were reduced to within an exclusive learning environment. To this extent, positive attitude was singled out as the most important enabler among others to the success of SwVI at Sim University. The positive attitude showed itself in various ways such as resilience, determination, innovation and self-motivation. Even where the support from the sighted was not available, a sheer determination, combined with resilience and innovation in the face of oppression was enough for SwVI to progress through the academic ladder.

Emerging from the study are the ten recommendations three of which are: (i) develop and implement an inclusive policy to guide practice; (ii) involve SwVI in decision-making process affecting their academic progression; and (iii) improve on the accessibility to the learning environment and content. In a nutshell, whereas resources are limited in universities similar to Sim University, SwVI carry with them unexploited mental resources that administrators, managers and teaching staff can tap into and devise innovative ways to combat exclusion. If only SwVI can be engaged and consulted in decision-making process, institutions are bound to break-through to multitude of challenges encountered when implementing inclusive education.

DEDICATION

To my dear wife Rachael and our lovely children Emmanuel, Esther, Naomi and Gershom in whom I am well pleased. I have endeavoured to motivate and lay a solid foundation for you all my life by the mercies from our Mighty God.

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ABBREVIATIONS AND ACRONYMS

ALD	Assistive Learning Devises
CSEN	Children with Special Education Needs
EFA	Education for All
GRZ	General Republic of Zambia
IDE	Institute of Distance Education
LSEN	Learners with Special Education
IE	Inclusive Education
MoE	Ministry of Education
MoGE	Ministry of General Education
MoHE	Ministry of Higher Education
ODL	Open and Distance Learning
O & M	Orientation and Mobility
PG	Postgraduate
SADC	Southern Africa Development Community
SDG	Sustainable Development Goal
SEN	Special Educational Needs
SHCA FRAMEWORK	Simui's Hermeneutics Crossword Analysis Framework
SNDP	Sixth National Development Plan
SNDP	Seventh National Development Plan
SwVI	Students with Visual Impairments
UG	Undergraduate
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNESCO	United Nations Education, Scientific & Cultural Organization
UNICEF	United Nations International Children Emergency Fund
UNZA	University of Zambia
UNZA-ZOU	University of Zambia – Zimbabwe Open University
VI	Visual Impairments.
WHO	World Health Organisation
ZOU	Zimbabwe Open University

DEFINITION OF KEY TERMS

Accessibility	Equal and equitable access for all students within a university environment as it pertained to "the physical and online environment...information andcommunications, including information and communications technologies and systems, and to other facilities and services open or provided to the public (United Nations, 2006, Article 9).
Enabler	Factors that empower SwVI (within and outside) to experience meaningful lives in higher education.
Disabler	Factors that work against SwVI (within and outside) to experience meaningful lives in higher education.
Hermeneutics	The interpretations and meaning SwVi give to their daily-lived experiences while pursuing higher education.
Inclusive Education	A process of increasing access, participation and achievements for the marginalised (SwVI inclusive) in higher education.
Lived Experience	First-hand accounts and impressions of living as a students with visual impairment while at a university.
Phenomenology	A research approach focusing on people's lived experiences comprising the daily activities, thoughts and impressions of an individual's world within a specific context.

Student	An individual enrolled at bachelors or postgraduate degree level studying at a dual mode university (regular and distance study modes).
Visual Impairment	Any degree of visual loss that affects an individual's ability to perform the tasks of daily life caused by a visual system that is not working properly or not formed correctly (Moore, Graves & Patterson, 1997).

CHAPTER ONE

INTRODUCTION

1.1 Overview

Chapter one provides the context within which this study was conducted. Here, the background, statement of the problem, the aim of the study, research objectives and research questions are presented. Other subsections of the chapter include: significance of the study and Study location. Furthermore, the chapter explains the delimitation and limitations, definition of key terms and finally a synopsis of the thesis.

1.2 Context

The thrust of this thesis is based on a Hermeneutic Phenomenological study of lived experiences of Students with Visual Impairments (SwVI) while pursuing their studies at 'Sim' University (Pseudonym) in Sub-Saharan Africa. In using the Hermeneutic approach, the researcher accepts the difficulty of bracketing, as advanced through the Transcendental Phenomenology of Edmund Husserl (1859-1938). Instead, the study leans on the works of Martin Heidegger (1889-1976) dubbed, Hermeneutic Phenomenological. This departure is primarily because of the rejection of the idea of suspending personal opinions and the turn for the interpretive narration to the description, as advanced by numerous philosophers such as Martin Heidegger, Maurice Merleau-Ponty, Jean-Paul Sartre, Emmanuel Lévinas, Jean-Luc Nancy, and Jean-Luc Marion (Healy, 2012). Therefore, this study attempts to unveil the world as experienced by the SwVI through their life world stories.

The rationale behind the researcher's decision to focus on visual impairment in isolation emanates from the reality that barriers and needs of students differ across disabilities (Alqaryouti, 2010). In addition, even the experiences and needs of students within one classification of impairments might also differ (Roy, 2003; Fuller *et al.,* 2004; Grace and Gravestock, 2009). For instance, two individuals living with blindness might have varying lived experiences and needs at university level, as one might have low self-esteem (in need of psychosocial counselling), while another might have high self-esteem (not requiring psychosocial counselling). In view of this reality, the study is centred on one impairment with its array of experiences and realities, rather than having the potentially confusing task of listening to various voices from a diverse range of disabilities (Lourens, 2015).

1.3 Key Influences Underpinning Current Study

There are four key influences underpinning the initiation of this research. The first influence relates to the researcher's prior academic engagement at undergraduate and postgraduate focus areas on Special Education Needs (SEN) and Inclusive Education (IE) respectively. In Special Education, the focus is on the educational needs of learners with disabilities such as the Visually Impaired (VI) in specialised settings. However, Inclusive Education (IE) on the other hand, addresses the need to improve environmental and systemic issues inherent in institutions that are responsible for the exclusion of the most minority learners in the mainstream setting, among which are Students with Visual Impairment (SwVI).

The second influence concerning the choice of SwVI is informed by the researcher's lived experience of two grandparents with blindness. Living with close relatives with

blindness has been such a life-changing experience, having noted their resilience and zest for life amidst challenges. These have motivated me to face life with positivity amidst challenges. Despite their humble education, they managed to become independent and breadwinners in the family. The two grandparents cited above represent many VI persons without formal education due to environmental and systemic challenges inherent in the society, which the study addresses.

The third influence emerges from prior professional engagement of the researcher in the education of the vulnerable minority in Zambia. The researcher worked as District Social Welfare Officer (DSWO) for Zambezi district in 2006 and Programme Officer (2008 – 2009) for the Zambia National Education Coalition (ZANEC). While the former was a government appointment, the latter meant working with a Civil Society Organisation (CSO). Within the CSO, the researcher coordinated the advocate strategy on equitable access to quality education for all in Zambia. Further, the researcher was engaged in the education of students in higher education sector in Zambia (2009 - 2017) where SwVI were present.

Finally, the fourth influence is informed by international trends on education particularly the discourse on Sustainable Development Goal (SDG) target number 4. The thrust of target 4 on education centres on ensuring that all learners have access to equitable quality education by 2030 (Simui, Kasonde-Ngandu, Cheyeka, Simwinga and Ndhlovu, 2018). However, there has been scarcity of information on inclusive education at tertiary level. Hence the need to address this research gap.

1.4 Background

The World Report on Disability shows that about a billion people, including children (approximately 15 percent) of the world's population live with some form of disability (WHO and World Bank, 2011). The report notes the disproportional effects which disability has on people and children in particular, from lower income countries and those living in the poorest wealth quintile of the world's population. Many children with disabilities in these circumstances are excluded from education. This exclusion is further echoed in the 2013 State of the World's Children report (UNICEF, 2016), According to this report, while access to education for other children is improving, the same cannot be said for children with disabilities. They remain most negatively marginalised and excluded from education. They continue to experience dismissive attitudes, discrimination, and are largely invisible in official statistics used for education planning and programme implementation. Such discrimination and exclusion has a negative effect on their livelihoods (UNICEF, 2013). UNESCO (2013) further confirms this prevailing situation. UNESCO argues that worldwide, there are still about 57 million children of primary school age, who are not in school due to financial, social or physical challenges. More than half of the 57 million children out of school are in Sub-Saharan Africa. In addition, UNESCO (2015) posits that globally, around 100 million children do not complete primary education.

At a policy level, almost all the Southern African Development Community (SADC) governments acknowledge this exclusion and recognise the right to education for all children. However, this acknowledgement is not always translated into systematic plans and programmes that can address the exclusion of children with disabilities from education. According to the Secretariat of the African Decade of Persons with

Disabilities (SADPD), conditions on the ground show that children with disabilities remain excluded from accessing education (SADPD, 2012). As earlier noted, this exclusion has a profound effect on the children's livelihoods and the rest of their lives. It restricts their ability to participate equitably and contribute meaningfully to their societies and renders them to on-going economic and socio-political exclusion (SADPD, 2012).

This exclusion is happening within a context in which most SADC Member States have adopted international and continental conventions and instruments. These instruments give SADC and its Member States the humanitarian and legal obligations to create an inclusive education system that embraces diversity and is responsive to educational and psychosocial needs of all learners including those with disabilities. Some of these legal instruments are outlined below.

1.4.1 International legal framework

The right to education for all children, including those with disabilities, is given full recognition through some of the following international frameworks such as:

i. The UN Convention on the Rights of the Child (1989) promotes the Right to education and training of all children, including those with disabilities.
ii. The Jomtien World Declaration on Education for All (1990) commits the curriculum, teaching and learning to be child-centered and to embrace diversity.
iii. United Nations Standard Rules on the Equalisation of Opportunities for People with Disabilities (1993) underlines the importance of realizing basic human rights of persons with disabilities who have been discriminated against.

iv. UNESCO Salamanca Statement and Framework for Action (1994) advances the principle of inclusion for children with special needs education.

v. The Dakar World Education Conference (2000) committed governments to ensure that their education systems are inclusive and specifically cater for the needs of disadvantaged, vulnerable and marginalized learners.

vi. The Flagship on Education for All (EFA) and the Right to education for Persons with Disabilities: Towards Inclusion.

vii. The UN Convention on the Rights of Persons with Disabilities (UNCRPD) (2006). Article 24 of the Convention demands the provision of education for persons with disabilities in an education system that is inclusive and responsive to their needs. The UNCRPD states that, with a view to realizing this right without discrimination on the basis of equal opportunity, States Parties should ensure an inclusive education system at all levels and lifelong learning. In realizing this right, States Parties should ensure that persons with disabilities are not excluded from the general education system on the basis of disability and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability.

1.4.2 The Post 2015 Agenda

Most recently, the international community through UNESCO agreed on the post-2015 education agenda as informed by the Muscat Agreement (2014). This was followed by the Kigali statement on education (2015), the United Nations General Assembly Open Working Group (OWG) for Sustainable Development Goals and the post-2015 Common African Position. In addition, the Africa Agenda 2063, National EFA Reviews, initiatives such as the EFA 'Big Push' and the mid-term evaluation of the

Second Decade of Education for Africa all are targeted at strengthening the inclusive education agenda. To this effect, the overarching goal of education is to ensure inclusive and equitable quality education and promote life-long learning opportunities for all (UNESCO 2015). In order to achieve this goal on education, one of the agreed targets is that by 2030 all signatories to this agreement, Zambia inclusive, will ensure equal access for all women and men to affordable quality technical, vocational and tertiary education, including university (UNESCO, 2015).

1.4.3 Continental Legal Framework

The African Charter on the Rights and Welfare of the Child (1999) commits members of the African Union to realize the right of every child to education. The Charter states that:

"State Parties to the present Charter shall take all appropriate measures with a view to achieving the full realization of this right and shall in particular:

i. Provide free and compulsory basic education;
ii. Encourage the development of secondary education in its different forms and to progressively make it free and accessible to all;
iii. Make the higher education accessible to all on the basis of capacity and ability by every appropriate means;
iv. Take measures to encourage regular attendance at schools and the reduction of drop-out rates;
v. Take special measures in respect of female, gifted and disadvantaged children, to ensure equal access to education for all sections of the community".

The commitment to realise the right to education of learners with disabilities as stipulated by international frameworks and embraced by continental leaders, is further evident in the adoption of the African Decade of Persons with Disabilities (1999-2009) that has been extended to 2019 with the African Union (AU) Continental Plan of Action for Persons with Disabilities. Among other things the African Decade of Persons with Disabilities (1999-2009) gives attention to the equalizing of opportunities for people with disabilities in all areas of society, including education. The extended African Union (AU) Continental Plan of Action for Persons with Disabilities (2019) makes provision for special measures to be put in place towards addressing the needs of children with disabilities, including ensuring that they have access to all levels of the education system (Africa Union, 2010) .

1.4.4 SADC Regional Legal Framework

As earlier noted, the international and continental legal frameworks adopted by most SADC Member States demand that they create equitable inclusive educational system that will allow all learner to learn and develop. In response to these conventions and instruments and others, SADC has developed regional frameworks that are aimed at enhancing regional access to education for all children, including children with disability. These instruments include the SADC Protocol on Education and Training (1997) and the SADC framework and Programme of Action for Comprehensive Care and Support for Orphans, Vulnerable Children, and Youth in SADC (2008 -2015). The main objective of the SADC Protocol on Education and Training (1997) is to ensure that the rights and basic needs of all learners in the SADC region are fully met, enabling them to grow up well and realise their full human potential. Its main purpose is to integrate vulnerable learners as a priority in all aspects of the development agenda

of SADC, at policy, legislative and intervention levels, with a focus on providing them with comprehensive services in a holistic manner. Children with disabilities are recognised as vulnerable children and targeted for specific attention.

1.4.5 The Zambian Educational Context

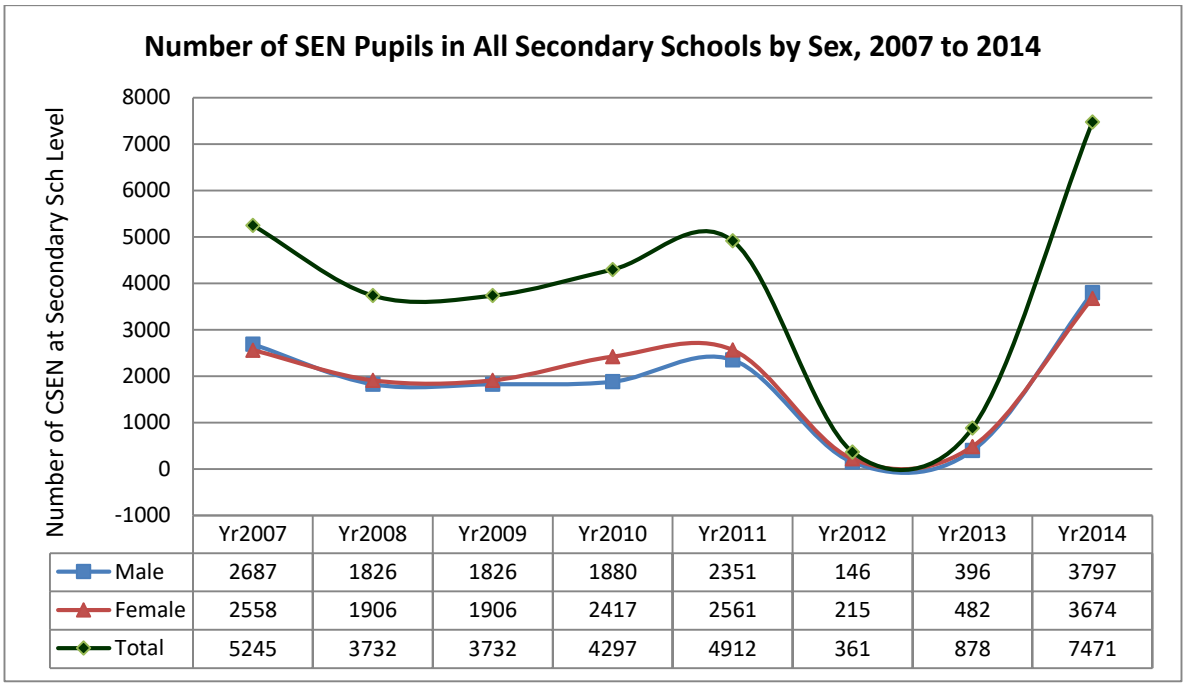
In an effort to adhere to international obligations in recognizing, promoting and protecting the rights of PWDs, the Zambian government ratified and domesticated the UNCRPD which has given effect to Persons with Disabilities Act of 2012. The Act protects rights of CWDs as stated in the UNCRPD particularly Articles 7, 16, 24, and 25 that demands that States Parties to the Convention ensure that CWDs are protected from violence and abuse and that their rights to inclusive education are protected. In addition, the Zambian government is party to the UNCRC 1989, which it ratified to promote and protect all children including CWDs (UNCRC Art. 2 and 23; UNCRC, General Comment 9).

In terms of legal provisions, the Persons with Disability Act of 2012, Part V stipulates that the Minister shall ensure that the education system is inclusive at all levels, higher education inclusive. This will result in the full development of human potential, sense of dignity and self-worth, personality, talents, creativity through the provision of an enabling environment. It therefore entails that the persons with disabilities are included in the education system without exception. Further, this entails making reasonable accommodation of the individual requirements of persons with disabilities such as provision of Braille, other alternative modes and formats of communication, orientation and mobility skills and facilitation of peer support (Disability Act of 2012).

In conformity with the Disability Act of 2012, Zambia's vision of the Education sector is "innovative and productive life-long education and training for all by 2030". Its goal is to "increase equitable access to quality education and skills training to enhance human capacity for sustainable national development". This is consistent with the Sixth National Development Plan (SNDP) 2011 – 2015 period, whose strategic focus of the sector was to expanding access to high school and tertiary education. Within the SNDP, it is envisaged that government will increase access, participation and equity in the provision of quality university education. One of the strategies was increased participation and improved facilities for Learners with Special Education Needs (LSEN) at University level (General Republic of Zambia, 2011).

According to the current Zambian educational policy, every individual, regardless of personal circumstances or capacity, has a right of access to and participation in the education system (Ministry of Education, 1996). To ensure attainment of full equality of access, participation and achievement for all learners necessitates interventions at all levels to support those at risk of exclusion. At school, college or university levels, this then calls for adoption of inclusive policies and practices.

MoE (2009) records show that at national level, there were 202,115 Children with Special Educational Needs (CSEN) enrolled at the Primary school level, and 2,445 in Zambia's secondary schools. The presence of pupils with SEN at Primary and Secondary school levels is dominantly evident as depicted by Figure 1.



	Yr2007	Yr2008	Yr2009	Yr2010	Yr2011	Yr2012	Yr2013	Yr2014
Male	2687	1826	1826	1880	2351	146	396	3797
Female	2558	1906	1906	2417	2561	215	482	3674
Total	5245	3732	3732	4297	4912	361	878	7471

Figure 1: Number of Pupils with disabilities at Secondary School level

Source: Ministry of General Education 2014

In addition, the Zambian Persons with disability Act of 2012 is in line with the Convention on the Rights of Persons with Disability (CRPD) of 2006. Article 25 compels educational institutions to admit persons with disability without discrimination. Refusal of admission on account of disability is a punishable offence according to the Zambian Law as contained in the Persons with Disability Act of 2012.

Despite the above international and local initiatives to promote child wellbeing, CWDs still experience wide spread violation of their rights. To substantiate this, at least 200 million children (10% of the world's young people) are born with a disability or become disabled before age 19. However, only around 10% of CWDs in the developing world receive an education of which 40 million of those out of school are CWDs. More than 80% CWDs who are out of school live in developing countries and have no access to social services (UNICEF, 2013). Most of the CWDs are excluded

and invisible within their communities while many are in institutions with no contact with their families (UNICEF, 2014). With regard to global progress made to improve the welfare of the children as stated in the 17 SDGs by 2030, the 2017 Progress for Every Child in the SDG Era UNICEF Report reveals it is difficult or impossible to determine the status of vulnerable groups, such as ethnic minorities, children with disabilities and migrant children with existing data monitoring. The Report further cites the Sub-Africa Region (in which Zambia is) as having countries which are off track on twice as many child indicators as countries from all other regions.

1.5 Statement of the Problem

While the World Health Organisation's (WHO) benchmark is 15 percent as persons classified as disabled, Sim University is way below that benchmark as only 0.001 are students classified as 'disabled' despite being in existence for more than 50 year. Within the 0.001, learners with visually impairment are the majority estimated at 70 percent enrolled in various programmes at undergraduate and postgraduate level. At the core of students with visual impairment within the university, we do not know their (i) lived experiences they face; (ii) enablers that empower them achieve academic success at university; and (iii) related disablers they face at university. Given that the university has no documented policy on inclusive education in place, it became critical to understand the lived experiences of students with visual impairment in relation to the three areas not known to the researcher.

1.6 Purpose of the study

The purpose of this study was to establish the lived experiences of SwVI at Sim University.

1.7 Objectives of the study

The research objectives that guided this study were to:

i) Describe the lived experiences SwVI face at university.

ii) Explore enablers that empower SwVI achieve academic success at university.

iii) Explore disablers faced by SwVI at university.

iv) Develop a framework for interpreting lived experiences of SwVI at university.

1.8 Research Questions

The Research Questions that guided the study were as follows:

i) What lived experiences exist among learners with visual impairment at Sim University?

ii) What enablers exist that empower SwVI achieve success at Sim University?

iii) What disablers do SwVI face at university?

iv) How can one develop a framework to interpret the lived experiences of SwVI at university?

1.9 Significance of the study

This study's findings could be used to inform inclusive education policy development in institutions of higher learning such as Sim University where comprehensive inclusive education policies are not in existence. The study could contribute to improved inclusive education practices in universities such as Sim University. The continuum of inclusive education practices could include various stages in the life of a student such as application, admission, learning process, assessment, orientation and mobility, living conditions and graduation among others.

In addition, the proposed study may contribute to the scanty literature that exists on the inclusion of persons with disabilities at tertiary level. Further, the study may enhance access, participation, equity and achievement of the marginalised learners at tertiary education level in line with the Sustainable Development Goal number 4 by 2030.

1.10 Contribution to knowledge

The value of this research study was exemplified by the emerging contribution to knowledge through research publications and international conferences chronicled below:

[1] Simui, F. Nyaruwata, L.T. and Kasonde-Ngandu (2017), ICT as an Enabler to Academic Success of Students with Visually Impaired at Sim University: Hermeneutics Approach**.** *IEEE International Conference in Information Communication Technologies Book of Abstracts*. 3-7th September 2017, Mulungushi Int. Conference, Lusaka Zambia.

[2] Simui, F., Kasonde-Ngandu, S. Cheyeka, A.M., Simwinga, J., and Ndhlovu, D. (2018). Enablers and disablers to academic success of students with visual impairment: A 10-year literature disclosure, 2007–201. *British Journal of Visual Impairment,* 36 (2), 163-174. https://doi.org/10.1177/0264619617739932

[3] Simui, F. Kasonde-Ngandu, S. and Nyaruwata, L., (2017). ICT as an Enabler to Academic Success of Students with Visually Impaired at Sim University: Hermeneutics Approach. *Zambia Information Communication Technology Journal*, 1 (1), 5-9. http://ictjournal.icict.org.zm/index.php/zictjournal/article/view/9/4

[4] Simui, F. Kasonde-Ngandu, S., Cheyeka, A., Kakana, F. (2018). Unearthing dilemmas in thesis titles: Lived experience of a novice researcher in Sub-Saharan Africa. *International Journal of Multidisciplinary Research and Development*. 5 (4), 99-105. http://www.allsubjectjournal.com/archives/2018/vol5/issue4/5-3-46

1.11 Study Location and context

The study is located at Sim University within Zambia. Currently, the student population is estimated at 30,000 (Lusaka Times 2017). The 30,000 figure includes all study modes out of which about 8,000 are studying via the distance learning mode representing 33% student population (Simui, *et al*., 2015). It is a public University. Within 'Sim' University, out of the estimated 30,000 students, anecdotal evidence did show that approximately 24 were classified as students with disabilities with the majority being visually impaired. Hence, this research site was purposively selected to explore the lived experiences of students with visual impairments.

1.12 Delimitation of the study

The study was primarily delimited to students with visual impairment at Sim University within Zambia. The selected students had substantively lived experience of one year and above in the university. This being the case, generalization is necessarily limited to similar groups of students. This was a qualitative research study utilizing hermeneutics phenomenology approach to examine the lived experiences of students with visual impairment in a dual mode public university offering its programmes by regular as well as distance study modes.

In addition, literature review was delimited to the key variable in the topic namely: 'lived experiences of students with visual impairments in a university: Hermeneutics Phenomenology approach.' Any other not related to this topic was not included in the literature search.

Furthermore, only students with visual impairments who were in session during the 2016/17 academic years participated in the study while excluding the rest.

1.13 Theoretical Framework

This section provides a synopsis of the most discussed theoretical models related to the current study within the disability field in recent years. Particularly, it highlights on the medical, social, phenomenological and human rights models of disability. It discusses the way in which the medical model emphasises on biology and locates disability related challenges in the affected person's body while the social model de-emphasised biology and situates disability within societal structures. Between the two major contrasting models (medical and social models), lies the phenomenological model, whose focus is on lived reality by persons with disabilities. Most recently, the human rights model thrust is on human culture and it affirms that all human beings irrespective of their disabilities have certain rights which are inalienable.

Hermeneutics Phenomenological school of thought guided the inclusion of a theoretical framework in this study. This was a departure from the 'objective' Phenomenological purists (Transcendental Phenomenologists), who argue against prior theoretical framing and in-depth literature reviews, owing to perceived increased researcher bias perpetuated by the influence from the literature. In construct to

Transcendental Phenomenology, the researcher embraced Hermeneutics Phenomenology whose proponents with a more practical perspective argue that it is beneficial to build upon earlier theories and literature. This helps to set the platform for deeper explanation, conceptual development, and theoretical refinement (Creswell, 2009 and Padgett, 2008). Hence, the inclusion of a theoretical framework, with an intention to build upon previous works and expand the discourse on lived experiences of SwVI in higher education.

1.13.1 Medical Model

The medical model of disability focuses on the individual person and regards disability as a personal tragedy that has befallen the individual and therefore a 'cure' is sought (Oliver, 1990, 1996; UNESCO, 2001 and Save the Children, 2008). This positions the affected person with an impairment into a 'sick role' whereby others may make decisions about the quality of that person's life (Pfeiffer, 1998). The medical model views disability as a problem, which lies within the disabled individual (Priestley, 2006; Rieser, 2006; Smith & Erevelles, 2004; Watermeyer, 2013).

To correct the problem, it is necessary to work on the individual – starting with a diagnosis of what is 'wrong' with him or her. The person and his or her life becomes defined solely in terms of the diagnosis. Medical personnel focus on the things that the disabled person cannot do: can't walk, can't see, can't talk, for example. In response to their diagnosis, medical personnel do their job and try to find a cure. If a cure is possible, all energy and resources are used to achieve it. If there is no cure, this is seen as tragic, and it is considered that the individual will need to be cared for instead (Beauchamp-Pryor, 2011).

Figure 2 illustrates the Medical model as described above. In the medical model, a metaphor of the 'doctor – patient' relation is applied within the education sector to make sense of what disability is about and how it should be treated. Within the medical model, a child is the centre of attraction and is blamed for any academic failure based on impairment identified. To succeed, a child with impairment requires a special teacher, in a special school where he/she is forced to fit within the system.

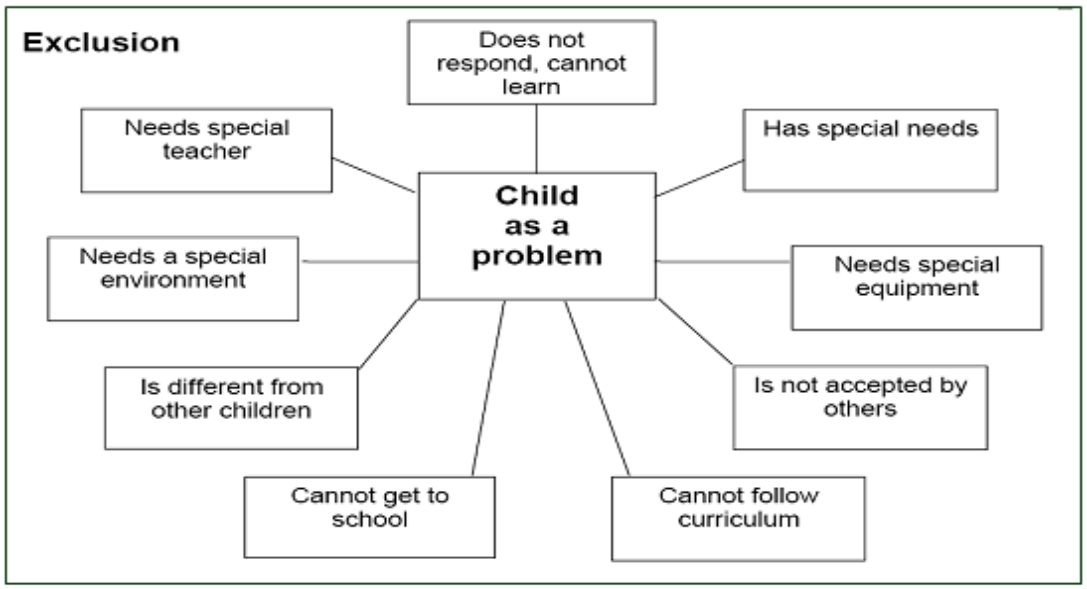


Figure 2: Medical Model (Adapted from Save the Children, 2008)

UNESCO (2001) observes that, just like in the medical field where an individual is regarded as being sick, so is the case with the education system. Here, a disability is seen as sickness that requires specialised personnel to fix it. The affected person is viewed as being 'special' (different from the rest), and so cannot respond to the ordinary way of teaching/learning. To fix the problem, the affected person requires 'special' teachers, 'special' environment, 'special' equipment and 'special' methods to learn and overcome disability, often in a setting called 'special' school. In the end,

the person with disability is isolated and excluded from his or her peers and learns in secluded marginalised environment called a special school.

According to Barnes (1990), the victim of disability experiences "social death" where their human rights are denied and they are subjected to tyrannical practices of professional care (Barnes, 1990). Consequently, Rieser (2006) argues that the medical model creates a cycle of dependency and exclusion which is difficult to break, as the voices of people with impairments remain faint and unheard. Inevitably, people with disabilities become the invisible objects of charity (Longmore, 2003). If the person with disability's lifestyle improves, then the prescription provided is deemed to have worked and the specialised personnel who provided the prescription is celebrated. However, if the disabled person does not improve, then it is the affected individual to blame for not responding positively to the prescription of the all-knowing specialists (Longmore, 2003). Rieser (2006), argues that, disabled people may therefore have internalised the negative views of others, resulting in low self-esteem and a warped sense of worth (Lourens, 2015).

1.13.2 Social Model

The social model is the term used by proponents opposed to the medical model way of viewing disability (Roulstone *et al*., 2012). Under the social model, it is argued that the medical model severely and unnecessarily restricts the roles that disabled people can play in life (Priestley, 2006; Swartz & Watermeyer, 2006; Watermeyer, 2013). Treating disabled people according to the medical models makes them dependent on certain (non-disabled) people and separates them from the rest of society. For many

Disabled People's Organisations, the social model describes the true nature of the problem of disability: the problem is not the individual, nor his or her impairment.

Figure 3 illustrates the way proponents of the social model conceptualise disability. Within the social model, an educational system is the centre of attraction and is blamed for pupils' academic failure based on environmental inadequacy. To succeed, a child with impairments requires system change to fit his or her requirements. The model is the opposite of the medical model above.

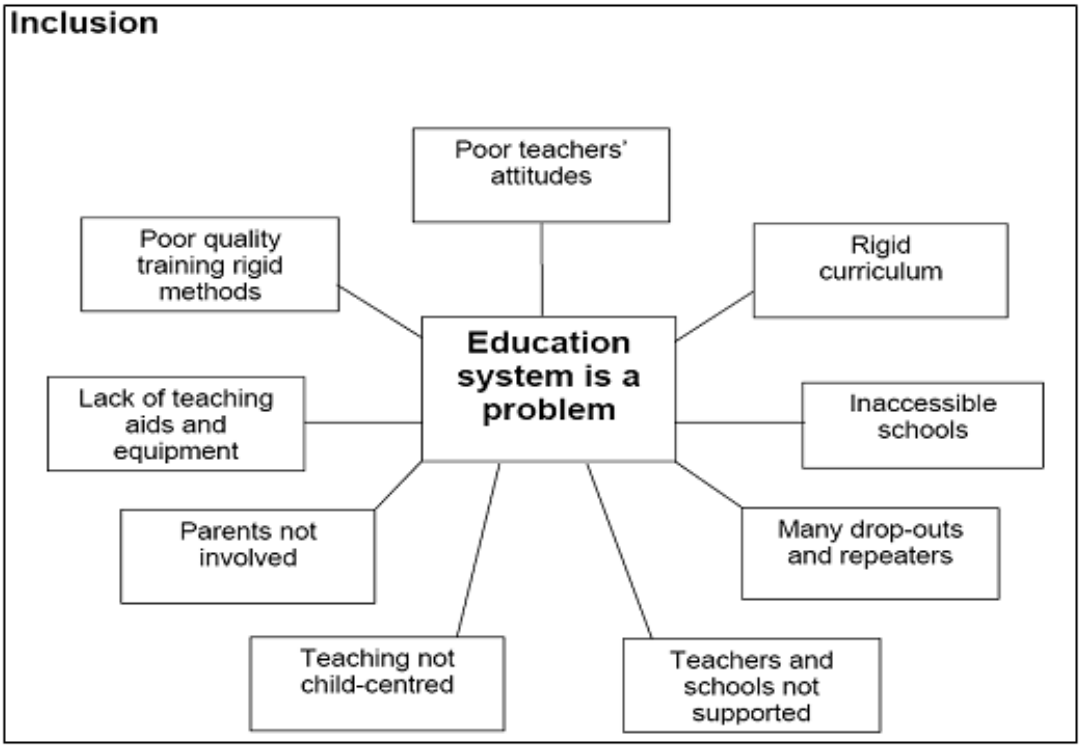


Figure 3: Social Model (Adapted from Save the Children, 2008)

In addition, Grech (2009) argues that the social model of disability is pivotal to understanding disability. The model observes that it is often social barriers such as prejudice and stereotypes, the way things are organised and run, and/or poor or no access to information, buildings and transport, which cause disability, rather than the impairments themselves. In addition, Grimes *et al*. (2015), observe that the social

model of disability as linked to education implies including persons with disabilities in mainstream education rather than segregating them in separate institutions.

The main needs of a person with an impairment are the same as anyone else's: life, love, education, employment, having control and choice in one's life, and access to adequate services (including medical and rehabilitation when necessary). The challenge of disability centres on how society reacts (proactively and reactively) to the individual and his or her impairment, and in physical and social environments which are designed (by non-disabled people) to meet the needs of non-disabled people only. Under the social model a person who has an impairment is disabled not because of the impairment, but because of the attitudes of society, and poorly constructed physical and social environments.

These are all challenges that can be resolved. It is not possible to make a paralyzed learner walk, or all blind people see (it is not necessary to walk or see in order to have a worthwhile and enjoyable life); but ramps and lifts can be built and non-disabled people can learn to think in a different way about disabled people. Therefore, the social model can be a helpful tool for disabled people and their supporters to make positive changes in their lives, and for non-disabled people to understand more about disability.

Overall, the social model contributed enormously to disability dialogue and exposed oppressive ideology of the past. However, in the recent past, the social model has come under scrutiny from challengers. For instance, Bury (2000), alludes to the fact that, despite the most successful efforts to remove societal obstacles from the environment, some traces, limitations and certain realities of a biologically informed disability

would still remain (Bury, 2000). To illustrate this, Lourens (2015) gives an example of a visually impaired student entering a university environment. Such a person would be justified in assuming that unfamiliar routes and inaccessible course material can be alleviated through societal intervention. However, someone can simply be appointed to transform study material into an accessible format.

In addition, an orientation programme prior to commencement of the academic year can assist in familiarising the student with the new physical environment. To this end, Lourens (2015) is of the view that, if the biological disability were not present, such intervention and restructuring would have been pointless and unnecessary. Similarly, take an example of blind person's experience as a student in a higher education context. Consider a blind person "looking" for her equally blind friend on a university campus. He might walk right passed his peer, without realising the friend's presence. Now the question remains, is this mutual inability to see each other socially imposed? Clearly, it would not appear to be the case (Lourens, 2015).

Argued from the Phenomenological stance, Watermeyer (2013) describes the existing and inner-worlds of people with disabilities. He writes,

> Disabled lives carry every aspect of human complexity; of relationship, uncertainty, self-regard, loss and hope….It is becoming clear that the world of disability has human reach which extends way beyond the material and rational, beyond tangible barriers, to the recesses where these are mirrored in psychic life (Watermeyer, 2013:44).

In contrast to the realty of human complexity within the psychological lived-world, social model writers deliberately ignored the personal and emotional experience and pain of a body that is impaired (Thomas, 2001; Shakespeare, 2006; Shakespeare, 2014). In other words, between the social model and the medical model there exits the real life of the disabled individual (Popplestone, 2009). It is the lived world (between the medical and social models), framed within individual's body that I turn your attention to below.

1.13.3 Phenomenology Model

Phenomenology focuses on human experience (Husserl, 1927). It explores the lived experiences of individuals in pursuit for a meaning (Carel, 2013). As the concept implies, lived experience comprises the daily activities, thoughts and impressions of an individual's domain within a specific context (Creswell, 2007). Lived experiences are experiences, exactly as they appear to us (Carel, 2011, 2013). Since we cannot leave our bodies in our perception of the world, things, as they appear to us, are subjective (Merleau-Ponty, 1962). The way things appear to us are therefore not necessarily the way things are objectively. Phenomenology offers more than a simple account of daily activities and perceptions. It digs deeper into the meaningful combination of emotions, thoughts, culture and bodily experiences of an individual (Carel, 2011 and Creswell, 2007). Therefore, a phenomenological account of the lived experiences of students with visual impairment would project their hopes, joys, but also of their fears, hardships and anger. In short, lived experience relates to the taken-for-granted world, our perceptions of it and the experiences we have in it (Husserl, 1970).

Lourens (2015), having lived with visual impairment, argues that phenomenology offers a lens through which we can see how the impaired body dys-appears.

> We remain aware of our own feelings of pain, and yes, personal tragedy, while remaining ever mindful of how the "leib" of experience are drenched with oppression and societal structures that may exclude us. This is felt, however, not only in the subjective body, but also in our very core, in our bodies. It thus remains a balancing act, knowing that societal structures are embodied and the body becomes social. Phenomenology, at best, offers a way of avoiding the dangers predicted by social model authors, while leaving room for the voices and very unique experiences of people with disabilities (Lourens, 2015:62).

In order to make sense of the lived experiences of SwVI, the hermeneutics phenomenological model as argued by van Manen (1997) is applied along the four quadrants as follows:

i) Lived with a visual impairment (Body - Corporeality).
ii) Lived with a visual impairment for more than a year in the university (Time - Temporality).
iii) Lived with the visual impairment in the target university (Space - Spatiality).
iv) Lived with a visual impairment while studying with others in a university (Relations - Relationality).

1.13.4 Human Rights Based Model

The human rights model locates disability within the human culture, and it holds that all human beings regardless of their disabilities have assured rights that are undeniable. This model builds upon the essence of the Universal Declaration of Human Rights, 1948. This model posits that all human beings are born free and equal in rights and dignity regardless of social, biological or economical standing in society. The principle of diversity provides the foundation to welcome and celebrate disability as part of human variation. In this study, the Human Rights model of disability is applied to explore and understand the lived experiences of learners with disabilities at various levels namely: individual, family, institutional, community, national and international, as duty bearers to the realisation of the said rights. These levels conform to Bronfenbrenner's ecological model defined by its nested rings starting with Micro, Meso, Exo and Macro systems (Bronfenbrenner, 2005).

The Human Rights model fits well in the Zambian context having ratified the United Nations Convention on the Rights of Persons with Disabilities (CRPD) on February 2nd, 2010 (ZAPD 2010). Later on the 21st of July, 2012, Zambia adopted the Persons with Disabilities Act (PWDA), a law domesticating the CRPD (PWDA, 2012). It makes sense to apply this model in understanding the lived experiences of SwVI.

In short, the four models presented provide four complementary lens through which we can view higher education, as contributing to the welfare of SwVI in addressing the challenges posed by disability. In this vein, the social model confronts societal strata as source of problem to the welfare of SwVI's success. It exposes the medical understanding of disability from its biological origins and advocates for a socio-

political definition of disability, wherein people with impairments are enabled through societal structures.

However, in view of the reality of human complexity within the psychological lived-world, social model writers appear to have ignored the personal and emotional experience and pain of a body that is impaired. In other words, between the social model and the medical model there exits the real life of the disabled individual. It is the lived world (between the medical and social models), framed within individual's body that phenomenological model addresses. Further, to fully make sense of the lived experiences, the human rights model affirms that all human beings irrespective of their disabilities have certain rights that are inalienable. Therefore, human lived experiences should be viewed within the context of the universal human rights provisions.

1.14 Organisation of the Thesis

The following outline of the chapters provides an overview of this thesis:

Chapter one provides the context within which this study was conducted. Here, the background, problem statement, purposive of study, research objectives, research question and justification. In addition, a theoretical underpinning of the study with a focus on four major theoretical models namely: medical, social, phenomenological and human rights is provided.

Chapter two reviews literature related to the study on lived experiences of students with visual impairments. The process includes identification of the studies, inclusion and exclusion criteria, the analytic strategy and presentation of the findings.

Chapter three provides a detailed description of the philosophical underpinnings and design of Hermeneutic Phenomenological study. The chapter outlines the research methodology guiding the design of this study. The final section describes how rigour was achieved, in undertaking this research.

Chapter four presents the findings of the study. The first part of the chapter profiles the seven (7) participants who volunteered to participate in this study based on the inclusion and exclusion criteria outlined in chapter 3. The second part of the chapter presents the research findings using a proposed Simui's Hermeneutics Crossword Analysis (SHCA) framework developed during the research analysis process.

Chapter five discusses the findings of the study in the light of the literature analysis presented in chapter two. This is meant to establish trends and add knowledge to the discourse of lived experiences of SwVI.

Chapter six reflects on the suggested framework for interpreting the lived experiences of SwVI while pursuing their studies at tertiary education level. The framework helps in documenting, interpreting and making sense of the essence within the lived experiences of students.

Chapter seven concludes the thesis and provides recommendations informed by the emerging enablers and disablers to lived experiences of SwVI. The recommendations have both policy and practical implications on future research on the phenomenon.

1.15 Summary

This chapter has introduced the phenomenon 'lived experiences of Students with Visual Impairments at Sim University.' Critical in this context-setting chapter has been the provision of a background from which a Problem Statement, Purpose of the Study and its related Objectives have been generated. In addition, the chapter has provided an overview of the entire thesis, to serve as a guide in the mind of the reader. What follows next is a review of related literature to the current study.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Overview

This chapter presents the literature reviewed related to the study linked to twenty-three (23) countries (Australia, Austria, Bangladeshi, Botswana, Canada, Czech, Ghana, Greece, Iceland, Lesotho, Nepal, New Zealand, Norway, Rwanda, Slovenia, South Africa, Sweden, Tanzania, Uganda, USA, UK, Zambia and Zimbabwe) spread across five (5) continents. The chapter is structured in several units namely: rationale for literature review, procedure followed and databases visited. The latter part on lived experiences of students with disabilities in higher education institutions is segmented in two layers namely: developed and Sub-Saharan Africa. For a snap-shot view on literature reviewed, see appendices 8, 9 and 10, herein referred to as literature review matrix. Emerging from the literature search is a wealth of information on prevalence of SwVI in higher education as well as their lived experiences.

2.2 Rationale for Literature Review

In this literature review, the researcher interacted with other studies with similar focus on the education of students with visual impairments at higher education level. Consequently, knowledge gaps were identified and filled-up through this study. In opting for a Hermeneutics Phenomenological approach, it was important to note that phenomenological purists (Transcendental Phenomenologists) argue against in-depth literature reviews because of the risk of increased researcher bias perpetuated by the influence from the literature. However, scholars with a more practical perspective argue that it is beneficial to "build upon earlier literature. This helps to set the platform for deeper explanation, conceptual development, and theoretical refinement (Creswell,

2009; Padgett, 2008: 46). To this effect, the study subscribes to the latter school of thought, in line with Hermeneutics Phenomenology, as this study sought to build upon previous work to expand the discourse highlighted above (Creswell, 2009). Therefore, the reflections that follow represent what was known in the literature prior to conducting the present study.

2.3 Procedures for the Literature Review

A number of databases used in my search included the Education Resource Information Center (ERIC), Directorate of Open access Resources (OpenDOAR); Education Index, University Press; JSTOR; Sage Knowledge; Sage Online Journals; University of Califonia Press; EBSCO; Emerald Management; Taylor & Francis Group, University of Chicago Journals; Google Scholar search engine; Palgrave Macmillan Journals; Wiley Library; University of Zambia repository; among others. The process for literature search lasted 6 months and was done in two phases. The initial phase being preliminary literature search at proposal stage while the second and final was done after data generation but before the discussion stage. This enabled the researcher to reflect on emerging themes independently and devise innovative ways of understanding the research process and emergent themes, without the influence of other researchers' views.

The literature review search in each of the listed databases above was conducted using key terms drawn from the topic, firstly searched using Boolean Operators: AND and " ", as single entities and then in combination with other entities as shown in Table 2. The literature search was limited to journals published in the last 10 years, out of which 68.63 percent of the related literature identified and reviewed had been published in the recent five years (2013 – 2017).

Table 1: Preliminary Literature Search framework

Database	Entities Search	Hits
1) The Directory of Open Access Journals	"Experiences of Students with Visual Impairments in/and higher education"	
2) Cambridge Journals Online	" "	
3) EBSCO Host Research Databases; Emerald Management	" "	
4) Elgar Online	" "	
5) Emerald Management 120 eJournal Collection	" "	
6) Google scholars	" "	
7) JSTOR	" "	
8) OUP - E-books Oxford Reference Online	" "	
9) OUP - E-books Oxford Scholarship Online	" "	
10) OUP - Oxford Journals	" "	
11) Palgrave Macmillan Journals	" "	
12) Policy Press	" "	
13) Sage Knowledge	" "	
14) Sage Online Journals	" "	
15) Science Direct	" "	
16) Taylor & Francis Group	" "	
17) University of California Press	" "	
18) University of Chicago Journals	" "	
19) University of Zambia library	" "	
20) Wiley Library	" "	

After an initial literature search across various databases, specific articles were purposively sampled based on their relevance and relatedness to the study at hand. The sampled journals were then studied in detail using an in-depth literature search guide as reflected in Table 3 with the aid of Boolean Operators: AND and " ".

Table 2: In-depth Literature Search Guide

Research Article	Research Title	Authors /Year	Methodology	Findings	Knowledge Gap
1) Lived Experiences AND Students with Visual Impairments					
2) Students with Visual Impairments AND Higher Education					
3) Lived Experiences of Students with Visual Impairments AND Hermeneutics Phenomelogical Approach					

The literature search yielded fifty-one (51) studies related to the research theme at hand. The 51 research journal articles were further reviewed in detail. For reference, see appendices 8, 9 and 10 below. Emerging from the literature search limited to research journals published in the last 10 years, 68.63 percent were published in the recent five (5) years.

2.4 Prevalence of learners with disability at tertiary level

In developed countries such as United States of America and Canada, persons with reported disabilities represented a small segment of the general population at post-secondary education level, averaging between 1.5 percent and 11 percent across North America (Harrison & Wolforth, 2012; MacKean, 2011 and Fichten, *et al*., 2003). These percentages varied greatly depending upon the size and type of the institution, with higher rates of enrolment being reported in colleges and distance education institutions (Fichten, *et al.*, 2003). Innovations in learning and assistive technologies, as well as provisions in disabilities supports, were viewed as central factors contributing to the increase in enrolment and graduation rates from colleges for

individuals with disabilities (Harrison & Wolforth, 2012; Klemes, *et al.*, 2006; MacKean, 2011). In the context of developing countries such as Zambia, such statistics of persons with disabilities engaged in studies at tertiary level are scarce and hard to find as investment in research especially at tertiary education level is poorly developed. This then provided an opportunity for research to explore the lived experiences of students with visual impairments at tertiary level.

2.5 Experiences of Learners with disabilities

This section explores the experiences of learners at various educational levels as well as contexts. Two levels with varying context are considered namely: Developed and Sub-Saharan Africa contexts for easy comparative analysis of lived experiences of students in the current study. To this effect, this segment provides a context in which the current study is located as a way to contributing to the discourse on students with visual impairment in higher education.

2.5.1 Studies from Developed Countries

At present, a number of studies on the education of learners with disabilities in higher education have been conducted including Riddell *et al.* (2004) study whose purpose was to investigate the impact of multiple policy innovations on the participation and experiences of disabled students in higher education in Scotland and England between 2001 and 2003. Emerging from Riddell *et al.* (2004) research study were the following findings: (i) most institutions had staffing and structures in places to develop policy and provision for disabled students. (ii) Educational provisions for persons with disabilities have supportive policies in a number of areas including admissions,

infrastructure and into some strategic plans. However, there was an apparent gap between policy and practice, with students encountering barriers to choice of institution and subject, access to the physical environment and to the curriculum.

In addition, addressing barriers to accessing the curriculum required a culture change within higher education. Further, (i) some disabled students lacked social networks and were uninvolved in extra-curricular activities, thus reducing opportunities for informal learning. (ii) Delays in receipt of the Disabled Students' allowance left students at a disadvantage at the start of their courses. Furthermore, (i) the label 'disabled', which students must adopt to qualify for the Disabled Students Allowance and the protection of the law, did not sit easily with many students' self-concept. (ii) Support for disabled students remains largely the province of student support services, with the emphasis on providing individual support to get round institutional barriers rather than fundamental institutional change (Riddell *et al.* 2004).

In developed countries, other than having established inclusive policy framework as advanced by Riddell *et al.* (2004), the use of ICTs for learning purposes in higher education has taken centre stage as well. ICTs come in various forms such as e-Learning platforms. In trying to understand the associated challenges that go with e-Learning among disabled learners, various studies have been conducted among which is by Fichten, et al. (2009). In their study, Fichten, et al. (2009) focused on disabilities and e-Learning problems and solutions as reported by 223 students with disabilities, 58 campus disability service providers, 28 professors, and 33 e-learning professionals from Canadian colleges and universities.

All four groups indicated, problems with: accessibility of websites and course/learning management systems (CMS); accessibility of digital audio and video; inflexible time limits built into online exams; PowerPoint/data projection during lectures; course materials in PDF, and lack of needed adaptive technologies. Students also mentioned technical difficulties using e-learning and connecting to websites and CMS, problems downloading and opening files, web pages that would not load, video clips taking too long to download, poor use of e-learning by professors and their own lack of knowledge working with e-learning, (Fichten *et al*., 2009).

Disability service providers identified the poor use of e-learning by professors as well as poor accessibility of course notes and materials in many formats. E-learning professionals noted difficulties with inaccessible course notes and materials. Professors identified mainly problems raised by the other groups. Sixty-seven percent of students, 53 percent of service providers, 36 percent of e-learning professionals and 35 percent of professors indicated that at least one of their three e-learning problems remained unresolved (Fichten *et al*., 2009).

Given the presence of inclusive policies and ICT infrastructure in developed countries as reported by Riddell, *et al.* (2004) and Fichten, *et al.* (2009) respectively, Heindel (2014), explored experiences of higher education students with disabilities in United States of America using a descriptive phenomenological approach. The study focused on the quality of the learning experiences and learner satisfaction of students with disabilities on the distance-learning mode. The findings suggest that, more training for instructors is needed on how to work with students with disabilities. The Students with Disabilities Services office and instructors needed to collaborate and work

together, rather than separately, in a proactive rather than reactive manner, to better serve the needs of students with disabilities. Further, there was need to empower students with disabilities to voice out their concerns, to pave way for improved quality of online learning environment for themselves.

Heindel's (2014) study focused on various disability categories which made the findings too general and not specific to students with visual impairments. In addition, the study was based on descriptive phenomenology approach with a slant towards bracketing subjective views of the researcher. Hence, findings of this study could not be interpreted further, leaving gaps for interrogation. Furthermore, the study restricted itself to open and distance e-Learning mode of study, a feature synonymous to developed countries. However, for developing countries where Sim University operates, students still depend on the print media to learn. The three identified limitations are gaps that warrant further exploration to elicit insights on the lived experiences of students with visual impairments.

In response to the challenge experienced by SwVI to access graphical information, a number of technologies have been developed, though not yet in extensive use. Such technologies include sonification (Brown & Brewster, 2003); haptic feedback (Darrah, 2013); integrated eBook delivery on touch screen (Goncu & Marriott, 2015) and 3D-printed tactile models (Grice *et al.* 2015 and Kolitsky 2014).

Butler *et al.* (2016) centred their study on understanding the graphical challenges faced by vision impaired students in Australian universities. They observed that information graphics such as plots, maps, plans, charts, tables and diagrams formed an integral part of the student learning experience in many disciplines. Conversely, for visually

impaired students, accessing such graphical materials posse a challenge. The findings of their study found that difficulty in accessing graphical materials was a barrier to many vision-impaired students and that there were systemic problems with current processes for accessible graphics provision.

The study by Butler *et al.* (2016) above links well with Fuller *et al*. (2004) who researched on incorporation of disabled students within an inclusive higher education environment in England. Their study described the views of disabled student volunteers with a range of impairments selected to discuss experiences of teaching and assessment that they commonly encountered. A case study approach was utilised. The students identified issues to do with access to, and the use of, information as important in their learning experience. Their study did not apply a much more integrated approach in its design to understanding disabled students' experiences as learners. The current study does bridge that gap through a hermeneutics phenomenological approach.

In addition, Fuller, *et al.* (2004b) reported on the findings from a survey of self-reported disabled students in a UK higher education institution. Analysis of the survey pointed to the need for attention be paid to concerns of parity and flexibility of provision and to staff development in making the ‘reasonable adjustments’ required by disability legislation.

Reasonable adjustments were better framed within contexts supported by legal frameworks as reported by Mullins & Preyde (2013) who argued that in Canadian

universities, law to make their services accessible to students with disabilities mandated them. Consequently, such measures had gone a long way to eliminate the physical obstacles that present barriers for students. In addition, Mullins & Preyde (2013) argue that the best means of assessing these needs is through direct consultation with students with disabilities.

Further, it would appear that reasonable adjustments for SwVI become meaningful when the affected persons as actively involved as supported by Vickerman & Blundell (2010). In their study, Vickerman & Blundell (2010) considered the voices of disabled students in higher education. This study's findings reported disabled students' lived experiences and views of transition from induction through to employability within one HE institution. Findings indicated that there were still much work to be done in levelling Higher Education experiences for disabled students and identified five key issues that should be addressed in order to enable access and entitlement to Higher Education. These included pre-course induction support, commitment by Higher Education institutions to facilitating barrier free curricula, consultation with disabled students, institutional commitment to develop support services and embedding of personal development planning. This study was pitched with a western context in mind using a questionnaire tool to elicit data. Thus, left knowledge gap for further study in a sub-Saharan African context.

Active participation in the research process as demonstrated by Vickerman & Blundell (2010) above of the affected students is further exemplified in StrnadovÃ (2015) who centred their study on Voices of university students with disabilities, with a bias on

inclusive education at tertiary level. Twenty-four university students with disabilities were interviewed about their experiences studying at Czech universities. The interviews were analysed by means of the grounded theory approach. The dominant experienced barriers faced by these students were institutional barriers, attitudinal barriers, and disability-specific barriers. The forms of support mentioned by the students included family support, peer support, and support provided by assistants. In addition, participants shared strategies they used to deal with the barriers they faced. These included assertiveness, self-determination, metacognition, efforts to 'fit in', optimism, and career planning.

Despite the institutional and attitudinal barriers noted above by StrnadovÃ (2015) in Czech universities, Hauerwas & Mahon's (2017) findings demonstrated that teachers had moderately high self-efficacy for inclusive practices. In their study, Hauerwas & Mahon (2017) focused on the education for students with disabilities at the secondary level with respect to secondary teachers' training and experiences with inclusive practices. Head Teachers from 20 different countries participated in this exploratory survey research about the context in which they worked as well as their experiences and their training. Findings showed that despite variations in the countries' concept of disability and their implementation of inclusive educational systems, the teachers had moderately high self-efficacy for inclusive practices yet had limited training and experience with students with special needs.

Evidence of self-efficacy reported by Hauerwas & Mahon (2017) was better exemplified in Lamichhane's (2017) study on teaching students with visual impairments in an inclusive educational setting in Nepal. According to Lamichhane's

(2017) mixed research findings, teachers' years of schooling, teaching experience, and using blackboard were positively correlated to teaching style adjustment. In addition, younger teachers were more likely to adjust their teaching styles for disabled students than the elderly teachers were. Other pedagogical adjustments at classroom level reported by teachers included: explaining more; more interactions; simultaneously reading out while writing on the board; and placing students with visual impairments in the front bench with other academically sound students.

Whereas a few learning institutions in a number of countries such as the ones reported by StrnadovÃ (2015) in Czech universities and Lamichhane (2017) in Nepal, there were still some reported barriers as documented by Higgins et al. (2013). For instance, Higgins et al. (2013), in their qualitative study explored the educational experiences of 10 Māori students with visual impairment in New Zealand. In their study, four common themes emerged, namely (i) visibility and invisibility, (ii) cultural location and dislocation, (iii) cultural consonance and dissonance, and (iv) transformation and change. Overall, schools had challenges providing both culturally fitting education and educational support for the participants' vision impairment. Inclusive education alternatives for Māori SwVI were limited. However, the participants articulated aspirations for education in their own communities, despite their visual impairment status (Higgins *et al.*, 2013).

Related to Higgins et al. (2013) study above was Higgins and Ballard (2000) who centred their study on seven blind New Zealand adults about their school experiences. The experiences of these participants were not that of inclusion, despite being in 'the mainstream.' The participants described how principals and teachers were both

welcoming and unwelcoming. Inclusive principals and teachers were described as friendly, challenging, helpful and positive. They understood their blind students were like their other students without blindness. Principals and teachers who were labelled as excluding blind students were described as unfair, inflexible, unprepared and absent. They viewed their students with blindness as different and did not find a social place for them.

Despite the disabling learning conditions highlighted by Higgins and Ballard (2000) above, McLinden (2016) proposed an alternative focused on human resource use. In his study McLinden (2016) examined the distinctive function and role played by specialist teachers across settings in helping to facilitate an appropriate balance of curriculum 'access'. An ecological systems theory was used as a lens through which to conceptualise and navigate the issues teachers negotiated with while facilitating an appropriate curriculum balance. The study developed a theoretical framework of understanding the role played by special teachers in facilitating access to curriculum in mainstream settings. Therefore, there study had significance for educators and researchers concerned with facilitating curriculum access across national contexts and educational settings in order to reduce barriers to learning and participation.

In addition, Datta & Talukdar (2016) investigated the self-concept of students with vision impairment who were placed in specialist and mainstream educational settings in South Australia. Self-Concept was explored across six dimensions, namely Physical, Moral, Personal, Family, Social and Academic Self-Concepts and the Total Self-Concept. The 'Tennessee Self-Concept Scale: Second Edition' was administered to 25 students with vision impairment (13 females and 12 males). Findings showed

that there were no significant differences between female and male students with vision impairment across the six dimensions of self-concept. These findings had implications for teachers, special educators, policy-makers and a range of professionals in the education and special education sector in enabling greater understanding of the self-concept accomplishment of the students with vision impairment. Nevertheless, their study had limited scope for generalisation of the study's conclusions due to the study's small population sample size.

The positive self-concept reported by Datta & Talukdar (2016) linked well with Ule's (2017) study on social experiences of students with disabilities in higher education in Slovenia. In their study, they drew on the results of a qualitative survey of students with disabilities who took courses in various faculties of the University of Ljubljana. The findings showed that students with disabilities were able to reshape their identities in a way that did not consist of the disability experienced, but was independent of it. In addition, they were able to accept their disability as the reality of life without losing their own purpose of living and life plans.

Similarly, Claiborne *et al*. (2011) examined the experience of 'inclusion' from several stakeholder groups in one university using a discursive analysis approach. The research team included disability support staff at the institution, external disability consultants and academic researchers. Four focus groups namely: students who were identified as having an impairment, academic staff, administrators and students who did not identify as having an impairment were engaged in discussions. Findings showed that groups recounted different experiences of inclusion. Students with impairments emphasised a lack of resourcing and barriers created by the teaching staff.

In contrast, teachers, administrators and students without disabilities emphasised the importance of social inclusion, while missed the core of students with impairments' concerns about recognition of their technical competence.

Another critical factor to bridge the gap between non-sighted and sighted individuals is positive attitude (Bešić *et al.* 2017). In their study Bešić *et al*. (2017) examined the implementation of inclusive education experiences of teachers at classroom level in Austria. This was done through a qualitative study approach. Twenty-five experts from seven schools and four Centres for Inclusion and Special Education were interviewed. The findings showed that for inclusive education process to be successful, positive attitudes towards inclusion of children with special educational needs are critical. Furthermore, negative attitudes towards inclusion could change if resources and support systems were made available. Equally, special education teachers were regarded as important resource. To this effect, meaningful collaboration between the conventional and special education teacher was considered as a first step in implementing inclusive education. The use of differentiated teaching methods, along with individual initiatives, were other essential practices. According to the experts, these differentiated teaching instructions were applied better in heterogeneous classrooms.

It should be noted here that failure to bridge the gap between non-sighted and sighted individuals as reported by Bešić *et al.* (2017) could negatively affect the level of participation of SwVI in the various educational, social, economic and political welfare of their communities (Brunes *et al.* 2017). For instance Brunes *et al.* (2017) examined the experiences of participation in Physical Activity (PA) by two individuals

with blindness (a girl aged 12 years and a man aged 23 years) both of whom lived in Norway. Data were gathered from individual structured interviews. A narrative descriptive analysis was used to analyse the data. The results showed that important factors for the blind participants' Physical Activity participation were having good instructors, support of visual interpreters, active family members, a safe sports environment, having tried many sports, private transportation to the exercise facilities, and a positive social environment, with peers, friends, and family members. Their study provided knowledge of factors that could increase Physical Activity adherence of individuals with blindness being included in PA and sports together with sighted peers.

One way in which the gap between non-sighted and sighted individuals could be bridged is through the use of ICT technologies. For instance, Walczak & Fryer (2017) in their study focused on the impact of audio description (AD) style on dimensions of presence (spatial presence, ecological validity, engagement, and negative effects) in blind and visually impaired audiences. The participants were shown two fragments of a naturalistic drama with two styles of description: 'standard' and 'creative'. While the former followed the principle of objectivity, the latter was an innovative type of AD that included elements of camera work and subjective descriptions of the characters, their actions, and scenes crucial to the plot. Findings suggested that the emotive AD prompted higher levels of presence for all participants. In a nutshell, the new AD style appeared more natural, especially to participants with recent sight loss. The results suggested that creative scripts may stimulate presence and thus increase the chances of AD users having a more immersive viewing experience.

In addition to Walczak & Fryer (2017), Vasan *et al*. (2017) documented the innovative use of technology to enable people with visual impairments improve their welfare. In their study, they presented a novel way to eliminate the use of data acquisition system by integrating a headphone jack. With the aid of a headphone jack, a cost-effective wearable ultrasonic module that would enable SwVI to virtually see was implemented. Unlike conventional walking canes that do not offer effective feedback, the ingenuity in their proposed module was that it would offer audible feedback to the user. The ultrasonic sensor coupled with the headphone jack and the output of the sensor would be relayed to the earphones with the help of a free mobile app. This substantially reduced the cost of the module as no micro-controllers were used.

Further, Lancioni *et al.* (2017) evaluated a smartphone-based program to promote independent leisure and communication engagement in five participants with visual impairment and mild intellectual disability. A smartphone with Android 5.1 Operating System and S-Voice application, Internet connection, contacts unit, and media player was used. The participants were taught to use the smartphone through specific verbal utterances. The results showed that all participants learned to use the smartphone. Their independent engagement times of leisure and communication increased from baseline values of zero to means of between about 75% and 85% of the session lengths. These findings indicated that a smartphone-based program could support independent leisure and communication engagement in people with visual impairment and intellectual disability who possess verbal skills.

Furthermore on ICT technologies, Alves *et al.* (2009) considered the application of assistive technology, especially information technology in the education of blind and

low-vision students from the perceptions of teachers in São Paulo, Brazil. The findings show that there are differences in the specificities and applicability of assistive technology for blind and low-vision students, for whom specific computer programs are important. The main reason for not using information technology was the lack of orientation. In addition, teachers indicated the need for infrastructure and pedagogical support (Alves *et al.* 2009).

However, knowledge of cyber threats by SwVI could account for low use of internet technology as argued by Inan, *et al.* (2016). According to Inan, *et al*. (2016), SwVI who were more knowledgeable and skilled about cybersecurity inclined to be more concerned about it and to use the Internet less than those who were less knowledgeable about cybersecurity. Therefore, cybersecurity concerns could lead SwVI to decrease their internet use, which could broaden the digital divide.

While the use of ICT technologies as argued by Walczak & Fryer (2017), Vasan *et al.* (2017) and Lancioni *et al.* (2017) could be useful in bridging the gap between non-sighted and sighted individuals, this may not be a complete solution as a number of SwVI have been found to have other challenges. For example, Verdier (2016) examined psychological well-being and social relations in school for six students with severe Visual impairments (VI) in Swedish inclusive education. A total of 151 interviews were conducted with the students, teachers, and parents during these years. At the end of ninth grade, the Strengths and Difficulties Questionnaire was also administered to all informants.

The findings revealed that a bulk of the students were stressed about school work and keeping up with their sighted peers and described feelings of loneliness. Some

exhibited emotional symptoms of which parents and teachers were not always aware. Three students had additional disabilities besides their VI. The study concluded that students with visual impairments were a heterogeneous group comprising individuals with different needs. Thus, many of these students faced social challenges in school. Interventions on different levels were necessary in order to improve the possibilities for these students' social inclusion (Verdier, 2016).

Egilson (2014) conducted a qualitative study investigating the experience and views of seven Icelandic young adults with disabilities aged 17 to 19 years, regarding their present and past schooling experiences. The findings revealed that the secondary schooling environment was less adapted for disabled students' educational and social needs than the primary school environment had been (Egilson, 2014). This supported the claim that mainstream school support services were less appropriate for older disabled children than for those available during earlier stages of schooling (Brodin & Lindstrand, 2007).

Similar to Egilson's (2014) study above, Vlachou & Papananou (2014) explored the perceptions of disabled students about different aspects of school experience in primary and secondary education in Greece. Thirty-two (32) disabled university students were interviewed and their narratives analysed. The findings showed that the interviewees went to mainstream schools lacking knowledge regarding the availability and unsuitability of special schools. In addition, the mainstream schools lacked the appropriate support systems, services, resources or training, which in turn, resulted in unfair treatment of these students throughout their education. The interviews also demonstrated how students had to adjust to the educational setting with challenges

(Vlachou & Papananou, 2014). The findings of this study are consistent with that of Egilson (2014), which indicated disabled students have not fully experienced inclusion in mainstream education.

Vlachou & Papananou's findings are also echoed in a Whitburn (2014) qualitative study of the experiences of five (5) students with visual impairments (SVI) in Australia. Whitburn was an insider in the field of disability and had received his schooling in a similar educational setting as the participants. His findings revealed unfair treatment of the participants in mainstream schools that appeared to have perpetuated their exclusion.

In a study, that explored individual perceptions, experiences and preferences of disabled students with respect to mainstream schools, Shah (2007) consulted 30 students with disabilities ages 13 and 25 in the UK. The findings showed that mainstream schools had not embraced full inclusion and continued to disempower disabled students with exclusionary procedures and practices. The study established that in spite of progressions in inclusion related legislation, a great deal of change was further needed within mainstream schools before disabled students could experience inclusion (Shah, 2007).

Related to Shah's (2007) study, Thurston (2014), explored the lived experiences of two albinism students in high school in the UK. The study applied an interpretative phenomenological analysis to examine and understand ways in which students with low vision-albinism experienced inclusion. Emerging from the study findings were two main themes namely: (i) experiencing low vision in school and (ii) experiencing

additional support in school. A negative cycle of inclusion was identified based on the students' internalised feelings of difference.

While Thurston (2014) delved in the lived experiences of students with albinism, Hewett *et al.* (2017), focused on developing an inclusive learning environment for students with visual impairment in higher education. The study applied a longitudinal qualitative approach of the experiences of 32 young people with visual impairment in the UK. Participants reported that though their HE institution made some adjustments to enable them to access their course, a lack of anticipatory adjustments created barriers. The most common solution for this barrier was to provide deadline extensions, often resulting in additional pressure. University staff highlighted limited specialist knowledge and resources within their institutions to enable accommodations for students with VI.

Riddell *et al.* (2004) are of the view that depending on their particular impairment, most of the students experienced barriers to accessing education as it relates to the physical environment or teaching and learning at some point during their studies. In addition, course choice of some students was affected by physical access issues. Some students found that adjustments to teaching practices were difficult to obtain. Even where they had received formal agreements to provide 'reasonable adjustments' as demanded by law, such as handouts in advance of lectures, they often found themselves in a difficult position of repeatedly having to ask for these, unsuccessfully. Some lecturers felt that adjustments to teaching practices would lower standards and give unfair advantage to students with disabilities. In all institutions, academic staff

felt they were overwhelmed with the volume of work and were unable to allot as much time as they would like to individual students.

Some students were entitled to the Disabled Students Allowance (DSA), subject to a formal assessment of needs, which enabled them to purchase equipment or employ assistants (eg readers, note-takers). In the Zambian context, Riddell, Tinklin & Wilson's (2004) findings remain unverified with respect to physical environmental accessibility, pedagogical challenges, learning facilitator willingness to engage persons with disabilities at higher education level and the availability of Disabled Student Allowance for improved access to higher education.

In another related research study Hutcheon & Wolbring (2012) documented experiences of post-secondary students with disabilities. In their study, ways in which 'disabled' post-secondary students make meaning of their experiences in post-secondary education was explored. Eight (8) participants (self-identified disabled post-secondary students) were recruited from post-secondary institutions in Calgary, Alberta within Canada. Five (5) themes (hegemonic voice, voice of the body, voice of silence, voice of assertion, voice of change) were identified within a body-social-self framework. Findings demonstrated a continued need for critical examination of higher education policy and its capacity to address differences in ability. This study does provide an opportunity to confirm or disapprove the research findings within the Zambian context, given the apparent variations at play between Canada and Zambia, developed and developing countries respectively.

In addition, Wendy *et al*. (2014) document lived experiences of learners with disabilities in post-secondary institutions in Canada. The study utilised a qualitative approach to elicit data from participants. Findings highlighted how important it is for students to feel comfortable and confident in disclosing their disabilities and, importantly, to communicate with their course instructors about what was required for their academic success. The study also provided insight into implications for post-secondary educators' pedagogical practices (Wendy *et al*., 2014).

Polushin (2015), focused on the Inclusive Andragogy in Distance Education using a Phenomenological Approach. The purpose of this study was to understand inclusive andragogy in distance education through the lived experiences of students and stakeholders involved in online teaching at a Canadian tertiary institution. Factors influencing a barrier-free learning environment were examined from a systems perspective, using the principles of universal design for learning (UDL). Findings suggest that inclusive andragogy needed a systemic approach to address learner and cultural variability. Specifically, systemic, curricular, technological and social accessibility supported by awareness training and interdisciplinary team knowledge and collaboration emerged as essential themes of the participants' lived experiences. Unlike Polushin's (2015) study whose scope was limited to experiences of students in Canadian post-secondary institutions, with a focus on inclusive distance education andragogy, in this study, the thrust was on students with visual impairments in one of the Sub-Saharan African countries. This provides an opportunity to major on students with visually impairments, whose characterises are diverse and so deserve to be studied in isolation from their peers.

According to Khokhar (2007), distance education is regarded as a flexible and appropriately methodology for delivering inclusive education. Given the advent of technology, it becomes possible to widen access to education among persons with disabilities through the flexible distance learning approach. Perhaps flexibility could be seen through learners being able to access study materials from their homes, which is viewed as the safest and least expensive environment. This could be incorporated with occasional attendance at local study centres, a form of blended learning (Khokhar, 2007).

In addition, Walken (2000) argues that distance education experience should be inclusive and relevant to the needs of the learners with disabilities. This could be achieved through ensuring that distance education has local provisions available within a local area. The value of localized interventions and the sensitivity with which learning facilitators have to implement and maintain social interaction would promote the process of inclusion.

Further, distance education instructional materials should address the need for pedagogy of recognition (Slee, 1999) where diverse learners can recognize their own experiences and identities in the curriculum. Sheehy, Rix, Nind & Simmons (2004:140) support this position, stating that "we want students with minority cultures, languages and sexuality to find themselves visible in the materials." Students should be valued as active meaning-makers with the potential power to transform their own and others' educational experiences. This study was pitched within the Canadian post-secondary institutions, a western oriented context different from the Sub-Saharan.

2.5.2 Sub-Saharan related studies

Lourens (2015), in his thesis, focused on the 'lived experiences of higher education for students with a visual impairment. A phenomenological approach was applied targeting two universities in the Western Cape, South Africa. The study findings described the challenges related to the transition from school. In addition, participants discussed complex social interactions with non-disabled peers, in which the latter reportedly offered help, and avoided or stared at participants, leaving them feeling "not seen". Third, within the learning environment, the participants were sometimes confronted with unwilling lecturers, a lack of communication amongst important role-players, late course material and/or headaches and muscle tension from the effort of reading with limited sight. The students recounted that they commonly self-advocated and took the responsibility upon themselves to get special accommodation (Lourens, 2015).

In general, Lourens' (2015) findings showed that the experiences of students did not seem to differ according to the institution they attended. Their visual category and secondary schooling seemed to have played a more significant role where their experiences differed. In addition to the typical demands of university studies, the participants also took a lot of responsibility upon themselves to manage their studies and their physical and social environment. Participants seemed resilient and innovative, yet the effort sometimes drained their energy and left them frustrated. Despite valuable steps towards inclusion, these visually impaired students were still not fully included on tertiary campuses (Lourens, 2015).

Related to Lourens' (2015) study above is Maguvhe's (2015) pitched within South African context, focused on factors that limited the participation of the visually impaired learners in mathematics and science education. A case study was applied to interrogate a blind technician, who regarded himself as an unqualified scientist, in his understanding of various school factors that could entice the visually impaired learners to participate in mathematics and science education, and to promote their retention in related professions. The study revealed that teacher motivation and mentorship in mathematics and science methodologies and the use of tools for learner empowerment were lacking. It further revealed that teachers lacked the requisite skills in special education to harness learner potential in mathematics and science. This situation necessitates government action in teacher training and development (Maguvhe, 2015).

Mutanga & Walker (2017), explored the academic lives of students with disabilities at two South African universities – University of the Free State and University of Venda, from the lecturers' perspectives. A qualitative approach was used to understand the lives of students with disabilities better. The findings show that, although most disability literature report students with disabilities blaming lecturers for their failure to advance their needs, this study highlights that the education system needs to be supportive to lecturers for the inclusive agenda to be achieved. Further, it is argued that a more comprehensive approach towards a national disability policy in higher education involving many stakeholders be adopted for a broader understanding of disability, to engage with the complex ways in which inequalities emerge and are sustained (Mutanga & Walker, 2017).

Similar to Lourens (2015), Maguvhe, (2015), and Mutanga & Walker (2017), Ntombela & Soobrayen (2013), contextualised their study within South Africa particularly at the University of KwaZulu-Natal. In their study, Ntombela & Soobrayen (2013) explored the nature of access challenges faced by students with visual disabilities at the Edgewood campus. A case study approach with a sample of two staff members in the Disability Support Unit was applied. The findings showed that although access had improved for students with disabilities in this institution, there are still systemic barriers that limit the participation of students with visual disabilities in the academic programmes. The study concluded that improved access requires partnership between Government and Higher Education institutions to monitor and support systemic transformation (Ntombela & Soobrayen, 2013).

In general, Grönlund *et al.* (2010), observed that in developing countries there existed many obstacles in the process of implementing inclusive education. In particular, Grönlund *et al.* (2010) focused on effective use of Assistive Technologies for Inclusive Education in developing countries. Grönlund *et al.* (2010) applied an in-depth case study of two developing countries, Bangladesh and Tanzania. The findings showed that obstacles to effective use of Assistive Technologies for inclusive education came from three different levels – school, national, and network. Because Assistive Technologies was only part of the equation for a country to achieve inclusive education, a high level national perspective was required and other related factors also need to be considered (Grönlund *et al.* 2010).

Mosia & Phasha (2017), in a quest to shed light on access to curriculum for students with disabilities at higher education institutions phenomenon, focused on the national

University of Lesotho. A qualitative data approach was applied through in-depth interviews, focus group discussions and document analysis. Eleven (11) students with various types of impairments and fifteen (15) academic and non-academic staff members involved in the education of students with disabilities were interviewed. Findings exposed inconsistencies between the institution's admission policy of non-discrimination according to disability status and its practices. To this effect, the study recommended that a clear policy concerning the support of students with disabilities should be developed. The policy would guide decisions on how disability data should be used, define roles that different university departments must play in facilitating access to curricula for all students, influence suitable development of teaching and learning resources, stimulate research on success and completion rates of students with disabilities and mandate restructuring of programmes that are currently inaccessible to students with disabilities.

Studies by Grönlund *et al.* (2010) and Mosia & Phasha (2017) highlighted above are general in their approach and do not focus on the specific context surrounding students with visual impairments. Whereas they are situated in Sub-Saharan Africa like the current study, data from the two studies were not generated using a hermeneutics phenomenological approach, to elicit the lived experiences of students with visual impairments. These are the knowledge gaps, the current study addresses.

Chhabra *et al.* (2010), carried out their study in Botswana, one of the neighbouring countries to Zambia, whose research purpose was to identify the attitudes and concerns of teachers toward the inclusion of students with disabilities in the general classroom. The findings indicate that teachers in Botswana have somewhat negative attitudes with

some concern about inclusive education. The results also reveal that many regular teachers feel unprepared and fearful to work with learners with disabilities in regular classes and so display frustration, anger, and negative attitudes toward inclusive education because they believe that it could lead to lower academic standards.

Linked to distance education is yet another study conducted by Kaputa (2013), 'Making Open and Distance Learning Inclusive: The Zimbabwe Open University's (ZOU) Experiences of People with Disabilities.' According to Kaputa (2013), only less than one percent (1%) of learners with disabilities were present at ZOU. This is in sharp contrast with the World Health Organization's (WHO) estimates of 15 percent of the world population as comprised of people with disabilities. Whereas ZOU was accommodating learners with disabilities, however, persons with disabilities were reported to be facing challenges accessing instructional materials especially those with visual and hearing impairments (Kaputa, 2013).

In a related study conducted within Zimbabwe, Mafa (2012), stresses that in Zimbabwe, inclusion has actively been on the national agenda since 1994. Nevertheless, there were still a lot of scepticism and ambivalence towards the implementation of inclusion in Zimbabwe, as in a number of sub-Saharan African countries. Findings from this study point to unavailability of suitable learning supporting facilities, teachers' limited skills and lack of support from instructional supervisors (Mafa, 2012).

Related to Mafa (2012), Chataika (2011) explored lived experiences of students with disabilities in higher education in Zimbabwe. The findings indicated that students with

disabilities continue to experience attitudinal, physical and institutional barriers. In addition, the study revealed that students developed coping mechanisms that enabled them reach their educational goals. A positive attitude and self-advocacy skills were regarded as the most important factors in determining the success of students with disabilities in higher education. Similarly, self-belief was viewed as a conduit to success. Nevertheless, Chataika (2011) appeals for improved policy and practice to ensure meaningful disability inclusion in education, without students with disabilities becoming 'superheroes' who spend most of their time trying to overcome a countless number of disablers that are common in most learning institutions.

Kaputa (2013), Mafa (2012) and Chataika's (2011) findings present further opportunities for research considering that their studies were conducted in Zimbabwe, a different context from Zambia. In addition, though their independently conducted studies claim to have applied qualitative approaches to arrive at the findings, the voices of the affected learners were silently missing. Instead, it was the voices of the researchers, which were prominent in the research findings. To exploit the identified knowledge gap, the present study explores the lived experiences of students with disabilities using Hermeneutics phenomenological approach.

Emong & Eron (2016) focused on disability inclusion in higher education in Uganda. The study revealed that despite Uganda's robust disability legal and policy framework on education, there is evidence of exclusion and discrimination of students with disabilities in the higher education institutions. The findings showed that there existed discrimination and exclusion tendencies in matters related to admissions, access to lectures, assessment and examinations, access to library services, halls of residence and other disability support services. To this end, the study concluded that institutional

policies and guidelines on support services for students with disabilities and special needs in higher education be developed. Further, data on students with disabilities needed to be generated to help in planning and collaboration of disabled peoples' organisations.

Similar to Emong & Eron's (2016) whose study was located within the Eastern African context, particularly Uganda, Nasiforo (2015), centred her study on Academic Impediments Students with Visual Impairments Encounter in the Colleges of University of Rwanda. Key findings revealed that the curriculum was not adapted, support learning resources were not available and the learning resources available and examinations were not adapted by the lecturers to suit the needs of students with visual impairment. Staff development in inclusive education was still at its infancy stage and majority of the students with visual impairment were un-trained in orientation and mobility and had no white canes.

Whereas Nasiforo's (2015) centred on students with visual impairment similar to the current study, her study had knowledge gaps to merit further exploration. For instance, the voices of students with visual impairments were drowned by the researcher's voice and were missing in the findings. This could be attributed to the research methodology adopted (descriptive survey) with questionnaire as a major data collection tool. To overcome this gap, the current study applied a Hermeneutics Phenomenology approach to elicit the lived experiences of students with visual impairments. In addition, Nasiforo's (2015) findings require further examination in a different context to establish the extent of similarity or divergence in results. It is these gaps the current study sought to fill up.

Similar to Nasiforo's (2015), Majinge & Stilwell (2014) focused on SwVI in a different context. They studied library services provision for people with visual impairments and in wheelchairs in academic libraries in Tanzania. The thrust of the study was on access to the information resources available and the layout of library buildings in five universities in Tanzania. Both quantitative and qualitative methods were applied.

Majinge & Stilwell's (2014) findings show that academic libraries provide services to people with visual impairments and in wheelchairs but these services are not inclusive or universal. Therefore, the study recommended academic libraries strive to provide inclusive services to all users including people with disabilities. This then entails that, an inclusive policy regarding provision of library services to people with disabilities be formulated and implemented. In addition, adequate budgets and staff training are a must to have. Further, there is need to ensure that new libraries constructed have ramps and maintaining working lifts, Braille materials and large print information resources, as well as providing assistive equipment (Majinge & Stilwell, 2014).

The lived experiences of SwVI in East Africa as documented by Emong & Eron (2016); Nasiforo (2015) and Majinge & Stilwell (2014) are similar to the one documented by Gregorius (2016) in West Africa particularly in Ghana. Gregorius (2016) studied narratives of disabled young people's experiences of educational institutions in Ghana. He observed that most social sciences and development literature tended to homogenise the educational trajectories of disabled young people and focuses predominantly on the perspectives of educationalists, development experts and carers in assessing educational needs and institutions.

Thus, the experiences of young people across multiple categories of social difference, and their agency in shaping their own educational trajectories, remained largely unknown. The study showed how exploring individual narratives provides new insights into the educational needs of and 'appropriate' education for disabled young people in the Global South. Whereas Gregorius' (2016) study explored educational narratives of young people with different impairments in mainstream, special and integrated schools in Ghana, the university education was not covered, leaving knowledge gap unattended to.

2.5.3 Zambian Related Studies

Majinge & Stilwell's (2014) findings in Tanzanian universities are consistent with Akakandelwa & Munsanje's (2011) earlier findings in Zambia. In their study, it was noted that most learning institutions in Zambia did not provide adequate and suitable learning and teaching materials to pupils with visual impairment. In addition, many schools did not have resource rooms for storage and use of learning and teaching materials for these pupils. Thus, most children with visual impairment appeared to perform poorly in their studies and were required to drop science and mathematics subjects due to lack of teaching and learning materials (Akakandelwa & Munsanje, 2011).

The inadequate and un suitable learning and teaching materials to pupils with visual impairment reported by Akakandelwa & Munsanje (2011) was further compounded by public buildings' lack of ramps, handrails, elevators, user-friendly restrooms and other facilities necessary for persons with disabilities to use buildings (Chilufya 2013).

Chilufya (2013), in her study on accessibility of public buildings to disabled persons views accessibility not an end in itself, rather a means of achieving a desired end that is, realisation of other rights such as Education, Health and Employment among others.

Findings of Chilufya's (2013) study reveal that most public buildings in Lusaka lacked ramps, handrails, elevators, user-friendly restrooms and other facilities necessary for persons with disabilities to appropriately use buildings. Consequently, this had resulted in practical dehumanising challenges in most cases when making use of the services offered in public buildings. This had restricted their enjoyment of the rights to independent living, inclusion in society and equality of opportunity (Chilufya, 2013).

The study concentrated on making public buildings accessible whether by universal design or reasonable accommodation to persons with disabilities generally within the Lusaka City Council geographical area. The findings do provide a platform for further investigation of the actual lived experiences of persons with disabilities in general and learners with visual impairments in particular. This is an identified knowledge gap worth pursuing. Given the challenges of access to and participation in quality higher education inherent in the conventional education system, it becomes paramount to explore ways in which access to higher education could be widened especially for learners with disabilities.

Whereas Chilufya (2013) focused on accessibility of public buildings to disabled persons, Banda-Chalwe *et al.* (2013), further escalated this by focusing on mobility limitations (PWML) in Zambia. Banda-Chalwe *et al.* (2013), explored the views of people with mobility limitations (PWML) in Zambia. A qualitative approach was

applied to generate data from 75 PWML in five of the ten provinces of Zambia. The findings revealed inaccessibility of education institutions, workplaces and spaces had on the education of students with disabilities. Consequently, such a state of affairs contributed to reduced participation in communal life of PWML. Government buildings, service buildings, and transportation were noted to be the most important but least accessible. To this effect, the study concluded that Zambians with mobility challenges were deprived of accessing services and facilities provided to the public, depriving them and their dependants of full and equitable life participation because of reduced economic capacity (Banda-Chalwe, *et. al.* 2013).

Muwana (2012), whose research study focused on the Zambian student teachers' attitudes toward including students with disabilities in general education classrooms' major findings indicate that University of Zambia students hold positive attitudes toward inclusion. However, student teachers believed that the implementation of inclusion was hindered by the lack of adequate resources and support from the government. Muwana's (2012) research approach was driven by a quantitative methodology with over reliance on a questionnaire research tool remotely administered to the Zambian trainee teachers. In addition, the study did not focus exclusively on learners with disabilities. The current study on the other hand is anchored on the qualitative methodology with a focus on phenomenology approach whose agenda was to explore the lived experiences of students with visual impairments in a higher learning institution (Muwana, 2012).

Finally, Silwamba (2005) in his qualitative study examined the perceptions of stakeholders on inclusive education within Kalulushi district of Zambia. Findings showed that general economic conditions, restructuring programs and medical and

social-cultural issues had a huge impact on the success of inclusive education implementation. In addition, schools within the district had few qualified human and appropriate material resources to support inclusion. Further, students with and/or without disabilities and most stakeholders, except teachers, tended to favour inclusion.

2.6 Chapter Summary

Emerging from the literature reviewed above, research studies on lived experiences of SwVI in higher education appear to be largely focusing on children and not adult learners. In addition, majority of the studies take a general approach by focusing on disability and not students with visual impairments. Further, there seem to be a huge focus on primary and secondary education and not tertiary level. Furthermore, the bulk of research works on lived experiences of SwVI are generated by developed countries while the developing countries are relatively fewer in number. Thus, most higher learning institutions in developing countries have no documented lived experiences of SwVI to guide policy formulation, implementation and evaluation. With these identified knowledge gaps, the reviewed literature forms a good foundation for the study at hand. What follows is a chapter focusing on the Methodology meant to guide the research process.

CHAPTER THREE

METHODOLOGY

3.1 Overview

Chapter three comprises two segments, which focus on the philosophical assumptions of phenomenology and present the rationale for using the phenomenological method in the present study. In the second segment, a description of the specific process of data generation and analysis is presented.

3.2 Philosophical Assumptions of Phenomenology

In research, philosophy denotes the epistemological, ontological and axiological assumptions on which an inquiry is leaning. Generally, epistemology describes 'how' a researcher knows about the reality and assumptions about how knowledge should be acquired and accepted. The ontology explains 'what' knowledge is and assumptions about reality. Axiology reveals the assumptions about the value system (Pathirage *et al.*2008).

Greenbank (2003) observes that when researchers are deciding what research methods to adopt, they are influenced by their underlying ontological and epistemological position. This in turn is informed by their values. Ontology is concerned with reality. It is the science of study of being. The reality can be external to individuals or produced by individual consciousness (Cohen *et al*., 2000). While applied to hermeneutical phenomenological research, reality is perceived as an individual construct dependent to, different situations. Hereafter, it is rested on the belief that realities are multiple.

Phenomenology denotes both a 'philosophy' and a research 'method.' Edmund Husserl (1859-1938), is regarded as the father of Phenomenology. Husserl's Phenomenology project has been stretched, challenged, and adapted by numerous philosophers, including Martin Heidegger, Maurice Merleau-Ponty, Jean-Paul Sartre, Emmanuel Lévinas, Jean-Luc Nancy, & Jean-Luc Marion, creating a dynamic and heterogeneous philosophical tradition. The rise of phenomenology as a philosophy began as an objection to 'reductionism' and is aimed at achieving a deeper and broader understanding of phenomena that can be attained from research.

The thrust of phenomenology is to understand how human phenomena are experienced in consciousness, in cognitive and perceptual acts, as well as how they may be valued. Primarily, phenomenology is the study of lived experience that explore the meanings of experience (Van Manen, 1997). Phenomenological researchers are intrigued by 'meaning' in human experience. Therefore, a phenomenological study aims at understanding a participant's experience of living in real life situations, not experimental situations. Phenomenologists argue that there are multiple realities and truths constructed by individuals within the social context of their lives. Therefore, there is no neutral (objective) reality or solitary form of truth, only the reality and truth as constructed by the individual's experience (Munhall & Boyd, 1993).

Phenomenology is a method of researching the essence or essential meanings of phenomena. Simply, phenomenology is "the study of essences" (Merleau-Ponty, 1962). The term essence refers to the essential meanings of a phenomenon; that which makes a thing what it is (van Manen, 1990). Heidegger (1977:3) describes the essence of a phenomenon as "the way in which it remains through time as what it is."

Hermeneutic phenomenology is concerned with human experience as it is lived. The focus is to illuminate particulars and seemingly trivial aspects within experience that may be taken for granted in our lives, with a goal of constructing meaning and achieving a sense of understanding (Wilson & Hutchinson, 1991). In addition, Langdridge (2007) argues that our experiences can be best understood through stories we tell of that experience. To understand the life world we need to explore the stories people tell of their experiences, often with the help of some specific hermeneutic circle.

Laverty (2003) takes a self-reflection as the standpoint to generate meaning from lived experiences. For Laverty data is to be interpreted using hermeneutic circle that consists of reading, reflective writing and interpretation. As a qualitative research method, phenomenology takes the form of inductive approach to the world as a person has lived it. Phenomenology is suited for researchers with an intent to fully describe an experience as it is lived by a study's participant (Burns & Grove, 2001). In this form of research, research participants describe their lived experience, and the words participants use in describing their experiences become the data of the study.

3.3 Philosophical Assumptions underpinning this study

The epistemological and ontological view adopted in this study embraces the nature of reality to be subjective, socially constructed and only understood by examining the perceptions of the human actors. To this effect, reality is understood from multiple perspectives and it is holistic and contextual in form. The study is aligned to a growing body of researchers arguing against positivism, pointing out that the social science

deals with action and behaviour which are generated from within the human mind and so cannot be studied externally by the researchers and researched (Bryman, 2008). This is consistent with Merriam (1997) who argues that the key philosophical assumption of a qualitative researcher is that individuals interacting with their social world construct reality. It is assumed that meaning is embedded in people's experiences.

Further, in this proposed study, the axiological assumption stance taken considers the researcher's values as a critical ingredient to the success of the study as values aid to determine what are recognized as facts and the interpretations thereof. To this end, the present researcher is actively involved with that which is being researched since he happens to be a practitioner of inclusive education in Higher Education in Zambia.

3.4 Choosing Phenomenological Inquiry among the Qualitative Approaches

This study advances the frontier of knowledge on the lived experiences of Students with Visual Impairments. The study falls within the continuum of qualitative research approaches. Given that there are various approaches within qualitative research continuum, it become critical that the chosen approach is fully justified. What follows then is a set of qualitative research approaches that apply across disciplines. The researcher's aim is to justify the choice of a Phenomenology approach over the other qualitative approaches through a comparative analysis of the various qualitative research approaches. The contrasted qualitative approaches are: (i) Grounded Theory; (ii) Ethnography; (iii) Case Study; (iv) Transcendental Phenomenology and (v) Hermeneutics Phenomenology.

3.4.1 Grounded Theory

Grounded theory approach is a brain-child of Glaser & Strauss (1967), whose emphasis is learning from the data rather than imposing a prior theoretical position. Researchers in the grounded theory have a different objective, whose focus is to generate or discover a theory, while the phenomenological inquiry focuses on the meaning of people's experience toward a phenomenon, (Creswell 1998). The thrust of grounded theory approach is the development or generation of a theory closely related to the context of the phenomenon being studied. On the other hand, researchers in a phenomenological study seek to understand the meaning of experiences of individuals (not a group).

3.4.2 Ethnography Enquiry

Ethnography enquiry examines a given social group culture through time spent combining participant: observation, in-depth interviews and document analysis in the informants' natural setting. This cultural understanding may help answer questions about, people's beliefs and practices, concerns, individual experiences in certain types of settings, among others. Researchers in ethnography examine the group's observable patterns of behaviour, customs, and ways of life. According to Wolcott (1994:116), "The ethnographer's task is the recording of human behaviour in cultural terms." To the contrary, the research study at hand centres on lived experiences and not cultural and traditional norms.

3.4.3 Case Study

A case study is applicable in studies with an in-depth thrust having clear boundaries (Creswell, 1998). In a case study, researchers gather extensive information from

multiple sources of information. Yin (1989) recommended six types of sources: documents, archival records, interviews, direct observations, participant observations, and physical artefacts. In a case study, it is important for researchers to have contextual material available to describe the setting for the case and need a wide array of information about the case to provide an in-depth picture of it. However, in a phenomenological study, researchers collect data through primarily interviewing (Creswell, 1998).

In a phenomenological study, it is important for researchers to capture and describe how people experience some phenomenon – how they perceive it, describe it, feel about it, judge it, remember it, make sense of it, and talk about it with others. To gather such data, researchers must undertake in-depth interviews with people who have directly experienced the phenomenon of interest; that is, they have "lived experience" as opposed to second-hand experience (Patton, 2002:104). In this study, it was essential to have information on students with visual impairment's experience from their perspective and in their own words. Therefore, documents, archival records, and physical artefacts, which are required in a case study, seemed less suitable for this study. Given the foregoing comparative analysis among the various research approaches on the purpose, data generation technique, and the form of results among the different qualitative traditions, a phenomenological method was the most suitable for this study.

Furthermore, within Phenomenology Research discourse, there are two major schools of thought namely: Descriptive (Transcendental) Phenomenology and Interpretive (Hermeneutics) Phenomenology. Below is a further comparative analysis of the two

schools of thought to warrant the choice of Hermeneutics over Transcendental Phenomenology.

3.4.4 Descriptive versus Interpretive Phenomenology

Two major schools of thoughts on phenomenology exist namely: descriptive phenomenology and interpretive phenomenology. Descriptive phenomenology is associated with Edmund Husserl whose aim was to capture the essence of participants' experiences through structuring phenomena. In descriptive phenomenology, participants are regarded the experts, and the researcher is an instrument who describes, compares and distinguishes the information provided by participants and then constructs the information into a structured description.

Nevertheless, interpretive (hermeneutic) phenomenologists take the freedom to interpret the unspoken, unconscious, and hidden meaning they perceive to exist in the phenomenon under study, rather than simply provide a full description of the data (Cohen & Omery, 1994). This method permits researchers to make inferences about informants' experiences beyond that which is conveyed. Put in other words, Interpretive Phenomenology is also known as Hermeneutic Phenomenology (Langdridge 2007; Laverty 2003) and as Existential Phenomenology (Spinelli 2005).

In this study, Hermeneutic Phenomenological approach was chosen, as it was not only consistent with the reflective value on knowledge creation of the researcher but also due to the unique lived experiences of SwVI. Proponents of Hermeneutic Phenomenology approach argue that it is impossible and undesirable to set aside or

bracket researchers' experiences and understanding. Halling *et al*. (2006), observe that researchers need to come to an awareness of their pre-existing beliefs, which then makes it possible to examine and question them in light of new evidence. Further, Finlay (2008:17) postulates that researchers need to bring a "critical self-awareness of their own subjectivity, vested interests and assumptions and to be conscious of how these might impact on the research process and findings."

One of the tenets of Hermeneutic phenomenology is interpretivism. The interpretivist paradigm is also called the "anti-positivist" paradigm (Ernest, 1994). It is also referred to as constructivism because it emphasises the ability of the individual to construct meaning. The rationale behind the choice of the paradigm was guided by the research phenomenon under study: 'lived experience' that is a social construct. Since the phenomena under study is situated within the social science and not natural science, therefore, action and behaviour which are generated from within the human mind cannot be studied objectively by the researchers as advanced by Ernest (1994), Bryman (2008) and Warthal (2006). Warthal (2006) particularly observes that under Existential phenomenology, within which is Hermeneutics phenomenology, research should not be conducted from a detached, objective, disinterested, disengaged standpoint. This is because, certain phenomena only manifest themselves to one who is engaged with the world (Warthal, 2006).

3.5 Research Design

A Hermeneutics Phenomenology design was applied to study the lived experiences of SwVI as illustrated in Figure 4. Heidegger's thesis is on 'Being and Time', which was further expanded by van Manen's four reflective thematic areas on lived experiences. The four are:

i) lived space – Spatiality;

ii) lived body – Corporeality;

iii) lived time – Temporality;

iv) lived human relation – Relationality

(van Manen 1997).

In other words, lived experience takes place in 'Space', 'Body', 'Time' and 'Relations.' Owing to limited time available to conduct a longitudinal study, a cross-sectional approach was preferred to longitudinal approach. This was done through the segmentation of participants purposively selected according to their level of experience within the university from year 1 to year 4 at undergraduate level up to postgraduate level. This enabled the researcher to have a broader understanding of the lived experiences of SwVI (Body) with varying ages and academic years (Time) studying in a company of other students (Relations) within a common university environment (Space), (van Manen 1997).

3.6 Research design Matrix

A research design matrix with research objectives, data type, data sources, data generation and data analysis was used to illustrate the data generation process as highlighted in Table 4.

Table 3: Research design Matrix

Research Objectives	Data Type	Source of data	Data Generation	Data Analysis
(i) Explore barriers faced by SwVI	Practices	• SwVI	• Interviews • Shadowing • Observation	Content analysis

				• Reflective Diary • FGD	
(ii)	Explore enablers that empower SwVI to achieve success at university	Practices	• SwVI	• Interviews • Shadowing • Observation • Reflective Diary • FGD	Content analysis
(iii)	Describe the lived experiences of SwVI at university	Experiences	• SwVI	• Interviews • Shadowing • Observation • Reflective Diary • FGD	Content analysis
(iv)	Interpret contributing factors to inclusion of SwVI at university	Experiences	• SwVI	• Interviews • Shadowing • Observation • Reflective Diary • FGD	Content analysis

3.7 Sample Size

To settle on the sample size, Marshall and Rossman (1995) document three broad approaches, namely convenience, judgement and theoretical sampling. Therefore, the sample size provides a response to the research questions. According to Neuman (2003), qualitative research works focus on non-probability or a non-random sample, which entails that they seldom determine the sample size in advance. To this effect, the participants engaged consisted of SwVI. According to Neuman (2003), purposive

sampling does empower the researcher the right to select cases with a specific purpose in mind, namely to get information on the basis of their informativeness.

3.8 Participants' Brief Profiles

In view of ethical considerations, pseudonym were used to represent each participants for confidentiality and anonymity purposes as shown in Table 5.

Table 4: Participants' Brief Profiles

Pseudonym	**Profile**
Participant 1: *Tom*	A 46 year married man with family of 3 children and 7 dependants. He is a PhD student with total blindness. *Tom* lost his vision at the age of 10 through an infectious measles. He is a full time Lecturer at 'Sim' University teaching both the regular and distance students. He has published and presented at locally and internationally organised conferences on various themes bordering on disability, education, inclusion and human rights.
Participant 2: *Joe*	A 28 year old, 4th year undergraduate student with blindness at 'Sim' University. He is single and a double orphan. Joe lost his sight at the age of 12 due to an infection. *Joe* is reading for his first degree in Special Education via the regular study mode.
Participant 3: *Steel*	A 36 year old second year student at 'Sim' University with blindness. He is the last born in a family of 14. *Steel* is not yet married. He serves as primary school teacher in one of the rural provinces in Zambia. *Steel* is reading for his first degree in Special

	Education at 'Sim' University and happens to be the only student living with blindness studying via the distance-learning mode.
Participant 4: *Charm*	A married second year old student at Sim University with blindness. He is an in-service student reading for his undergraduate degree in Special Education through the regular study mode.
Participant 5: *Brid*	A single female student at Sim University with a condition called Albinism. Albinism condition has left her with low vision. She is reading for her undergraduate degree in Special Education through the regular study mode.
Participant 6: *Tau*	A single male student at Sim University. *Tau* has low vision. He is reading for his first degree in Special Education via the regular study mode.
Participant 7: *Frey*	A single male student at Sim University. *Frey* is with low vision diagnosed with schizophrenia challenge. He is reading for his first degree in Special Education via the regular study mode.

3.9 Sampling Procedure

In selecting participants for this study, the researcher employed a purposeful sampling method to select those who could offer him comprehensive information about the phenomenon (Mayan, 2009). With purposeful sampling, the aim is not to generalize findings to a larger population, but to select participants who will allow the researcher to understand the phenomenon in depth (Mayan, 2009). Therefore, the number of cases is less important with this approach than what the selected cases contribute to the understanding of the topic at hand (Stake, 1995).

3.10 Inclusion/Exclusion criteria

In order to choose research participants purposively, an inclusion/exclusion criteria was developed adapted from van Manen (1997) as follows: To be included as a participant, each student needed to have the following as reflected in Box 1:

Box 1: Inclusion/Exclusion Criteria

i) Lived with a visual impairment (Corporeality)

ii) Lived with a visual impairment for more than a year in the university (Temporality)

iii) Lived with the visual impairment in the target university (Spatiality)

iv) Lived with a visual impairment while studying with others in a university (Relationality)

v) Willingness to participate in the study through face-to-face interviews.

As highlighted above, lived experiences take place in Space, Body, Time and Relations. The choice of inclusion/exclusion criteria enabled the researcher to have a broader understanding of the lived experiences of SwVI (Body) with varying ages and academic years (Time) studying in a company of other students (Relations) within a common university environment (Space).

At the commencement of interviews, an informed consent form was given to target SwVI with an explanation. The informed consent form explained in detail the purpose of the study as well as the expectations for the study participants and the researcher's responsibilities. I made every effort possible to include sufficient information in the informed consent materials for potential participants to make an informed decision regarding participation in the study. Once the researcher received a signed consent

form from each potential participant, a schedule of the first interviews was then agreed on.

Seven participants were engaged to reach saturation of the lived experiences of SwVI, as demonstrated in Figures 4. The figure displays SwVI who were purposefully sampled according to their academic levels at Sim University.

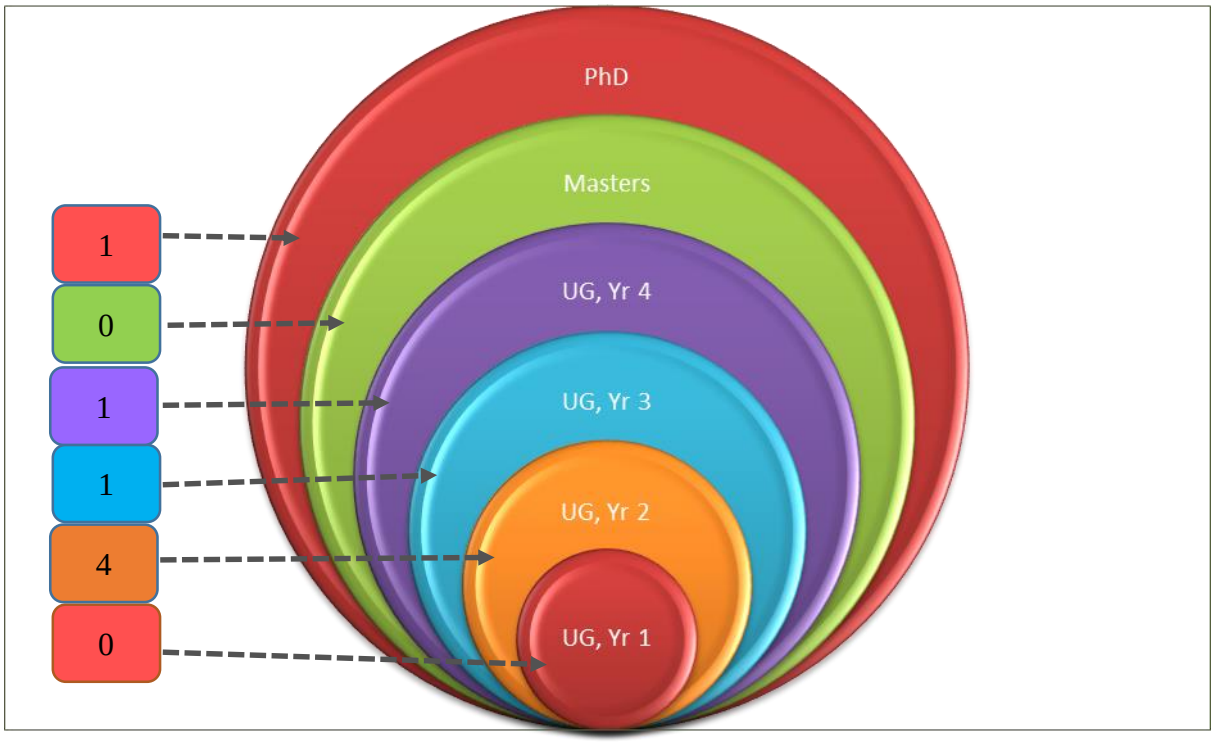


Figure 4: Sample Size of students with visual impairments
Source: Own illustration based on current study

3.11 Research instruments

In this study, the researcher used the following research instruments namely: unstructured interview schedule, focused group discussion guide and observation guide. Use of multiple tools strengthened the validity and reliability of the study findings as evidence was collaborated and triangulated from different viewpoints. In

addition, the researcher was equipped with a voice recorder as well as a digital camera to capture evidence on the subject matter where ethically permissible.

3.12 Data generation procedure

The data generation process took several steps to complete namely: (i) Shadowing, (ii) Interviews by researcher, (iii) Interviews by other students, (iv) Focus Group Discussion and finally, (v) Document Review. Note that, the data generation process took a cyclic process, since the process is repeatable once one has reached step five. Figure 5 provides a visual illustration of a data generation path taken with five stages by the researcher to elicit data from the engaged participants.

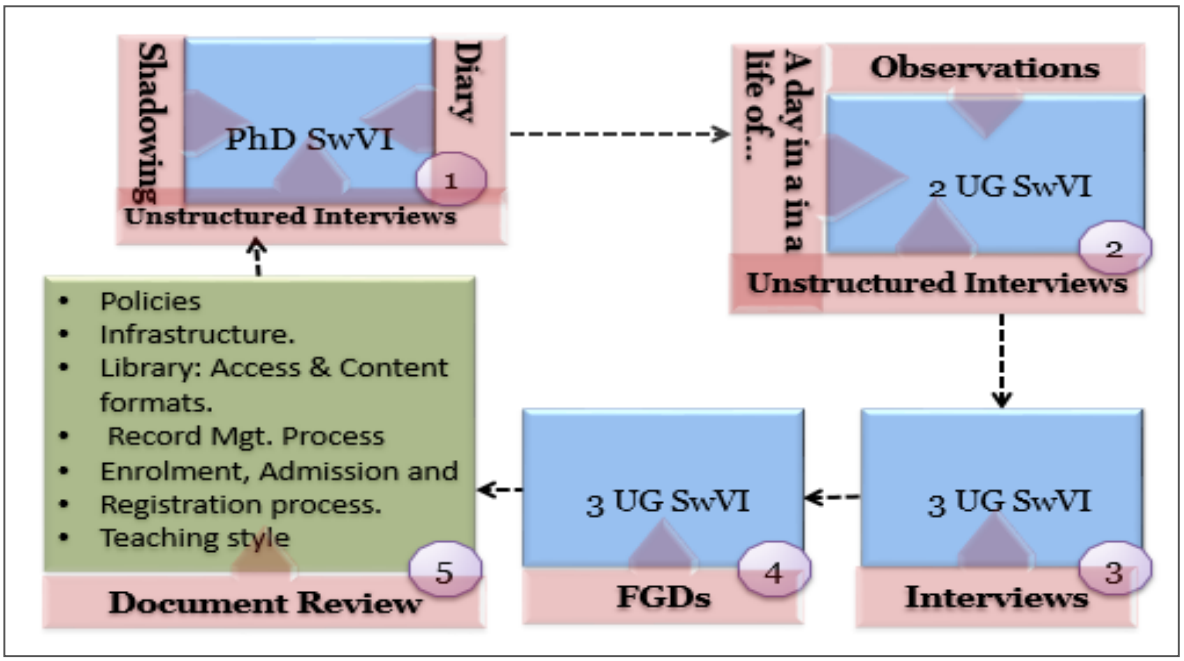


Figure 5: Five Steps of Data Generation Process
Source: Own illustration based on current study

1) At step one, shadowing and unstructured interview techniques helped to generate in-depth lived experiences of the lead participant who happened to be a PhD Student as well as lecturer with visual impairment (SwVI). A voice recorder, digital camera and diary enabled the researcher to document evidence and personal reflections while interacting with the phenomenon during the shadowing process.

2) At step two, two Undergraduate SwVI purposively engaged and interviewed had the longest duration among the Undergraduates in the university. While one of the two participants happened to be the only SwVI under the distance-learning mode, the other one was in his fourth and final year at regular study mode. Unstructured Interviews were used within which a day in the life of…feature was embedded to elicit in-depth narratives.

3) At Step three, a team of three second-year students were engaged to identify and interview three SwVI on their lived experiences within the university. This helped to widen the scope of the research data generators' perspectives as a means to validate the research findings.

4) Step four, involved three second year SwVI in a focused group discussion composed of a female with albinism, a male student with low vision (SwLV) and a totally blind. These helped to comment on the various emerging themes from the study with respect to their lived experiences.

5) Finally, step five centred on a review of policies as informed by the SwVI's lived experiences. The researchers had to authenticate a selected number of aspects identified by the participants as enablers or barriers in their academic life in the study such as:
   i) Infrastructure
   ii) Library services
   iii) Record Management System

iv) Enrolment, Admission, Registration and Accommodation

v) Media and Content formats.

Generally, the data generation approach taken was consistent with Bryman (2008), who advocates for collaborated evidence as a critical ingredient in qualitative research. To this extent, the approach deployed ensured trustworthiness, confirmability and dependability of the research findings.

3.13 Data Analysis and interpretation

The analysis of data in this study was concurrently done throughout the data gathering process using Inductive Data Analysis as shown in Figure eight. Field notes and interview transcriptions were reviewed from time to time to identify the emerging themes or patterns. The data were coded accordingly from the sources reviewed and across each site case. Specific analytic questions were developed relevant to the research questions informing the study and also based on the emerging themes. The data was analysed thematically and the identified themes were cross-checked by the participants for validation purposes. According to Clarke and Braun (2013), researchers are at liberty to express emerging research themes in various ways.

Given the four research objectives, a new data analysis and interpretation approach dubbed ‘Simui's Hermeneutics Crossword Analysis Framework (SHCA framework) was developed. It should be noted that van Manen’s four reflective thematic guide was used as a starting point for analysis of lived experiences as follows: (i) lived space – Spatiality; (ii) lived body – Corporeality; (iii) lived time – Temporality; and (iv) lived

human relation – Relationality (van Manen, 1997). The SHCA framework approach conforms to Ross's 1999 inductive data analysis strategy as well. See figure 6.

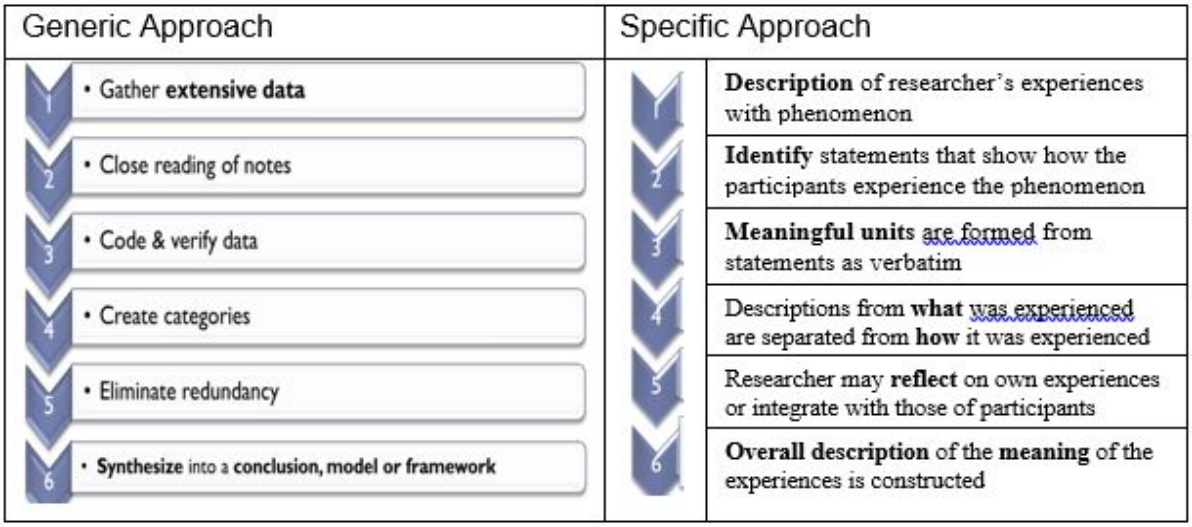


Figure 6: Inductive Data Analysis Strategy
Source: Ross, 1999

3.14 Symbols used in the accounts presented

Given Ross' (1999) inductive data analysis model in Figure 6 above, the following symbols below were adopted to elicit meaning from the lived experiences of SwVI as seen in Table 6.

Table 5: Symbols used in the accounts presented:

Symbol	Meaning
[…]	Removed text for anonymity and confidentiality on ethical principle
[*Text*]	Added explanation meant to provide context to the quotation
Name	Pseudonym in italics for clear distinction with the rest of the content
…	Irrelevant words omitted in a sentence
….	Irrelevant words omitted in a number of sentences
Quotes	Statements that show how participants experienced the phenomenon.

Source: Own illustration based on current study

3.15 Trustworthiness

In this study, Guba's (1981) four criteria was applied. The four elements are: (i) credibility, (ii) transferability, (iii) dependability, and (iv) confirmability. Unlike in quantitative researches where validity and reliability are the buzz words, in qualitative researches, the four highlighted elements are meant to assure the findings and the research process as trustworthy.

3.15.1 Credibility

According to Guba (1981) and Brewer and Hunter (1989), triangulation ensures that the research findings are credible. Triangulation encompasses the application of diverse methods, such as observation, focus group discussions and individual interviews, which form the major data generation strategy for qualitative research. In line with the above guide, the current study deployed the following data generation approaches: individual interviews, focused group discussion, shadowing and observation. Such an approach in data generation helped to complement the strengths and shortfalls inherent in each of the various data generation tools applied.

Researchers such as Shenton (2004) and Smith (2006) recommend reflexivity as another means to enhance and strengthen the credibility of qualitative studies (Shenton, 2004; Smith, 2006). In this study, reflexivity was applied as seen through the resultant innovation called Simui's Hermeneutics Crossword Analysis Framework. The framework was a result of deep reflections on the research process, which led to the emergence of 'essences' in line with Hermeneutics Phenomenology approach.

Early familiarity with the culture of participants prior to data generation is critical to assuring credibility of the research findings (Lincoln & Guba 1985). The researcher in

this study happed to have interacted with the participants for more than four years, having been their subject lecturer in special education. This enhanced the level of credibility of the research findings. In addition, the researcher had a master's degree in special education where emphasis was on various disability categories including visual impairment which gave the researcher insights into the lived world of SwVI prior to data generation.

Member checks is yet another tool that enhances credibility of the study according to Guba and Lincoln (1985). This is a critical ingredient to boost a study's credibility (Pitts, 1994). In this study, data generation was done at various intervals coupled with follow-ups for clarity and feedback to the seven participants. Member check was done through phone calls as well as face-to-face interactions. Considering that the researcher and the seven participants were resident within the same university, it became easy to conduct member checks to strengthen the credibility of the research findings.

Silverman (2001), argues that, examination of previous research findings plays a critical role in ensuring that the study results at hand are congruent with those of previous studies. This is an important criterion for evaluating the level of credibility in qualitative inquiry (Silverman, 2000). To this effect, 18 international databases as well as a local university repository, as demonstrated in chapter two (literature review), were consulted. This resulted in harmonised research process as well as findings.

3.15.2 Transferability

According to Morrow (2005), and Shenton (2004), findings of a study are transferrable if other researchers are able to generalise the findings to the given setting. This can be

achieved through boundary setting of the study. The research study boundary setting encompasses:

i) the number of organisations taking part in the study and where they are based
ii) any restrictions in the type of people who contributed data
iii) the number of participants involved in the fieldwork
iv) the data collection methods that were employed
v) the number and length of the data collection sessions
vi) the time period over which the data was generated (Morrow 2005 & Shenton 2004).

For this study, the institution involved was Sim University, the restrictions in the type of participants are reflected in the inclusion/exclusion criteria given in chapter three. The profiles of the seven participants who volunteered to comment on their lived experiences via various avenue namely individual interviews, focus group discussions and shadowing are documented in chapter three. The length of data generation lasted for four months (January to April, 2017) at a time when students were in residence. All this was used to set a research boundary for easy transferability as advocated for by Morrow (2005), Shenton (2004) and Pitts (1994).

3.15.3 Dependability

According to Marshall and Rossman (1999), Florio-Ruane (1999) and Witherell and Noddings (1991), the research design and its implementation, describing what was planned and executed enhances the dependability of a qualitative findings. The current study's research design and data generation procedure used and eventual findings generated are clearly documented in chapter three and four to strengthen confirmability aspect of the research findings and its related processes. In addition, the

last part of chapter five, is a reflection on the data generation process through the SHCA framework and the benefit realised. All this was included to ensure that the findings met the quality criteria of credibility and dependability as well (Shenton 2004 & Smith 2006).

3.15.4 Confirmability

In qualitative research, confirmability entails that findings are there result of the experiences of the informants, rather than the characteristics and preferences of the researcher (Shenton 2004 & Smith 2006). In this study, the findings are presented in a verbatim way in order to enhance the confirmability quality check. The SHCA framework was applied to distil experiences into 'essences' in line with hermeneutics phenomenology tradition. Subsequently, the essences were constructed into sociograms to map out patterns within the lived world of SwVI.

Therefore, the study findings and research process are trustworthy as the four quality checks namely (i) credibility, (ii) transferability, (iii) dependability, and (iv) confirmability were adhered to strictly as demonstrated above.

3.16 Limitations of the Study

The application of Hermeneutic Phenomenology methodology to generate, analyse and interpret data could have limited the creativity of the researcher to 'think outside the box. This then would have meant that, its application in this study needed a longitudinal dimension added to the identified target participants. However, owing to limited time available for a longitudinal approach, an effort was made to embed a cross-sectional dimension to the study. This was done through the segmentation of

participants purposively selected according to their level of experience within the university from year 1 to year 4 at undergraduate level up to postgraduate level. This enabled the researcher to have a broader understanding of the lived experiences of SwVI within a common university environment.

In addition, an ethical limitation arose, as the researcher could not engage all the participants involved throughout the stages of the study, given the emancipatory nature this study had assumed. The failure to involve all throughout the stages of research was due to the busy academic schedules students had to contend with during the period under study. Nevertheless, while not all students could get involved, the choice of Hermeneutics Phenomenology still gave the research an insight to the lived experiences of the target students using a retrospective approach. Further, three out of the seven students were available to provide extended commentaries on the transcriptions. The further input from students helped to authenticate the research findings on behalf of the rest, given that their lived experiences had a lot in common.

3.17 Ethical Considerations

In carrying out this study, ethical issues as guided by Cohen *et al*. (2000), such as verbal and written consents from all participants were followed. For Rubin and Rubin (2005), conversational partnership between the interviewer and interviewees is of paramount importance. According to Rubin and Rubin, this personal relationship generates ethical obligations for the researcher, because it can result in private information being shared. Therefore, a pseudonym was assigned in place of their actual names, to assure confidentiality and privacy of each participant. The *pseudonym* given were as follows: *Tom, Joe, Steel, Charm, Brid, Tau and Frey***.** In addition, the name of

the university where the participants were drawn from, a pseudonym ‘Sim University’ was assigned, to hide its identity.

The researcher stored all materials related to this research in a locked cabinet in his office to ensure controlled access to the participants’ confidential information. The interviews were transcribed, a CD with a backup was created of the interviews and before the original files were deleted from the digital recorder used during the interviews.

In line with the Educational Research Ethical Committee guidelines of Sim university, all participants were informed about the research, the importance of their contribution and how I was going to use the acquired data. In addition, verbal consent of all the interviewees were obtained before conducting all the interviews. This included asking for their consent to record the interview; sharing some of the information with the supervisors of the research and in the case of publishing any material, reassuring them that anonymised data obtained from the interviews would be used. Moreover, all the interviewees were made aware that their anonymity and confidentiality would be maintained throughout.

The researcher provided all contacted participants with a summary of the research, explaining:

- the research topic;
- the information needed to be generated;
- the individuals who it would be helpful to; and
- the confidentiality of the participants.

Once each interview was done, the researcher performed immediate transcription as supported by Oliver, Serovich and Mason (2005). All the participants were given the choice not to answer any questions that they did not feel comfortable answering, as well as to opt out at any point during the interview. They were also given the right to ask for any information to be taken out of the research, if there was anything they wished not to be included.

Furthermore, the ethics committee cleared the research proposal as provided for in the university regulations. The ethical clearance reference for this study was REF. HSSREC: 2018-May-014. See attached ethical clearance in appendix.

3.18 Summary

The chapter focused on the methodology applied with its related philosophical underpinnings as well as research paradigm. Given the nature of the research topic at hand, the study applied hermeneutic phenomenology approach targeting primarily students with visual impairments within a university. What follows next is chapter four, presenting the findings of this study.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.1 Overview

Chapter three focused on the 'How' aspects, otherwise referred to as Methodology, applied in this research study that culminated in chapter four on the findings of the study. As a recap, there were four key research questions addressed that guided this research study. These were:

i). What lived experiences exist among learners with visual impairment at Sim University?

ii). What enablers exist that empower SwVI achieve success at Sim University?

iii). What disablers do SwVI face at university?

iv). How can one develop a framework to interpret the lived experiences of SwVI at university?

The four research questions above formed the reflection point throughout chapter four and chapter five, as demonstrated by the themes that emerged subsequently.

4.2 Emerged Themes

After a six-month period of interacting with SwVI, the following themes emerged namely: (i) Lived experiences by SwVI at university; (ii) Enablers to learning experienced by SwVI; (iii) Disablers to learning experienced by SwVI; and (iv) Proposed analysis framework for lived experiences of SwVI. What follows below is a detailed presentation of findings based on the four themes as guided by the above research questions.

4.3 Continuum of Lived Experiences by SwVI at university

Students with visual impairments' university lived experiences were all linked to a series of stages namely: (i) Pre-Entry; (ii) Admission; (iii) Registration; (iv) Teaching-Learning; (v) Assessment and (vi) Graduate/Alumni as depicted in Figure 7. Once a student graduated, there was a prospect of enrolling for a higher degree as illustrated by the dotted line below. Learning experience stage appear to be influenced by a number of critical factors such as the social, physical, library and pedagogical environments as attested by SwVI in their accounts.

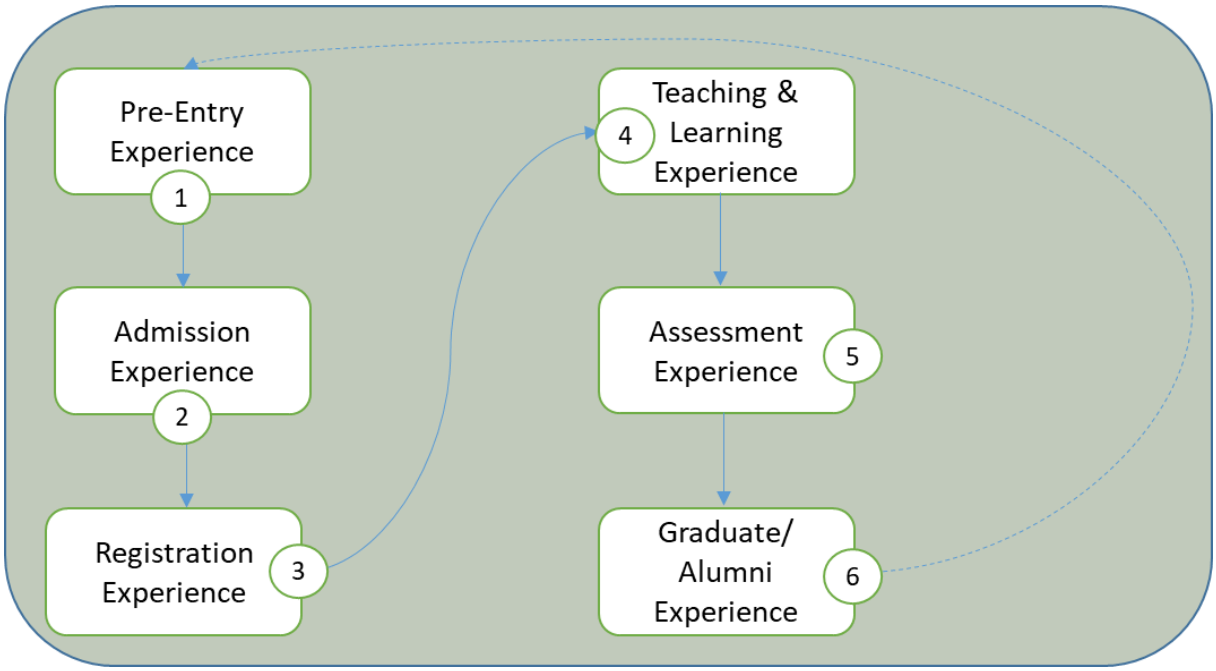


Figure 7: Continuum of lived experiences by SwVI at Sim University
Source: Own illustration based on current study

4.3.1 Pre-entry stage

At Pre-entry stage, a number of factors played a role in aiding SwVI to enter university education as observed by *Tom*, when he reflected on the role played by his parents after measles infection debilitated his sight. His father is singled-out to have played a

pivotal role in facilitating *Tom's* medical and educational interventions. For instance, *Tom* recounted how his father arranged medical intervention and educational placement to save a desperate situation in a vignette below.

> …quickly he organised transport to Kabwe General Hospital….So my left eye was completely removed, because it was damaged. That is how my life was saved and I became blind in grade 2….Though my father was not educated, (ended in sub-B), he was so inquisitive. He asked several people on what could happen in terms of my education. They told him about a school in Ndola for the blind. He researched about it and decided to take me to Ndola Lions school for the blind (Tom, 04.01.2017).

As for *Joe*, he attributed his post-traumatic success to the role played by a philanthropist organisation called Cheshire Homes. He observed that, the family was approached by Cheshire Homes. '*Later, tried to work on my sight but couldn't work. Then Cheshire Homes connected us to ST. Mulumba Special School in Choma for school placement*.'

Prior to becoming blind, *Tom* recalled how in grade two, term three he had under-performed academically. His academic performance was poor in the first two grades while he was still sighted. '*I recall in grade two, at the end of term three, the teachers reading out the academic performance of my class by name and when it came to me all he could say was, Tom, number zero!*' However, *Tom's* academic improvement came about with the onset of the blindness. With the presence of blindness and the change in school placement, *Tom* was down graded from potential grade three to grade one, where he learnt braille. Tom observed that, '*in my grade one in Ndola, I learnt how to read and write in braille.*' Consequently, '*in grade two, the teachers were convinced that my performance was well beyond what a grade two needed to know and do. So I was promoted to grade three and skipped grade two*.' This points to the

critical role played by the school in general and teachers in particular to establish a firm foundation for further success.

Steel alluded to his personal desire to contribute to improved livelihood of the disadvantaged and excluded in the community. This led him to apply for admission in the university. He observed as follows:

> I just developed a desire to do special education going by the numerous challenges that learners with disabilities were going through. I also had an interest on how I could come to the aid of those without access to education by developing mitigatory measures to sustain their lively-hood once I acquired my degree (Steel, 20.01.2017).

Tom remembered how Christianity transformed his life from a rebellious to a disciplined and hard-working person while in Eastern province. Consequently, he was the best student among the grade 10 entrants who emerged from the grade nine examinations in the Eastern province in his cohort.

> I was the best student in the entire eastern province. I remember my teacher wrote: 'it is unbelievable! Every one is shocked that these are your results! Can you quickly come to school' (Tom, 04.01.2017).

However, poverty at household level was the only threat to *Tom's* academic progression, as he had no money to get back to school. Further, because of his good academic performance, *Tom* was selected to do his senior secondary school (grades 10 - 12), at Hill crest Technical Secondary School in Livingstone. This opportunity to learn among the cream of his time could not materialise, as the secondary school had no supportive learning environment to attend to the learning needs of pupils with visual impairments at that time.

> The new challenge that emerged when I passed to grade 10 was that, the family had no money. No one was working. No one was earning any money….I should have gone to Hillcrest Technical secondary

> school in Livingstone but there was no special unit for the blind (Tom, 04.01.2017).

Consequently, *Tom* recalled how the entire term one of his grade 10 he could not go to school due to financial challenge. By the time it was term two in 1990, '*at that time I had already given my life to Christ and was reading several literature.*' *Tom* recounted the role played by the Lutheran Braille Workers through their literature distributed from which he came across '*testimonies of Christians who had made it in life yet blind….This motivated me to soldier on and go back to school despite lacking money. God shall provide*!'

One teacher realised the poverty challenge *Tom's* immediate family were faced with who then decided to share with his Church. '*That is how the church donated money to take me to school*.' He was redirected for placement at Katete Secondary school where he excelled with good academic performance. *Tom* observed that, '*eventually, I got 18 points in grade 12, which was quite remarkable in those days. At that time, 20 points was enough for anyone to be admitted at the University*.'

4.3.2 Admission stage

Once SwVI had managed to negotiate their way beyond grade 12 with good academic results, they now had an opportunity to further their studies at university level. For instance, Joe, attributed his getting admitted to the university as motivated and supported by other people and government sponsorship. He observed that, '*I was encouraged by a certain woman by the … to come here*.' He added,

> she was impressed by my results. At the time, we were struggling to find sponsorship. She observed that once admitted here, then I stood a good chance of being sponsored. So I applied for government sponsorship. Thankfully, I was awarded 100 percent bursary (Joe, 26.01.2017).

As for *Tom*, he successfully applied for admission to the university. However, when one of the teachers followed up the admission letter for *Tom*, the university registrar once he had noted that *Tom* was blind, could not release the admission letter. The registrar just said, '*no, we do not want blind students here….They are really a problem. We don't have facilities for them'* (Tom, 04.01.2017).

Tom complained but it could not work. He did not give up but opted to do a secondary school teachers' diploma course instead at a named college within the country where he specialised in teaching English and Religious Education. The second option had its own challenges that *Tom* had to face head-on to graduate as a secondary school diploma teacher. For example, *Tom* recounts how he was nearly denied an opportunity:

> I went for interviews; there was no one to attend to me until on the last day of the interviews, that is when I was referred to see the principal. He observed that I qualified for admission, 'but just give me your details; I will communicate to you later' (Tom, 04.01.2017).

Tom remembered how time flew by without any response from the college even when other prospective candidates had received their admission letters. Later, he made effort through phone calls to remind the principal about his promise but to no avail. *Tom* recounted, '*When I saw that my friends had received the admission letters but not me, I declared a prayer and fast session. Something started pushing me that, 'just pack your bags and go*.' *But I have no acceptance letter! 'Just pack and go.'* He had just completed his short contract as untrained teacher experience where he had raised money enough for transport to college. '*I told the people that I am going and I travelled*' (Tom 04.01.2017).

Upon reaching the college, *Tom* went to the office of the admission director who demanded for his acceptance letter before she could attend to him. In his own words, he said: '*I went to see the admission director who requested for my acceptance letter but I had none.*' With further explanations and involvement of the college principal, *Tom's* admission letter was eventually granted as well as accommodation space.

4.3.3 Registration stage

At Registration stage, students reported difficulties with the university procedures that did not favour SwVI compared to the sighted. For instance, *Steel* remembered how challenging registration period was.

> Registration was another challenge. You would find a queue whilst you have a cousin who also has other programmes and so it was a big challenge. To collect Modules was yet another challenge. Modules were printed in hard copies and those hard copies myself I cannot read them (Steel, 20.01.2017).

Queues are a common feature at Sim University and every student is compelled to line-up for various services during registration period. For SwVI, it becomes such a burden to queue-up in squeezed unfriendly environment often times for long hours as reported by *Steel* above.

4.3.4 Learning stage

The learning experience was reported to be linked to a number of factors such as social, physical, pedagogical and library experiences as illustrated in figure nine above. For example, *Steel* observed that, for SwVI under distance learning mode, developing meaningful social relations was one of the challenges he faced. This he attributed to pre-occupied minds of mature students.

> Everyone who is on this distance programme are mature students. The kind of support that one might want provided is quite limited. For instance if I want to go outside. I can even stand on the way,

> without even having someone coming to my aid for direction. This is because everyone is pre-occupied with his or her own business. This has been one of my challenges (Steel, 20.01.2017).

Steel's lived experience was re-echoed by *Charm* who observed that,

> When an assignment is given, I find it very challenging to research from library and internet. I must have someone to help me. Whenever I ask them to help me, they tell me that they are busy and I have to wait until they are done with their work. But then, what happens is that, when the assignments are given to us, we are asked to present or submit on the same day. I remember one day, I submitted a bit late through the tutor. At first, he was reluctant. Though he agreed and got my paper, he wasn't sure of my problem (Charm, 26.01.17).

Equally, important in a life of a university student is the availability of accessible reference materials that often time are stocked in physical libraries. For Sim University, none of the SwVI had visited the library for any reference materials, even when their sighted peers were competing for the available reading materials. The materials were said to be in hard copies that made them unfriendly to SwVI. For example, Joe reported that:

> In my four years of stay at the University, I have never been in the library. If I was to go there it would be just mere visiting. Here, there are no braille books. So, I find it more comfortable studying in my room and I usually study during the night. I enjoy studying during the night. Just for experience purposes, I may visit the library (Joe, 26.01.2017).

In the words of Frey, he recommended that, *'library staff should consider reserving space for us as well. I hear each time our friends go there that seating spaces are fully booked by some sighted students*.' Frey was able to appeal for a reading space in the library since he possessed low vision and so could still make use of the available prints using magnifying lenses.

4.3.5 Assessment stage

Assessment component is composed of Continuous Assessment (CA) and Final Examinations at Sim University. Within the CA, students sit for tests, write

assignments, present short papers during tutorials as well as get involved in practicum related activities. Courses are structured and weighted differently as approved by the university Senate. In most courses, students are expected to pass both the CA as well as the final examination before they can be deemed as having passed the course.

In one of the focused group discussions, *Brid* reported that, 'I am aware that all of us had some courses missing after sitting for our examinations.' *Charm* added further that,

> I understand the papers were given to Mr. *Tom* who also gave them to another person and the papers were misplaced. Not until a complaint was launched, that is when the papers were found and marked….some lectures were saying, if your paper goes missing, we have nothing to do with that, you just have to repeat the course (Charm, 26.01.17).

It would seem that some lecturers had negative attitudes towards SwVI as observed by *Charm* in his submission above. This could be pointing to the need for an inclusive policy to guide practice, as well as sensitization and capacity building among the teaching staff in the university, if the reported missing results challenge was to end.

4.3.6 Graduate/Alumni stage

Given the challenging experiences SwVI face within the university, it is unlikely that they may decide to do their further education at Sim University. This could be seen in very few numbers (only one) of SwVI who had pursued studies at postgraduate level, even when the university has been in existence for more than fifty years. However, given the strong will power demonstrated by SwVI, it was possible that many would still be able to advance their studies at postgraduate level as demonstrated by *Tom* [the pace-setter and model to other SwVI]. At a time when an alumnus re-joins the University for their Higher Degrees, it becomes yet another cycle of lived experience, hence a cyclic model as illustrated in Figure7, earlier.

What follows next are observed enablers to the lived experiences of SwVI at Sim University as depicted in Figure 8. The figure highlights various furniture which contributed to the academic progression of SwVI namely: (i). Elevator, (ii). Embossed map, (iii). Slant floor in the library, (iv). Overhead bridge slant passage, (v). Zebra crossing, (vi). Slant floor in the school of education, (vii). Slant passage to the graduation squire, (viii). slant floor in one of the university buildings.

Figure 8: Examples of inclusion promising practices
Source: Own illustration based on current study

Description: 1. Elevator, 2. Embossed map, 3. Slant floor in the library, 4. Overhead bridge slant passage , 5. Zebra crossing , 6. Slant floor in the school of education, 7. Slant passage to the graduation squire, 8. slant floor in one of the university buildings.

4.4 Enablers to learning experienced by SwVI

Emerging from the SwVI lived experiences were eight enablers which accounted for the academic progression and success of SwVI present at Sim University. These are illustrated in Figure 9 and clarified below.

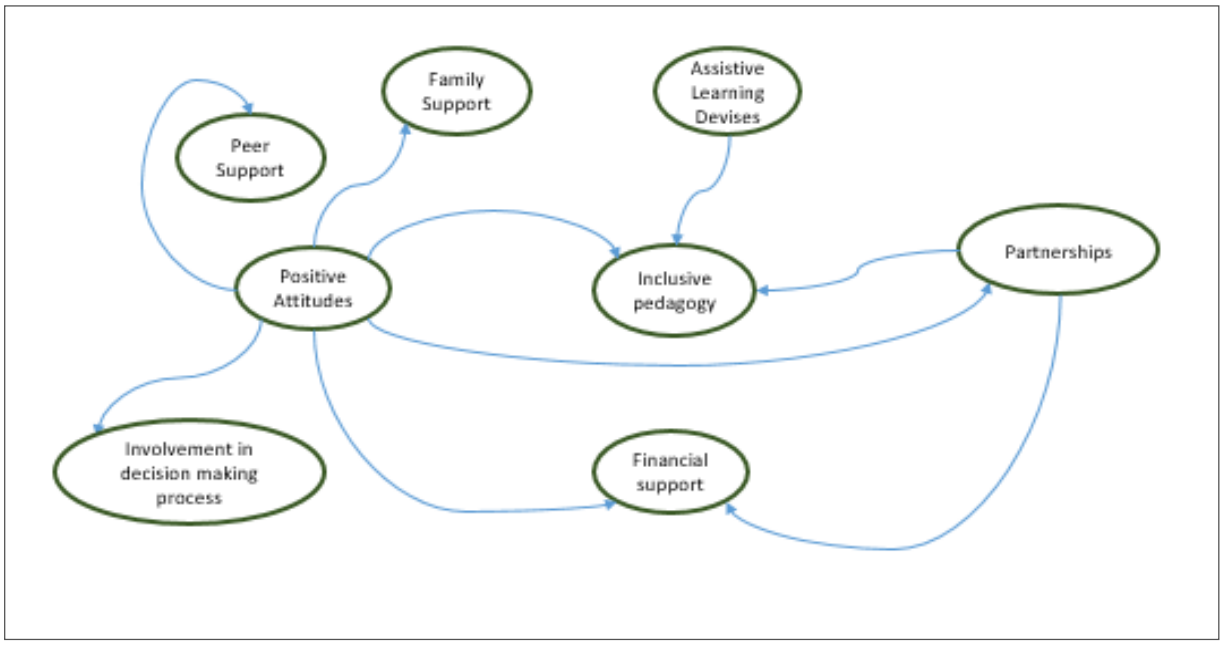


Figure 9: Actual Enablers to learning experienced by SwVI
Source: Own illustration based on current study

4.4.1 Positive Attitudes

A positive attitude appears to influence other enablers such as peer support, staff support, family support and other beneficial partnerships among others as illustrated in figure 11 above. Positive attitudes among SwVI as well as in people surrounding them was reported to be the most critical enabler to academic progression and their success at Sim University. Given the challenges that SwVI faced on a daily basis, having a positive attitude became a vital resource to carry them through various huddles of life. An example below of *Steel* typified the tenacity exhibited by the majority of SwVI when faced with a huddle.

> When I needed to be in third year, because of their institutional challenges, the university has returned me into second year. Myself for example I have been accused of not sitting for examinations and was equally accused of not submitting my assignments. However, evidence does show that I sat for the examinations. Even the resident lecturer….came to testify and discussed the issue with relevant officers on my behalf but to no avail. They have just maintained the same. This became so puzzling to a point where I almost quit! I almost quit, but I will remain resistant until I graduate (Steel, 20.01.2017).

Like *Steel*, Joe had his share of challenges to overcome through his positive attitude to life as well. He had had injuries in the past owing to inaccessible learning environment as can be attested in the example that follows below:

> I had my leg twisted [due to ditches around the university premises]….I was with a friend, a course mate….there was a deep drainage, he forgot to inform me and I ended up in a drainage and it was rainy season….I injured myself again. This time it was my hand. It really disturbed me. But I encouraged myself to soldier on with my education (Joe, 26.01.2017).

In his first semester, in year one at Sim University during registration period, the Assistant Dean informed Tom that he was too late for registration, to catch-up with his course mates who had been learning for six weeks. The Assistant Dean wondered how *Tom* would adapt to such a situation. Tom responded positively and pleaded with the Assistant Dean that he would still be able to perform well without any challenge. This was the third time *Tom* had attempted to do a bachelors' degree at Sim University, having been rejected entry previously. Below is Tom's conversation with the Assistant Dean, as he negotiated entry into the university:

> *[Assistant Dean]* '…we closed registration two weeks ago. How come you are coming this time?' I told him that I had just received my acceptance letter and so it was not my fault. 'But how do you catch-up? Your friends have been learning for 6 weeks*!' [Tom]* 'No, that should not be a problem at all!' I pursued the Assistant Dean, who then registered me….Life was tricky. There was no accommodation for me (Tom, 04.01.2017).

Some teaching staff within the university as reported by *Steel* also exhibited positive attitudes.

> For example, in special education courses i.e. EPS 2035 and EPS 2031, the lecturers who are handling me are very good, because they are taking into account my special needs, making sure that they provide the content in appropriate media (Steel, 20.01.2017).

Generated from direct observations of SwVI, it was noted that within the concept of positive attitude resided a host of other resources. Such resources included: persistence, optimism, focused, tenacity, 'I can do it' mentality and determination, seeing possibilities in obstacles, strong will-power, grateful, Zest for life, resolve and creativity. Consequently, SwVI were propelled to succeed in their education as observed from their lived experiences, illustrated in Figure 10.

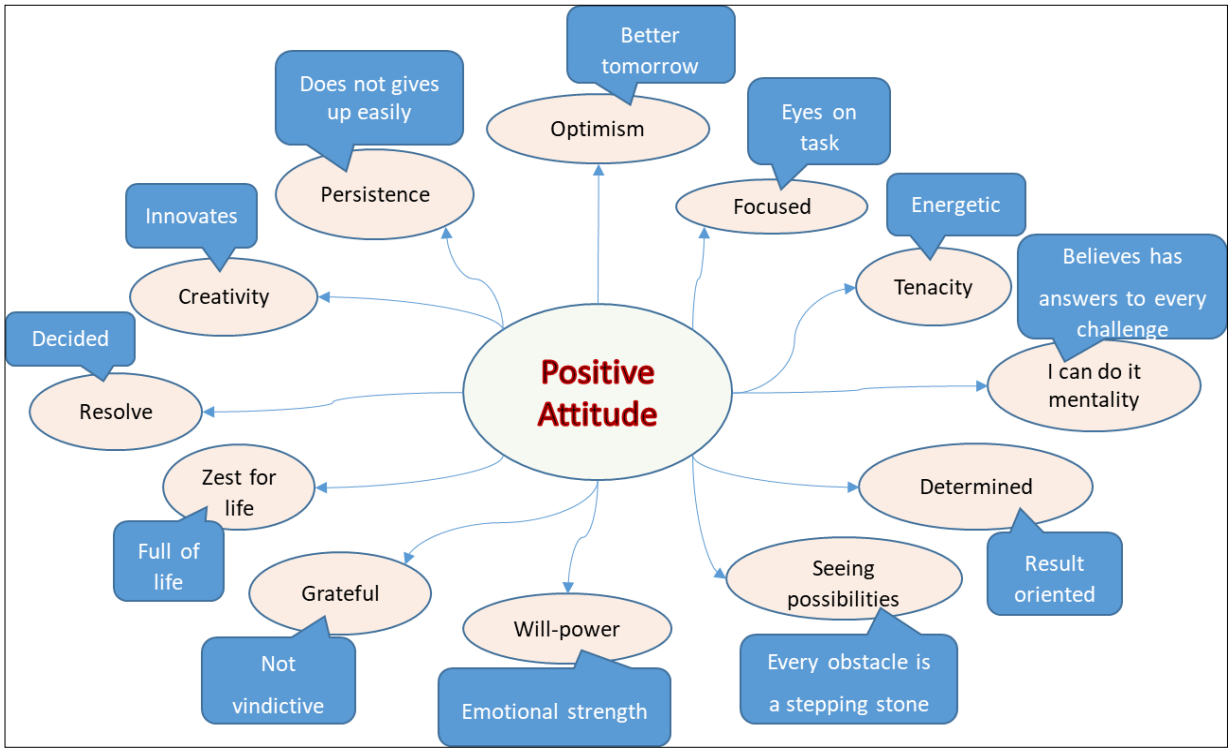


Figure 10: Positive Attitude Resources
Source: Own illustration based on current study

Positive attitude related attributes displayed by SwVI: Persistence, Optimism, Focused, Tenacity, I can do it mentality, Determined, Seeing possibilities in obstacles, Strong will power, Grateful, Zest for life, Resolve and Creativity.

4.4.2 Peer Support

Peer Support was identified as another critical factor to the progression and success of SwVI, as observed by *Joe*, '*When you are anti-social, you will face problems. However, as for me I socialise with many friends. That has really helped me*.' In addition, he conceptualised his lived experiences as follows:

> …it is never easy for a visually impaired student to make it this far [bachelor's degree]. Because where we come from there is usually nothing to point at [in terms of support]. For instance the time I was at…Secondary school, there was hardly any textbook in braille. This then entails that the education of the visually impaired students is in the hands of the sighted (Joe, 26.01.2017).

Joe's statement above was re-echoed by many other SwVI in various ways. For example, *Tom* observed that after his admission and successful registration at Sim University, he virtually had to depend on the support of his sighted peers to progress and succeed academically. The support ranged from social support, mobility support, financial support and academic support among others. Below is a lived experience of how *Tom* engaged his peers to teach him to master an ordinary typewriter meant for the sighted persons, to be able to write assignments, tests and examinations.

> …Yes, I had to learn to use an ordinary typewriter. I engaged friends to teach me the various letters and their locations on the keyboard until I mastered using it. In about 2 weeks, I had learnt the art. That's how I started typing my assignments using that type writer. I did the same with tests. Life became easy. Eventually, I did very well. At the end of the year, I got a merit. In some courses, I did have some 'A' grades. I even worn some prizes in some courses (Tom 04.01.2017).

Tom was prepared to spend extra funds to acquire a new typewriter and learn from others while the institution and staff were not ready to invest money in braille literacy skill. Eventually, he was rewarded for all his hard work, graduated with a merit in secondary school diploma programme. The Peer support was further demonstrated at

university level during the period he was not accommodated by the institution, a friend accommodated him.

> …I remembered that there was a gentleman had been with at college and was here by the name of […]. Someone had given me his number. Then I decided to call him. He was very busy. However, he responded, "…although I have a squatty, just for a start, you can be with us." That is how I started life at the university (Tom 04.01.2017).

Listening to the lived experiences of SwVI, at the core of Peer Support are critical related elements namely: empathy, dependence, values, warmth, trust, reliability, love, sensitivity, listening, collaboration, respectful and mutual reciprocity that propelled SwVI to succeed in their education as observed from their lived experiences above and illustrated in Figure 11.

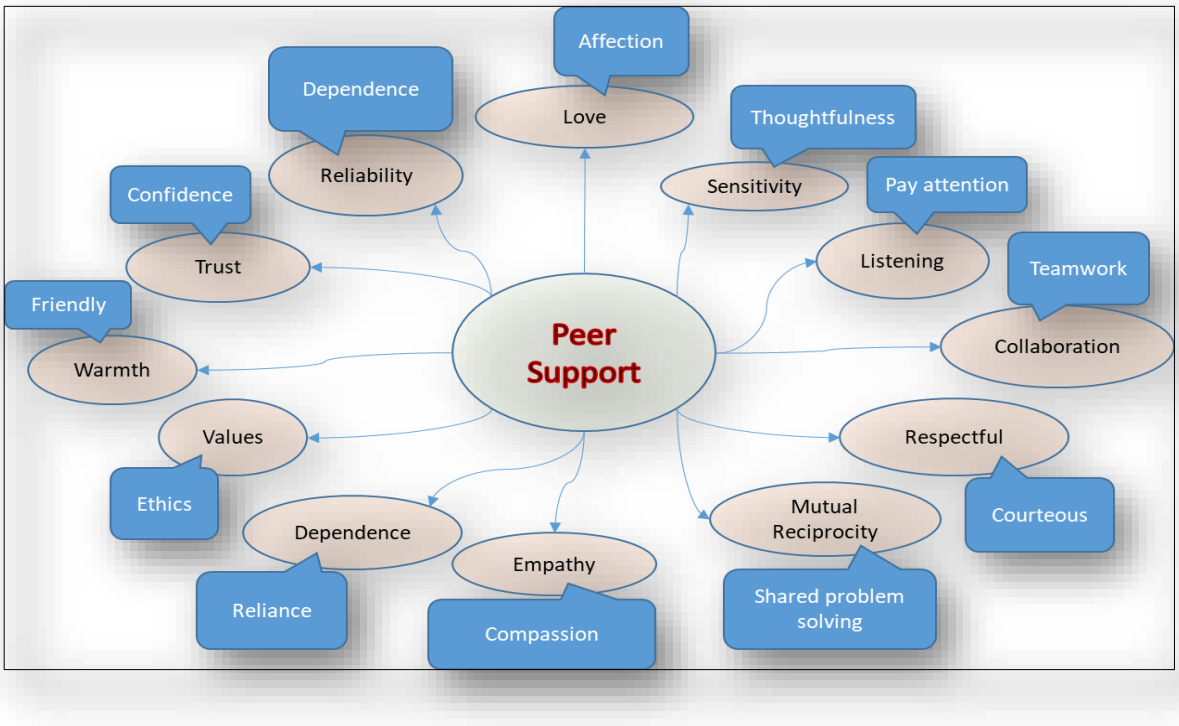


Figure 11: Peer Support Elements
Source: Own illustration based on current study

Peer Support related attributes displayed by SwVI: Empathy, Dependence, Values, Warmth, Trust, Reliability, Love, Sensitivity, Listening, Collaboration, Respectful and Mutual reciprocity.

4.4.3 Family Support

Just like the Peer support, Family support too was noted to contribute towards progression and academic success of SwVI at Sim University. For instance, *Steel* argued that during his first day at the university, he had to depend on a family member to adapt to university life.

> …Just the first day, a family member had to collect a mattress and a key to my apartment. That was a big challenge. I had to go and pick my cousin from within to come and help me. That I did and up to date, I am still depending on my cousin for me to move from point A to B. Registration was another challenge. You would find a queue whilst you have a cousin who also has other programmes and so it was a big challenge (Steel 20.01.2017).

Joe, like *Steel*, depended on his family during the first two weeks to adapt to the university life as well.

> …Unfortunately, I was left out on the accommodation list. So I had to go back home. I waited for about two weeks. Home is just near here! After appealing, I was accommodated. Later I shifted to […] campus (Joe, 26.01.2017).

It is apparent that family support plays a critical role in the education of SwVI as exemplified by *Steel* and *Joe* above among others. Areas of family support included but not limited to the following: finance; psychosocial, medical and accommodation as depicted in Figure 12.

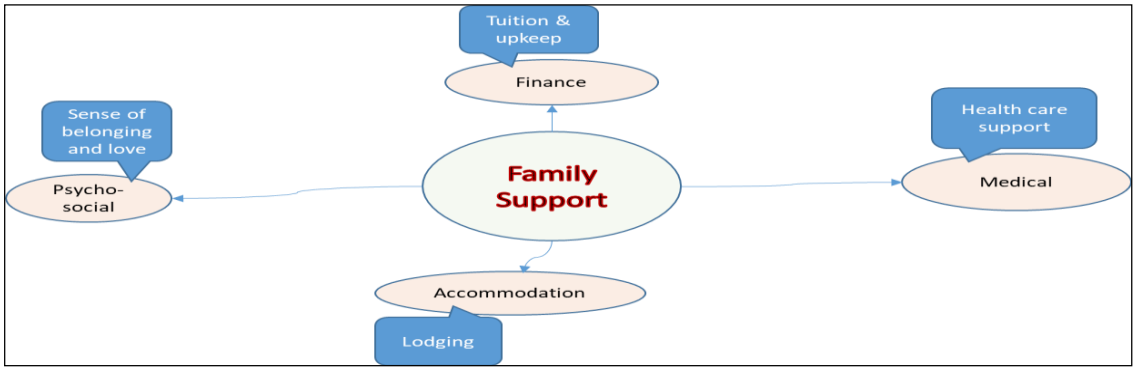


Figure 12: Areas of Family Support
Source: Own illustration based on current study

4.4.4 Inclusive Pedagogy

Inclusive pedagogy played a critical part in the academic progression and success of SwVI at Sim University. For instance, *Brid*, observed that her progression and success could be attributed to the support she had been given by her lecturers and tutors especially in her major.

> My lecturers and tutors in special education know how to handle us [*SwVI*]. However, in other courses such as EDU… the lecturer just come without recognising our presence. Often times, it happens that we are in the…lecture theatre and seated at the back [*due to overcrowding*]. It becomes very difficult to take down notes. I have to ask from friends to copy their notes. Sometimes I fail to read their handwriting due to my low sight (Brid, 26.01.17).

Bri was not the only one who noted the support received from the teaching staff. Equally, *Joe*, recounted the support received from the teaching staff as well. '*Lecturers are very kind, to give me their soft copies. Except in few instances where some lecturers claim to be computer illiterate*' (Joe 26.01.2017).

4.4.5 Assistive Learning Technologies

Assistive Learning Technologies (ALT) proved vital tools to the academic success of SwVI as described by *Tom*: '*I had to come with my old typewriter for all my academic work as first year student in the university*.' The same could be said of *Joe*, in the use of ALT for academic activities:

> ….In first year, it was a big challenge. But I decided to buy a voice recorder. Which I place in front of lecturers, after which I play back in my spare time. Then I also use soft copies (Joe, 26.01.2017).

In the case of *Steel*, under the distance learning mode, where hard copies were given instead of modules in braille format, he had to think of a solution outside the box.

> At registration into the university, I was given modules in hardcopy format. I forced myself to just go and buy a printer/scanner whereby when I got home I had to scan the modules and convert them into soft copies. I had to download a pdf editor which was capable of

> transforming pdf files to word files. That is what I did with those modules (Steel, 20.01.2017).

Just like *Joe* and *Steel above*, *Tom* and *Charm* all felt competent enough in the use of computers for academic activities. For *Tom*, both his desktop computer and laptop were well fitted with jaws to aid him when researching, typing and writing on-screen records.

In addition, *Tom* acknowledged the elevator facility fitted within the school of education, which makes movement easy when rushing for lectures. '*Yes, this is our lift. At least this one speaks and has braille. Which makes it very friendly. This is what we refer to as universal design*.'

For *Tau*, *Brid* and *Frey*, they all had special eye glasses put on during class time as well as during focused group discussion. The eye glasses aided them to see since the three had low vision. As for *Charm*, *Tom, Steel* and *Joe*, they had white cans aiding them navigate their way to learning spaces and around the university. It is clear that the use of white cans, eyeglasses, computers, jaws software, elevator, voice recorder and even the old typewriter helped SwVI successfully learn and progress in their academic endeavours. With the exception of an elevator, the rest were self-sourced, which demonstrated innovative mind-set, creativity and a strong will to succeed among SwVI.

4.4.6 Types of ALT in use by SwVI at Sim University

A close look at the ALT in use by SwVI at Sim University review that numerous technologies are in use to support learners in their education pursuits. These include the following: (i) cell phones, (ii) talking watches, (iii) eye glasses, (iv) jaws software, (v) laptops, (vi) desktops, (vii) while canes, (viii) voice recorders, (ix) embosser, (x)

scanners, (xi) text converters, (xii) head phones, (xiii) Learning Management System (LMS), (xiv) type writers and (xv) elevator. Apparently, with the exception of an elevator, embosser and LMS, the rest of the ALT in use were self-initiated and financed. Equally, the entire university has only one elevator despite having public storey buildings with levels two to five. The embosser in use was a domestic type mean for domestic use and not on a large-scale use.

At the time of this study, 24 students were classified as being visually impaired; hence, requiring visual support in their learning process. Among the 24, majority needed their academic works embossed in braille especially during assignment, tests and examination related tasks. However, the domestic embosser was not adequate to handle such a huge demand especially that for distance students they needed modules embossed in braille as well. In addition, the LMS had just been introduced to students at the time of this study. Before, the LMS and embosser were procured; all students under the distance learning mode, inclusive of the visually impaired were subjected to print media as the sole mode of accessing learning content. This made it very challenging for SwVI to learn and succeed in their academic pursuit. This could explain the rise in numbers of SwVI at Sim University in the recent past compared to the past.

Further, the bulk of ALTs in use by SwVI at Sim University were self-generated and financed. Whereas only *Tom* had nearly all the other ALTs , the other SwVI had fewer ALTs to aid them in their academic activities. To a larger extent such variations in ALTs across SwVI negatively impacted on their academic performance especially to

those who had no access to such support facilities owing to financial difficulties stemming from high poverty level.

Figure 13 depicts the various ALTs in use by SwVI at Sim University that contributed to their academic progression. In figure is clustered in six segments as displayed below. Cluster 1 was an old type writer used by *Tom* to type assignments and write examinations at one of the tertiary institution while pursuing a teachers' diploma programme as well as at Sim University. Cluster 2 were items used by SwVI to access information from the lecturers as well as internet as represented by a Voice recorder, laptop, head-phone, scanner and text convertor. Cluster 3 represented desk top computers, jaws software and a learning management system. These proved critical in the learning process. Cluster 4 consisted of an institutional embosser donated by cooperating partners, slate, braille and reading glasses. Cluster 5 represented assistive devices used for mobility purposes such as while cane and an elevator. Finally, cluster 6 consisted of devises used for communication and spatial orientation purposes respectively as exemplified by a cell phones and talking watch. For details, see Figure 13.

Figure 13: Identified ALT used by SwVI at Sim University
Source: Own illustration based on current study

Types of ALTs used clustered in 6 segments namely: 1. Type writer, 2. Voice recorder, laptop, head phone, scanner & text conventor, 3. Desk top, jaws, learning management system, 4. Embosser, slate, braille & reading glasses, 5. While cane, & elevator, 6. cell phones & talking watch.

4.4.7 Involvement in decision making

Involvement of SwVI in decision making by the university administrators equally played a pivotal role in developing innovative ways to deal with complex challenges. It should be stated that for this enabler, it was only applied at a low scale but yielded ground-breaking results. The example of *Tom*, whom the college teaching staff, while pursuing his diploma, was almost excluded from school because of their negative attitudes. It was only when, one member of staff [college counsellor], consulted *Tom* that a ground-breaking solution was found, using a typewriter meant for the sighted to type all his assignments, tests and examinations, even when he could not see what he was typing.

> … Others were even advocating that 'let him be expelled. Let him be sent home.' He is incompatible. The then late […] who happened to be the college counsellor, advised, 'why don't we consult him and establish what else can be done. If all fails, then we can recommend a transfer to other colleges. So, that is how I was called.... He told me the resolutions of the staff meeting, that I was asked to leave due to challenges lecturers had understanding braille. He then asked me for my input. I said no, it would not make sense for me to go, because I was already in. 'But, how do you communicate with your lecturers, because they need to mark your test and assignments?' [*Counsellor*]. Then I remembered to say, if I can get a typewriter then I think this will ease the challenge at hand among my lecturers. 'how can you use a typewriter when you cannot see what you will be typing?' [Counsellor]. 'It will be better. As long as what I am typing is readable by the sighted [*Tom*]. That is how the man said, OK! and then wrote letters to many organisations to request for a donation of a typewriter. One organisation called Lottery club responded and donated a triumph typewriter to me (Tom, 04.01.2017).

It is clear from the above, that solutions to the challenges encountered in the process of implementing inclusive education lie with the excluded persons. If only they can be engaged and consulted in decision-making process, institutions are bound to make a break-through to a multitude of equity challenges they face. In the case of *Tom*, a typewriter became a solution to the problem of communication between a braille

expert student and ordinary lecturers oriented to handle ordinary students alone. In this instance, the triumph named typewriter was the triumph of not only *Tom* but also the college and society at large, as demonstrated by the collage Principal. *Tom* finally graduated with a merit. In the words of *Tom*:

> …Eventually, I did very well. At the end of the year, I got a merit. In some courses, I did have some As [distinctions]. I even won some prizes in some courses. At the time I was leaving […], the principal called me and said, 'we are really humbled.' We never knew that blind people can make it here! Because, earlier, they had tried to enrol 3 blind persons. But, all of them failed to graduate. 'With what you have done, kindly make some recommendations for us, so that we continue enrolling blind students' [*Principal*]. Since I left the college, every year they have been enrolling blind students. This time around when I last visited the college, two weeks ago, to train them how to use jaws, they were telling me that they had almost ten blind students. …Although the challenge remains the issue of communication (Tom, 04.01.2017).

The devised solution helped to change the mind-set of the administrators and lecturers alike. Stereotype was at play and should be discouraged at all times, when dealing with SwVI. *Tom's* success had a ripple effect so was failure of the first three entrants at […] college, which resulted in stereotype of all blind students in the minds of staff. However, when *Tom* had a breakthrough, his success led to change of attitude among staff and many other blind students were attracted and enrolled yearly.

4.4.8 Financial Support

Financial support was yet another enabler to the academic progression and success of SwVI as already discussed. For instance, *Joe*, a double-orphaned SwVI, having met the admission criteria into the university, could only enrol after a 100 percent sponsorship from government was granted.

> At the time, we were struggling to find sponsorship. She [*Neighbour*] observed that once admitted here [*Sim University*], then I stood a good chance of being sponsored. So, I applied for government

> sponsorship. Thankfully, I was awarded 100 percent bursary (Joe, 26.01.2017).

Joe's need of financial support is similar to many SwVI. Given that SwVI spent more than their sighted peers, according to *Steel*, the need for financial resources becomes a critical driver to their academic progression and success. What is gratifying is that once SwVI are empowered with an education and are in gainful employment, they themselves become a sure source of financial support to their families and their community at large as demonstrated by *Tom*.

> …I am the fifth born in a family of seven from the same father and mother…. In terms of education, nearly all my siblings have ended at primary school level. As for me, thank God for the disability, I am the only one who managed to go beyond primary education to secondary and university level (Tom, 04.01.2017).

At a time of this shadowing interview, it was noted that *Tom* was a breadwinner to six of his children, wife and supporting ten extended family members directly. The researcher observed that, some of the extended family members were sighted and older than *Tom*, yet remained dependant on him. Whilst shadowing, the researcher also noted *Tom's* generous disposition to share resources among others unconditionally. At one point, a family member came in while we were in *Tom's* office, then asked for money, to which *Tom* responded positively by offering his ATM card and instructed the relative to withdraw a *[….]* for their use. At another time, *Tom* bought food for five adult men whom he had given a lift to [*Tom's* family car] on our way to the Ministry of Education to sort out his financial challenges. Before the close of the day, *Tom* decided to buy his family relish and other kitchen goodies. All this demonstrated the benefit of educating persons with VI to their families and community at large.

4.4.9 Partnerships

Partners played a significant role to enable SwVI progress in their academic pursuits. For *Tom* to progress, he needed a typewriter donated by a partner. At a time when *Tom's* typewriter got damaged, another partner in the name of Universal Christian Community (UCC) based in the UK came through and donated a jaws software. At the time of this interview, Sim University had a domestic embosser donated by the Zambia Information Communication Authority (ZICTA), which was being used to print tests, assignments and examination scripts in braille format. Equally, the only lift in use in the university was a donated facility. Clearly, partners are essential in the quest to implement inclusive education at university level.

4.5 Disablers to learning experienced by SwVI

Emerging from the lived experiences narratives were fifteen disablers to the success of SwVI at Sim University. These included: (i) negative attitudes; (ii) absence of ie policy; (iii) inaccessible learning environment; (iv) inaccessible learning materials; (v) exclusive assessment system; (vi) exclusive pedagogy; (vii) absence of financial support; (viii) exclusive sanitary facilities; (ix) limited orientation and mobility and (x) absence of landmarks. Others were: (i) limited institutional support staff; (ii) inadequate assistive learning devises; (iii) indiscipline; and (v) limited partners. For details, see Figure 14.

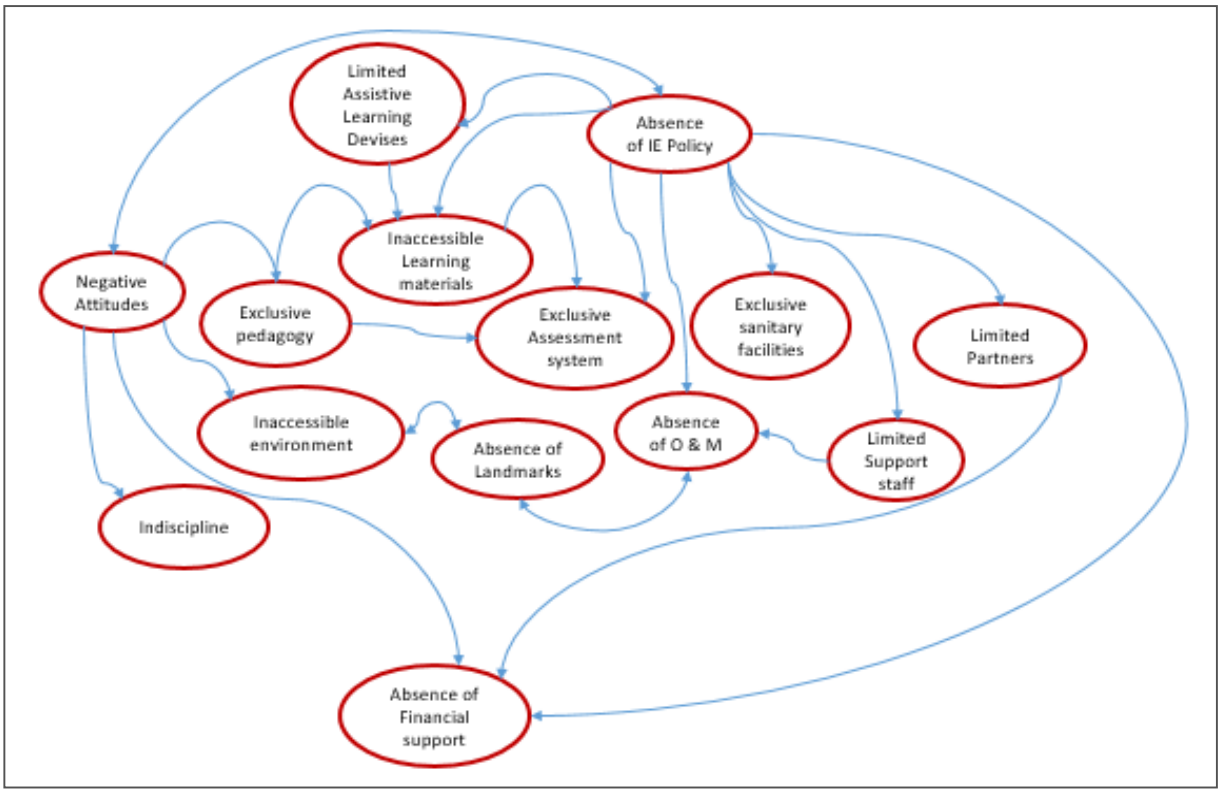


Figure 14: Disablers to learning experienced by SwVI
Source: Own illustration based on current study

4.5.1 Negative Attitudes

As displayed in figure 16 above, in the area of negative attitudes there were many incidences where these were manifested. For example, *Brid* reported a number of sighted students having bullied her based on her albinism condition. She painfully recounted how in the past she had been called demeaning and offensive labels.

> They call me all sorts of names. Aaaaah!!!!! Ati ka chitangwa nalesa (God's creation). Kamwabi (albino)….not in my class but kuma ruins (old residences for the male students) when I am visiting the shopping complex. This time, I have lent to ignore and move on. It is their nature. They do not know what they are doing (Brid, 26.01.17).

Equally, Tau had his moments when a sighted peer could not provide support to him due to suspected negative attitudes.

> There was a day I was going to another hostel and I asked for directions. The persons just pointed but then I quickly told him that

> I had a visual impairment and so could not see properly. He did not care. He just pointed and left me stranded. I felt it was an attitude problem (Tau, 26.01.17).

Negative attitudes appear to influence nearly all the other disabling factors as demonstrated in figure nine previously. Where the attitudes are negative, there is likely to be limited financial support, limited peer, family and staff support as well. This then entails that for SwVI to progress and realise their potential, the need for positive attitudes becomes paramount.

4.5.2 Exclusive policy

Nearly all the challenges pointed out thus far indicate the need for a functional inclusive policy to guide practice at national and institutional levels. How else can one explain the lack of accessible library materials to SwVI, the negative attitudes among staff and students, the absence of orientation and mobility to empower SwVI among others, other than to argue that such are a consequence of the absence of an inclusive policy? there are many incidences that could be cited pointing to lack of institutional inclusive policy. The first case is that of *Tom's* admission to the university on three occasions. However, his sheer determination helped him get admitted on the fourth attempt. The second case is that of *Brid. Brid* was relentlessly bullied within the university grounds without any recourse. The third and final case is that of *Steel*, who was forced to repeat a year because of the institution's failure to provide assessment materials in braille. Clearly, all the three cases illustrated above point to the need for an inclusive policy to guide practice.

However, even when a policy is crafted and instituted, *Brid* and *Frey* argued that some staff could still not comply with the guidelines. The two cited one policy in the school

of education, where the Dean had come up with a rule that front seats were for students with impairments. '*Other people do not care even with a statement from the Dean.*' This then calls for transformed values and attitudes of staff and students if inclusive education is to thrive in higher learning institutions.

4.5.3 Inaccessible learning environment

In terms of accessibility, *Steel*, described Sim University as not being accessible. In his words, he observed that: 'the environment is not accessible. You need to climb a number of stairs to access services. Roads are not well planned, no landmarks. For me to walk alone, is such an impediment. *Steel's* lived experience regarding accessibility was collaborated with others' experiences as demonstrated by *Charm* who painfully remembered his experience as well.

> I remember one time; I bumped into a metal pole. I happen to have surveyed the place without any guide. It made me fear to move alone. Thereafter, I feared that there existed many other poles around (Charm, 26.01.17).

In addition, *Joe* observed that inaccessibility of the university can be attested by the number of stairs one has to climb on a daily basis, a situation he described as scary.

> My day-to-day experiences honestly speaking, I am quite limited, because of my challenge. It is not that I don't know campus, but the things that frighten me are the arrangements, the issue of staircases. When I am moving around, I do so with a friend (Joe 26.01.2017).

Joe's expressed sentiments were shared by *Steel*, who loudly exclaimed that:

> The place here has **TOO MUCH STEPS! [Amplified voice].** Those steps become a hindrance to my mobility. On the other hand, the issue of the buildings being scattered all over is also another challenge. This is because, you find that I am required to attend a lecture in school of education and may be the following lecture is to be taken in the library basement. That becomes a challenge for me to move from one end to the other. How I wish special education was to be taken in one building to take into account the needs of learners with visual impairments. With one building, I can have no challenges. Even for a short period of being in this environment, I can adapt to that arrangement (Steel, 20.01.17)

The complications that result from inaccessible learning environment is that SwVI can be involved in avoidable life threatening accidents which consequently could render one to fail to continue with school. For instance, *Joe* recalled how one day he injured himself within the university premises.

> There is one day, I was with a friend busy chatting and he forgot to alert me that we were approaching a staircase. I injured myself badly. Now I was asking myself, 'imagine I had injured myself with someone, what if I was alone?' I had my leg twisted. Again, the other time I was going to town. I was with a course mate. As I was about to board a bus, there was a deep drainage, he forgot to inform me, I ended up in a drainage, and it was rainy season. There was water there and I injured myself again. This time it was my hand (Joe, 26.01.2017).

In addition, it was observed during shadowing process of *Tom* that the learning environment was inaccessible as it was full of barriers as noted by Steel and *Joe* above. The Figure 15 demonstrate how inaccessible Sim University was. In Figure 15, items i. and ii. represented the road from Tom's home to Sim University without safe walking passage, item iii represented the dangerous steep stares, item iv. Represented the taken for granted grill door obstructing easy passage near Tom's office, while item v. was a cluster of desktop computer cables littered in Tom's office. Further, items vi, vii & viii were stares at the hostels and library section within Sim University that SwVI had to negotiate with in their quest for higher education at Sim University.

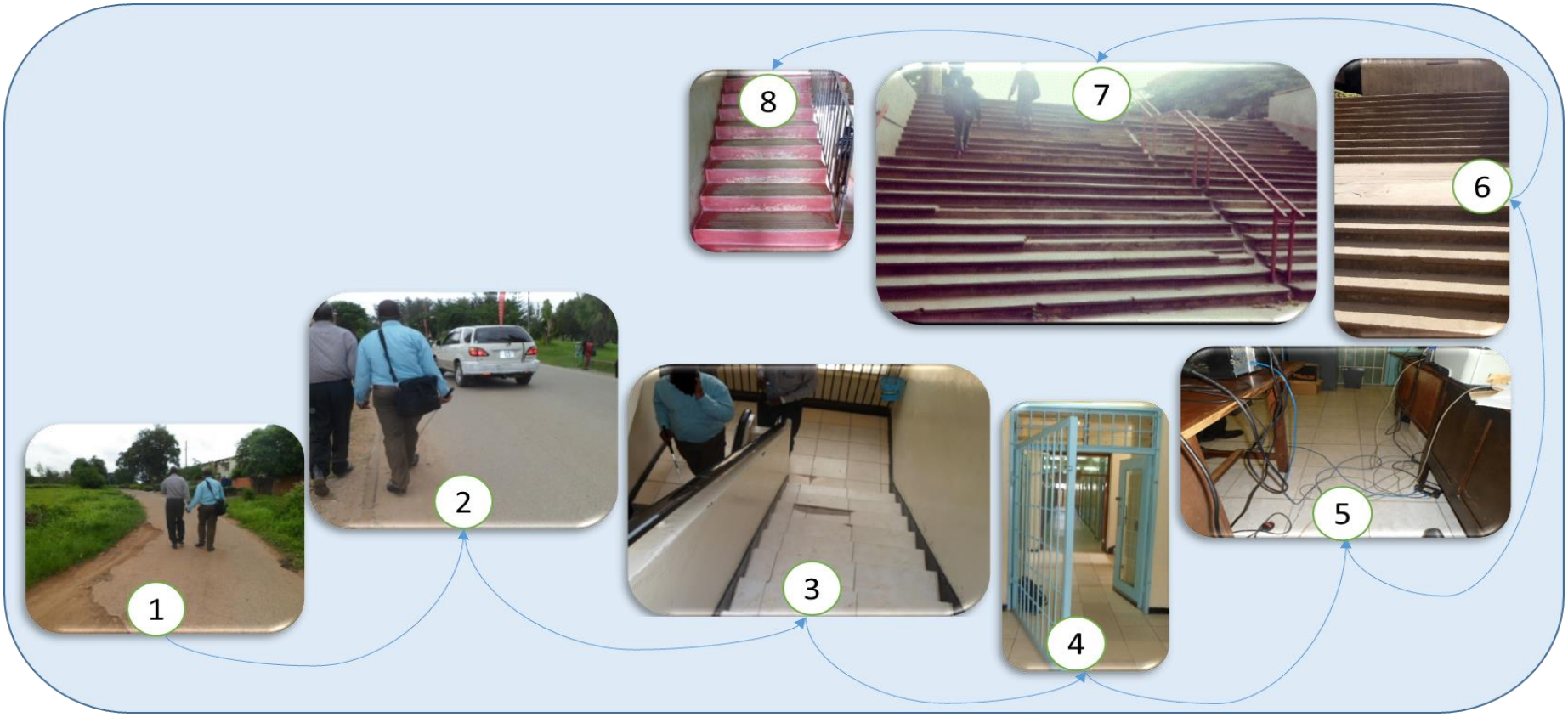


Figure 15: Inaccessible Learning Environment
Source: Own illustration based on current study

Description: 1 & 2 is the road from Tom's home to Sim University without safe walking passage, 3. Steep stares, 4. Grill door obstructing easy passage near Tom's office, 5. PCs cables littered in Tom's office, 6, 7 & 8 are stares at the hostels and library section within Sim university.

In Figure 15 above, captions one and two illustrate how dangerous it was for a SwVI like *Tom* to move from home to Sim University, given the non-availability of pedestrian sidewalks. SwVI were at risk of being hit by moving vehicles. Captions three, four, five, six and seven represented the challenge of stairs and the taken for granted overhead and ground obstacles in offices. Thus, it was observed by this researcher that given the many obstacles, a SwVI could easily fall down and injure himself or herself needlessly. In addition, since *Tom* carried two hats, i.e. that of a postgraduate student and lecturer, he was expected to visit the library for reference research materials. Apparently, captions six and seven represented the passage to the main library whose stairs cases were dilapidated and poised a risk to not only the sighted but also much more to SwVI.

4.5.4 Inaccessible learning materials

Earlier, we referred to *Steel's* solution to the challenge of modules in hardcopy. What is apparent is that modules for distance students are not accessible to SwVI as they are in hardcopy format. *'…I was given modules in hardcopy format to obviously use, when I am totally blind! What a puzzle*!' However, at the time of this interview, an innovative solution had been introduced and the university had started implementing e-Learning among distance students. In the words of *Steel*:

> [….] e-Learning platform is excellent. However, we have not gone very far with it. In my view, it is excellent and should be embraced by everyone. This is because, all one needs is to become computer literate then the issue of losing assessment results would be a thing of the past. Even following lecturers door-to-door will be the thing of the past. For example materials will be accessed on the e-Learning system. Which is very good. I will no longer be relying on hard copies. But the system will make available pre-installed or uploaded materials in soft copies. Which is very good for me, because it would reduce mobility challenges (Steel, 20.01.2017).

In addition, *Steel* observed that the library was not a friendly place.

> I remember it was just one single day when I visited the library….that was when I got my student card. After the student card issuance, I wanted to read some of the books found there. Unfortunately, I could not find any books or modules in braille. All of them are hard copies. That stated to me clearly in my mind that the library here is not helpful to people with visual impairment especially the blind (Steel, 20.01.2017).

4.5.5 Exclusive Assessment system

Some students reported challenges at assessment stage, as they were assessed using unfriendly print media both during the continuous assessment as well as during final examinations. Missing results was a common phenomenon among SwVI. *Steel* reported that he had been forced to repeat a year due to missing results experience.

> When the results came out, I only managed to pass two of the three that I had registered for. And the other one, they wrote 'None Examined' (NE). But, that was unfortunate because I had sat for that examination too. Evidence was there but the results were not available. That forced me to re-entry the same course the following year. It is devastating because, once results get lost and I have a mobility challenge, I cannot manage to follow them up on my own (Steel, 20.01.2017).

When *Tom* was asked to comment on *Steel's* experience, he observed that;

> The challenges he had were that, he wrote his assignments…, which were reported misplaced by lecturers. Then he wrote his examinations in braille. The exam went to the provincial centre in ink. They had to run around. Although that was our problems as well. I had communicated with the Institute to take care of the gentleman's needs to print all the exam papers in braille. I think that one was not done. So, because of that, he wrote all his exams with a lot of challenges. But, unfortunately very few papers out of those were transcribed. We didn't manage to trace all the papers. So you are looking at all those nasty experiences forcing him to repeat the same courses. Sadly, very few lecturers are willing to support the visually impaired students, which creates another challenge. This young man, out of 5 courses, he needs to repeat 3 of them which does not work very well. Wherever he is going, he is spreading a [negative] message (Tom, 04.01.2017).

4.5.6 Exclusive Pedagogy

The teaching methodologies or pedagogy adopted by most lecturers was exclusive to SwVI. For example, Joe observed that most of the teaching staff took a hasty-teaching approach, without taking cognisance of the needs of SwVI into account. He argued:

> My own experience has been that lecturers rush against time. In a space of one hour we cover a lot of content. As a result most lecturers, rush when they are delivering their lessons. They even tell our friends the sighted to write their notes in short forms to cover a lot of notes. This becomes a challenge to us who are using braille to cope up. Especially that I am not all that fast in terms of braille compounded by the speedy-rush lecturing, makes the whole experience very challenging (Steel, 20.01.2017).

As for Tau, a low-sighted student, he too has his own share of challenges during the learning process. He observed that,

> …on my part I am low sighted. When I am in class, it is very difficult for lectuers to take note of me. They just take the whole lecture room as being fine, (Tau, 26.01.17).

Reflected on the experiences in other universities within the Sub-Saharan Africa, *Tom* recalled how teaching staff adapt their pedagogy to meet the needs of SwVI, contrary to the approach followed at Sim University.

> We do not bother to ask the question how can I help you? All we do is to teach using whatever mean available to everyone even when some of those teaching strategies are not friendly to learners with disabilities. For instance, its common to hear: *See* the diagram on the board. *Copy* the notes on the board. Can you *see* here what they are doing? To date, there are no students in the schools of Humanities and Natural Sciences are enrolled in those schools. They keep on sending them to the school of education. Lecturers are not ready and willing to attend to SEN students, (Tom 04.01.2017).

In other words, the teaching approaches adopted by some of the teaching staff at Sim University are exclusive and not inclusive to the needs of SwVI. Such an approach if not checked could contribute to low numbers of SwVI able to progress and realise their potential at Sim University.

4.5.7 Limited Financial support

Limited financial support was reported to be a barrier to entry into university education. For instance, *Tom*, in his first year and first semester, could not register on time, owing to poor communication coupled with lack of financial resources. His would be sighted course mates had been learning for six weeks into the syllabus after the registration window had closed. This was yet another huddle *Tom* had to overcome, before he could be admitted in a bachelor's degree programme. Only sheer determination and positive attitude enabled *Tom* to eventually register progress and complete his studies.

Tom's lived experience is similar to that of *Steel*. Like *Tom, Steel* was an in-service student when he first joined Sim University. Steel observed that,

> I always spend more than my colleagues who are sighted. For instance, on food, I have a guide whom I accommodate and feed. So, I have to spend more than a K1000 ($100) every residential (period of two weeks), (Steel 20.01.2017).

Steel recounted his cost centres, unique to SwVI as follows: …on food, I have a guide whom I accommodate and feed. So, I have to spend more than a K1000 ($100) every residential period of two weeks.' From the Steel's extract above, it is clear that the Cost of living is higher for the VI compared to the non-VI students. The challenging part of the indirect costs of the education of SwVI, such as the cost for guide, purchase white cane and jaws software is that SwVI and their families are forced to shoulder such costs, even when they are living in abject poverty. This becomes a barrier, even when their tuition fees are fully taken care by government and other well-wishers.

4.5.8 Exclusive Sanitary facilities

Tau, had issues with the communal sanitary facilities within the hostels. He observed that the communal sanitary facilities were in poor state. He argued that, *'I fail to see*

whether the communal toilet or bathroom is clean. I just go their without realising that the room is unclean.' Unlike *Tau*, with low vision, the rest of SwVI were much more affected by the poor hygiene levels in communal sanitary facilities around campus, a situation they described as 'pathetic' and requiring urgent attention.

4.5.9 Absence of Orientation and Mobility

Reflecting on unforgettable nasty experiences in the university, *Tom* remembered a day when he equally fell into a ditch.

> I remember, there was a time, I needed to attend a lecturer in maths lab, in 2004 and I had just come in the university….there was no one to escort me….So decided to start off and take a risk. I started quite well….I found myself hammering flowers. Someone asked, where I was going, whom I told Maths lab. He responded to me that I was in…in an opposite direction to where I was supposed to he headed. He later volunteered to show me the direction to Maths lab via…. hostel. So he brought me back to the right route. I climbed and crossed over. But I had a challenge to cross where they park vehicles. That man just left after some few steps and gave verbal directions to me to go straight, whatever straight meant. Now, I crossed but I didn't know that where I was going there was a ditch. Two ladies stood afar off and they were saying '**eyeeee**, bala ponena muchilindi.' (meaning, ooh! He is going to fall into a ditch). Meanwhile I was headed in the same direction. At the time I heard them, I had already lifted my leg. I found myself in a ditch. The only good thing was that I fell sat. I didn't fell portrait. I went in with my two legs and sat down. Then, one of the two ladies said, 'wamona, efwo nachilalanda (meaning, you see, this is what I told you that he was going to fall into a ditch!). But I wondered, they saw me coming toward a ditch, but could they decide not to warn me! That is how I went back to my room. I could not attend that lecture, (Tom 04.01.2017).

Why is it easy for a sighted student to watch disabled students (perhaps course mate) fall in a ditch without offering support? Could it be a sign of negative attitude or lack of education? *Tom's* lived experience is a reminder on the need to embrace Orientation and Mobility (O & M) by all stakeholders, given the many barriers that exist in and

around the university. There is need to train all students and staff in O & M skills to be able to offer a service whenever required to do so.

4.5.10 Absence of landmarks

The earlier reported challenge of uncovered ditches and dangerous obstacles displayed all over the university premises was compounded by the lack of landmarks, as observed by *Charm*, *Tom* and *Steel*. For instance, *steel* concluded that,

> The university has no landmarks. The area is too vast. For us to move around and get to know places where we are there must be some landmarks. Therefore, I think it is a very big challenge, (Steel, 20.01.2017).

Going by the lived experiences of SwVI, the need for O & M appear to be linked to landmarks. In other words, as SwVI are oriented to their university surroundings, such an initiative would be meaningful when coupled with the presence of permanent landmarks. At Sim University, both O & M and presence of permanent landmarks were missing, leaving SwVI vulnerable and exposed to all sorts of avoidable accidents.

4.5.11 Limited Institutional support staff

Institutional staff covers both academic and non-academic support offered to SwVI learn effectively. From the on-going discourse, staff support to SwVI was limited to a few oriented in Special Education matters. In addition, support is directly affected by the attitudes and values staff have towards SwVI as well. Take the experience of *Tom* as an example below.

> A problem came up at …college even after fighting those battles. I only knew braille and there was no lecturer who knew braille to support me. When an assignment is given, I would write in braille and there was no one who could transcribe from braille to text language for lecturers to read. The tests, it was the same, (Tom 04.01.2017).

The experience of […] college is similar to that of Sim University, on the number of staff qualified in braille education. Very few [about two] are fully equipped to transcribe braille materials. Given the rise in the number of SwVI in need of their academic works transcribed, against the very few staff able to offer such a service, this becomes a critical needy area. In addition, Sim University did not have support staff engaged to act as guides and provide mobility and orientation service to SwVI. Coupled with limited specialised staff in braille education and the absence of O & M, SwVI are left at the mercy of their sighted peers to progress in their academic endeavours as argued by *Joe* previously.

4.5.12 Limited Assistive Learning Technologies

At a time SwVI enter university, they have expectations. One of those expectations borders on the availability of Assistive Learning Devices (ALT). At Sim University, the institution appears to be ill equipped with such tools as observed by *Steel* below.

> When I came here [Sim University], I thought I would be provided with Orientation and Mobility support, by helping me with a white cane and then orient me on the infrastructure. Sadly, I was not oriented, (Steel 20.01.2017).

As was noted earlier in 4.4.2.5 above, the bulk of the ALD used by SwVI are privately sourced and owned by individual students. It is clear that the use of white cans, eyeglasses, computers, jaws software, voice recorders, magnifying lenses, scanners and embossers enhance the learning experiences of SwVI to realise their potential. Therefore, there is need for the university to invest in this area as well.

4.5.13 Indiscipline

Nevertheless, *Tom* had his downside to life as he had disciplinary issues to contend with while at primary school level.

> I went up to grade 5 in Ndola but become became **rebellious** in the process to a point that I wanted to beat up the head teacher. I was suspended in the process. Just before my suspension, my father had grown so old and was in the village, My father then passed through seeking for my transfer to Mangwero school for the blind in Chipata. The head retorted that 'but your son was planning to beat me!' In fact there is a suspension letter for him here! My father was very annoyed with me and rebuked me in front of the head-teacher. The head-teacher commended him for his instant justice on me. That is how my transfer request was granted, (Tom, 04.01.2017).

Tom's rebellious experience could be attributed to the negative peer influence within the school, away from the parental guidance. It is for this reason that parents resolved to transfer him from a distant located school from home [about 800km] to a nearby school within the reach of the family. From Ndola Lions Special School, he was transferred to Magwero Special school for the blind.

> I went to do my grade 6 and 7 at Magwero school for the blind in Chipata, Eastern province. Everyone was in the village and so it was easy for them to take turns to escort me to and from school, (Tom, 04.01.2017).

4.5.14 Limited Partnerships

As noted above, partners play a significant role in providing the much-needed resources in the education of SwVI at university level. For Sim University, very few partners exist focused on SwVI, as alluded to by *Tom*.

> We need partners to come on board and join hands with the university, given the amount of resources needed to address the needs of students with visual impairments. Currently, very few VI focused partners exist, if any, (Tom, 04.01.2017).

Sim University, being a state owned university is open to partners willing to invest in the higher education sector, specifically in the area of SwVI. Partners could choose to focus on stocking the library with braille resources, donating an industrial embosser, donating slates and stylus, re-engineering the university environment with landmarks for easy orientation and mobility of SwVI among others. Further, they could choose

to capacity build staff in braille education, providing scholarship to deserving SwVI as well as providing employment opportunities to graduates with VI.

4.6 Summary

The chapter focused on the study findings as guided by the research questions. Major themes that emerged were (i) lived experiences by SwVI at university; (ii) enablers to learning experienced by SwVI; (iii) disablers to learning experienced by SwVI; and (iv) a proposed documentation and analysis framework for exploration of lived experiences of SwVI. In addition, students with visual impairments' university lived experiences were characterised by a series of stages namely: (i) pre-entry; (ii) admission; (iii) registration; (iv) teaching-Learning; and (v) assessment and (vi) graduate/alumni. Within this continuum of lived experiences existed enablers and disablers which were manifested in various forms such as attitudes, policy, learning environment, learning materials, assessment system, pedagogy, financial support, sanitary facilities, orientation and mobility, landmarks, institutional support staff, assistive learning technologies and limited partners.

CHAPTER FIVE

DISCUSSION

5.1 Overview

In chapter six, the researcher builds on the previous chapter by discussing the findings of the study. The chapter revisits the various themes that emerged in chapter five and weaves other researchers' findings conducted in various settings worldwide. The discussion anchors on the four theoretical models namely (i) Medical; (ii) Social; (iii) Phenomenological; and (iv) Human Rights models as earlier presented in chapter two, to elicit meaning from the lived experiences of SwVI. In addition, the chapter discusses the lived experiences of SwVI in higher education in two major segments namely: enablers and disablers. In the next chapter, we shall focus on the proposed SHCA framework as a tool for interpreting lived experiences of SwVI in higher learning institutions like Sim University.

5.2 Enablers to learning experienced by SwVI

Academic success of SwVI appear to be influenced by five critical factors at Sim University namely: (i) positive attitude, (ii) family support, (iii) peer support, (iv) institutional support, and (v) beneficial partnerships. The enablers were crafted from within the lived experiences of SwVI considered as having aided them to succeed in their academic progression. Students with visual impairments' university lived experiences were all linked to a continuum of stages namely: (i) pre-Entry; (ii) admission; (iii) registration; (iv) learning and teaching; (v) assessment and (vi) graduate/alumni as depicted in figure 11. The expanded continuum of lived experiences is related to Lourens' (2015) framework used to interpret the lived

experiences of students with disabilities namely: (i) pre-tertiary environment; (ii) social environment; and learning environment (Lourens, 2015).

5.2.1 A positive Attitude

According to UNESCO (2017), the greatest barriers to inclusion are caused by society, not by particular medical impairments. In this regard, UNESCO applied the *Social Model* to focus on external factors and not biological factors as championed by the *medical model,* as cause for marginalisation and exclusion. To this extend, negative attitudes towards diversity result in discrimination and can lead to a serious barrier to learning (Bešić, 2017). Negative attitudes manifest through social discrimination, lack of awareness and traditional prejudices. UNESCO (2017) observes that people in some regions still beliefs that educating the disabled is pointless. Therefore, for a SwVI to succeed in their academic pursuits, it takes one with a positive attitude to overcome secondary barriers emerging from negatively charged stakeholders. It is for this reason that *Joe* argued that,

> …it is never easy for a blind student [*corporeality*] to make it this far [*temporality*] [bachelor's degree]. Because where we come from [*Spatiality*], there is usually nothing to point at [in terms of support]. For instance the time I was at…Secondary school, there was hardly any textbook in braille. This then entails that the education of the visually impaired students are in the hands of the sighted [*relationality*], (Joe, 2017).

Underlying *Joe's* sentiments echoed above is the sense of positive attitude, consistent with the Harwick, Lindstromb and Unruh (2017), who argue that resilience, self-advocacy and self-determination are the key drivers to the success of students with disability in general. Equally, Bell, Devecchi, Mc Guckin and Sheylin (2016) stressed the need to encourage the development of self-determination skills among students with disabilities. As an enabling factor, self-determination skills was found to be a key

predictor of success in higher education among students with disabilities (Bell *et al*. 2016).

Whereas SwVI in this study demonstrated a positive attitude mind-set as their biggest enabler to their academic success, majority of the researchers appear to champion and perpetuate the negative label through their research works. For instance, Mutanga and Walker (2017), argue that students with disabilities display negative attitudes and a lack of preparedness for higher education. Consequently, this affects their full inclusion in higher education.

One reason to account for the divergent feedback from the researchers could be the methodological orientation applied. For example, unlike in qualitative research (self-reflection), quantitative methodological approaches (non-self-reflection) project beliefs, norms and values of the researcher onto the researched inherent in society. Thurston (2014) posits that quantitative researchers tend to think they know what is best for students with disabilities as projected through their structured data collection tools and approaches. An example of researchers who used quantitative research data generation approaches to elicit data among students with disabilities are Vickerman & Blundell (2010). In their study, those of the researchers drowned the voices of students with disability. Hence, the current study is a departure to Vickerman & Blundell's (2010) study, as SwVI voices took a centre stage.

According to Barbour (2007), quantitative researchers are unable to understand the embedded actions of people's everyday lives in detail. Contrary to Mutanga & Walker's (2017) assertion above, Zheng *et al.* (2016) observed that caregivers who had taken care of PWD for longer durations of time had a more negative attitude

toward disability. In contrast, PWD disabled for longer times had a more positive attitude toward disability (Zheng *et al*. 2016).

5.2.2 Family Support

Zheng *et al.* (2016) observed that over 90 percent of caregivers were people with disabilities family members. To this effect, family support becomes a critical determinant to the success of SwVI in their academic pursuit. For *Tom, Joe, Steel, Charm, Brid, Frey and Tau,* they all acknowledged the family support [*relationality*] in their individual academic progression. For instance *Joe* observed that it was through his family that Cheshire Homes identified him and later took care of his school placement at […]. For *Steel*, he observed that the first two weeks in the university, he depended on his family for accommodation and adaptation into the university life. The lived experiences of SwVI in this study are consistent with Bell *et al.* (2016) who in their study concluded that accessing support in higher education proved to be a complex process for some students. This then meant a sustained input from parents to ensure that students with disabilities utilise the support available. It is apparent that family support plays a critical role in the education of SwVI as exemplified by *Steel* and *Joe* above among others.

5.2.3 Peer Support

Just like family support, peer support [*relationality*] was highly rated as a critical ingredient in the education of SwVI at Sim University. In chapter 5, *Joe,* observed that 'When you are anti-social, you will face problems. However, as for me I socialise with many friends [*relationality*]. That has really helped me.' Joe's sentiments above were re-echoed by many other SwVI in various ways. For example, *Tom* observed that after

his admission and successful registration at Sim University, he virtually had to depend on the support of his sighted peers to progress and succeed academically. The support ranged from social support, mobility support, financial support and academic support among others.

5.2.4 Institutional Support

Institutional [*spatiality*] support took a number of forms at Sim University such as inclusive pedagogy, involvement of SwVI in decision-making and use of Assistive Learning Technology among others. Sim University's institutional support was in line though not fully with the Royal National Institute for the Blind's (2009) recommendations on how learning institutions could promote inclusive education. The four recommendations included the need for qualified staff; provision of one-to-one support for SwVI, provision of access to suitable technology; and provision of teaching assistants to support pupils with a visual impairment.

5.2.5 Inclusive Pedagogy

Inclusive pedagogy [*social model*] proved critical to the academic progression and success of SwVI at Sim University. Inclusive pedagogy was displayed through braille materials use for teaching/learning process, academic assignments in groups involving none VI students, extension of due dates to assignments, extension of examination and tests duration and provision of soft copies among others. In particular, Roe (2008) advocates for the use of group work in teaching/learning process as it promotes social inclusion for SwVI. As noted in chapter 5 above, a number of SwVI such as *Bri* and *Joe* observed that their progression and success could be attributed to the support they

had been given by some of their lecturers and tutors. Both *Bri* and *Joe*, recounted the quality of support received from their academic staff. 'Lecturers are very kind, to give me their soft copies, except in few instances where some lecturers claim to be computer illiterate' (Joe, 26.01.2017). *Joe*'s sentiments above fits well within Lamichhane's (2017) findings on pedagogical adjustments required for inclusive education to take root in institutions of higher learning.

The lived experiences cited above in the area of pedagogical support are consistent with other studies' findings. For instance, Douglas, McCall, Pavey, and Nisbet (2009), alluded to examinations adaptation provided in form of information in appropriate formats. In their study across England and Wales, Australia, Canada, Czech Republic, Denmark, France, Germany, Ireland, the Netherlands, Scotland and Sweden, it was reported that best practice matched the provision of adapted materials to the specific needs of learners (Douglas *et al.,* 2009).

5.2.6 Involvement in Decision Making

Involvement of SwVI in decision making by the university administrators proved a critical enabler in academic progression and success as innovative ways were created to deal with complex challenges. Though this enabler was applied at a very low scale, the enabler yielded ground-breaking results. Take for instance the lived experience of *Tom*, written-off by the teaching staff college was able to pioneer a new approach with an ordinary typewriter to bridge the communication barrier. The innovation was only realised when *Tom* was involved in decision-making process by the college counsellor. It was through the use of the ordinary type writer [meant for the sighted] that *Tom* was

able to type all his assignments, tests and examinations, even though he could not see what he was typing.

The resultant effect of involving *Tom* in decision-making was the successful completion of programme meritoriously as well as change of attitudes among staff, who previously had written-off SwVI. Consequently, a number of other SwVI got admitted and completed their studies as well, courtesy of *Tom's* involvement in decision-making process.

5.2.7 Assistive Learning Technologies

Use of technology was the other enabler to the academic progression and success of SwVI at Sim University. As reported by the seven participants, they all appeared to be using jaws supported technology to access information especially the very blind students. For the low sighted, they all used computers with magnifying tools to enlarge the content. As noted earlier, *Tom* reported that he had to come with his old typewriter for all his academic work, as first year student in the university. Equally, *Joe* argued that in his first year in the university, he had a big challenge to cope up with lectures. To overcome this challenge, he had to buy a voice recorder, which he used to place in front of lecturer for later playbacks in his spare time.

The use of ALT phenomenon reported above is consistent with Thurston (2014), Vasan *et al.* (2017), Walczak & Fryer (2017) and Lancioni *et al.* (2017) observations in the use of technology for SwVI in higher learning institutions. He observes that increasingly, technology was deployed by SwVI to provide curriculum access. Conversely, several studies take a view that technology promotes learning without considering the social implications of development and how technology may affect

them (Alves *et al.*, 2009). According to Rodney (2003), the curricular and psycho-social needs of visually impaired students are inseparable. Until they are administered jointly, social inclusion may not be possible (Rodney, 2003).

5.2.8 Beneficial Partnerships

Partnerships [*relationality*] played a critical role in enabling SwVI progress in their academic pursuits as noted by Bešić (2017). For example, *Tom* made progress in his schooling experience due to the support given to him through the donated typewriter as well as financial support. At institutional level, partners equally played a pivotal role through the donation of an embosser used to transform print into braille. The embosser was identified as a tool that teaching staff were using to convey print into braille especially tests and examinations. Without an embosser, the lived experiences of SwVI would have been a lot more challenging at Sim University.

From the experiences above, academic success of SwVI is dependent upon a number of factors such as a positive attitude, family support, peer support, support staff, assistive learning devises, and beneficial partnerships. However, as argued by Kühl & Eitel (2016) in Simui *et al*. (2017), the desirable difficulty has a tendency to force students to invest more mental effort and hence to learn more (Simui *et al.*, 2017).

5.3 Disablers to learning experienced by SwVI

Emerging from the lived experiences of SwVI is a host of factors reported to have disabled the learning experiences at Sim University. Factors included: (i) negative attitudes, (ii) policy-practice disjuncture, (iii) limited knowledge and skill base, (iv) staff unreadiness and unpreparedness, (v) associated cost of education, (v) inaccessible

buildings, (vii) rigid curricula (viii) limited assistant learning resources, (ix) low legal enforcement; and (x) poverty.

5.3.1 Negative Attitudes

Nearly all SwVI cited incidences where negative attitudes were exhibited. For instance, *Brid* cited incidents where sighted students bullied her based on her albinism condition [*corporeality*]. She painfully recounted how in the past she had been called demeaning and offensive language. This state of affairs described above point to lack of human rights [*Human Rights model]* enforcement by the duty bearers.

Equally, *Tau* had moments when a sighted peer could not support him due to suspected negative attitudes. *Tom* and *Joe* equally recounted incidences when they fell in ditches on their way to class owing to non-availability of support from the sighted peers [*relationality*] nearby.

The identified presence of negative attitudes in this study is common to many settings as noted by Chhabra *et al*. (2010); Hess (2010); Ainscow (2000) and Muwana (2012) in Botswana, UK and Zambia respectively. In the UK, students with a visual impairment were reported to be at risk of social exclusion and of being stigmatised for their impairment (Hess, 2010; and Ainscow, 2000). In addition, Chhabra *et al*. (2010) revealed that many regular teachers feel unprepared and fearful to work with learners with disabilities in regular classes hence their display of frustration, anger and negative attitudes toward inclusive education.

Thurston (2014) describes discomfort experienced by students with disabilities generated by peers outside their network of friends. Equally, Dart *et al.* (2010), reported that students experienced low self-esteem, loneliness and a lack of acceptance from their peers that consequently contributed to poor academic performance. Negative attitudes appear to influence nearly all the other disabling factors as demonstrated earlier in figure 16. Where the attitudes are negative, there is likely to be limited financial support, limited peer, family and staff support as well. This then entails that for SwVI to progress and realise their potential, the need for positive attitudes becomes paramount. It is for this reason that a number of researchers rank negative attitudes top among other barriers to inclusion. For instance, McDougall *et al.* (2004), contend that negative peer attitudes were commonly considered a major barrier to full social inclusion of students with disabilities in schools.

5.3.2 Absence of an Inclusive Policy

Generally, all the disabling challenges highlighted above indicate the need for a functional inclusive policy to guide practice at national and institutional levels. How else can one explain the lack of accessible library materials to SwVI, the negative attitudes among staff and students, the absence of orientation and mobility to empower SwVI among others, other than to argue that such are a consequence of the absence of an inclusive policy? Take the case of *Tom* who was almost denied access to university education at admission stage as observed earlier or the bullying experience of *Bri* within the university, all pointed to the need for an inclusive policy to guide practice. The case for *Steel,* compelled to repeat a year due to failure on the part of the institution to provide assessment materials in braille, point to the need for a functional inclusive policy.

In developed countries, a number of studies on the education of learners with disabilities in higher education have established the presence of inclusive policies. For example, Riddell, Tinklin & Wilson's (2004) study established that most institutions had staffing and structures in places to develop policy and provision for students with disabilities. In addition, educational provisions for persons with disabilities have supportive policies in a number of areas including admissions, infrastructure and into some strategic plans. However, at Sim University, an inclusive education policy was missing at the time of the study.

Even where an inclusive policy is available, there are instances where a disjuncture between policy and practice prevails. For instance, Mosia & Phasha's (2017) study findings suggest that a disjuncture existed between students' experiences of university accommodation practices, and current university policies. In this regard, Read *et al*. (2003), argue that education that does not accommodate student diversity perpetuates inequality in society. These restrictions also violate human rights of persons with disabilities.

5.3.3 Inaccessible Curricula

The researcher observed that of the more than twenty SwVI at Sim University none of them was enrolled in any other faculties except school of education with a major in special education. *Tom* attributed this phenomena to inaccessible curricula in other faculties. This is consistent with Matlosa & Matobo's (2007) findings in Lesotho on the visually and hearing impaired students. Their study showed that access for students with visual impairments to science-related programmes is constrained by Mathematics

and Statistics requirements, insufficient resources and lecturers' lack of understanding about the students' disability and support needs.

5.3.4 Limited Assistive Learning Technologies

At a time SwVI enter university, they have expectations. One of those expectations borders on the availability of Assistive Learning Technologies (ALT). At Sim University, the institution appears to be ill equipped with such tools as observed by *Steel* who had hoped that Sim University would provide him with a white can and other assistive learning devises. For instance *Steel* re-called that: '*when I came here, I thought I would be provided with Orientation and Mobility support, by helping me with a white cane…. Sadly, I was not oriented'* (Steel, 20.01.2017). Similarly, Maguvhe (2015), revealed that blind and partially sighted learners find it difficult to pursue mathematics and science subjects because learning support devises are limited and teachers are not capacity-built to create a conducive learning environment for SwVI.

Given the state of affairs at Sim University, ALT could be used to bridge the gap between non-sighted and sighted individuals. As noted by Walczak & Fryer (2017), an audio description (AD) style could be used to enhance awareness levels of the environment by SwVI through spatial presence, ecological validity, engagement, and negative effects. In addition, Vasan *et al*. (2017) supports the innovative use of technology to enhance the welfare of people with visual impairments. Further, Lancioni *et al.* (2017) advocated for the use of a smartphone-based program to promote independent leisure and communication engagement in people with visual impairments. As for Sim University, none of the modern technologies advocated for

by Walczak & Fryer (2017) and Vasan *et al*. (2017) were available. Instead, most of the available technologies were outdated and privately sourced by individual SwVI.

It is clear that the use of white cans, eyeglasses, computers, jaws software, voice recorders, magnifying lenses, scanners and embossers enhance the learning experiences of SwVI to realise their potential. Therefore, there is need for the university in question to invest in this area as well.

5.3.5 Staff limited knowledge and skill in Braille

A number of SwVI questioned the level of competence in braille among staff, as braille course work could not be transcribed on time. For instance, *Steel* painfully recollected how he had been forced to repeat a year due to missing results attributed to failure by the institution to provide assessment materials in accessible formats. This finding is similar to Emong & Eron's (2016) findings, where students reported that their university had found it challenging to transcribe brailed works into print. Consequently, blind students did their examinations, as they were not brailed. *'I feel it is unethical*.' Affected students retorted that it was unethical on the part of the university. It made SwVI feel that their former secondary schools were better than that university in understanding their disability as it had brailed examinations for them (Emong & Eron, 2016).

Staff's limited knowledge and skills in braille and general welfare of SwVI appear to have contributed to their unreadiness and unpreparedness. This is re-echoed by *Tom's* lived experience during the time when he was pursuing his teaching diploma. Whereas the college staff had earlier resolved to exclude *Tom* from studies, they were

magnanimous to acknowledge their unreadiness due to limited knowledge and skills. This finding concurs with that of Maguvhe (2015) and Sahin & Yorek (2009), namely that many teachers do not have direct experience in teaching blind and partially sighted learners. They do not know what to do to improve the learning conditions of their learners in cases where resources are scarce.

In addition, Chhabra *et al*. (2010) observed that a significant number of regular teachers felt unprepared and fearful to work with learners with disabilities in regular classes and so displayed frustration, anger, and negative attitudes toward inclusive education as they believed that it could contribute to inferior academic results. Equally, Mayat & Amosun (2011) noted the lack of lecturers' awareness in their study, which explored the perceptions of academic staff of admission of students with disabilities at a South African university.

5.3.6 Inaccessible Infrastructure

All the SwVI consulted painfully recounted how inaccessible Sim University's infrastructure was. They all noted the presence of staircases and lack of pedestrian walking-paths within the university. Gelbar *et al*. (2015) reported the same experiences where they noted that, students with disabilities faced challenges such as inaccessible buildings, rigid curricula and negative attitudes of staff and lecturers. Therefore, Banda-Chalwe *et al*. (2013) contended that accessibility to premises, facilities and services was a right by people with disabilities. To this extent, inaccessibility of the physical environment is a violation of that right.

Further, Swain & French (2008) observed that exclusion was the denial of rights and responsibilities of an individual expressed in oppression, which shaped the personal and collective experiences and expectations of People with Disabilities (PWD). This is consistent with the current United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) protocols. The UNCRPD mandates nations to respond appropriately to identify and eliminate obstacles and barriers to accessibility and ensure that PWD participate fully in all aspects of life (UN Convention, 2006) and the Zambian government at policy level has embraced this.

One key infrastructure to the learning process identified by all SwVI at Sim University as being inaccessible was the university library. All of the seven SwVI consulted had not used the library for learning purposes as it had study materials in inaccessible formats. Whereas academic libraries are expected to provide services to people with visual impairments, Majinge & Stilwell (2014) noted that their services were not inclusive or universal. This then entails that, an inclusive policy regarding provision of library services to people with disabilities be formulated and implemented. In addition, adequate budgets and staff training are a must to have.

5.3.7 Cost of education for SwVI

The cost factor appears to have played a significant role in the education of SwVI at Sim University. Take the experience of Tom and *Steel*, who despite being in-service students; they both almost got excluded due their poor financial status. Despite their poor financial status, *Tom* and *Steel* argued that they spent more than their sighted colleagues towards their education did. In chapter 5, *Steel* recounted his cost centres, unique to SwVI as follows: '…on food, I have a guide whom I accommodate and feed.

So, I have to spend more than a K1,000 (an equivalent of US $100) every residential period of 2 weeks.' From *Steel's* extract above, it is clear that the cost of living is higher for the VI compared to the non-VI students. The challenging part of the indirect costs of the education of SwVI, such as the cost for personal guides, purchase of white canes and jaws software among others, is that SwVI and their families are forced to shoulder such costs, even when they are living in abject poverty. This becomes a barrier, even when their tuition fees are fully taken care of by government and other well-wishers.

This study's finding on cost element is consistent with Emong & Eron's (2016) who argued that the monetary value of the basic requirements for a blind students to effectively study exceeded far much the financial support they received from the university. For example, a blind student received during the first year of his studies, 1,400,000/= Uganda Shillings (UGX). He was expected to buy; a Perkins machine which is 2,000,000/= UGX, a carton of Braille paper at 94,000/= UGX, Jaws computer software which is 2,300,000/= UGX, and a laptop computer which is at least 1,200,000/= UGX. For the student of limited mobility using a wheel chair, the cost of a new wheelchair is 400,000/= UGX. To this extent, the cost of educating SwVI far exceeds the financial support provided (Emong & Eron, 2016).

To problematize this situation further, the cost incurred on assistive learning technology may not result in effective learning on the part of SwVI where they could not influence how their lecturers project their voices or move around the lecture rooms, and could not record lesson content successfully. For instance, Mosia & Phasha's (2017) findings indicate that students with disabilities incur costs that their non-disabled peers are spared from. SwVI were dependant on technology to access

information. Hence, they bought essential hardware such as tape-recorders. However, where technology without lecturers augmenting their teaching approaches accordingly, students could not fully benefit from it. Students' experiences revealed that they felt that they could not influence how their lecturers projected their voices or move around the lecture rooms, and nor could they record lesson content effectively.

5.3.8 Poverty

Related to the cost, as a disabling factor is the poverty status. For example, *Tom* was temporarily excluded from school due to poverty at household level despite his outstanding academic performance at secondary school. The findings on cost, poverty and access are consistent with the Central Statistical Office in the 2000 national census, which revealed that 43.2 percentage of the 256 690 people with disabilities (2.7 percentage of the total population) had no education and only 1.3 percentage had attained a high level of education (Banda-Chalwe *et al.,* 2013).

5.3.9 Lack of Legal Enforcement

The inaccessible learning environment and materials in the library, rigid curriculum, lack of guides, absence of orientation and mobility, absence of landmarks, limited assistive learning devises, all point to a weak legal enforcement mechanisms at institutional as well as country levels [*Human Rights model*]. For instance, the legal provisions, the Persons with Disability Act of 2012, Part V stipulates that the Minister shall ensure that the education system is inclusive at all levels, higher education inclusive. This will result in the full development of human potential, sense of dignity and self-worth, personality, talents and creativity through the provision of an enabling

environment. It therefore entails that the persons with disabilities are included in the education system without exception. Further, Lamichhane (2017) argues that reasonable adjustments be made in order for the affected persons to have meaningful access to curricula. The individual requirements of SwVI's provision could include braille, other alternative modes and formats of communication, orientation and mobility skills and facilitation of peer support (Disability Act of 2012).

Whereas a legal framework is an important ingredient, Emong & Eron (2016) observed that a legal framework is not an end in itself but just a means to the realisation of inclusive education. For instance, Emong & Eron (2016) documented a Ugandan experience in its quest to achieve inclusive education. That, despite having legal supportive provisions, students with disabilities were not yet included. This was the experience of Nepal as well (Lamichhane, 2017).

5.4 Being a student with visual impairment at Sim University

The key question for further discourse is 'what is it to be a student with visual impairment at Sim University?' This is an ontological question delving into the lived experiences of SwVI at Sim University at a particular time of their existence. According to van Manen (1997), the question borders on *'Being and Time'* derived from the German dialect equivalence of '*Sein und Zeit.'* It would therefore seem that whereas student with visual impairments are physically present at Sim University, it is clear that they are absent and missing-out on the learning process due to various barriers highlighted in the findings chapter above. In other words, the question calls to mind the *'Forgottenness of Being,'* as advanced by Heidegger (van Manen, 1997).

Nearly all the accounts reported above resonated within the social model and medical model approaches as they sought to explain the enabling and disabling reality as resident without and within the affected individuals respectively. Further, to illuminate the discourse of lived experience of disability, Guilherme & Freire (2015) focused on Phenomenology model to explore the enabling and disabling reality in affected individuals. For example, in their study, they applied Merleau-Ponty's theory of 'embodiment', where the body was viewed as mediator of the world. According to this theory, the body was central to one's 'understanding' of the world, to one's engagement with others, as well as to one's self-transformation.

To this end, another critical question arises: what are the implications for the individual's interaction with others when one of the body's senses, such as sight, is impaired in one way or another? In their study, Guilherme & Freire (2015) engaged with this question and focused on blindness and how it affected one's interaction with others. Findings suggested that 'dialogical education' as conceived by Martin Buber was a useful tool in bridging the gap between non-sighted and sighted individuals. According to Morgan & Guilherme (2012) and Cohn (2001), Martin Buber (1878–1965) philosophised the *'I and Thou*' type of relationship as being a powerful tool to achieving meaningful inclusion in society. The *'I and Thou'* relationships was characterized by spontaneity, subjectivity, reciprocity, and recognition and acceptance of the unique other as essential for humanhood (Cohn, 2001).

On the contrary, the experiences of *Tom 2017*, where he was denied admission on three occasions in one particular higher learning institution and twice at Sim University on account of his disability point to what Buber refers to as *'I and It*' relationship. In the

'I and It' interaction, individuals observed others and kept part of themselves outside the moment of relationship. This was done either to protect their vulnerabilities or to get them to respond in some preconceived way, to get something from them (Morgan & Guilherme, 2012).

How else can one explain the presence of the fourteen identified disablers faced by SwVI at Sim University which limited their access to and participation in the higher education sector other than through Buber's *'I and It*' type of relationship? Like in the medical model way of conceptualising reality, the *'I and It*' type of interactions heaps blame on the affected SwVI and not society. In addition, through the many painful accounts presented by SwVI, it is clear that they were viewed as '*things'* and not '*beings,'* by society which led to their missing out on the priority list of the same society. For instance, *Joe* observed that it was never easy for a blind student to complete their studies at university level, as there was usually nothing to point at in terms of support. *Joe's* lived experience was shared by his peers as well as demonstrated above in the findings chapter.

To this end Buber urged society to reflect deeply and consider others as being '*Beings'* and not *'things'* as encapsulated in his '*I and Thou'* relationship if inclusion is to thrive. In the case of Sim University, there were indicators that pointed to the presence of the '*I and Thou'* type of relations within. For example, the presence of the supportive peers, relatives and staff to SwVI pointed to the existence of the '*I and Thou'* relations a precursor to inclusion. Except, as observed by Buber the '*I and Thou'* relationship is a '*momentarily'* issue (Fife, 2015) and (Morgan & Guilherme, 2012). In other words, there exists a ridge between and within the *'I and Thou'* and *'I and It'* relationships

(Morgan & Guilherme, 2012). Thus, the *'I and It'* relation could punctuate one moment of the '*I and Thou'* relation as well. This then explained the many experiences SwVI lived where their closest relatives, peers and teaching staff acted as disablers in other instances.

From the epistemological conceptualisation of this study, the approach chosen was informed by ontological orientation of the study as supported by Buber's who argued that the *'I and Thou'* relations were not quantifiable. Attempts to quantify the *'I and Thou'* relations immediately negated its power and became the *'I and It'* relation instead (Morgan & Guilherme, 2012). Hence, the choice of Hermeneutics Phenomenology approach. Through this approach, the study has brought to the fall the reality of lived experiences of SwVI which prevailed at Sim University through their '*eyes'* and '*voices'* undiluted.

5.5 Constructed framework to document and interpret Lived Experiences

This section is an extension of the findings and discussion chapters and responds to the last research objective focused on developing a framework for documenting and interpreting lived experiences of SwVI at University. The emergent framework is dubbed Simui's Hermeneutics Crossword Analysis Framework (SHCA framework), a result of six months of deep reflection on the lived experiences of SwVI. The multi-dimensional framework consists of three segments namely: (i) documentation, (ii) Analysis, and (iii) interpretation segments. In addition, the framework is situated within existential philosophy and highlights the role of *Words* and *Language* in uncovering the hidden essence in *'Being and Time'* as advanced by Heidegger and other proponents such as Ricoeur, Gadamer and Merleau-Ponty. The first part answers

the '*why'* SHCA framework question followed by '*what'* and 'how' the framework was constructed.

5.5.1 Why Simui's Hermeneutics Crossword Analysis Framework

According to Finkelstein (2001), a good framework enables someone to see something which one do not understand as it can be seen from different viewpoints. Thus, 'this multi-dimensional replica of reality can trigger insights that one might not otherwise develop' (Finkelstein, 2001:3). In like manner, the SHAC framework is inspired by Heidegger's view as documented by Benjamin (1989:8) arguing that *Words and language are not wrappings in which things are packed for the commerce of those who write and speak. It is in words and language that things first come into being and are.* It is in this vein that the conceptualisation of the SHCA framework is based on essential words as given by SwVI while pursuing their studies at Sim University. The words depicts their felt lived world while interacting with their environment. To this extent, the SHCA framework provided a framework for documenting patterns based on the essences generated through the lived experiences of SwVI. In addition, the framework aided in developing a story line during the writing phase of findings and discussion chapters.

The significance of the SHCA framework (see Figures 17 and 18 below) lies in what Zalaghi & Khazaei (2016:24) refers to as 'making the infrastructure of… knowledge more scientific.' In this vein, the framework contributes to the already existing infrastructure of Hermeneutics Phenomenology by illuminating the 'hidden.' According to Serafin (2016), Heidegger's ontological position attempts to phenomenologically describe the hidden, or the invisible, phenomena in its movement

of disclosure. Heidegger portrays his entire philosophy as “phenomenology of the invisible” (Heidegger, 1986: 399). To this extent, the proposed SHCA framework conforms to the tenets of Hermeneutic Phenomenological approach as it uncovers or discloses the hidden ‘*essences’* in the lived experiences of SwVI.

In addition, the SHCA framework conforms to the inductive reasoning (Godfrey & Hudson, 2010). For example, Bernard (2011) observes that in inductive approach, ‘at the end of research as a result of observations, theories are constructed.’ The inductive approach embraces generation of patterns based on the observations and developing a theory for those patterns (Zalaghi & Khazaei, 2016:25).

The key benefit derived through inductive method is that there is no necessity for any pre-fabricated framework. While essences generated are generalized, they should be verified through a logical method called deductive approach (Zalaghi & Khazaei, 2016). Further, while the inductive approach uses the data to generate ideas, the deductive method starts with an idea and uses the data to verify or disapprove the idea (Holloway, 1997). In this vein, the SHCA framework finds its space in the current study as an innovation developed through inductive logic. The framework could be used as a snap-short of verifying the emergent themes within a short space of time available. In other words, the SHCA framework offers the researcher and other stakeholders interested in the research process an eagle's view of the emergent pattern within the findings. The framework offers a ‘valuable format to communicate knowledge’ on the lived experiences as perceived by the participants (Schadewitz & Jachna 2007:1).

Furthermore, the framework is good in determining saturation of sample, when emergent themes are related and similar and no longer new. Qualitative researchers agree on 'sample saturation' as determinant point to end further sampling process. However, little is known on how the saturation point looks like. Therefore, the framework could be useful to novices in qualitative research dealing with the challenges related to determining saturation point.

5.5.2 What the SHCA framework is about

The first segment of the SHCA framework (documentation) is made-up of columns and rows in excel spreadsheet application software. While each participant heads a column, the roles have letters of the alphabet (A-Z). Pseudonyms were used to represent participants, as provided for within the ethical considerations. However, due to limited space when pasted in print, the SHCA framework has been split in two namely SHCA framework (A-M) and SHCA framework (N-Z). Key participants views are isolated using key descriptors. The descriptors are colour coded *Words* to represent the emergent themes. Red colour represented 'disablers' while green colour represented 'enablers.' For details on SHCA framework (A-M) and (N-Z). For details, see figures 17 and 18.

5.5.3 SHCA framework architecture described

The SHCA framework is a product of 10 stages through the research process as depicted in Box 2.

Box 2: SHCA Framework Architecture Procedure

i. Recruited participants using the inclusion/exclusion criteria.

ii. Identified the lead participant with richest experience on the phenomenon.

iii. Shadowed the lead participant using a voice recorder and still camera to capture evidence.

iv. Conducted open interviews for all participants.

v. Conducted a focus group discussion at the end of the data generation process for selected participants to authenticate research findings.

vi. Listened to the recorded voices of participants over time until researcher was fully immersed into the text.

vii. Transcribed the whole interviews for holistic representation of findings.

viii. Designed a Crossword framework with rows ordered alphabetically and columns bearing participants' pseudonyms.

ix. Extracted and documented essences using key words that represent lived experiences of participants.

x. Analysed and interpreted themes using the framework while reflecting on the research objectives until themes were clear.

Source: Own illustration based on current study

5.5.4 SHCA Framework A – Z

Once data has been generated through various research tools and listened to the recorded voices of participants over time by researcher fully immersed into the text then extraction of documented 'essences' which describes lived experiences of participants, using key words follows. The process of generating essences was enhanced through a designed a Crossword framework with 'rows' ordered alphabetically and 'columns' bearing participants' pseudonyms. In table 7, essences run from A – M while in Table 8 they run from N – Z.

Table 6: SHCA framework A – M

	Simui's Hermeneutics Crossword Analysis Framework: SwVI's Lived Experiences at Sim University						
	Tom [1973 - 2017] (FT & ODL)	Joe [1989 - 2017] (FT)	Stev [1981 - 2017] (ODL)	Charm	Brid	Tau	Frey
A	Accessibility, Attitudes, Accommodation	Accessibility, Attitudes, Adjust, Accommodation	Accessibility, Attitudes, Accommodation	Accessibility, Attitudes	Albinism, Attitudes	Attitudes	Attitudes
B	Born-sighted, Barriers, Braille, Blindness	Born-sighted, Blindness	Born-sighted, Blindness, Bemba	Blindness, Barriers	Bullying, Big font size	Big font size,	Big font size,
C	Church, Capacity, Computers, Counsellor, Consultation, Courage, Communication, Chain-reaction, Chipata	Cheshire Homes, Computers, Choma	Computer, Cost, Cousin	Computer	Computer	Computer	Computer
D	Decision-making, Determination, Disability, Dependance, Drainages	Drainages, Dependance, Disability,	Dependance	Dependance			
E	Emboser, Employment	Embosser	eLearning, Employment, Embosser	Employment,			
F	Family, Friends	Family, Friends	Family, Friends, Fourteen,				
G	God, Government, Guide	God, Guide	Guide, Group-work	Guide, Group-work			
H	Humility, Hardwork	Humility, Hardwork	Hard-copies				
I	Infrastructure, Inquisitive, Innovation, Involved, Intelligent, In-service, Indiscipline, Information	Injuries, Infrastructure, Intelligent, Information, Independence	Infrastructure, Intelligent, In-service, Information, Innovation	Infrastructure, Internet			Indiscipline
J	Jaws	Jaws					
K	Knowledge, Katete, Kabwe	Knowledge,					
L	Lecturer, Landmarks, Lundazi, Lusaka, Library	Landmarks, Library, Life-skills	Landmarks, Lecturers, Library	Landmarks, Library, Lecturers	Low-vision, Library	Low-vision, Library	Low-vision, Lecturers
M	Mobility, Measles, Motivation, Musician, Magwero	Mobility, Mumbwa, Minority	Motivation, Mobility, Musician, Mwansabombwe, Mansa,	Mobility			

Source: Own illustration based on current study

Description: rows run from 'A to M' represents the emergent themes using prominent words from the seven participants respectively who headed seven columns as demonstrated above. In turn, each cell had a provision for comments based on the reflections and interpretations of the emergent themes.

Table 7: SHCA framework N – Z

	Simui's Hermeneutics Crossword Analysis Framework: SwVI's Lived Experiences at Sim University						
	Tom [1973 - 2017] (FT & ODL)	Joe [1989 - 2017] (FT)	Stev [1981 - 2017] (ODL)	Charm	Brid	Tau	Frey
N	Negotiation, Ndola	Note-dictation, Ndola	None-Examined, Networking	None-Examined	None-Examined	None-Examined	None-Examined
O	Orientation, Optimism, on-line,	Orphan	Orientation, Optimism, on-line,				
P	Poverty, Persistence, Policy, Practice, Prayer, Phone	Pre-service, Poverty	Printer-Scanner, Pre-installed, positivity	Positiveness	Postitiveness	Positiveness	Positiveness
Q	Questions	Questions	Questions	Questions	Questions	Questions	Questions
R	Role-models,	Role-model	Restriction, Relations	Restriction, Relations			Resource-Room
S	School; Skills, siblings, Support, Sponsorship, staircases,	Sponsorship, staircases, soft-copies	soft-copies, staircases,	soft-copies, staircases, Sensitization,		Sanitation	Schezophrenia, Study-room, Sporsorship
T	Technology, Typewriter, Teacher,	Technology, Transcribe	Technology, Transcribe	Technology, Transcribe, Tutor	Technology, Transcribe		
U		Unmarried	Unmarried	Unmarried	Unmarried, Unidentifiable	Unidentifiable	Unmarried, unfriendly
V	Vice-President, Visually-impaired, Voice	Visually-impaired, voice-recorder	Visually-impaired	Visually-impaired	Visually-impaired	Visually-impaired	Visually-impaired
W	Will-power, White cane	White cane	White cane	White cane			
Z	Zero, Zest	Zest	Zest	Zest	Zest	Zest	Zest

Source: Own illustration based on current study

Description: rows run from 'N to Z' represents the emergent themes using prominent words from the seven participants respectively who headed seven columns as demonstrated above. In turn, each cell had a provision for comments based on the reflections and interpretations of the emergent themes.

5.5.5 SHCA framework: Analysis and Interpretation

The second part of the SHCA framework consists of an analysis and interpretation segment. In this segment, the framework synthesizes all the elements covered during the findings chapter as demonstrated in Figure 16. In this vein, the quality of interpretation is enhanced through a critical reflection otherwise referred to by Hermeneutics' proponents as 'Hermeneutics circle' of the entire process of generating evidence.

5.5.6 SHCA framework for interpreting lived experiences of SwVI

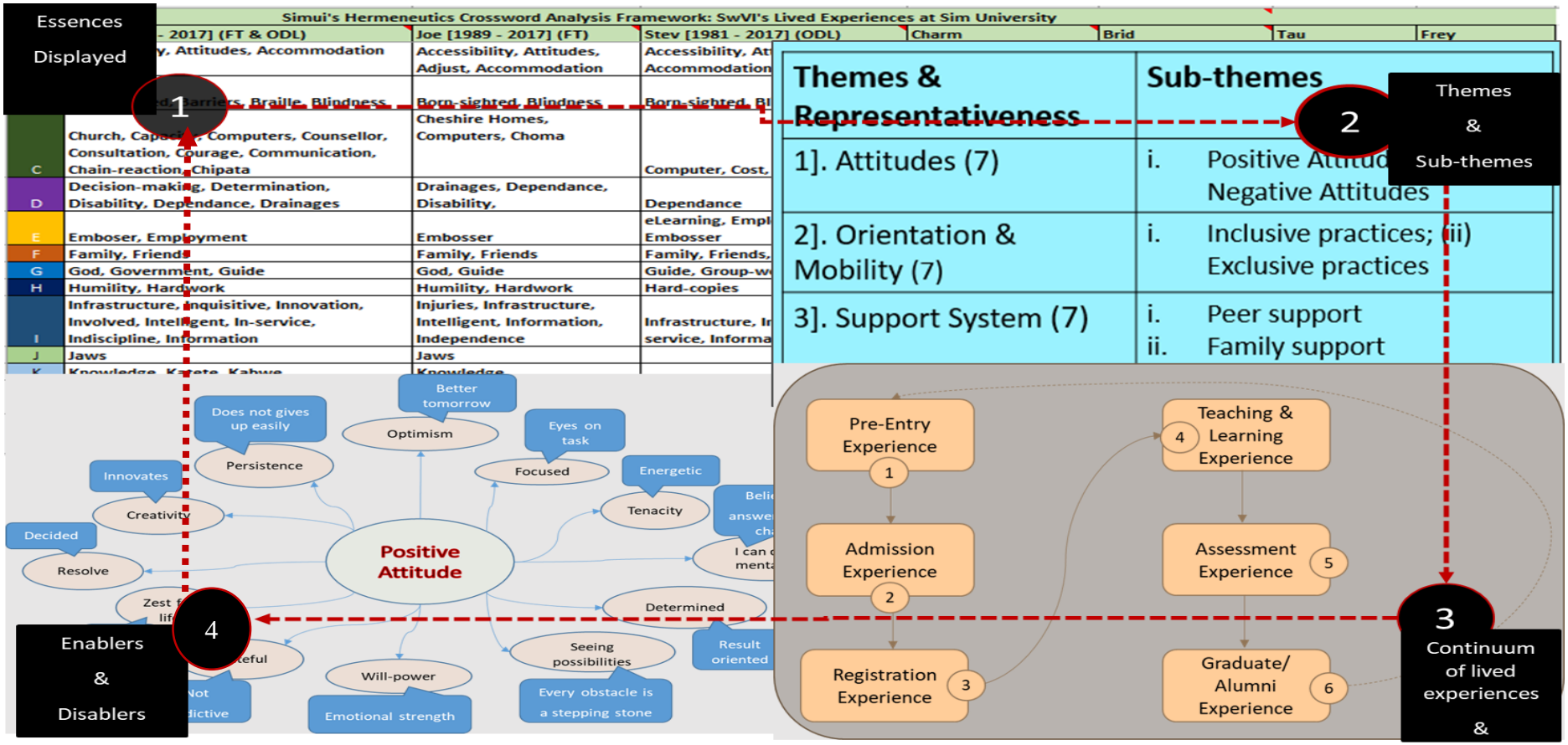


Figure 16: SHCA framework for interpreting lived experiences
Source: Own illustration based on current study

Description: items 1). Documented essences, 2). Emergent themes and sub-themes, 3). Continuum of lived experiences, 4). Enablers/disablers. For clear and detailed explanations on each of the four diagrams within the SHCA framework , revisit the findings and discussion chapters where they are described.

5.6 Summary

In a nut-shell, the proposed SHCA framework offered a window through which this researcher viewed reality as lived by SwVI at Sim University. In addition, the framework empowered the novice researcher to determine sample saturation based on the similarity of prominent words from the participants and then documented emergent themes accordingly. Further, this framework aided the researcher to develop a story-line based on the emergent themes during the write-up process.

CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Overview

This concluding chapter revisits the purpose of the current study and provides a short recap of the findings. Thereafter, a set of recommendations are presented hierarchically at individual, community, institutional and national levels. Added to the recommendations are three proposed areas for further research.

6.2 Study Summary

The purpose of this study was to establish the lived experiences of SwVI at Sim University with a view of contributing to increased access to tertiary level. Despite the significant low numbers of students with disabilities in comparison to the rest of the university student population, a review of literature did show the deafening silence on what could be contributing to this phenomenon especially SwVI in lowly resourced communities such as Sim University. Since the study had an added thread of emancipation of SwVI in a higher education, a Hermeneutic Phenomenology approach was chosen to drive the research process. Seven participants volunteered to voice their lived experiences and a cluster of themes emerged thereafter. The themes were generated using the SHCA framework informed by the Hermeneutic Phenomenological approach tenets, which thrive on ‘essences’.

Emerging from the lived experiences of SwVI was a host of enablers and disablers that represented their felt worlds while at Sim University. The silent voices expressed their felt vulnerabilities and triumphs, resilience and frustrations, while pursuing their studies in an environment favouring and dominated by the sighted. The disabling

factors included: (i) negative attitudes; (ii) absence of an inclusive education policy; (iii) inaccessible learning environment; (iv) inaccessible learning materials; (v) exclusive assessment system; (vi) exclusive pedagogy; (vii) absence of financial support; (viii) exclusive sanitary facilities; (ix) limited orientation and mobility and (x) absence of landmarks. In addition, other disablers were: (i) limited institutional support staff; (ii) inadequate assistive learning devises; (iii) indiscipline; and (v) limited collaborating partners.

Amidst the disabling environment, five ingredients proved pivotal to SwVI's academic success namely: (i) positive attitude, (ii) family support, (iii) peer support, (iv) institutional support, and (v) beneficial partnerships. It is clear that the lived world of SwVI had more disabling than the enabling factors.

With the exception of a positive attitude, the other four enablers pointed to the 'dependence syndrome' on the sighted that SwVI are reduced to within an 'exclusive' learning environment. To this extent, positive attitude was singled out as the most important enabler among other enablers to the success of SwVI at Sim University. The positive attitude showed itself in various ways such as resilience, determination, creativity, innovation, self-motivation, will power and zest as documented through the SHCA framework above. Even where the support from the sighted was not available, a sheer determination, combined with resilience and creativity in the face of oppression was enough for SwVI to progress through the academic ladder.

6.3 Conclusion

In conclusion, SwVI are faced with a host of disablers on a daily basis to progress through their academic journey at higher education level. Whereas resources are

limited in universities similar to Sim University, SwVI carry with them unexploited resources that administrators, managers and teaching staff can tap into and devise innovative ways to combat exclusion. To this effect, it is clear that solutions to the challenges encountered in the process of implementing inclusive education lie with the excluded persons. If only SwVI can be engaged and consulted in decision-making process, institutions are bound to make a break-through to multitude of challenges encountered when implementing inclusive education. In view of the many disablers echoed by SwVI and the need to expand access to education in universities, I now turn your attention to a set of recommendations for further consideration by various stakeholders.

6.4 Recommendations

Based on the findings of the current study, the researcher provides ten (10) recommendations. Thus, other universities similar to Sim University may do well to engage with and reflect on the recommendations in their quest to implementing inclusive education. These recommendations are discussed below and have been classified into inclusive policy, accessibility, active involvement, orientation and mobility, landmark, assistive learning devises, capacity building, guides, peer support and partnerships. In addition, further research areas for future research are recommended as well.

(i) The university should develop and implement an inclusive policy. It was observed above that policy guides practice of practitioners. However, Sim University had no tailor made policy on inclusive education for more than fifty (50) years of its existence. It was not surprising that majority of SwVI were unreasonably impeded from accessing and participating in the higher education. To this effect,

government should consider developing an inclusive education policy, which can be domesticated at institutional level as well. The policy could provide a guide and support to SwVI within their continuum of experiences from pre-enrolment, admission, registration, learning, assessment and graduation. In addition, all the disablers should be addressed within the inclusive education policy framework.

(ii) The university should involve SwVI in decision-making process affecting their academic progression. Given that the challenges encountered by SwVI had no prepackaged solutions to themselves, administrators, managers and teaching staff in institutions of higher learning are encouraged to actively involve the affected students in decision-making process. This is consistent with a slogan 'nothing for us without us!' The active involvement should include programme design, development, implementation and evaluation. At each of these stages, SwVI could provide feedback on the anticipated disablers and how best to overcome them.

(iii) The university should introduce an orientation and mobility for SwVI within its curriculum. For SwVI to be independent and lessen their dependence on the sighted, orientation and mobility should be incorporated in the university curriculum. The activity empowers SwVI to safely navigate their passages to various locations around and beyond the university premises. Since all SwVI reported lack of exposure to orientation and mobility at Sim University, it is recommended that the faculty of education where VI are situated seize the initiative and commence O & M activity.

(iv) The university should introduce permanent landmarks for easy mobility. Related to O & M is landmark inclusion. Landmarks are guides meant to aid a SwVI locate their passage from unfamiliar territory to a desired location. All students reported that Sim University had no landmarks. That the university was vast but bare. Consequently, this had contributed to SwVI being dependent on their sighted peers. Therefore, the university should take the initiative to redesign and deploy landmarks for the benefit of SwVI. Deliberately, landmarks could be embedded within the Sim University environment. Landmarks could be linked to all senses such that SwVI would be able to utilize all their senses such as audio, tactile, visual and olfactory.

(v) The university should procure an industrial embosser. Given the rise in number of SwVI at Sim University and the over use of the basic small embosser, the University should procure an industrial embosser to be able to meet the growing demand for braille materials. Equally, cooperating partners could donate an industrial embosser for the benefit of SwVI and society.

(vi) The university should improve on the accessibility to the learning environment. As demonstrated, Sim University was inaccessible by SwVI. Nearly all SwVI especially the totally blind complained that the university was full of stairs, ditches and hanging objectives, making it unfriendly. The university should work on its environment as provided for in the UNCRPD 2006 article 24.

(vii) The university should consider providing easy access to content in friendly formats. All the SwVI bemoaned the lack of content in friendly formats especially

in the university library. In addition, one student under the distance learning mode bemoaned the continued use of print formats as study modules meant for the sighted, when other formats such as soft, audio and braille are desirable. In addition, there were instances when assessment was administered in print (hard copies) when braille was preferable. This then calls for an urgent transformation of all the study materials and assessment items into accessible formats.

(viii) There is need for qualified staff in teaching and provision of general support to SwVI. It is not enough to have lecturers who are experts in specialized subject content. As a matter of urgence, the university as well as Ministry of Higher Education should invest in human resource specialists on how to effectively manage the learning experiences of SwVI. Government should make it mandatory for all lecturing staff to be trained in braille literacy as well as O & M among others.

(ix) The university and Miistry of higher education should provide access to suitable assistive technology. Procure assistive learning technologies for SwVI to effectively carry out their studies independently. Such tools could include white canes, talking watches, voice recorders, embossers and elevators. Since nearly all the participants acknowledged the value derived from the use of technology, Sim University should consider investing in assistive teaching/learning technology for SwVI. The few assistive technologies in use had been procured through the initiative of SwVI, making their education a lot more expensive beyond their reach, given their poverty status. Increased application of assistive learning devises are said to contribute to the general access to curriculum and improvement in academic performance of SwVI, as noted above.

(x) Finally, researchers interested to study the lived experiences of the marginalized and excluded learners to consider applying the SHCA framework as a tool for documenting essences and interpreting the phenomenon.

6.5 Future Research Areas

Further research works are recommended to illuminate the discourse on the lived experiences of SwVI using the phenomenology approaches. In view of the limited numbers of SwVI at higher education level, it can be argued here that a lot more remain 'hidden' to a critical eye. To this effect, if SwVI are to be emancipated from societal bondage, more research should be conducted to uncover their hidden lived experiences. Further research works could be conducted in the following areas:

(i) Lived experiences of SwVI on the distance-learning mode. On one hand, given the challenges faced by SwVI to access tertiary education in public institutions and on the other, the flexibility distance education offers, it becomes critical to venture into this area.

(ii) A comparative analysis of the lived experiences of SwVI across public/private universities. Since this study was conducted in a single public university, findings cannot be generalized to the whole country. This then calls for an expanded study on the SwVI's lived experiences not just in public but also private universities as well.

(iii) Lived experiences of visually impaired graduates in the community. Beyond the formal education system is the real life experiences in the community. A study in this area would help in establishing enablers and disablers faced by graduates with

visual impairments in the community and propose measures on how to combat such challenges. Consequently, such a study could contribute to the realization of an inclusive society.

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APPENDICES

Appendix 1: Informed Consent Form

(Adapted from Janesick, 2004)

University of Zambia

Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach

This is to confirm that I am conducting this study for educational purposes only. That, no harm will come to you; and that all information will be treated with confidentiality and anonymity. You may withdraw from the study at any time if you wish without any penalty. Upon completion of the study you will receive a draft copy of the research findings for your review. You may also see the data and anything I write at any time during the course of this study.

Signed: _____

Affirmation of Intent

To be completed by participants:

I, _____ agree to participate in this study. I understand that the information collected during this study will be used for educational purposes, and I can withdraw from the study at any time without any penalty. By signing this document, I affirm that I understand the intent of this study.

Signed: _____

Date: _____

Appendix 2: Invitation to Participate (Focus Group Discussion)

University of Zambia

Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach

Letter of Invitation & Informed Consent for Focus Group Discussion

Dear _____,

You are invited to participate in a Focus Group Discussion for a research study being conducted by Francis Simui in fulfilment of a Doctorate of Philosophy in Inclusive Education degree through the University of Zambia. I am conducting a study regarding the **Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach.**

The purpose of the study is to establish the lived experiences of students with visual impairments at Sim University with a view of coming up with a strategy to increase their access, participation and achievement.

Specifically, the study will seek to achieve the following objectives:

(i) Describe the lived experiences SwVI face at university.

(ii) Explore enablers that empower SwVI achieve academic success at university.

(iii)Explore disablers faced by SwVI at university.

(iv) Develop a model for interpreting lived experiences of SwVI at university.

In exploring the objectives above, you are being asked to participate in this focus group discussion because you are:

(i) a student with VI at Sim university

(ii) a faculty member student with identified Visual Impairments having a minimum of two years' experience teaching.

(iii) a Learning Support Specialist with the library

(iv) an administrator with an interest in the education of learners with SEN.

Participation is completely voluntary. There are no anticipated risks associated with your participation in the focus group discussion. All participants will be asked to respect the privacy of each group member. You are free to withdraw your consent to participate at any time throughout the study without prejudice. The focus group discussion will be held at a mutually agreeable place and time for approximately 60 minutes. You do not have to respond to these questions or to specific questions if you wish. At a later date, I will send you a draft copy of the discussion for feedback to ensure I have accurately captured your perspective and you are comfortable with how it is represented in the draft report.

With your permission, I would like to record the discussion with a digital audio recording device for purposes of documenting and transcribing the data into written form. For purposes of maintaining privacy and confidentiality, you will be assigned a code during the focus group discussion for the purpose of confidentiality.

As the only researcher, I will be personally transcribing the audio file and field notes utilizing this code for identification purposes only. The audio file contents, field notes and transcripts will be password-protected and stored on the University of Zambia server in the researcher's personal file or in a locked cabinet in the researcher's office. This data will only be accessible to the researcher. The final manuscript will not reflect any personally identifying information. Audio files and electronic files of the transcripts will be destroyed upon completion of the study by means of erasing software, which will permanently remove the files from the SD card and the researcher's computer. Any hard copies of the transcripts will be destroyed through confidential shredding provided through the University after ten years.

As this research involves humans, it will be carried out with oversight from the University of Zambia Research Ethics Review Board.

There are no direct benefits from participating in this study and you will not be compensated for your time. However, your participation may help stakeholders design, development and implement a strategy to increase access, participation and achievement among learners with SEN at tertiary level. Further, as a topic understudied '**Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach**, your participation will contribute to the literature in inclusive education.

If you have any questions about this research, you may contact Francis Simui by email at francis.simui@unza.zm or phone +260 978 882 952.

Thank you for your consideration. I will contact you within the next week to see whether you would be interested in participating.

Yours Sincerely,

Francis Simui

Appendix 3: Participant Consent Form

University of Zambia

Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach

To indicate your interest in participating, please check that you voluntarily agree to participate in the focus group discussion and are willing to be digitally recorded through an audio recording device. By signing this document you are giving me permission to report your responses in the final manuscript without revealing any personally identifying information. A copy of this consent form will be made available to you for your own records.

- ☐ I voluntary agree to participate in the Focus Group Discussion
- ☐ I agree to being digitally recorded through an audio recording device during the Focus Group Discussion.

_____ _____

Participant's Signature Date

Appendix 4: Invitation to Participate (Research Interview)

(Adapted from SANDRA POLUSHIN, 2015)

University of Zambia

Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach

Letter of Invitation & Informed Consent for Research Interview

Dear _____,

You are invited to participate in a Research Interview being conducted by Francis Simui in fulfillment of a Doctorate of Philosophy in Inclusive Education degree through the University of Zambia. I am conducting a study regarding the **Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach.**

The purpose of the study is to establish the lived experiences of learners with disabilities on distance education programme at Sim University with a view of coming up with a strategy to increase their access, participation and achievement.

Specifically, the study will seek to achieve the following objectives:

(i) Describe the lived experiences SwVI face at university.

(ii) Explore enablers that empower SwVI achieve academic success at university.

(iii)Explore disablers faced by SwVI at university.

(iv)Develop a framework for interpreting lived experiences of SwVI at university.

In exploring the objectives above, you are being asked to participate in this interview because you are:

(i) a student with SEN on distance or full time study mode

(ii) a faculty member students with SEN have a minimum of two years' experience teaching

(iii)a Learning Support Specialist with the library and

(iv)an administrator with an interest in the education of learners with SEN.

Participation is completely voluntary. There are no anticipated risks associated with your participation in this interview. You are free to withdraw your consent to participate and may withdraw your consent at any time throughout the study without prejudice. The interview will be held at a mutually agreeable place and time for approximately 60 minutes. You do not have to respond to these questions or to specific questions if you wish. At a later date, I will send you a draft copy of the discussion for feedback to ensure I have accurately captured your perspective and you are comfortable with how it is represented in the draft report.

With your permission, I would like to record the discussion with a digital audio recording device for purposes of documenting and transcribing the data into written form. For purposes of maintaining privacy and confidentiality, you will be assigned a code during the interview to remove any personally identifying information during the discussion.

As the only researcher, I will be personally transcribing the audio file and field notes utilizing this code for identification purposes only. The audio file contents, field notes and transcripts will be password-protected and stored on the University of Zambia server in the researcher's personal file or in a locked cabinet in the researcher's office. This data will only be accessible to the researcher. The final manuscript will not reflect any personally identifying information. Audio files and electronic files of the transcripts will be destroyed upon completion of the study by means of erasing software, which will permanently remove the files from the SD card and the researcher's computer. Any hard copies of the transcripts will be destroyed through confidential shredding provided through the University after ten years.

As this research involves humans, it will be carried out with oversight from the University of Zambia Research Ethics

There are no direct benefits from participating in this study and you will not be compensated for your time. However, your participation may help stakeholders design, development and implement a strategy to increase access, participation and achievement among learners with SEN at tertiary level. Further, as a topic understudied '**Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach,'** your participation will contribute to the literature in distance education.

If you have any questions about this research, you may contact Francis Simui by email at francis.simui@unza.zm or phone +260 978 882 952.

Thank you for your consideration. I will contact you within the next week to see whether you would be interested in participating.

Yours Sincerely,

Francis Simui

Appendix 5: Focus Group Discussion Guide

University of Zambia

Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach

1) Bio Data

i. Gender	
ii. Age	
iii. Marital Status	
iv. Dependants	
v. Ethnicity	
vi. Location	
vii. Study Mode	

viii. Prior Education	
ix. Employment	

2) What do you understand by the term "inclusive" distance learning?
3) What motivated you to enrol in your current programme?
4) What did you want to become in life after completing your grade 12?
5) Are you following your desired career path? if yes, to what extent? If not why?
6) Share with us any challenges you faced:
   i. Before enrolling at the University
   ii. First time visiting the University
   iii. During registration of courses
   iv. Staying in university and/or private residence
   v. Support among peers
   vi. Support from instructors
   vii. Support from administrators
   viii. Instructional materials
   ix. Transport facilities
7) From your experience, how is learner diversity addressed within the University for students who study by the distance learning mode?
8) What infrastructure and/or practices currently exist to support inclusive education curriculum within the university?
9) From your experience, what enhances and/or inhibits learning for students with diverse learning needs in the distance learning mode?

10) From your experience, what resources and practices would enhance inclusiveness in distance learning environments?
11) Could there be anything else you would like to say about your experiences in supporting students with disabilities?

Appendix 6: Protocol for Individual Interviews & FGDs

University of Zambia

Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach

1. Begin with facilitator providing introductory comments:

   (i) Welcome and thank everyone for volunteering to participate.

   (ii) Introduce yourself.

   (iii)Hand out the consent form.

2. Ask participants to ask any questions, and then sign the consent form. Offer a copy of the Consent form (unsigned) to each person. Some will want a copy, others will not but always offer.
3. Give a very brief overview of the project and goals for the focus group discussion or interview.
4. Give participants information about the process, times, breaks, bathrooms, and so forth.
5. Distribute name tags for focus group discussion or community meetings (first names only).
6. Provide basic guidelines for the focus group discussion, review them with participants, and
7. Consider posting them for everyone to see. Adapt pertinent guidelines for individual interviews:

a. If you feel uncomfortable during the meeting, you have the right to leave or to pass on any question. There is no consequence for leaving. Being here is voluntary.
b. The meeting is not a counseling session or support group.
c. Keep personal stories “in the room”; do not share the identity of the attendees or what anybody else said outside of the meeting.
d. Everyone’s ideas will be respected. Do not comment on or make judgments about what someone else says, and do not offer advice.
e. One person talks at a time.
f. It’s okay to take a break if needed or to help yourself to food or drink (if provided).
g. Everyone has the right to talk. The facilitator may ask someone who is talking a lot to step back and give others a chance to talk and may ask a person who isn’t talking if he or she has anything to share.
h. Everybody has the right to pass on a question.
i. There are no right or wrong answers.
j. Does anybody have any questions?

8. Let people know when you are going to ask the last question. This cues participants to share relevant information that may not have come up in answer to your key questions. For example, “Is there anything else you want to share that we haven’t talked about yet?”

9. Let participants know the process for feedback after discussion has been transcribed, analysed and written up.

10. Thank all for participating.

Appendix 7: Student Interview schedule

(Adapted from SANDRA POLUSHIN, 2015)

University of Zambia

Lived Experiences of Students with Visual Impairments at Sim University in Sub-Saharan Africa: A Hermeneutic Phenomelogical Approach

1) Bio Data

(i) Gender	
(ii) Age	
(iii) Marital Status	
(iv)Dependants	
(v) Ethnicity	
(vi)Location	
(vii) Study Mode	
(viii) Prior Education	
(ix) Employment	

2) What prompted you to enrol for the program?
3) How would you describe your experience in the use of computers for academic purposes?:
4) What is your experience leaving with a disability:
5) What is your experience in the use of assistive technologies in your studies?
6) Tell me about your experiences as they relate to being part of the University community? (i.e. What benefits and/or limitations exist that enhance or inhibit your participation in being part of the larger University community?)

7) Tell me about your experiences regarding student services and supports as a student studying (i.e. application, registration, library, residential facilities, tech support, continuous assessment activities, examinations, etc?)

8) Tell me about your experiences in accessing study modules? (i.e. what was helpful and what barriers did you face?)

9) Tell me about the components of the courses that you found most motivating and why?
10) Tell me about the components of the courses that you found least motivating, and why?
11) Tell me about your experiences with communication between your peers and instructors? What factors supported your learning? What factors inhibited your learning?
12) Is there anything else you would like to share?

Thank you very much for your participation in this interview. At a later date, you will be sent an email from the researcher providing you with an opportunity to review and confirm the accuracy of your responses as prepared by the researcher.

Thanks again.

Appendix 8: Literature Review Matrix - Western Countries

Below is a Literature Review matrix with summary details of the reviewed literature. The knowledge gaps exposed will be further visited once more in chapter 6 dealing with the discussion of the research findings.

Study	Key Findings	Identified Knowledge Gap
1) Harrison & Wolforth, (2012); MacKean, (2011) and Fichten, *et al.*, (2003)	• Postsecondary education level, averaging between 1.5% & 11% LSEN across N/America	• Western context and un verified in Zambia
2) Riddell and Wilson (2004)	• LSEN experienced barriers to accessing edu in relation to physical environment or teaching and learning.	• Western context and un verified in Zambia
3) Hutcheon and Wolbring (2012)	• Need for critical examination of higher education policy and its capacity to address differences in abilities.	• Policy and practice audit needed in sub Saharan context

4) Heindel (2014), *Phenomenological Study of the Experiences of Higher Education Students with Disabilities*.	• Limited competencies to handle students with disabilities identified among instructors. • Limited collaboration between Students with Disabilities Services office and instructors exposed • Reactive and proactive work culture in serving the needs of students with disabilities. • Absence of the voices of students with disabilities in planning, management of the online learning environment for them.	• Descriptive and not Hermeneutics phenomenology approach applied. • Restricted to distance & e-Learning mode and not print media. • Situated in developed and not developing context
5) Egilson (2014)	• The secondary schooling environment was less adapted for disabled students' educational and social needs than the primary school environment had been. • mainstream school support services were less appropriate for older disabled children.	• Iceland context and limited to young adults with physical impairment

6) Vlachou and Papananou (2014)	• Interviewees went to mainstream schools lacking knowledge regarding the availability and unsuitability of special schools. • Mainstream schools lacked the appropriate support systems, services, resources or training, which in turn, resulted in unfair treatment of these students throughout their education.	• Greece context limited to school experience in primary and secondary education
7) Whitburn (2014)	• Unfair treatment of the participants in mainstream schools that appeared to have perpetuated their exclusion.	• Australian context and limited to mainstream schools
8) Wendy *et al*. (2014) Teaching Students with Disabilities in Post-secondary Landscapes: Navigating Elements of Inclusion, Differentiation, Universal Design for Learning and Technology	• Importance for students to feel comfortable and confident in disclosing their disabilities • Communicate with their course instructors about what was required for their academic success. • Implications for post-secondary educators' pedagogical practices.	• Canadian context and un verified in sub Saharan Africa

9) Polushin (2015), I*nclusive Andragogy in Distance Education: A Phenomenological Perspective.*	• Inclusive andragogy needed a systemic approach to address learner and cultural variability • Specifically: systemic, curricular, technological and social accessibility supported by awareness training and interdisciplinary team knowledge and collaboration emerged as essential themes of the participants' lived experiences.	• Canadian context and focused on inclusive distance education andragogy at the exclusion of other modes of study
10) Shah (2007)	• Mainstream schools had not embraced full inclusion & continued to disempower disabled students with exclusionary procedures & practices. • In spite of progressions in inclusion related legislation, a great deal of change was needed within mainstream schools before disabled students could experience inclusion	• Study scope limited to experiences of students in UK institutions, • Focused on mainstream schools
11) Thurston (2014) *"They Think They Know What's Best for Me": An Interpretative Phenomenological*	• Two main themes emerged: (i) experiencing low vision in school and (ii) experiencing additional support in school.	• Study scope limited to experiences of students in UK institutions,

Analysis of the Experience of Inclusion and Support in High School for Vision-impaired Students with Albinism.	• A negative cycle of inclusion was identified based on the students' internalised feelings of difference.	• Focused on albinism at high school level.
12) Hewett *et al.* (2017). *Developing an inclusive learning environment for students with visual impairment in higher education: progressive mutual accommodation and learner experiences in the United Kingdom*.	• Participants reported that while their HE institution made some adjustments to enable them to access their course, a lack of anticipatory adjustments created barriers. • The most common solution for this barrier was to provide deadline extensions, often resulting in additional pressure. • University staff highlighted limited specialist knowledge and resources within their institutions to enable accommodation for students with VI.	• Study scope limited to experiences of students in UK institutions,
13) Bešić, E., Paleczek, L., Krammer, M. & Gasteiger-Klicpera, B. (2017). Inclusive practices at the teacher and class level: the experts' view	• Inclusive education process to be successful, positive attitudes towards inclusion of children with SEN are critical. • Special education teachers were regarded as important resource.	• Limited to Austrian context. • The approach used drowned the voices of

	• Meaningful collaboration between the conventional and special education teacher was considered as a first step in implementing inclusive education. • The use of differentiated teaching methods, along with individual initiatives, were other essential practices.	students with disabilities.
14) Mullins, L. & Preyde, M. (2013). The lived experience of students with an invisible disability at a Canadian university.	• In Canadian universities, law to make their services accessible to students with disabilities mandated them. Consequently, such measures had gone a long way to eliminate the physical obstacles that present barriers for students. • The best means of assessing students with disabilities' needs is through direct consultation with students with disabilities.	• Limited to Canadian context. • Focused on invisible disabilities and not visual disability.
15) Vickerman, P. & Blundell, M. (2010). Hearing the voices of disabled students in higher education.	• There were still much work to be done in levelling Higher Education experiences for disabled students. • Five key issues that should be addressed in order to enable access and entitlement to Higher Education.	• This study was pitched with a western context in mind using a questionnaire and face-

	• These included pre-course induction support, commitment by Higher Education institutions to facilitating barrier free curricula, consultation with disabled students, institutional commitment to develop support services and embedding of personal development planning.	to-face to elicit data. Thus, left knowledge gap for further study with a sub-Saharan African context.
16) Fuller, M., Bradley, A. & Healey, M. (2004). Incorporating disabled students within an inclusive higher education environment.	The students identified issues to do with access to, and the use of, information as important in their learning experience.	• The study did not apply a much more integrated approach in its design to understanding disabled students' experiences as learners. The current study does bridge that gap through a hermeneutics

		phenomenological approach.
17) Fuller, M. Healey, M. Bradley, A. & Hall, T. (2004b). Barriers to learning: a systematic study of the experience of disabled students in one university.	• The findings pointed to the need for attention to be paid to concerns of parity and flexibility of provision and to staff development in making the 'reasonable adjustments' required by disability legislation.	• Limited to UK context and used a survey approach to elicit information, hence could have failed to an veil the lived world of SwVI.
18) Ule, M. (2017). Identity challenges and social experiences of higher education students with disabilities in Slovenia	• Students with disabilities were able to reshape their identities in a way that did not consist of the disability experienced, but was independent of it. • In addition, they were able to accept their disability as the reality of life without losing their own purpose of living and life plans.	• Limited to Slovenia context and used a qualitative survey approach.

19) Lamichhane (2017)Teaching students with visual impairments in an inclusive educational setting.	• Teachers' years of schooling, teaching experience, and using blackboard were positively correlated to teaching style adjustment. • In addition, younger teachers were more likely to adjust their teaching styles for disabled students than the elderly teachers were. • Other pedagogical adjustments by teachers: explaining more; more interactions; simultaneously reading out while writing on the board; and placing students with visual impairments in the front bench with other academically sound students.	• Limited to Nepal context and used a mixed research approach.
20) Claiborne, L.B., Cornforth, S., Gibson, A. & Smith, A. (2011). Supporting students with impairments in higher education: social inclusion or cold comfort?	• Findings showed that groups recounted different experiences of inclusion. • Students with impairments emphasised a lack of resourcing and barriers created by the teaching staff.	• Limited to New Zealand context and used a discursive research approach, hence created

	• In contrast, teachers, administrators and students without disabilities emphasised the importance of social inclusion, while missed the core of students with impairments' concerns about recognition of their technical competence.	knowledge gap for further verification in Sub-Saharan Africa.
21) Higgins, N., Phillips, H., & Cowan, C. (2013). Eighty years of growing up kāpo (blind) Māori: what can we learn about inclusive education in New Zealand?	• Four common themes emerged, namely (i) visibility and invisibility, (ii) cultural location and dislocation, (iii) cultural consonance and dissonance, and (iv) transformation and change. • Overall, schools had challenges providing both culturally fitting education and educational support for the participants' vision impairment.	• Limited to New Zealand context, hence created knowledge gap for further verification in Sub-Saharan Africa.
22) Guilherme, A. & Freire, I.M. (2015). Merleau-Ponty and Buber on seeing and not seeing the Other: inclusion and exclusion in education.	• According to Merleau-Ponty's theory of 'embodiment', the body was central to one's 'understanding' of the world, to one's engagement with Others, as well as to one's self-transformation.	• Driven by a theoretical approach without practice, hence created knowledge gaps for

	• To this end, a critical question arises: what are the implications for the individual's interaction with Others when one of the body's senses, such as sight, is impaired in one way or another? • In their study, they engaged with this question by way of focusing on the issue of blindness and how it affected one's interaction with others. • Findings suggested that 'dialogical education' as conceived by Martin Buber was a powerful tool in breaching the gap that existed between non-sighted and sighted individuals.	further verification using lived experiences of SwVI.
23) Hauerwas, L.B.& Mahon, J. (2017). Secondary teachers' experiences with students with disabilities: examining the global landscape.	• Findings showed that despite variations in the countries' concept of disability and their implementation of inclusive educational systems, the teachers had moderately high self-efficacy for inclusive practices yet had limited training and experience with students with special needs.	• Study suffered from western cultural bias when interpreting the findings from the 20 selected countries, hence created a

		knowledge gap for further exploitation using the Sub-Saharan lenses.
24) Higgins, N. Ballard, K. (2000). Like everybody else? What seven New Zealand adults learned about blindness from the education system.	• Participants described how principals and teachers were both welcoming and unwelcoming. • Inclusive principals and teachers were described as friendly, challenging, helpful and positive. They understood their blind students were like their other students without blindness. • Principals and teachers who were labelled as excluding blind students were described as unfair, inflexible, unprepared and absent. They viewed their students with blindness as different and did not find a social place for them.	• Pitched within New Zealand context, hence created a knowledge gap for further verification in Sub-Saharan Africa.

25) Strnadovã, I. Hã¡jkovã, V. & Kvä›toåˆovã, L. (2015). Voices of university students with disabilities: inclusive education on the tertiary level, a reality or a distant dream?	• The dominant experienced barriers faced by these students were institutional barriers, attitudinal barriers, and disability-specific barriers. • The forms of support mentioned by the students included family support, peer support, and support provided by assistants. • In addition, participants shared strategies they used to deal with the barriers they faced. • These included assertiveness, self-determination, metacognition, efforts to 'fit in', optimism, and career planning.	• Pitched within Czech Republic context and applied grounded theory approach. Hence, created a knowledge gap for further verification using Hermeneutics phenomenology approach in Sub-Saharan Africa
26) Datta, P & Talukdar, J.(2016). The impact of vision impairment on students' self-concept.	Findings showed that there were no significant differences between female and male students with vision impairment across the six dimensions of self-concept. These findings had implications for teachers, special educators, policy-makers and a	• Limited to Australia context, hence created knowledge gap for

	range of professionals in the education and special education sector in enabling greater understanding of the self-concept accomplishment of the students with vision impairment. Nevertheless, their study had limited scope for generalisation of the study's conclusions due to the study's small population sample size.	further verification in Sub-Saharan Africa.
27) Lancioni, G. E., Singh, N.N., O'Reilly, M.F., Sigafoos, J., Alberti, G., Perilli, V., Zimbaro., C., Chiariello., V. (2017). Supporting leisure and communication in people with visual and intellectual disabilities via a smartphone-based program.	Findings showed that people with visual impairment and intellectual disability's independent engagement times of leisure and communication increased from baseline values of zero to means of between about 75% and 85% of the session lengths. These findings indicated that a smartphone-based program could support independent leisure and communication engagement in people with visual impairment and intellectual disability who possess verbal skills.	• Limited to western context, hence created knowledge gap for further verification especially that the study indicated multiple disabilities.

28) Brunes, A., Krokstad, E., Augestad, L.B. (2017). How to succeed? Physical activity for individuals who are blind. British Journal of Visual Impairment.	The results showed that important factors for the blind participants' Physical Activity participation were having good instructors, support or visual interpreters, active family members, a safe sports environment, having tried many sports, private transportation to the exercise facilities, and a positive social environment, with peers, friends, and family members. Their study provided knowledge of factors that could increase Physical Activity adherence of individuals with blindness being included in PA and sports together with sighted peers.	• Limited to Norwegian context as well as applied structured interviews to generate data. Hence, created knowledge gap for further investigation based on the local context and hermeneutics approach.
29) Vasan, G.C.K., Suresh, B., & Venkatesan, M. (2017). Agile and cost-effective ultrasonic module for people with visual impairment using a headphone jack: Implications for	Vasan et al. (2017) documented an innovative use of technology to enable people with visual impairments improve their welfare. In their study, they presented a novel way to eliminate the use of data acquisition system (DAQ) systems/micro-controllers by incorporating a headphone jack. With the aid of a headphone jack,	• The study was pioneered in western context and hence the need to verify the use of technologies in use

enhancing mobility aids. British Journal of Visual Impairment.	a cost-effective wearable ultrasonic module that would enable people with visual impairment to virtually see was implemented. Unlike conventional walking canes or its derivatives that do not offer effective feedback, the ingenuity in their proposed module was that it would offer audible feedback to the user.	for mobility purposes in Sub-Saharan Africa context.
30) Walczak, A. & Fryer, L. (2017). Creative description: The impact of audio description style on presence in visually impaired audiences.	Walczak & Fryer (2017) in their study focused on the impact of audio description (AD) style on dimensions of presence (spatial presence, ecological validity, engagement, and negative effects) in blind and visually impaired audiences. Findings suggested that the emotive AD prompted higher levels of presence for all participants. In a nutshell, the new AD style appeared more natural, especially to participants with recent sight loss. The results suggest that creative scripts may stimulate presence and thus increase the chances of AD users having a more immersive viewing experience.	• The study was pioneered in western context and hence the need to verify the use of technologies in use for mobility purposes in Sub-Saharan Africa context.

31) Verdier, K., (2016). Inclusion in and out of the classroom: A longitudinal study of students with visual impairments in inclusive education.	The findings revealed that a majority of the students were stressed about school work and keeping up with their sighted peers and described feelings of loneliness. Some displayed emotional symptoms of which parents and teachers were not always aware. Three students had additional disabilities besides their VI. The study concluded that students with visual impairments were a heterogeneous group comprising individuals with different needs. Thus, many of these students faced social challenges in school. Interventions on different levels were necessary in order to improve the possibilities for these students' social inclusion.	• Study limited to Swedish context, pitched at secondary school level and used questionnaire tools to generate data. Hence, created knowledge gaps for further investigation in the local context, pitched at university level and applied hermeneutics approach.
32) McLinden, M., Douglas, G., Cobb, R., Hewett, R., & Ravenscroft, J. (2016).	The study developed a theoretical framework of understanding the role played by special teachers in facilitating access to curriculum	The study was crafted within western context and

'Access to learning' and 'learning to access': Analysing the distinctive role of specialist teachers of children and young people with vision impairments in facilitating curriculum access through an ecological systems theory.	in mainstream settings. Therefore, there study had significance for educators and researchers concerned with facilitating curriculum access across national contexts and educational settings in order to reduce barriers to learning and participation.	theoretical in nature. Hence the need to verify some of its elements within the Sub-Saharan context as well in order to bridge the knowledge gap.

Appendix 9: Literature Review Matrix - Sub-Saharan related studies

Study	Key Findings	Identified Gap
33) Lourens (2015), *The lived experiences of higher education for students with a visual impairment: A*	• Participants described the challenges related to the transition from school. • Participants discussed complex social interactions with non-disabled peers, in which the latter reportedly offered help, and avoided or stared at participants, leaving them feeling "not seen".	• South African context and un verified in Zambia

phenomenological study at two universities in the Western Cape, South Africa.	• Participants confronted with unwilling lecturers, a lack of communication amongst important role-players, late course material and/or headaches and muscle tension from the effort of reading with limited sight. • Students recounted that they commonly self-advocated and took the responsibility upon themselves to get special accommodations. • Participants demonstrated resilience and innovation, yet the effort sometimes drained their energy and left them frustrated.	
34) Maguvhe (2015), 'Teaching science and mathematics to students with visual impairments: Reflections of a visually impaired technician'	• Teacher motivation and mentorship in mathematics and science methodologies and the use of tools for learner empowerment were lacking. • Teachers lacked the requisite skills in special education to harness learner potential in mathematics and science..	• South African context and focused on factors that limited the participation of the VI learners in

		mathematics and science education.
35) Mutanga & Walker (2017), 'Exploration of the academic lives of students with disabilities at South African universities: Lecturers' perspectives'	• Although most disability literature report students with disabilities blaming lecturers for their failure to advance their needs, this study highlighted the need for education system to be supportive to lecturers for the inclusive agenda to be achieved. • Multi-sectoral approach was needed in higher education involving many stakeholders be adopted for a broader understanding of disability, to engage with the complex ways in which inequalities emerge and are sustained.	• South African context and generally focused on disability and not specific to SwVI. Hence, created knowledge gaps for further verifications.
36) Ntombela and Soobrayen (2013),	• Although access had improved for students with disabilities in this institution, there were still systemic barriers that limited the participation of students with visual disabilities in the academic programs.	• South African context. • Focused on challenges faced by

	• Improved access requires partnership between Government and Higher Education institutions to monitor and support systemic transformation.	students with visual disabilities • Used a case study approach
37) Grönlund, Lim and Larsson (2010)	• Obstacles to effective use of Assistive Technologies for IE come from three different levels – school, national, and network. • Because Assistive Technologies is only part of the equation for a country to achieve inclusive education, a high-level national perspective was required.	• Bangladesh and Tanzania. • Focused on effective use of Assistive Technologies for Inclusive Education
38) Mosia & Phasha (2017), 'Access to curriculum for students with disabilities at higher education institutions:	• Inconsistencies between the institution's admission policy of non-discrimination according to disability status and its practices existed. • Recommend a clear policy concerning the support of students with disabilities is developed: • Policy to guide decisions on how disability data should be used,	• Lesotho Context and un verified in Zambia

How does the National University of Lesotho fare?'	• Define roles that different university departments must play in facilitating access to curricula for all students. • Influence suitable development of teaching and learning resources.	
39) Chhabra *et al.* (2010), Inclusive Education in Botswana:The Perceptions of School Teachers.	• Many regular teachers felt unprepared and fearful to work with learners with disabilities in regular classes and so displayed frustration, anger, and negative attitudes toward inclusive education because they believed that it could lead to lower academic standards.	• Botswanan context • Pitched study at school level and un verified at university level
40) Kaputa (2013). Making Open and Distance Learning Inclusive: The Zimbabwe Open University's Experience with People with Disabilities.	• Less than one percent of learners with disabilities were present at ZOU. • Persons with disabilities faced challenges accessing instructional materials especially those with visual and hearing impairments.	• Zimbabwean context • Voices of the affected learners were silently missing.

41) Mafa (2012). Challenges of implementing inclusion in Zimbabwe's Education System..	• Stressed that in Zimbabwe, inclusion had actively been on the national agenda since 1994. Nevertheless, there were still a lot of scepticism and ambivalence towards the implementation of inclusion • Unavailability of suitable learning supporting facilities, teachers' limited skills and lack of support from instructional supervisors	• Zimbabwean context • Voices of students with visual impairment were silently missing.
42) Chataika (2010), 'Inclusion of disabled students in higher education in Zimbabwe', in Lavia & Moore (eds.), *Cross-cultural perspectives on policy and practice: Decolonizing community contexts,* pp. 116–131, Routledge, New York.	• Students with disabilities continue to experience attitudinal, physical and institutional barriers. • Students developed coping mechanisms that enabled them reach their educational goals. A positive attitude and self-advocacy skills were regarded as the most important factors in determining the success of students with disabilities in higher education. • Similarly, self-belief was viewed as a conduit to success.	• Zimbabwean context • Voices of students with visual impairment were silently missing.

43) Emong & Eron (2016), 'Disability inclusion in higher education in Uganda: Status and strategies'	• Despite Uganda's robust disability legal and policy framework on education, there is evidence of exclusion and discrimination of students with disabilities in the higher education institutions. • There existed discrimination and exclusion tendencies in matters related to admissions, access to lectures, assessment and examinations, access to library services, halls of residence and other disability support services.	• Ugandan Context. • Voices of students with visual impairment were silently missing
44) Nasiforo (2015), *Academic Impediments Students with Visual Impairments Encounter in the Colleges of University of Rwanda*.	• Curriculum was not adapted, • support learning resources were not available and the learning resources available and examinations were not adapted by the lecturers to suit the needs of students with visual impairment. • Staff development in inclusive education was still at its infancy stage and majority of the students with visual impairment were un-trained in orientation and mobility and had no white canes.	• Rwandan Context • A descriptive survey design as applied • Voices of the affected learners were silently missing.
45) Majinge & Stilwell (2014), Library services provision for	• Academic libraries provide services to people with visual impairments and in wheelchairs but these services are not inclusive or universal.	• Tanzanian Context

people with visual impairments and in wheelchairs in academic libraries in Tanzania. *SA Jnl Libs & Info Sci* 2013, 79(2). http://sajlis.journals.ac.za/	• Academic libraries should strive to provide inclusive services to all users including people with disabilities. • This then entails that, an inclusive policy regarding provision of library services to people with disabilities be formulated and implemented. In addition, adequate budgets and staff training are a must to have.	• A descriptive survey design as applied • Voices of the affected learners were silently missing.
46) Gregorius, S. (2016). Exploring narratives of education: disabled young people's experiences of educational institutions in Ghana.	• The study showed how exploring individual narratives provides new insights into the educational needs of and 'appropriate' education for disabled young people in the Global South.	• The study was situated within Ghana with a bias on narratives on disabled young people in secondary schools. Hence, created a knowledge gap.

Appendix 10: Literature Review Matrix - Zambian Related Studies

Study	Key Findings	Identified Gap
47) Chilufya (2013), *Accessibility of Public Buildings to Persons with Disabilities.* University of Zambia. Unpublished Obligatory Essay in the School of Law.	• Most public buildings in Lusaka lacked ramps, handrails, elevators, user-friendly restrooms and other facilities necessary for persons with disabilities to use buildings. • Prevailing conditions had resulted in de-humanising challenges in most cases when making use of the services offered in public buildings. • This had restricted their enjoyment of the rights to independent living, inclusion in society and equality of opportunity.	• Concentrated on accessibility of public buildings within Lusaka. • Voices of the affected learners were silently missing.
48) Banda-Chalwe *et al.* (2013), 'Impact of inaccessible spaces on community participation of	• Inaccessibility of education institutions, workplaces had contributed to reduced participation with negative implications for personal, family, social and economic aspects of the lives of participants.	• Voices of the affected learners were silently missing.

people with mobility limitations in Zambia',	• Government buildings, service buildings, and transportation were noted to be the most important but least accessible.	
49) Muwana (2012). *Zambian Student Teachers' Attitudes Toward Including Students With Disabilities In General Education Classrooms*.	• University of Zambia students held positive attitudes toward inclusion. • Student teachers believed that the implementation of inclusion was hindered by the lack of adequate resources and support from the government.	• Used questionnaire, which limited the views of participants. • Voices of the affected learners were missing.
50) Akakandelwa & Munsanje (2011), Provision of learning and teaching materials for pupils with visual impairment: Results from a National Survey in Zambia. *The British Journal*	• Noted that most learning institutions in Zambia did not provide adequate and suitable learning and teaching materials to pupils with visual impairment. • In addition, many schools did not have resource rooms for storage and use of learning and teaching materials for these pupils.	• Restricted at primary and secondary school level and not verified at university level.

of Visual Impairment 30(1) 42–49.	• Most children with visual impairment appeared to perform poorly in their studies and were required to drop science and mathematics subjects due to lack of teaching and learning materials	
51) Silwamba, S. (2005). *Inclusive Education in Zambia: The Kalulushi Trial Inclusive Program.*	• Findings showed that general economic conditions, restructuring programs and medical and social-cultural issues had a huge impact on the success of inclusive education implementation. • In addition, schools within the district had few qualified human and appropriate material resources to support inclusion. • Further, students with and/or without disabilities and most stakeholders, except teachers, tended to favour inclusion.	• Restricted at primary and secondary school level and not verified at university level.