

**Knowledge, attitudes and practices  
of academic and admission staff  
on the inclusion of students with physical disabilities  
in the School of Health Care Sciences  
at Sefako Makgatho Health Sciences University:  
An exploratory, qualitative descriptive study.**

**MASHUDU RONALD MPHOHONI**



**Submitted in partial fulfilment of the requirements for the degree  
Masters in Human Rehabilitation Studies (Coursework Option)  
Centre for Rehabilitation Studies  
Stellenbosch University  
March 2020**

**Supervisor: Dr Martha Geiger  
Co-supervisor: Dr Surona Visagie**

## DECLARATION

**I, Mashudu Ronald Mphohoni**, declare that the work contained in this research assignment is entirely my own, original work (except where acknowledgement indicates otherwise), and it has not been previously submitted for any other degree at Stellenbosch University or at another University.

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

**Mashudu Ronald Mphohoni**

## ABSTRACT

**Introduction:** Inclusive higher education incorporates and welcomes all students, irrespective of their disability; in the higher education institutions (HEI) so that all are able to participate in educational opportunities. Disability is an umbrella term for physical, sensory, mental or other impairments resulting in activity limitations and participation restrictions due to a person's contextual factors. The focus of this study was on students with physical disabilities (SWPD) that affects mobility and/or dexterity. To maintain this focus, other physically determined sensory impairments like visual and hearing disabilities were excluded. Knowledge and attitudes regarding inclusion affect the successful implementation of inclusive higher education (practice). Therefore, the aim of the study was to explore the self-reported knowledge, attitudes and practices of academic and admission staff on the inclusion of SWPD in the School of Health Care Sciences (SHCS) at Sefako Makgatho Health Sciences University (SMU).

**Methods:** A qualitative descriptive study design was used in this exploratory study. The setting was the SHCS at SMU, and the study population comprised of academic and admission staff. A purposive sampling strategy was used, and the final sample consisted of 12 participants (10 academic staff and 2 admission staff). The researcher used a qualitative, semi-structured interview to collect data.

**Findings:** The topic areas of knowledge, attitudes and practices were predetermined by the objectives of the study. Themes under each topic were generated by reflexive thematic analysis. In addition, the effects of environmental factors on participants' attitudes, were identified by inductive analysis.

**Conclusion:** All academic staff demonstrated some **knowledge** of inclusive higher education while the admission staff demonstrated no knowledge. The lack of knowledge of the admission staff may imply that applications from the SWPD may not be processed in an equitable manner. Most participants' **attitudes** were positive and welcomed the possibility of accommodating SWPD, but with some apprehension. This might be due to the effect of the environmental factors on inclusion as discussed. This may also imply that the inclusion of SWPD would be enhanced as more staff become positive, embrace inclusion and the environmental factors are addressed. In terms of **practices**, all participants noted the absence of students with physical disabilities, disability inclusion policy and Disability Unit at SMU. It may thus be concluded that SMU is currently not inclusive in terms of the recommended higher education practices.

## DEDICATIONS

I would like to dedicate this research assignment to the following:

- The Almighty God, for giving me life, for keeping me alive and allow me the capabilities to complete this research assignment, I give you the Glory, Amen!
- My late parents, Mr Sam and Mrs Phophi Mphohoni, for rearing me as a child until I grew up to be a man that I am now and for encouraging me to take education seriously. I vividly remember the fact that mommy would buy me school uniforms instead of Christmas clothes in order for me look like other scholars and daddy would sell his cows to finance my undergraduate degree at times. Let your gentle spirits rest in perfect peace, I LOVE YOU!
- My wife, Ndivhuho Mphohoni and all our children, for being patient with me, for your encouragement and for your understanding and sacrificing our quality family time by giving me the time to complete this study. I LOVE YOU ALL!

## **ACKNOWLEDGEMENTS**

I would like to thank the following people for their sincere contributions and support that they have made in this research assignment:

- Dr Martha Geiger, my research supervisor, for her expert guidance, support and patience throughout the study;
- Dr Surona Visagie, my research co-supervisor, for her inputs and contributions in this research assignment;
- All my research participants, for dedicating their time to participate in this research study. This study would not have been possible without you; you deserve a big THANK YOU!
- Dr Mashudu Manafe, for her technical support and continuous encouragement throughout the study as well as for proof-reading this research;
- Mr Alfred Ramukumba, my supervisor at work, for continuous administrative support and encouragement;
- All my colleagues in the Occupational Therapy Department at SMU, for their encouragement and support
- Sefako Makgatho Health Sciences University, for granting me the financial assistance towards the tuition fees.

## ACRONYMS

DHET	: Department of Higher Education and Training (South Africa)
DoE	: Department of Education (South Africa)
DoH	: Department of Health (South Africa)
DSD	: Department of Social Development (South Africa)
FOTIM	: Foundation of Tertiary Institutions of the Northern Metropolis
HEI	: Higher Education Institutions
HPCSA	: Health Professions Council of South Africa
HND	: Human Nutrition and Dietetics
KAP	: Knowledge, Attitudes and Practices
NEI	: Nursing Education Institutions
OT	: Occupational Therapy
PSET	: Post-School Education and Training
PT	: Physiotherapy
PWD	: Persons with Disabilities
SHCS	: School of Health Care Sciences
SLPA	: Speech Language Pathology and Audiology
SMU	: Sefako Makgatho Health Sciences University
SWD	: Students with Disabilities
SWPD	: Students with Physical Disabilities
UN	: United Nations
UNCRPD	: United Nations Convention on the Rights of Persons with Disabilities
WHO	: World Health Organisation
WPRPD	: White Paper on the Rights of Persons with Disabilities
WP6	: White Paper 6 on Special Education Needs

## OPERATIONAL DEFINITIONS

**In this study, the following definitions and concepts were applied:**

- **Disability** – Disability is an umbrella term for impairments, activity limitations and participation restrictions. It denotes the negative aspects of the interaction between a person's health condition(s) and that person's contextual factors (environmental and personal factors) (WHO 2001: 8, 10). Disability has further been described as the inability to equitably participate in life opportunities with others (such as higher education) due to physical, sensory, mental or other impairments (DHET, 2018).
- **Knowledge** - having a theoretical or practical understanding of inclusive higher education; being aware or familiar to inclusive higher education through experience (Oxford Dictionary of English, 2017).
- **Attitude** - the way that people (admission and academic staff) think or feel about including students with physical disabilities (SWPD) in the School of Health Care Sciences (SHCS) at Sefako Makgatho Health Sciences University (SMU) (Oxford Dictionary of English, 2017).
- **Practice** - the application of inclusive higher education at SMU; the customary or habitual way of implementing inclusive higher education at SMU (Oxford Dictionary of English, 2017).
- **Students with physical disabilities (SWPD)** – students who meet the academic admission requirements of the university, but who have physical impairments that affect their mobility and/or dexterity. However, the researcher excluded other physically determined impairments like visual and hearing disabilities to maintain the study focus.
- **Inclusion** - the act of socially including a group of SWPD on the basis of non-discrimination by allowing or enabling them to fully participate in higher education and enjoy the same rights as others (DHET, 2018)
- **Universal access** – the removal of environmental barriers that prevent students with disabilities from entering, using or benefiting from higher education like other people in the society (DHET, 2018)
- **Universal design** – the design of educational products, environments, study programmes and services to be used by everyone without the need for adaptation or specialized modifications for persons with disabilities (DHET, 2018)
- **Universal design for learning** – the design of teaching and learning opportunities so that people with different needs and/or disabilities are also included. It integrates accessibility and inclusion beyond physical environments (Dalton et al., 2019).

## TABLE OF CONTENTS

DECLARATION .....	ii
ABSTRACT .....	iii
DEDICATIONS .....	iv
ACKNOWLEDGEMENTS .....	v
ACRONYMS .....	vi
OPERATIONAL DEFINITIONS.....	vii
TABLE OF CONTENTS .....	viii
LIST OF TABLES .....	xi
Chapter 1: Introduction.....	1
1.1 Brief background and problem statement.....	1
1.2 Rationale and motivation for the study .....	2
Chapter 2: Literature Review.....	4
2.1 Introduction.....	4
2.2 Inclusive higher education.....	4
2.3 Inclusion in practice.....	4
2.4 Current admission (access) requirements.....	6
2.5 Access-related issues .....	7
2.5.1 Curriculum issues.....	7
2.5.2 Physical infrastructure access.....	8
2.5.3 Service information and educational support.....	9
2.5.4 Marketing of the study programmes.....	9
2.6 Knowledge, attitudes and Inclusion practices .....	10
2.7 Research Question and Conclusion .....	11
Chapter 3: Methodology.....	13
3.1 <i>Introduction</i> .....	13
3.2 <i>Research Design</i> .....	13
3.3 <i>The study setting</i> .....	13
3.4 <i>Study population, sampling and participants</i> .....	13
3.5 <i>Data collection</i> .....	14
3.6 <i>Data analysis</i> .....	15

3.7 Ethical considerations .....	17
3.8 Trustworthiness.....	18
3.9 Limitations of the study.....	19
Chapter 4: Findings.....	20
4.1 Introduction.....	20
4.2 Research findings.....	20
4.3.1 Theme 1: Participants’ knowledge of inclusive higher education .....	21
4.3.2 Theme 2: Participant’ attitudes on inclusion .....	21
4.3.3 Theme 3: Effects of environmental factors on participants’ attitudes.....	24
4.3.4 Theme 4: Current practices of academic and admission staff in the inclusion of SWPD .....	25
4.3.5 Conclusion.....	27
Chapter 5; Discussion .....	29
5.1 Introduction.....	29
5.2 Knowledge .....	29
5.3 Attitudes .....	30
5.4 Practices .....	33
Chapter 6: Conclusion and Recommendations.....	35
6.1 Conclusions .....	35
6.2 Recommendations.....	36
6.2.1 University management.....	36
6.2.2 Curriculum Developers.....	36
6.2.3 Student Affairs Department .....	36
6.2.4 Disability Unit .....	36
6.2.5 Marketing Department/Students recruitment .....	37
6.2.6 Academic departments (lecturers, clinical facilitators, etc).....	37
6.2.7 Student Administration Department (Admission and Enrolment) .....	37
6.2.8 Students with disabilities (SWD).....	37
6.3 Future Research .....	37
References .....	38
APPENDICES.....	43
APPENDIX 1: SEMI-STRUCTURED INTERVIEW SCHEDULE .....	43
APPENDIX 2: PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM .....	46
APPENDIX 3: ETHICS CLEARANCE FROM STELLENBOSCH UNIVERSITY .....	50

APPENDIX 4: SMU PERMISSION TO CONDUCT RESEARCH..... 52

## LIST OF TABLES

Table 3.1: Demographics of sample .....	14
Table 4.1: Overview of research objectives, themes and subthemes .....	20

## LIST OF FIGURES

Figure 3.1 Data coding tree .....	16
-----------------------------------	----

## Chapter 1

### Introduction

#### 1.1 Brief background and problem statement

Disability is a broad and complex concept. It is relative in nature and it depends on different perspectives (WHO, 2001). The focus of this study was on students with physical disabilities (SWPD) who can academically meet the admission requirements of the university, but who have a physical disability that affects mobility and/or dexterity. To maintain this focus, the researcher excluded other physically determined sensory impairments like visual and hearing disabilities.

Article 24 (Education) of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), highlights basic education as a universal human right. Furthermore, it states that everyone, including persons with disabilities (PWD) “*should have equal access to tertiary education without discrimination*” (UN, 2007:19). Bialocerkowski, Johnson, Allan and Phillips (2013:2) urge “education providers must be able to demonstrate, through documentary evidence, that no discrimination has occurred, and that all reasonable adjustments have been considered and implemented” to facilitate inclusive higher education.

Although a strong equity factor is noted in the disability policy framework in Higher Education in South Africa, the implementation of it continues to be poor (FOTIM, 2011). For example, despite the efforts by much legislation and policies to meet disability challenges such as negative attitudes, behaviour, teaching methods, curricula and environmental access, many challenges still remain (DHET, 2016:8). As compared to other universities, there is no disability inclusion policy or Disability Unit at SMU to address disability inclusion matters.

SMU is fundamentally a Health Sciences University and consists of Schools of Medicine, Pharmacy, Dentistry, and Health Care Sciences. The focus of this research assignment is the School of Health Care Sciences (SHCS), which consists of the departments of Nursing, Physiotherapy (PT), Occupational Therapy (OT), Speech-Language Pathology and Audiology (SLPA), and Human Nutrition and Dietetics (HND). Entry-level admission requirements to the SHCS programmes are mainly based on adequate academic performance in Grade 12 as well as on applicants' grades in the Physical Science and Mathematics subjects.

Engelbrecht and De Beer (2014) noted that attitudinal barriers are worse than architectural barriers and that they are the most notable barrier to inclusion progress. They asserted that attitudes of academic staff towards SWPD in higher education institutions play an important

role in students' studies. Hence, the topic of the research study included attitudes as a variable in the inclusion practices.

Generally, PWD are still marginalized despite many efforts to include and liberate them. For example, Kochung (2011) mentioned that when SWPD meet all the requirements for admission into higher education, they still meet other barriers such as being regarded as inadequate by lecturers. Mutanga and Walker (2015) noted the inequalities that students with disabilities face in higher education as compared to those experienced by students without disabilities. In concurrence with other authors, Mosia and Phasha (2017) indicated that SWPD still face negative attitudes of staff members who lack information or knowledge on disability issues.

Brandon and Ncube (2006), noted that knowledge and attitudes regarding inclusion of SWPD affect the successful implementation of inclusive education. The knowledge and attitudes of academic and admission staff on inclusive higher education may therefore have a role to play on whether SWPD are included in the SHCS at SMU or not.

## **1.2 Rationale and motivation for the study**

Education is one of the key components of Community Based Rehabilitation (CBR) to ensure community integration of PWD (WHO, 2010). WHO (2010) further highlights that participation in educational opportunities by PWD enhances their employability prospects or livelihoods, and therefore their quality of life. As a vocational rehabilitation professional, the researcher has a special interest in community integration as the ultimate goal of rehabilitation and this includes the access of PWD's to higher education.

Ramaahlo, Tönsing and Bornman (2018) conclude that South Africa has a sound legal and policy framework that protects PWD's right to education. They furthermore emphasise that, in line with the UNCRPD (2006), the rights of students with disabilities (SWD) should not be compromised and that their right to access further higher education should be equal with that of others.

The researcher is of the view that identifying knowledge, cultural beliefs/attitudes and behavioural practices of those who are closely involved with the admission and tutoring of students (i.e. academic and admission staff) can facilitate understanding and positive action. As Cramm (2013) concluded, reducing negative attitudes and improving inclusion practices requires interventions aimed at lecturers and admission staff.

The researcher thus envisaged that as academic and admission staff are key determinants of inclusion in higher education, insight into inclusion-related knowledge, attitudes and practices of these staff members would be beneficial to planning positive changes. The researcher also

envisaged that SMU would be able to demonstrate possible inclusion challenges and inform prospective SWPD and the community accordingly so that they can make informed decisions about their study choices at SMU.

## Chapter 2

### Literature Review

#### 2.1 Introduction

A "Quick-and Easy" search strategy was applied and various databases such as PubMed and Google Scholar were accessed through the Stellenbosch University Library. The search terms used included combinations of Inclusive Higher Education, Students with Physical disabilities, facilitators to inclusion and barriers to inclusion, Knowledge, Attitudes and Practices. Using the funnelling process for planning the literature review as illustrated by Hofstee (2006), the researcher included topics about inclusive higher education, inclusion in practice, admission requirements, and access-related issues. Sub-topics included curriculum issues, physical access, service information and educational support, and marketing of the study programmes. The researcher also explored the interrelationship between knowledge, attitudes and practices and how they affect one another in social issues such as inclusion of SWPD.

#### 2.2 Inclusive higher education

In their study of inclusive education in higher education at the University of Seville in Spain, Morgado, Cortes-Vega, Lopez-Gavina, Alvarez, and Morina, (2016) described inclusive higher education as a model of education that incorporates and welcomes all students in the higher education institution so that they are able to learn and participate. In South Africa, inclusive education and training requires changing attitudes, behaviour, teaching methods, curricula and environment to meet the needs of all learners (DoE, 2001:7).

The aim of inclusive education (whether at basic or higher education level) is to remove exclusion through modification of legislation, policies and practices (Kochung, 2011:144). In striving to realize the overall goal of rehabilitation, which aspires community integration of people with disabilities (PWD) in all spheres of life (including education), this aim serves to promote inclusion of all students irrespective of whether they have a disability or not.

#### 2.3 Inclusion in practice

South Africa ratified the UNCRPD in 2008 and specifically domesticated it in 2016 through the formulation of the White Paper on the Rights of Persons with Disabilities (WPRPD) in order to eliminate exclusion of PWD (South Africa. Department of Social Development (DSD) 2016). The WPRPD was formulated to ensure that all PWD participate fully and equally with others in mainstream social and economic life (DSD, 2016:42). Based on the WPRPD, education must be inclusive to all students in South Africa, including students with physical disabilities (SWPD).

In order to realize the goals of the WPRPD, South Africa developed the Strategic Policy Framework on Disability for the Post-School Education and Training (PSET) System (DHET 2018). The intention was to create an inclusive PSET system for people with disabilities, to guide PSET institutions in the creation of enabling environment for PWD, and to provide DHET with a monitoring and evaluation instrument. According to DHET (2018), the inclusion and mainstreaming of PWD in the PSET system was to ensure that disability-related policies and guidelines are formulated, implemented and monitored.

Based on their UNCRPD perspective of disability, Ohajunwa, Mckenzie, Hardy and Lorenzo (2014), noted that PSET institutions, as higher education providers, have a role to play in transforming societies and disability inclusion. From the UNCRPD perspective, disability is viewed as the interaction between people with impairments and their physical and attitudinal or social environments that may hinder (barrier) or enhance (facilitator) full and equal participation in society (UN, 2007).

Dalton, Lyner-Cleophas, Ferguson, & McKenzie (2019) recommended that in order to realize inclusion, education (basic and tertiary) should be designed according to inclusive models such as universal design and universal design for learning. They pointed out that such inclusive models should be applicable to admission procedures. Essentially, these policy frameworks have challenged PSET institutions to include SWPD in their programmes and compliance to these policies will therefore enhance the ideal situation of inclusive higher education. From a vocational point of view, this implies that including SWPD to participate in educational opportunities will enhance their future employability prospects.

Ramaahlo et al. (2018) highlighted that in South Africa, each HEI is required to have its own disability policy in order to promote inclusive education on that level. Disability policies from five local universities, that is, Stellenbosch (2005; 2018), Western Cape (2007), Cape Town (2011), Pretoria (2018), and University of the Witwatersrand (2013)] indicate the application of universal access and design principles as common inclusion features. However, these policies seem very generic intended for implementation in all faculties and are not specific enough for applicants in schools of medicine and health sciences.

While these policy initiatives seemed to have provided progress towards inclusive higher education, FOTIM (2011) found that the actual enrolment figures of students with disabilities in South African universities were still low.

According to the report on the Statistics on Post-School Education and Training (PSET) in South Africa: 2016 that was released in 2018, the enrolment of students with disabilities in 2016 was reported to be just under 1% (7 525) of the total students enrolled in public HEIs, and almost half of the students reported physical and sight disabilities (DHET, 2018).

In concurrence with FOTIM (2011), Ndlovu (2019) lamented that while inclusive higher education policies support access of all students into professional degree programmes, there were still practices that excluded students with disabilities at entry. As one of the essential measures of inclusive higher education, Ramaahlo et al. (2018) concurred with other authors that disability units should be available at all PSET institutions because they play a vital role in the inclusion of students with disabilities upon admission and beyond.

## **2.4 Current admission (access) requirements**

Admission entry requirements for professional degrees programmes differ from one degree programme to another as well as from one institution to another. Ndlovu (2019) noted that PSET institutions do not deny students with disabilities entry into Law, Medicine, Education or any other professional degree, but that students with disabilities are merely advised on the difficulties they might experience in taking a particular programme, looking at the demand of the programme versus the impairment of the student and its severity.

Ndlovu (2019) noted that admission entry requirements varied in terms of academic marks obtained at school, compulsory subject requirements and/or admission procedures. However, Ndlovu (2019) also noted that students with disabilities are expected to achieve the same entry requirements as students without disabilities to enter into for example, degrees in Medicine at the institution. However, Ndlovu (2019), also noted that their schooling background is different from students without disabilities; that is, special schools for learners with special needs do not offer subjects that are prerequisites to enter specific professional degrees. This be a predetermined reason for exclusion.

In their South African study about current access and recruitment of student nurses with disabilities (SNWD) in Nursing Education Institutions, Moodley and Mchunu (2019) found similarities in terms of access to the nursing programme amongst different Nursing Education Institutions. Their findings suggest that there was no discrimination between the non-disabled and disabled student nurses in terms of the application procedures; thus all students were treated equally, but the students were expected to indicate in the application form if they have a disability or not (Moodley and Mchunu, 2019).

At SMU, as also at some other South African medical schools, the academic criteria used in the admission of prospective students to the SHCS degree programmes is based on matriculation or national senior certificate or National Certificate Vocational (NCV) on NQF4 with a minimum score of 4 in Mathematics, Physical Science, English and Life Sciences (SMU calendar, 2019).

Van der Merwe, Van Zyl, Gibson, Viljoen, Iputo et al. (2016) conducted a study of current state of selection criteria and medical students' demographic profile in the eight South African medical schools. They noted that non-academic inclusion criteria of students was based on race and gender in all eight South African medical schools. Although disability was not included in the inclusion criteria, Van der Merwe et al. (2016: 76) concluded: "selection policies for undergraduate medical programmes aimed at redress should be continued and further refined with the provision of support to ensure student success". This means that selection policies could also be refined to include students with disabilities, as long they would receive the necessary support to ensure their success.

## **2.5 Access-related issues**

Just like other authors such as Ntombela (2013), Engelbrecht and De Beer (2014), and Chiwandire and Vincent (2017); Moodley and Mchunu (2019) found that current practices of access to HEIs have common access-related issues. These issues constitute barriers to access study programmes in HEIs. Most authors highlighted common barriers as comprising curriculum issues, access to the physical environment such as inaccessible buildings and inaccessible clinical sites, educational support systems, as well as social barriers (stigma, stereotyping and attitudes) and lack of knowledge.

### **2.5.1 Curriculum issues**

As part of the curriculum, all the SHCS programmes at SMU have common inherent requirements of having clinical practice placements. Rankin, Nayda, Cocks and Smith (2010:) highlighted that the greatest challenge is on those programmes that have professional placement components where students are required to demonstrate practice competency, regardless of their situation, e.g. programmes that are offered at Medical and Health Sciences universities like SMU. For example, Rankin et al. (2010) noted that clinical practice placements requires certain physical and mental capabilities; and that it could be challenging to meet the learning needs of SWPD and the statutory requirements of rendering a safe and effective health care to patients during clinical practice placements.

Bialocerkowski et al. (2013) asserted that inherent requirements are seen as the cornerstone of inclusive higher education because they are fundamental and essential to the individual

student to demonstrate the capabilities, knowledge and skills to achieve the core learning outcomes of the programme. As part of their inherent requirements, all registered students registered in the SHCS at SMU are placed at accredited hospitals or health centres for clinical or practical learning purposes.

When investigating the requirements inherent in a physiotherapy programme in one Australian university, Bialocerkowski et al. (2013) noted that information on the requirements to study physiotherapy was not in harmony with inclusive education, which ensures accessible learning to all students irrespective of impairment or disability. They also noted that the information tended to focus on “fitness to practice” concept, which includes clinical competence, professional behaviour and being free from impairment (Bialocerkowski et al.: 2013).

Rankin et al, (2010) reported that Nursing degree programmes in Australian Universities accept applicants based exclusively on academic merit without assessing whether the applicants have the physical ability to accomplish clinical practice-based competencies. According to Rankin et al. (2010), this was directly in conflict with their Nursing Council’s statutory requirements (inherent requirements) to demonstrate the ability to meet the physical practice-based competencies associated with safe nursing practice, thus presenting a dilemma for students with physical disabilities. However, Rankin et al. (2009) noted that unlike the universities, healthcare organisations (offering clinical placement) might decide not to provide placements for students with physical disabilities who are unable to meet their safety and practice requirements.

Curricula create the most significant barrier to learning and exclusion for many SWD (DoE, 2001: 31). Due to their inherent requirements, curricula of these SHCS programmes somehow seem to present themselves as barriers to inclusion. As Dalton et al. (2019) concluded, study programmes that are not accessible makes it difficult for students, especially those with disabilities, to have adequate support in their studies.

Bunbury (2018) suggested that higher education institutions should adopt an inclusive curriculum that minimizes barriers that hinder learning and participation. However, Bunbury (2018) also noted concerns of whether it would be possible to achieve inclusive curriculum, as it is difficult for staff members in the universities to make reasonable modifications. In the case of SMU and other medical or health sciences universities in South Africa, curriculum is dependent on the statutory requirements and it could be difficult to change anything without the approval of the statutory HPCSA.

## **2.5.2 Physical infrastructure access**

Ntombela (2014) noted that many campuses consist of several places that a physically disabled student will have to rely on others for access, e.g. grassy and uneven pathways to different buildings and inaccessible buildings. According to Chiwandire and Vincent (2017), poorly designed physical environments exclude PWD from participating in mainstream society, especially in HEIs. Chiwandire and Vincent (2017) proposed that accessibility of facilities such as lecture halls or theatres, libraries, toilets, and modes of transport should be prioritized. Engelbrecht and De Beer (2014) indicated that although there have been some accessibility improvements globally, SWPD still experience a variety of physical access constraints.

### **2.5.3 Service information and educational support**

Even though the learning experiences of SWPD in higher education is not the primary focus of this study, considering them might enable academic and admission staff to reflect upon their own role in creating and/or perpetuating barriers or facilitators to inclusive higher education.

Although disability units within the HEI link SWPD to institutional disability support services, most of them complain about physical inaccessibility, particularly those students with mobility impairment (Engelbrecht and De Beer, 2014). Furthermore, Engelbrecht and De Beer (2014) found that SWPD struggle with issues such as disclosing their disabilities and highlighting their particular needs; difficulty with finding out about available advice and support for learning and assessment, and they often feel disempowered and marginalized. Engelbrecht and De Beer (2014) also found that despite not making use of the support offered to them, SWPD prefer to voice their opinions about the services they are being offered.

Chiwandire and Vincent (2019) highlighted the barriers related to educational support in terms of funding of SWDs within the HEIs. They postulated that these barriers include complicated application processes for funding, lack of disability funding, means-test requirements and inadequate budget to meet the day-to-day disability-related costs.

### **2.5.4 Marketing of the study programmes**

Moodley and Mchunu (2019) found that the majority of NEIs do not have internal policy guidelines to recruit potential SWD. However, in their study to advance diversity in Pharmacy and Pharmaceutical Sciences, Tillman, Whitfield, Mills and White (2015) postulated that it is necessary to increase exposure of historically underrepresented people like those with disabilities to health sciences careers if their access in those careers is to be realized. This means that there should be a recruitment drive in their community, e.g. schools for PWDs, organizations of PWDs, etc. to make them aware of and interested in health sciences careers.

They were of the view that this is possible by expanding representation in such careers, thus increasing diverse enrolment (Tillman III et al., 2015).

## **2.6 Knowledge, attitudes and inclusion practices**

While there was a dearth of literature related to knowledge, attitudes and practices on the inclusion of students with disabilities, the researcher reviewed similar qualitative knowledge, attitudes and practices research studies focusing on diverse issues. For example, De Pretto, Acreman, Ashfold, Mohankumar, and Campos-Arceiz (2015) found that awareness or knowledge about something is directly proportional to the concern or attitudes about it. Additionally, De Pretto et al. (2015) also found that the more the awareness (Knowledge) of, and concern (Attitudes) over something, the more likely people will be to engage into positive actions (Practices) towards it.

In their European study about faculty attitudes and practices towards college students with disabilities, Leyser and Greenberger (2008) found that staff members with more training, information and experience (knowledge) on disability issues had attitudes that are more positive and were more willing to make reasonable accommodations than those with less training and experience. In nearby Botswana, Brandon and Ncube (2006) noted that knowledge and attitudes regarding inclusion of SWPD affect the successful implementation of inclusive education. Since it is difficult to define someone's level of knowledge, the Bloom's Taxonomy of cognitive development may be applied to identify participants' level of theoretical or practical understanding of inclusive higher education as follows (Heick, 2018):

- Knowledge level (Recall) – remembering previously learnt information about inclusive higher education
- Comprehension level (Understand) – grasping the meaning of inclusive higher education
- Application level (Generalize) – Using learning in new situation
- Analysis level (Break down/discover) – breaking down an idea of inclusive higher education into component parts so that it is easily understood
- Evaluation level (Judge) - making a judgment about inclusive higher education
- Creation level (compose) – designing a new solution to an old problem that honours the previous inclusive higher education failures

However, as illustrated by Ntombela (2013), SWPD still experience exclusion based on the perception by others because of their physical conditions, probably because they are viewed as people who need help. Ntombela (2013) also added that negative attitudes towards different students (SWPD) continue to influence HEIs' culture and practices while causing a

stress to those who desire transformational changes. In their study of perceptions of academic staff towards accommodating students with disabilities in a civil engineering program in a South African University, Mayat and Amosun (2011) found that academic staff were more willing to admit and accommodate them. Mayat and Amosun (2011) postulated that the academic staff's willingness might be related to the efforts by the Disability Units to increase awareness about disability issues as a means of fast-tracking inclusive higher education.

According to the Strategic Policy Framework on Disability for the PSET System, inclusion implies that society has to change their perceptions to accommodate diverse people, including those with disabilities. This means that there must be a system in place to accommodate diversity so that the ultimate objective of mainstreaming can be realised (DHET, 2018). Chiwandire and Vincent (2019) recommended that HEIs should address the barriers related to educational support urgently if the rights of SWDs are to be respected and provide SWDs with an enabling environment in order for them to succeed academically.

## **2.7 Research question**

In view of the literature reviewed, and considering the context as described in Chapter 1, the research question was:

*“What are the reported knowledge, attitudes and practices of academic and admission staff on the inclusion of students with physical disabilities (SWPD) in the School of Healthcare Sciences (SHCS) at Sefako Makgatho Health Sciences University (SMU)?”*

## **2.8 Conclusion**

Inclusive higher education was described here from an international and South African perspective; particularly its aim of removing exclusion through modification of legislation, policies and practices. Furthermore, inclusion of all students, whether they have a disability or not, was highlighted. With the purpose of realizing the ultimate goal of rehabilitation, i.e. integrating SWPD in higher education, both international and local policy framework that support higher education inclusion in practice were consulted.

Even when SWPD meet admission requirements, they still meet environmental barriers to inclusion in the form of curriculum, physical access and negative attitudes by staff members who lack information/knowledge on disability issues. When considering the interrelationship between knowledge, attitudes and practices, literature shows that knowledge and attitudes regarding inclusion of SWPD affect the successful implementation of inclusive higher education and while negative attitudes lead to exclusionary practices, positive attitudes support affirmative practices with regards to inclusion of SWPD. In order to realize inclusion, there should be a system in place to accommodate diverse people, including those with

disabilities (DHET, 2018). For example, disability funding, as highlighted by Chiwandire and Vincent (2019) that these have contributed to the realisation of a steady increase of inclusion of SWDs in the public HEIs.

## Chapter 3

### Methodology

#### **3.1 Introduction**

This chapter describes the research methodology followed in this research study. It focuses on the research approach and design; the study setting, population, sampling and recruitment of participants, data collection and analysis, ethical considerations, measures to ensure trustworthiness and limitations of the study.

The researcher worked from a post-positivist position and adopted a relativist approach (O'Leary, 2017) in exploring the knowledge, attitudes and practices of academic and admission staff on the inclusion of students with physical disabilities in the School of Health Care Sciences (SHCS) at Sefako Makgatho Health Sciences University (SMU).

#### **3.2 Research Design**

A qualitative descriptive study design was applied. As noted by Colorafi and Evans (2016), a qualitative descriptive design describes the phenomena of interest. In this case, the phenomena of interest were the self-reported knowledge, attitude and practices of staff about inclusion of SWPD in the SHCS at SMU, as well as factors that could facilitate or hinder such inclusion.

#### **3.3 The study setting**

The study setting was the SHCS at SMU, which consists of staff in the Nursing, PT, OT, HND, and SLPA Departments. The setting also included admission staff at the central Student Admission and Enrolment Department, which serves all of these SHCS Departments.

#### **3.4 Study population, sampling and participants**

The study population comprised all academic staff members employed in the School of Health Care Sciences Departments and all admission staff members at SMU at the time of data collection (between November and December 2018). The total study population was 75; where 10 were admission staff members and 65 were academic staff members from five academic departments.

A purposive sampling strategy was used to hand-pick all six departmental Heads of Departments (HODs) in the SHCS by virtue of their position and expertise (O'Leary, 2017:210). The researcher then asked the HODs themselves for their consent to participate

as well as to identify staff members with **at least one-year** working experience who would be interested in participating in the study, and permission for the researcher to approach these staff members. While five departments agreed to participate, the Nursing Department needed to discuss the request first and due to a further delay in responding, potential participants from the Nursing Department could not be included in the study.

Participants with at least one-year working experience at the study setting were included because they have experienced more than one annual academic cycle of admission, teaching, and assessment. People on long leave of absence from work during the data collection period were excluded, as data collection could not be extended off-campus.

The researcher envisioned a total sample of 12 – 15 participants during planning, but the final sample consisted of 12 participants (10 academic staff and 2 admission staff from the Student Admission and Enrolment Department). Although females dominated most of the academic staff, gender was not included as that would have compromised anonymity (especially for the few males who would easily have been identified based on their being the only one in their department). Nine of the 12 participants were older than 40 years and all participants had a working experience of three years or more. The demographics of the sample was summarized according to the department, age, and years of experience of the participants and recorded as in Table 3.1 below.

**Table 3.1: Demographics of sample (n = 12)**

Participant	Department	Age in years	Experience in years
1	SLPA	44	3
2	SLPA	60	3
3	PT	60	30
4	HND	33	6
5	HND	50	12
6	HND	45	5
7	PT	33	3
8	Admission	65	9
9	Admission	47	20
10	PT	48	5
11	OT	30	3
12	OT	59	30

### **3.5 Data collection**

The researcher prepared a qualitative, semi-structured interview schedule (Appendix 1), based on two recognized general guidelines on knowledge, attitude and practices (KAP) surveys. These guidelines are the *Knowledge, Attitudes and Practices for Risk Education: how to implement KAP Surveys: Guideline for KAP Survey Managers* (Handicap International, 2009) and *Advocacy, communication and social mobilization for TB control: a guide to*

*developing knowledge, attitude and practice surveys* (WHO, 2008). The semi-structured interview schedule had four sections, which were:

- Demographic data;
- General knowledge and awareness of physical disability and inclusive higher education
- Attitudes on inclusion of students with physical disabilities and
- General inclusive higher education practices.

The researcher piloted the interview schedule with one participant (not included in the main study) to fine-tune the interview questions; to see if it answers all the study objectives and to determine how long it would take participants to complete it. The researcher also used the pilot study to test the effectiveness of the audio recorder and then do a provisional deductive analysis as proposed for the main study. Although different academic departments were involved, the researcher only used one pilot participant. No changes were needed after the pilot study and the same interview questions continued to be used with the 12 participants.

The researcher made appointments with the 12 participants who consented to take part in the research study. The researcher conducted the scheduled interviews in their offices/seminar rooms during times convenient to them. During the audio-recorded interviews which were all conducted in English and lasted 30-45 minutes, the researcher asked open-ended questions which allowed for prompts and follow-ups.

After the interview, the researcher manually transcribed all the recorded interviews into written formats and sent them to the main supervisor who checked them. The researcher stored the transcribed data in a password-protected laptop and external memory for back up.

### **3.6 Data analysis**

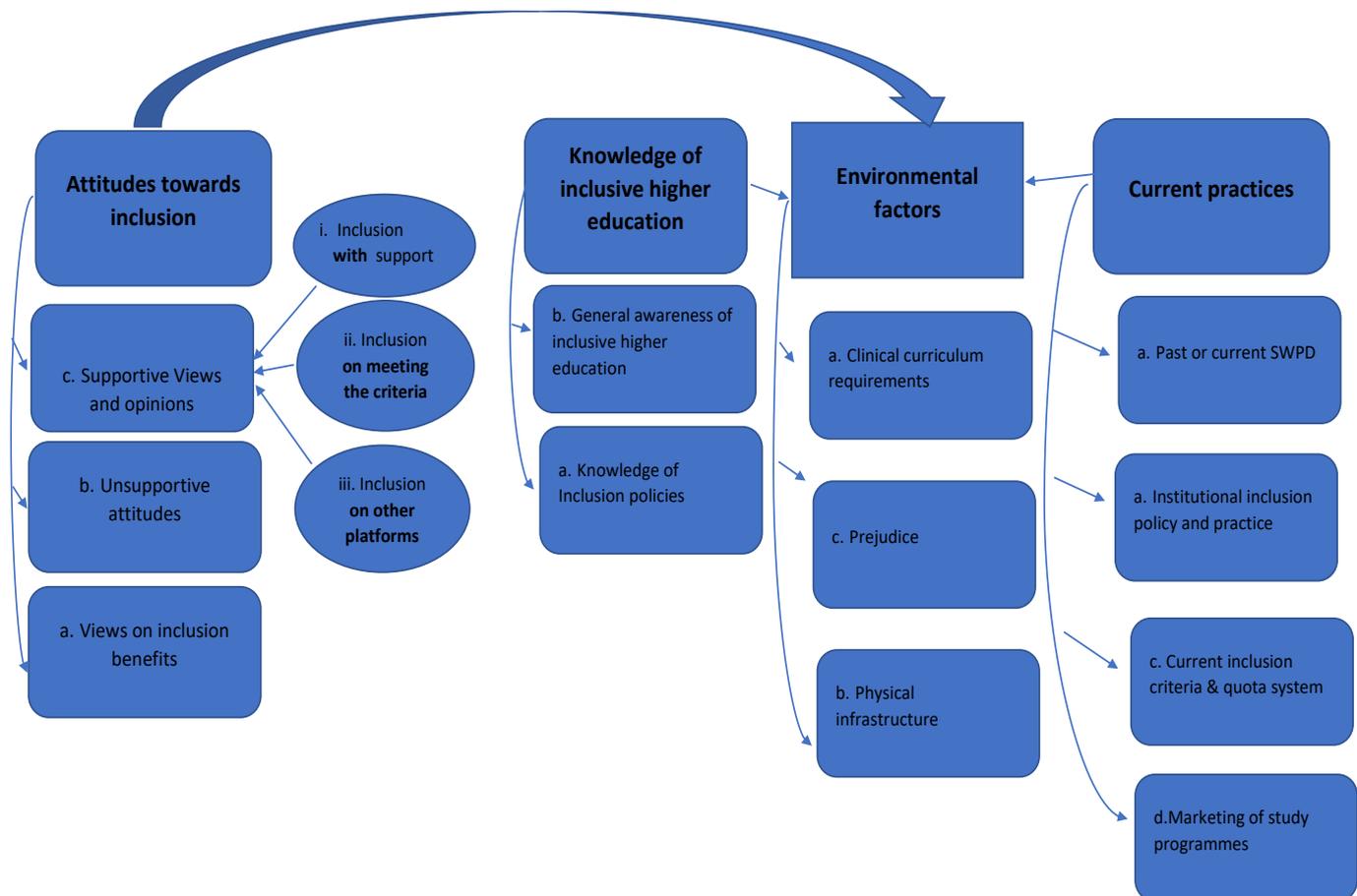
The aim of the analysis was to identify and describe the reported knowledge, attitudes, and practices of the participants on the inclusion of students with disabilities. The researcher listened to the audio recording several times to immerse himself in the data and to understand the participants' perspectives. After the recorded verbal data was transcribed in a written format, the researcher applied a simple thematic approach to analyse the interviews. Thematic analysis is a method to analyse data by identifying, analysing and reporting patterns (themes) within the data, where the researcher codes relevant responses directly as expressed by the participants (Braun and Clarke, 2006).

The researcher therefore applied the following step-by-step technique for thematic analysis to identify, analyse and report patterns relating to knowledge, attitudes and practices (themes) in relation to inclusion of SWPD within the data as outlined by Braun and Clarke (2006):

- Be familiar with the transcribed data – this involved repeatedly going through the data to understand it.
- Generating initial codes – this involved coding of data systematically with specific KAP guided questions in mind. As deductive logic was being used, colour-coding was done to identify particular features of the data set for potential confirmation of these KAP ideas, and this was done manually to increase the researcher's engagement with the data.
- Searching for themes – the researcher, with the assistance of the supervisor, sorted different codes into potential themes using a thematic map. This was done to uncover data deductively according to predetermined themes as indicated in the background and problem statement as well as in the literature review (O'Leary, 2017:330).
- Reviewing of themes were refined as they are in the research report now.
- Defining and naming themes - each theme was named and according to the data each theme captured. From the inductive analysis, an additional theme was developed from the content of the data related to the predetermined themes
- Producing the report – final analysis occurred together with the writing up of the research report.

Firstly, within the three predetermined areas of knowledge, attitudes and practices the researcher analyzed the data through a deductive approach because the semi-structured interview was based on a predetermined Knowledge, Attitudes and Practices (KAP) guided questionnaire to identify codes and themes. Secondly, the researcher analysed the data using an inductive approach in order to identify codes and themes related to the predetermined themes from the content of the data (Fereday & Muir-Cochrane 2006). The researcher coded relevant responses by participants (i.e. those relating to knowledge, attitudes and practices in relation to inclusion of SWPD) in the data and then collated these codes into subthemes and overarching themes ([Figure 3.1](#)).

Figure 3.1: Data coding tree



### 3.7 Ethical considerations

The researcher first obtained Ethical clearance from Stellenbosch University's Health Research Ethics Committee (HREC Reference No # S18/05/114) (see Appendix 3). Then, the researcher obtained approval to conduct this research by SMU Ethics Research Committee (See Appendix 4).

The researcher strived at all times to adhere to the research ethics principles as per the South African Department of Health (DoH) (2015) which is based upon the World Medical Association (WMA) Declaration of Helsinki because it involved human subjects (WMA, 2013). On initial contact, participants were briefed with the introduction of the researcher followed by the purpose of the study and what was expected of them should they wish to participate.

All the invited 12 participants signed a consent form. To ensure confidentiality, participants' identifications and demographic information were recorded at the beginning of the interview

as participant no.1, no.2, and so on and only the researcher knew which participant matched which number.

The ethics principles of **respect for persons** (dignity and autonomy); **beneficence and non-maleficence** and **justice** (DoH, 2015) were applied in this no-risk study in the following ways: The consent form was attached to the information leaflet for the participants to sign if they were interested and that they should please feel free to make a copy of their completed consent form to keep for their own records. As outlined by Locharoenrat (2017: 191-192), the researcher provided the participants with the information leaflets that contain the following information for their perusal before consenting:

- That their participation was entirely voluntary and were free to decline to participate.
- That there would also be no direct benefit to them and no compensation for taking part but that their participation might potentially benefit students with disabilities.
- That if they say no, they would not be negatively affected in any way whatsoever.
- That they were also free to withdraw from the study at any point, even if they did agree to take part initially.

The researcher and all the participants agreed on the above information in the information leaflet and participants consented to take part in the research study. Although participants were given the opportunity to withdraw from the study, none of them withdrew and they were reassured that their information would remain confidential.

### **3.8 Trustworthiness**

“It is the responsibility of the researcher to consciously minimize the possibility that results are false or misleading” (O’Leary, 2017:66). In order to ensure credibility, the researcher acknowledged that conducting research at one’s place of work might present a conflict of interest and the researcher, as a subjective entity, had to manage his own personal bias (neutrality).

The researcher also took the following precautions as outlined by O’Leary (2017:67) to enhance trustworthiness and avoid bias:

- Dependability – the researcher had to consistently and systematically maintain the line of open-ended questions on knowledge, attitudes, and practices on inclusion of students with physical disability in a higher education institution, particularly in the health care sciences domain.
- Authenticity - the researcher captured and let participants’ responses voices speak for themselves through quotes.

- Transferability - through a detailed description of the methods followed, the researcher is of the view that the value of the study could be transferable and applied in medical and health sciences faculties in other universities in South Africa.
- Auditability - The researcher has also kept the recorded information safe to allow for verification and analysis by another researcher.

### ***3.9 Limitations of the study***

Of necessity, this study for degree purposes, was restricted in terms of scope and time frame. Although no limitations were encountered in terms of staff participation once Heads of Divisions granted permission, but the lack response from one division meant that that Division (and professional training field) was not represented among the participants and in the findings. While the intent of the study was as a means of redress, the sensitive nature of the topic could have been one of the reasons why SMU Research Committee took a long time to grant permission to conduct research, causing extended initial delays.

## Chapter 4

### Findings

#### 4.1 Introduction

In this chapter, the researcher presents the data according to the research aim and objectives, which were to identify the knowledge, attitudes and practices of academic and admission staff on the inclusion of students with physical disabilities (SWPD) in the School of Healthcare Sciences (SHCS) at Sefako Makgatho Health Sciences University (SMU). Participants' quotes were included wherever possible to let their voices speak for themselves.

#### 4.2 Research findings

Four (4) themes were identified from the data. Three themes were predetermined from the research objectives using deductive analysis, namely, participants' **knowledge** of inclusive higher education; participants' **attitudes** on inclusion and current **practices** related to inclusion. The other theme, **the effects of environmental factors on inclusion**, was identified using inductive analysis from the content of the data and it played a part in the participants' attitudes towards inclusion. The researcher formulated sub-themes that fit into the predetermined themes as determined by the research objectives and through inductive analysis as presented in table 4.1 below:

**Table 4.1: Overview of research objectives, themes and subthemes**

Research objectives	Themes	Sub-themes
To identify knowledge of academic and admission staff on the inclusion of SWPD in the SHCS at SMU	Participants' knowledge of inclusive higher education	a) General awareness of inclusive higher education
		b) Knowledge of general disability inclusion policies
To identify the attitudes of academic and admission staff on the inclusion of SWPD in the SHCS at SMU	Participants' attitudes on inclusion	a) Supportive views and opinions
		b) Unsupportive views and comments on inclusion
		c) Views regarding inclusion benefits
	Effects of environmental factors on participants' attitudes	a) Physical infrastructure
	b) Prejudice	
	c) Clinical curriculum requirements	
To identify the practices of academic and admission staff in the inclusion of SWPD in the SHCS at SMU	Current practices of academic and admission staff in the inclusion of SWPD	a) Past or current students with physical disabilities
		b) Institutional disability policy and practice
		c) Current inclusion criteria and the quota system
		d) Marketing of study programmes

### 4.3.1 Theme 1: Participants' knowledge of inclusive higher education

The first theme identified was the participants' knowledge and awareness of inclusive higher education. It contains two sub-themes: Participants' general awareness of inclusive higher education and knowledge of general disability inclusion policies.

#### a) **General awareness of inclusive higher education**

Academic staff (e.g. P4) could describe inclusive higher education to some extent while admission staff members (e.g. P9) admitted to not knowing what it was at all:

**Participant 4:** *"Not restricting access to any groups [...] Anyone should have the opportunity to pursue higher education [...] irrespective of disability, race or adversity".*

Other participants, notably those from the admission section, indicated no knowledge of inclusive higher education and they could not describe it:

**Participant 9:** *"Oh God, let me google it".*

#### b) **Knowledge of general disability inclusion policies**

Participants indicated that they were not aware of any general disability inclusion policy at national level, other institutions of higher learning or at SMU:

**Participant 4:** *"I am not aware of the national policy looking at inclusive higher education. To my knowledge, we also do not have SMU's policy on inclusive higher education..., so I have not seen a policy on disability yet".*

In contrast, one participant knew about inclusive higher education policies, but was not aware of the details regarding how it should be implemented:

**Participant 12:** *"I am aware of current policies regarding inclusive higher education, but I don't know the details about them. I know SMU are trying to expand but there seems to be, in my observation, limited support for people with disabilities, and people are not overt about it. I'm also aware as it is practiced in basic education but not the details".*

### 4.3.2 Theme 2: Participant' attitudes on inclusion

The second theme, on participants' attitudes on inclusion of students with physical disabilities comprised three sub-themes: supportive views and opinions, unsupportive views and comments on inclusion, and views regarding inclusion benefits.

#### a) **Supportive views and opinions**

Despite the barriers, most participants' views and opinions on inclusion were positive. One participant viewed inclusion very positively and took a revolutionary perspective on supporting inclusion of students with physical disabilities without attaching any conditions. However, this participant also noted that SMU is reactive and not proactive, and that in the event that a student suddenly becomes physically disabled, the environment should be modified:

**Participant 1:** *“I’m an advocate for any kind of disability that say ‘nothing about us is without us’. So [...] provide an environment [...] and give them the necessary support [...] for them to succeed in their chosen field. Our university is reactive, they are not proactive. If a student becomes physically disabled, it’s then that they can be reactive and implement things [...] student in completing their studies, but we are not proactive, so we are waiting for that day [...] then that we will be able to **modify the environment** to include PWD”.*

However, some participants laid down some conditions that would ensure that inclusion is effective. Their views and opinions were that inclusion could be possible with support, on meeting the criteria and on other admission platforms. If a student suddenly become disabled, these participants further indicated that the student should continue studies with special arrangements to accommodate and that the environment should be modified:

- i. **Inclusion with support** – some participants were of the view that facilities and infrastructure should be accessible enough to accommodate students with physical disabilities:

**Participant 4:** *“I think we should include them. But we should then bear in mind how we can accommodate such students in our departments and in the clinical facilities where we train them off campus. I think the only time we will change is when we actually get a SWD. So currently we don’t see a need to modify our buildings [...], but when we have someone disabled coming, it will be trigger to say now we need some adjustments. [...] if it’s a final year student and he becomes disabled, we will then if the current health facility which he was sent to can’t accommodate him, make special arrangement to get another health facility where he can do his clinicals”.*

**Participant 5:** *“I think that it can be done, I don’t see any problem as long as all the things or every challenge can be addressed, or their needs can be addressed. The student who becomes disabled needs to continue; [...] it wouldn’t be fair to say the student should not continue [...]. I think the university needs to come in and do everything to support the student... the student needs that support [...] whether it’s in the clinical area or it’s in the classroom”.*

- ii. **Inclusion on meeting the criteria** – some participants were of the opinion that potential applicants with disabilities should be assessed and screened first before admission in order to determine the type and severity of the physical disability as well as to determine the suitability of the programme chosen, especially when considering safety and ethical issues:

**Participant 3:** *“I am not negative, I am positive, but my responsibility lies on the ethical side of the public... to protect the public and the patient. The criteria [...] they*

*must be assessed on their level of functionality [...] to perform all the different actions of the profession”.*

**Participant 8:** *“I think they need to be considered. I think they must be assessed [...] to be in a certain programme. There are things that I think they can’t cope with [...] get a chance”.*

**Participant 12:** *“I think it is a good thing to include them, but on condition that we screen them [...]. Therefore, my attitude is a positive one, for as long as we have screened them, assessed them, and they understand their limitations”.*

- iii. **Inclusion on other platforms** – some participants opined that sub-stream programmes within the main generalist programmes could be incorporated as a way of including them:

**Participant 7:** *“Even if they have severe disabilities ... we can look at doing a sub stream ... where the students have a role”.*

**Participant 10:** *“Beyond the shadow of doubt, I believe students with physical disabilities should be admitted. [...], I think there are certain fields or sub-fields within the programme that do not require much of strength, [...] we can find means and ways of training them differently for particular sections or sub-sections [...] without compromising the requirements for the main degree”.*

**Participant 11:** *“If we want to include them [...], not to change the programme but to make an adapted programme for them, which then is going to mean is not including physical work”.*

#### **b) Unsupportive views and comments on inclusion**

There were also participants who were not supportive of inclusion of SWPD, citing ethical and safety issues as paramount to inclusion. If a student suddenly become disabled, these participants further indicated that depending on the severity of the disability, the student should either interrupt the studies until recovery or change the profession:

**Participant 3:** *“[...] will not be able to do [...]; it is unethical [...] as patient safety and treatment efficacy are major responsibilities. It is not about attitude or anything; [...]. It’s also for the protection of the disabled person. [...] it depends on how severe and what type of physical disability it is [...] otherwise the student should be advised to change the profession”.*

**Participant 7:** *“[...] safety of the patients during treatment should be considered. Wheelchair-bound students [...] will definitely not be able to do [...] a lot of our work is with our hands. [...] it depends on the nature of the injury, so if it is severe we usually*

*advise the student to interrupt a year or two, just to heal as much as possible... to recover from injury”,*

**Participant 11:** *“NO: I don’t think SWPD can do [...]. From 2<sup>nd</sup> year it becomes problematic for SWPD to study the physical component of the [...] program”. [...] I think reasonable accommodation should take place [...] we can maybe make a plan that he goes to a profession that does not demand him to use his body.*

### **c) Views regarding inclusion benefits**

Some participants considered inclusion as having a source of equality and adding value to disability awareness:

**Participant 1:** *“Once we break that attitude of looking at them as our service recipients, they also will look at us as their peers”.*

**Participant 4:** *“If we had someone as a physically disabled staff member, that could help to raise the awareness [...] and allow disability in higher education, because we may have students who can opt to come here”.*

**Participant 12:** *“As people in rehabilitation, I think they will add value in bringing in first-hand experience, [...]. I think we can learn a lot from them”.*

### **4.3.3 Theme 3: Effects of environmental factors on participants’ attitudes**

This theme emerged from the content of the data using inductive analysis, as these effects appear to have affected participants’ attitudes on inclusion. It consists of three sub-themes, namely, the physical infrastructure, prejudice, and clinical curriculum requirements.

#### **(a) Physical infrastructure**

Although participants considered the Departments in the School of Health Care Sciences to have reasonable possibilities, they highlighted that the physical environment within the campus (lecture halls, library, laboratories, kitchens, walking pavements, transport and community mobility) are not conducive enough to allow effective inclusion in terms of access and mobility. Although the clinical placement areas or sites (hospitals, clinics, old age homes and special schools) should be accessible, participants highlighted that they are not accommodating or user-friendly to people with mobility problems:

**Participant 1:** *“the challenge that we have now is the **accessibility** of the therapy rooms, testing rooms, lecture rooms and things like that because the university has not designed the university to accommodate PWDs.”*

**Participant 5:** *“The lecture halls and the library can be a challenge [...]. Clinical placement areas [...] is a challenge. Transportation to a placement area [...] is also a problem if the transport cannot accommodate them”.*

**(b) Prejudice**

Participants urged that prejudice could be one of the factors that affect inclusion of students with disabilities and highlighted the misconception that people with disabilities are different and they are not worthy enough to make it in health sciences programmes:

**Participant 7:** *“So there is a lot of barriers.... having the stigma of being different from the rest of the students”.*

**Participant 9:** *“You know that we normally see the disabled people differently and we don’t treat them like normal people”.*

**Participant 10:** *“I think attitudinal barriers can play a big role in making sure that they are not maybe included, because we all have our prejudices and I think we prejudge and think these ones are not going to make it before we even give them a chance”.*

**(c) Clinical curriculum requirements**

Participants indicated that as student health care professionals, there would be barriers for SWPD as they are also required to meet the minimum standards during their training as part of the clinical curriculum requirements:

**Participant 11:** *“For some courses that have high physical demands, there will be barriers there... we use our bodies to transfer these patients. So SWPDs will experience barriers”.*

**Participant 12:** *“In terms of curriculum the barrier would be the clinical requirements, because we expect them to do physical conditions, where they have to do transfers and treat patients on standing frames”.*

**4.3.4 Theme 4: Current practices of academic and admission staff in the inclusion of SWPD**

The fourth theme identified was the current practices on inclusion of students with physical disabilities. It also contains four sub-themes: past or current students with physical disabilities, institutional disability policy and practice, and current inclusion criteria and the quota system, and marketing of study programmes.

**a) Past or current students with physical disabilities**

Some participants indicated previous experience of including students with physical disabilities at SMU, but with different outcomes:

**Participant 3:** *“I had experience of a CP Diplegic student but his gait was greatly improved [...]. He graduated [...] now a very successful therapist”.*

**Participant 7:** *“We had one student here this year who had severe scoliosis ... and she was able to complete. A couple of things had to be adapted for her... She was included in all other activities and she is graduating now”.*

**Participant 12:** *“[...] we had a wheelchair-bound student whose hands could not straighten out [...] he would not be able to meet the requirements from second year [...] we tried to refer him to a programme [...] but he refused. [...]. It took us a year to win that student off to another programme at Turfloop Campus”.*

In contrast, most participants noted that there were no students with physical disabilities admitted into their programmes:

**Participant 1:** *“I do not think we have any inclusive practices; I have been here since 2002... it is a long time. There has never been a student who had physical disability that was admitted in our programme”.*

**Participant 4:** *“In the 5 years that I’ve been here; I have not seen a student with a physical disability being admitted into the programme”.*

**Participant 6:** *“No, I don’t think we are including them. For now, I think it is zero and from my own view, we are not including them. Since I started working here I have never seen any student with a disability here”.*

#### **b) Institutional disability policy and practice**

Despite the availability of the national strategic policy framework on disability for post-school education and training system (DHET, 2018), most participants (e.g. P1) indicated that SMU has no policy that addresses inclusion of students with disabilities:

**Participant 1:** *“SMU has no Disability Desk/Unit. SMU has not embraced disability in terms of students and staff. We do not have a clear-cut policy in the university regarding being representative. Higher education policy makers have not been strict in terms of implementing disability inclusion”.*

#### **c) Current inclusion criteria and the quota system**

Although the main academic admission or inclusion criteria is based on grade 12 results and the relevant subjects (SMU calendar, 2019), some participants (e.g. P1) reported that the current final selection criteria or the quota system does not address the number or percentage of students with disabilities to be admitted per annum. It only addresses race, gender, students with prior degrees, and foreign students:

**Participant 1:** *“I sit on the selection committee for first years, and I know for sure we don’t look at people with disabilities. We look at race, we look at gender, but we never look at people with disabilities. The application form has your quota’s to say you can*

*take so many percentage of women and men, ... different races but it does not say anything about people with disabilities”.*

#### **d) Marketing of study programmes**

Some participants urged that marketing of health sciences programmes is not extended to people with disabilities and that potential applicants with disabilities may not be aware of the programmes that SMU offers and whether they are also eligible to do them or not:

**Participant 5:** *“I don’t even see the people or the university marketing the university in a setting where there is disabled people”.*

**Participant 6:** *“I think we don’t attract them and I don’t remember any marketing initiative from us to go to the school of learners with disabilities, try to and promote our professions”.*

**Participant 12:** *“I do not think we have got enough awareness in the disability community regarding our programmes as a whole, except those who are aware that there is physio, and OT if they have gone through rehabilitation. However, whether they are aware that a person with disability can do it, I’m not sure. They are not aware how far they can go”.*

#### **4.3.5 Conclusion**

In terms of knowledge, the academic staff could describe inclusive higher education to some extent while those from the admission section admitted to not knowing what it was at all. Interestingly, most participants, including the academic staff who could describe inclusive higher education, were not aware of any general disability inclusion policy at national level, other institutions of higher learning or at SMU itself. However, one participant knew about inclusive higher education policies, but he was not aware of the details regarding how it should be implemented. Some participants had previous experience of including students with physical disabilities at higher education institutions while others lacked exposure and knowledge of including them.

Despite the barriers, most participants’ attitudes on inclusion were positive, although they had some reservations, for example they proposed that inclusion could be possible with support, on meeting the criteria. There were also participants who did not seem supportive of inclusion of students with physical disabilities, citing ethical and safety issues as paramount to inclusion.

Participants noted that there were no students with physical disabilities admitted into their programmes to date and that there is no policy at SMU that addresses inclusion of students with disabilities. Although the main academic admission criteria is based on grade 12 results and the relevant subjects (SMU calendar, 2019), some participants reported that the current

final selection criteria or the quota system currently only addresses race, gender, citizenship but does not address the inclusion of students with disabilities to be admitted per annum. Some participants noted that marketing of health sciences programmes by SMU is not extended to people with disabilities and that potential applicants with disabilities may not be aware of the programmes that SMU offers and whether they would be eligible or not.

## Chapter 5

### Discussion

#### 5.1 Introduction

In this chapter, the findings in the themes identified in the previous chapter are discussed in relation to the relevant literature. Adding elements of inductive (data driven) analysis, the effects that environmental factors might have had on participants' attitudes towards inclusion, the reasons for current inclusion practices and current approaches to inclusion are also further discussed.

#### 5.2 Knowledge

The academic staff in particular, described inclusive higher education as equal access to education without restriction based on disability, but that some reasonable accommodations should be in place to realize such inclusion. This indicates that the level of most academic staff's knowledge to describe inclusive higher education is on the analysis level according to Bloom's taxonomy because they were able to identify the parts involved in the inclusion process (Heick, 2018). Such components include equal access to education, no restriction based on disability, and reasonable accommodations. This is probably because academic staff interviewed were rehabilitation professionals who understand the concept of inclusion in different environments including higher education.

The findings of the study concur with Morgado et al. (2016), who described inclusive higher education as a model of education that incorporates and welcomes all students. The findings also concur with Kochung (2011) in terms of a multi-faceted approach to removing exclusion i.e. through modification of legislation, policies and practices and promoting inclusion of all students irrespective of whether they have a disability or not. According to Bloom's taxonomy (Heick, 2018); the admission staff demonstrated no knowledge (even at the most basic level of awareness) of inclusive higher education. This might be attributed to having received no information about disability and/or rehabilitation issues in their studied careers. The admission staff are the first people potential students come into contact and correspond with. If the admission staff lack disability awareness, this could affect inclusion of SWD as they will not know how to meet the needs of SWD during registration, e.g. allocation of hostel rooms, disability-funding opportunities, etc.

Participants were not aware of any general disability inclusion policy at national level, other institutions of higher learning, nor at SMU. Studies such as those done by Ohajunwa et al. (2014) noted that PSET institutions have a role to play in transforming societies and disability inclusion. Since most participants were not aware of general disability inclusion policy, SMU

will have challenges with implementation thereof, particularly because compliance enhances the ideal situation of inclusive higher education practice. Since they deal with students matters, both academic staff and admission staff have a role to play in ensuring that disability inclusion policies and guidelines are formulated, implemented and monitored as directed by the South African Strategic Policy Framework on disability for the PSET (DHET, 2018). So it is necessary that they become knowledgeable of disability and how SWPD should be included.

The reason why most participants were not aware might be the lack of evidence of any disability inclusion policy and absence of a Disability Unit at SMU that address disability related inclusion matters. As Ramaahlo et al. (2018) pointed out; disability units should be available at all PSET institutions because they play a vital role in the inclusion of students with disabilities without restriction. Without a disability inclusion policy and a Disability Unit, inclusion at a HEI may not be realised.

### **5.3 Attitudes**

Although most participants, especially the academic staff, welcomed the possibility of admitting SWPD in the SHCS, they expressed their willingness to accommodate them with some apprehension. Based on their level of understanding, they were expected to have more concern about inclusion than those with no or less knowledge about inclusion, as highlighted by De Pretto et al. (2015), who found that awareness or knowledge about something is directly proportional to the concern or attitudes about it.

Participants recommended that SWPD should be included with support in terms of accessible facilities and infrastructure, on meeting the assessment criteria to meet safety and ethical issues, and on other platforms within the main generalist programmes such as sub-stream or adapted programmes. While there were no participants from the academic programme in Nursing, the participants' responses in this study were in line with findings by Moodley and Mchunu (2019) that although there was willingness to recruit student nurses with disabilities by Nursing Education Institutions, there was still a long way to go to meet their needs in terms of support and accommodation. Participants further mentioned that SWPD should be included with support in terms of accessible facilities and infrastructure because SWPD still experience a variety of physical access constraints (Engelbrecht & De Beer 2014). Participants' responses here also concurred with Chiwandire and Vincent (2017), who proposed that accessibility of facilities such as lecture halls or theatres, libraries, toilets, and modes of transport should be prioritized.

Participants who recommended that SWPD should satisfy the assessment criteria to meet safety and ethical issues seemed to have a view that impairments of SWPD are not all so severe as to compromise the safety of the patients during treatment. This could be the solution

to the dilemma of including SWPD after assessing whether they can accomplish clinical practice-based competencies and the statutory requirements as noted by Rankin et al. (2010) in the international context. In South Africa, this then calls for the HPCSA to review their minimum training standards in order to include SWPD who can meet this criterion.

There were participants who suggested that SWPD may be included on other platforms such as sub-stream or adapted programmes within the main generalist programmes. However, there was dearth of literature to support this suggestion. In essence, with guidance and support, this could work for applicants who wish to enrol into the study programmes that their physical abilities allow. Thus, the departments could make formal applications to offer such sub-stream programmes and obtain approval to offer them from the relevant authorities. However, from the human rights perspective, this may seem discriminatory on the side of persons with disabilities.

Despite their knowledge of inclusive higher education, there were also participants who were not supportive of inclusion of students with physical disabilities. This was contrary to the assertion made by De Pretto et al. (2015), who found that awareness or knowledge about something is directly proportional to the concern or attitudes about it. This was also contrary to Leyser and Greenberger (2008), who found that staff members with more training, information and experience (knowledge) on disability issues had attitudes that are more positive and were more willing to make reasonable accommodations than those with less training and experience. This finding indicates that knowledge does not always lead to improved attitudes and behaviour.

Some participants considered inclusion as being an issue of equality and adding value to disability awareness. Their inclusion will raise disability awareness at SMU and raise our attitudes towards their inclusion to another level because of first-hand experience as SWPD will be taught to train people who may have the same disabilities as them and all stakeholders can learn a lot from them. Leyser and Greenberger (2008) indicated that as staff members get more hands-on information and experience (knowledge) on disability issues, their attitudes become more positive and are willing to make reasonable accommodations.

Further discussion on attitudes included how the participants would integrate a student who become physically disabled during the study period, in the event that a student suddenly become physically disabled. Most participants indicated their willingness to accommodate, depending on the nature and seriousness of the physical disability as well as the level of studies. They indicated that the more serious the physical disability, the less chance that the student could continue. They also indicated that the higher the level of the study, (e.g. final year student) the greater the need to accommodate. However, participants conceded that in addressing such an issue, the university is more reactive and not proactive. Participants had

different and mixed opinions in the event that a student suddenly become physical disabled. Those who were supportive opined that the student should continue with studies but special arrangements should be made to accommodate such a student and the environment should be modified. Those who were unsupportive felt that the student should interrupt the studies until full recovery or change the profession.

Using inductive analysis, environmental factors that emerged from the content of the data include physical infrastructure, prejudice, and clinical curriculum requirements. These factors affected participants' attitudes on inclusion, thus further affecting institutional practices.

Although the physical environment within the campus and clinical placement areas or sites such as hospitals should be accessible, participants reported that they were not conducive enough to allow effective inclusion in terms of access and mobility. This concurs with the findings of Chiwandire and Vincent (2017) and Engelbrecht and De Beer (2014) who indicated that poorly designed physical environments exclude PWD from participating in mainstream society, especially in HEI, and that SWPD still experience a variety of physical access constraints. That is the reason why Chiwandire and Vincent (2017) proposed that accessibility of facilities such as lecture halls or theatres, libraries, toilets, and modes of transport should be prioritized.

Participants urged that prejudice could be one of the factors that affect inclusion of students with disabilities. Their responses support the findings of Ntombela (2013), who postulated that SWPD are perceived as people who need help, not as people who can offer help; further supported by Moodley and Mchunu (2019), who highlighted social barriers (stigma, stereotyping and attitudes) as some of the barriers that hinder access to study programmes in HEIs. Thus, they also echoed Engelbrecht and de Beer (2014), who noted that attitudinal barriers are worse than architectural barriers and that they are the most notable barriers to inclusion progress. Both Engelbrecht and de Beer (2014) and Ntombela (2013) noted that negative attitudes towards SWPD continue to influence the culture and practices by HEIs.

Participants also saw clinical requirements of study programmes in the SHCS as posing a significant challenge, especially because in South Africa, these standards are the custodian of the HPCSA and they have a considerable effect on inclusion initiatives. They agreed that curriculum is one of the issues that creates barrier to learning and exclusion for many SWD (DoE, 2001: 31), especially because curricula of these SHCS programmes have inherent clinical placement requirements. As noted by Rankin et al. (2010), clinical practice placements require certain physical capabilities; and that it could be challenging to meet the learning needs of SWPD and the statutory requirements of rendering a safe and effective health care to patients during clinical practice placements. In the case of SMU and other medical or health

sciences universities in South Africa, curriculum is also dependent on the statutory requirements of the Health Professions Council of South Africa (HPCSA).

#### 5.4 Practices

Few participants showed previous experience of having students with physical disabilities at higher education institutions, where they were working. Most participants had never had such experience and therefore did not know how to include them. This was contrary to the Strategic Policy Framework on Disability for the PSET System's intention to socially include a group of SWPD based on non-discrimination (DHET, 2018). This lack of experience of inclusion is probably so because SWPD were probably not allowed or enabled to fully participate in higher education and enjoy the same rights as others (DHET, 2018). As Brandon and Ncube (2006) noted that knowledge regarding inclusion of SWPD affect the successful implementation of inclusive education, because of this lack of knowledge, inclusive education at SMU seem to have been affected.

Although Ndlovu (2019) asserted that PSET institutions do not deny students with disabilities entry into Law, Medicine, Education or any other professional degree, participants noted that there were no students with physical disabilities admitted at SMU. The reasons for the absence of SWPD could be many, including being advised against choosing particular programmes due to the difficulties anticipated in taking such programmes as a result of their impairments and their severity to meet the demands thereof (Ndlovu, 2019) as well as the current recruitment practices that lack policy guidelines to recruit them (Moodley & Mchunu, 2019).

However, participants provided the reasons that might have contributed to having no students with physical disabilities admitted into the institution. Firstly, some were of the opinion that there is a possibility that potential students with physical disabilities do not apply. Academic staff participants who sit on the selection committee for first years urged that despite having a space to indicate disability on the application form, they have never seen any applicant who indicated any form of a physical disability except those with visual impairments. Admission participants who process admission forms confirmed the above.

Secondly, a participant who had a prior personal work experience of dealing with students with disabilities indicated that potential students with disabilities do not want to disclose their disabilities. As participant 12 pointed out:

*"My experience is that the students do not disclose, even when the university application form requires of you to disclose, they don't. I was in a Senate Committee for people with disabilities [...]. I was given a mandate to do an audit of how many students live with disabilities. [...] the student admin said that nobody would disclose*

*because they are afraid that they would be discriminated [...]. Then I went to SRC, and I said to SRC, 'we want to start a group to support people with disabilities'. The SRC said to me: 'forget it, they won't tell you, they don't want to be discriminated and be targeted [...], I stopped there until we demerged'.*

The findings concur with the findings made by Moodley and Mchunu (2019) (within the field of nursing) that some student nurses with disabilities did not disclose their disabilities for fear of being excluded from the nursing programme.

Although the main inclusion criteria are based on grade 12 results and the relevant subject requirements, some participants reported that the quota system does not address the number or percentage of students with disabilities to be admitted per annum. It only addresses other inclusion criteria such as gender, race, students with other degrees, and foreign students. Again, this is totally in contravention of the strategic policy framework on disability for PSET System (DHET, 2018), which was intended for the creation of an inclusive PSET system for PWD and to guide PSET institutions in the creation of enabling environment for PWD. This shows that the DHET is also not monitoring the compliance or implementation of this policy framework (DHET, 2018).

Participants urged that marketing of health sciences courses or programmes is not extended to people with disabilities and that potential applicants with disabilities may not be aware of the programmes that SMU offers or whether they are also eligible to do them or not. This is contrary to Tillman et al. (2015) who postulated that people with disabilities should be exposed to health sciences careers if their access to those careers is to be realized.

Although this is a practice issue, it is related to negative attitudes when looking at how marginalized or prejudged persons with disabilities are seen. This attitude of marginalizing people with disabilities (e.g. lack of internal policy guidelines for recruiting SWDs (Moodley & Mchunu, 2019), might have contributed to the practice of marketing of programmes only directed towards those without disabilities. Despite having an analytic level of knowledge of disability and inclusive higher education, academic staff were not considerate of people with disabilities in terms of including them in their marketing activities, thus exhibiting negative practices.

## Chapter 6

### Conclusion and Recommendations

#### 6.1 Conclusions

This chapter presents the conclusions and the recommendations based on the findings of the study. The findings of the study are concluded based on the research objectives of identifying knowledge, attitudes and practices of academic and admission staff on the inclusion of SWPD in the SHCS at SMU as follows:

Academic staff had adequate knowledge of inclusive higher education while the admission staff demonstrated no knowledge. Participants lacked knowledge or awareness of any policy regarding inclusive higher education at SMU. The lack of knowledge on the admission staff implies that applications from the SWPD may not be processed in an equitable manner. The general lack of knowledge or awareness on inclusive higher education policy would lead to challenges with regard to implementation of inclusive higher education at SMU.

Although most participants' attitudes were positive and welcomed the possibility of admitting SWPD in the SHCS, they expressed their willingness to accommodate them with some apprehension. Their attitudes were that students with disabilities should be included with support in terms of accessible facilities and infrastructure, on meeting the assessment criteria to meet safety and ethical issues, and on other platforms within the main generalist programmes such as sub-stream or adapted programmes. This might be due to the effect of the environmental factors such as physical barriers, prejudice and clinical curriculum requirements. Based on their high level of understanding; they were expected to have more concern about inclusion as indicated in the literature review. This imply that the inclusion of SWPD would be enhanced as more staff become positive, embrace inclusion and the environmental factors are addressed.

Furthermore, most participants noted that in the event of a student suddenly becoming physically disabled, the university is more reactive and not proactive. Being reactive implies that SMU is not prepared for such events. Just as participant 10 puts it: "*...we will be caught with our pants down*", SMU may not know what to do. Participants had different and mixed opinions in addressing such an occurrence. Being proactive implies that SMU is prepared and the staff know what to do in such events.

All participants noted the absence of students with physical disabilities, disability inclusion policy and Disability Unit at SMU. This implies that SMU is currently not inclusive in terms of the recommended higher education practices. However, it should be noted that SMU is still at its infancy development stage as it is now 5 years old and some of the policies are still to be

formulated. The DHET is also expected to intervene where necessary and the need for an effective monitoring system is clear.

## **6.2 Recommendations**

In order to promote inclusion of students with physical disabilities (SWPD) in the School of Health Care Sciences (SHCS) at Sefako Makgatho Health Sciences University (SMU), the researcher identified the following stakeholders and recommendations relevant to each:

### **6.2.1 University management**

- Include disability in university policies
- Awareness training to all staff members on the concepts of disability and inclusion to increase their understanding and promote positive attitudes to accept SWDs.
- Training all staff members on disability legislations and related policies to get a comprehensive understanding and correct and improve the current situation
- Bench marking in other universities that have medical and health sciences programmes to learn how others are implementing inclusive higher education
- Eliminate as many environmental barriers as possible so that inclusion becomes easy (Apply universal access and universal design principles)

### **6.2.2 Curriculum Developers**

- Specifically review the curriculum in collaboration with the statutory body (HPCSA) so that it is inclusive.

### **6.2.3 Student Affairs Department**

- Establish a Disability Unit to deal with all disability inclusion matters
- Have a quota system that includes the number of students with disabilities to be admitted per annum

### **6.2.4 Disability Unit**

- Promote a proactive approach in dealing with students with disabilities
- Formulate an informative disability inclusion policy as a matter of urgency that includes recruitment and selection guidelines for SWDs as well as disability funding and sponsorships for SWDs

### 6.2.5 Marketing Department/Students recruitment

- Extend marketing activities of study programmes to include learners with disabilities
- Encourage learners with disabilities to take the correct subjects that will allow them into medical and health sciences programmes
- Encourage learners with disabilities to apply for admission

### 6.2.6 Academic departments (lecturers, clinical facilitators, etc)

- Conduct screening of all prospective students before placement in a study programme to ensure that they can cope in their chosen fields.
- Give appropriate advice to students regarding their choices and expectations in the study programmes.
- Act as agents of change to promote positive attitudes towards SWD.
- Provide the necessary support and accommodations in academic related matters.
- Liaise with clinical placement sites to promote an enabling environment for SWD.

### 6.2.7 Student Administration Department (Admission and Enrolment)

- Attend disability awareness training in order to gain understanding of dealing with students with disabilities.
- Implement disability inclusion policy guidelines with regards to admission and enrolment of SWD, including adhering to the set quota and their access to funding.

### 6.2.8 Students with disabilities (SWD)

- Disclose their disabilities by completing in the relevant section in the admission form the type of disability they have (For disability statistical and funding purposes and to enable the institution to be able to accommodate SWD).

## 6.3 Future Research

- A **benchmark study across diverse** medical and health sciences faculties across the region to explore and learn from one another's inclusion practices and processes.
- A **feasibility study** to explore the budgeting needs at SMU in terms of technical, marketing, management, and financial issues.

## References

- Berger, R. (2015). Now I see it, now I don't: Researcher's position and reflexivity in qualitative research. *Qualitative research*, 15(2), pp.219-234.
- Bialocerkowski, A., Johnson, A., Allan, T. & Phillips, K. (2013). Development of physiotherapy requirements statement – an Australian experience. *BMC Medical Education*, 13(54), 2 - 3
- Brandon, D., & Ncube, M. (2006). Botswana's Agriculture Teachers' Attitudes towards Inclusion of Students with Physical Disabilities in Mainstream Classes. *Negro Educational Review*, 57(3/4), 215-227,265.
- Braun, V. & Clarke, C. (2006). Using thematic analysis in psychology, *Qualitative Research in psychology*, 3:2, 77 – 101
- Braun, V. & Clarke, C. (2019) Reflecting on reflexive thematic analysis, *Qualitative Research in Sport, Exercise and Health*, 11:4, 589-597, DOI:10.1080/2159676X.2019.1628806
- Bunbury, S. (2018). Disability in higher education – do reasonable adjustments contribute to an inclusive curriculum? *International Journal of Inclusive Education*, DOI:10.1080/13603116.2018.1503347
- Chiwandire, D. & Vincent, L. (2017) Wheelchair users, access and exclusion in South African higher education, *African Journal of Disability*, a353 <https://doi.org/10.4102/ajod.v6i0.353>
- Chiwandire, D. & Vincent, L. (2019). Funding and inclusion in higher education institutions for students with disabilities, *African Journal of Disability* 8(0), a336. <https://doi.org/10.4102/ajod.v8i0.336>
- Cramm, J. M. (2013). Disabled youth in South Africa: Barriers to education, *International Journal on Disability and Human Development*, 12(1), 31-36.
- Colorafi, K.J., & Evans, B. (2016) Qualitative Descriptive Methods in Health Science Research, *Health Environments Research & Design Journal*, SAGE 9(4) 16-25
- Dalton, E.M., Lyner-Cleophas, M., Ferguson, B.T. & McKenzie, J. (2019). Inclusion, universal design and universal design for learning in higher education: South Africa and the United States, *African Journal of Disability* 8(0), a519. <https://doi.org/10.4102/ajod.v8i0.519>
- De Pretto, L., Acreman, S., Ashfold, M.J., Mohankumar, S. K., & Campos-Arceiz, A. (2015). The Link between Knowledge, Attitudes and Practices in Relation to Atmospheric Haze Pollution in Peninsular, Malaysia, *PLoS ONE* 10(12): e0143655. doi:10.1371/journal.pone.0143655

- Engelbrecht, L., & de Beer, J. (2014). Access constraints experienced by physically disabled students at a South African higher education institution, *Africa Education Review*, 1-19.
- Fereday, J. and Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International journal of qualitative methods*, 5(1), pp.80-92.
- Foundation of Tertiary Institutions of the Northern Metropolis (FOTIM), (2011). *Disability in Higher Education: A Project Report*, Cape Town: FOTIM, P. 4. Available at [www.students.uct.ac.za/usr/disability/reports/annual\\_report\\_10\\_11.pdf](http://www.students.uct.ac.za/usr/disability/reports/annual_report_10_11.pdf) [22 Nov. 2017].
- Handicap International (2009). Knowledge, Attitudes and Practices for Risk Education: How to implement KAP Surveys: *Guideline for KAP Survey Managers*. Available at [http://d3n8a8pro7vhmx.cloudfront.net/handicapinternational/pages/269/attachments/original/1369065460/Landmines\\_How\\_to\\_implement\\_KAP\\_Surveys.pdf?1369065460](http://d3n8a8pro7vhmx.cloudfront.net/handicapinternational/pages/269/attachments/original/1369065460/Landmines_How_to_implement_KAP_Surveys.pdf?1369065460) [02 March 2018]
- Heick, T (2018). What Is Bloom's Taxonomy? A Definition for Teachers. Available at <https://www.teachthought.com/learning/what-is-blooms-taxonomy-a-definition-for-teachers/> [08 Nov. 2019]
- Hofstee, E. (2006). Constructing a Good Dissertation: A Practical Guide to Finishing a Master's, MBA or PhD on Schedule. Available at [www.exactica.co.za](http://www.exactica.co.za) [22 Feb. 2018].
- Kochung, E. J. (2011). Role of higher education in promoting inclusive education: Kenyan perspective. (Report). *Journal of Emerging Trends in Educational Research and Policy Studies*, 2(3), 144-149.
- Leyser, Y. & Greenberger, L. (2008). College students with disabilities in teacher education: faculty attitudes and practices. *European Journal of Special Needs Education*, 23:3, 237-251, DOI: 10: 1080/08856250802130442. Available at <https://doi.org/10:1080/08856250802130442> [27 Feb. 2018].
- Locharoenrat, K. (2017). *Research Methodologies for Beginners*. Teachers College Press: Columbia University
- Mayat, N. & Amosun, S. (2011). Perceptions of Academic Staff towards Accommodating Students with Disabilities in a Civil Engineering Undergraduate Program in a University in South Africa. *Journal of Postsecondary Education and Disability*, 24(1), 53-59
- Moodley, S. & Mchunu, G. (2019). Current access and recruitment practices in nursing education institutions in KwaZulu-Natal: A case study of student nurses with

- disabilities, *African Journal of Disability* 8(0), a429. <https://doi.org/10.4102/ajod.v8i0.429>
- Morgado, B., Cortes-Vega, M.D., Lopez-Gavina, R, Alvarez, E. & Morina, A. (2016). Inclusive Education in Higher Education? *Journal of Research in Special Education Needs*, 16(1), 639-642
- Mosia, P.A., & Phasha, N. (2017). Access to curriculum for students with disabilities at higher education institutions: How does the National University of Lesotho fare? *African Journal of Disability* | Vol 6 | a257 | DOI: <https://doi.org/10.4102/ajod.v6i0.257>
- Mutanga, O. & Walker, M. (2015). Towards a Disability-inclusive Higher Education Policy through the Capabilities Approach, *Journal of Human Development and Capabilities*, 16:4, 501-517, DOI: 10.1080/19452829.2015.1101410
- Ndlovu, S. (2019). Access into professional degrees by students with disabilities in South African higher learning: A decolonial perspective, *African Journal of Disability* 8(0), a514. <https://doi.org/10.4102/ajod.v8i0.514>
- Ntombela, S. (2013) Inclusive education and training in South African higher education: Mapping the experiences of a student with physical disability at university, *Africa Education Review*, 10:3, 483-501, DOI: 10.1080/18146627.2013.853541
- Ohajunwa, C., Mckenzie, J., Hardy, A. & Lorenzo, T. (2014). Inclusion of disability issues in teaching and research in higher education, *Perspectives in Education*, 32(3), pp. 104-117
- O'Leary, Z. (2017). *The Essential Guide to Doing Your Research Project*, 3<sup>rd</sup> Edition. Sage Publications Ltd. London
- Ramaahlo, M., Tönsing, K.M. & Bornman, J. (2018) Inclusive education policy provision in South African research universities, *Disability & Society*, 33:3, 349-373, DOI: 10.1080/09687599.2018.1423954
- Rankin, E.R., Nayda, R., Cocks, S. & Smith, M. (2010). Students with disabilities and clinical placement: understanding the perspective of healthcare organisations. *International Journal of Inclusive Education*, 14; 5, 533-542, DOI: 10.1080/13603110902730176
- Sefako Makgatho Health Sciences University (2019). *2019 General Calendar*. Available at <https://www.smu.ac.za/students/registration-2019/sch-cals/> [09 May 2019]
- South Africa. Department of Education (DoE), (2001). *Education White Paper 6: Special Needs Education*. Available at <https://www.gov.za/documents/special-needs-education-education-white-paper-6> [09 November 2019]
- South Africa. Department of Health (DoH), (2015). Ethics in Health Research: Principles, Processes and Structures available from: <http://www.nhrec.org.za/index.php/grids-preview> [24 April 2018]
- South Africa. Department of Higher Education (DHET), (2018). *Statistics on Post-School Education and Training in South Africa: 2016*. Available at

- [http://www.dhet.gov.za/Research%20Coordination%20Monitoring%20and%20Evaluation/6\\_DHET%20Stats%20Report\\_04%20April%202018.pdf](http://www.dhet.gov.za/Research%20Coordination%20Monitoring%20and%20Evaluation/6_DHET%20Stats%20Report_04%20April%202018.pdf) [01 November 2019]
- South Africa. Department of Higher Education (DHET), (2018). *Strategic Policy Framework on Disability for the Post-School Education and Training (PSET) System*. Available at <http://www.dhet.gov.za/SiteAssets/Gazettes/Approved%20Strategic%20Disability%20Policy%20Framework%20Layout220518.pdf> [01 June 2019]
- South Africa. Department of Social Development (DSD), (2016). *White Paper on the Rights of Persons with Disabilities*. Available at <https://www.gov.za/documents/white-paper-rights-persons-disabilities-official-publication-and-gazetting-white-paper> [10 October 2018]
- Stellenbosch University, (2018). *Disability Access Policy*. Available at <http://www.sun.ac.za/english/learning-teaching/student-affairs/cscd/Documents/Career%20Services/Disability%20Access%20Policy%201%20April%202018%20WEB.pdf> [16 October 2018]
- Tillman III, F., Whitfield, N., Mills, J. and White, C. (2015). Undergraduate Students for Diversity in Pharmacy (USDP): An Approach to Advancing Diversity in Pharmacy and the Pharmaceutical Sciences. *Journal of Best Practices in Health Professions Diversity*; Winston-Salem Vol. 8, Iss. 2 (Fall 2015): 1123.
- United Nations (UN), (2007). *Convention on the Rights of Persons with Disabilities (Optional Protocol)*. New York. Available at <https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf> [12 February 2018]
- University of Cape Town (2011). **Disability Policy**. Available at [https://www.uct.ac.za/sites/default/files/image\\_tool/images/328/about/policies/DIS\\_Policy\\_Disability\\_2011.pdf](https://www.uct.ac.za/sites/default/files/image_tool/images/328/about/policies/DIS_Policy_Disability_2011.pdf) [12 February 2018]
- University of Pretoria, (2018). *Students with Disabilities*. Available at [https://www.up.ac.za/media/shared/703/ZP\\_NewsImages/rt-282\\_13-amended-2018-01-08policy-on-students-with-disabilities\\_v.9.zp157022.pdf](https://www.up.ac.za/media/shared/703/ZP_NewsImages/rt-282_13-amended-2018-01-08policy-on-students-with-disabilities_v.9.zp157022.pdf) [09 November 2019]
- University of the Western Cape (2007). *Policy on students with Disability*. Available at <https://www.uwc.ac.za › Disability Policy accepted by Council C2007.4.pdf>. [09 November 2019]
- University of the Witwatersrand (2013). *Students with Disabilities*. Available at [https://www.wits.ac.za/media/wits-university/students/disability-unit/documents/Wits%20Policy%20Students%20with%20Disabilities%20\(ver%202.0\).pdf](https://www.wits.ac.za/media/wits-university/students/disability-unit/documents/Wits%20Policy%20Students%20with%20Disabilities%20(ver%202.0).pdf) [09 November 2019]
- Van der Merwe, L.J., Van Zyl, G.J., Gibson, A.S.C., Viljoen, M., Iputo, J.E., Mammen, M., Chita, W., Perez, A.M., Hartman, N., Fonn, S., Green-Thompson, L., Ayo-Yusuf, O.A., Botha, G.C., Manning, D., Botha, S.J., Hift, R., Retief, P., Van Heerden, B.B., &

- Volmink, J. (2016). South African medical schools: Current state of selection criteria and medical students' demographic profile. *South African Medical Journal*, 106(1); 76-81. DOI:10.7196/SAMJ.2016.v106il.9913
- WHO (2001). International Classification of Functioning, Disability and Health. Available at <https://www.who.int/classifications/icf/icfbeginnersguide.pdf> [20 February 2018]
- WHO (2008). Advocacy, communication and social mobilization for TB control: *A guide to developing knowledge, attitude and practice surveys*. Switzerland WHO (2010). CBR Guidelines. Available at <http://www.who.int/disabilities/cbr/guidelines/en/index.html>. [20 February 2018]
- Yin, R.K. (2009). *Doing Case Study Research: Design and Methods*, 4<sup>th</sup> Edition. Sage Publications: USA

## **APPENDICES**

### **APPENDIX 1: SEMI-STRUCTURED INTERVIEW SCHEDULE**

NB: All participants are informed that they will be recorded and the information gathered will be kept confidential. Participant's identification number must be mentioned and recorded at the beginning of the interview, e.g. participant no.1

## Section A: Demographic information of participants

	Age	Gender	Department	Current position	Years of experience.
P1					
P2					
P3					
P4					
P5					
P6					
P7					
P8					
P9					
P10					
P11					
P12					
P13					
P14					
P15					

### Section B: General knowledge and awareness of Physical Disability and Inclusive Higher Education

Please provide details about your knowledge and understanding of physical disabilities and inclusive higher education.

1. How can you describe physical disability in your own words?
2. How can you describe inclusive higher education in your own words?
3. Can students with physical disabilities be included in your department?
4. Please explain why they could be included or not be included?

### Section C: Attitudes on inclusion of students with physical disabilities

Please provide your views and opinions on including **students with physical disabilities** in your department.

1. Do you think students with physical disabilities should be admitted for a programme in your department? Could you please explain why?

- Please explain what you think could be the barriers of including **students with physical disabilities** in your department/university
  - Please explain what you think could be the facilitators of including **students with physical disabilities** in your department/university?
2. In your own opinion, what could be done to improve inclusion of students with physical disabilities in your department/university?

#### **Section D: General inclusive higher education practices**

Please describe your current inclusion practices in your department/university.

1. Are you aware of the current policies regarding inclusive higher education?
2. If yes, please comment on how it is being implemented/not implemented in your department/university
3. What are your current inclusion practices in your department/university?
4. How do you think your current inclusion practices should be improved?

## APPENDIX 2: PARTICIPANT INFORMATION LEAFLET AND CONSENT FORM

### TITLE OF THE RESEARCH PROJECT:

**A CASE STUDY TO EXPLORE THE KNOWLEDGE, ATTITUDES AND PRACTICES OF ACADEMIC AND ADMISSION STAFF ON THE INCLUSION OF STUDENTS WITH PHYSICAL DISABILITIES IN THE SCHOOL OF HEALTH CARE SCIENCES (SHCS) AT SEFAKO MAKGATHO HEALTH SCIENCES UNIVERSITY (SMU)**

**HREC Reference# S18/05/114**

**PRINCIPAL INVESTIGATOR: MR. M.R. MPHOHONI**

**ADDRESS: 118 LOTZ AVENUE  
DANVILLE  
0183**

**CONTACT NUMBER: 076 831 2804**

You are being invited to take part in a research project. Please take some time to read the information presented here, which will explain the details of this project. Please ask the researcher any questions about any part of this project that you do not fully understand. It is very important that you are fully satisfied that you clearly understand what this research entails and how you could be involved.

Also, your participation is **entirely voluntary**, and you are free to decline to participate. If you say no, this will not affect you negatively in any way whatsoever. You are also free to withdraw from the study at any point, even if you do agree to take part.

This study has been approved by the **Health Research Ethics Committee at Stellenbosch University** and will be conducted according to the ethical guidelines and principles of the international Declaration of Helsinki, South African Guidelines for Good Clinical Practice and the Medical Research Council (MRC) Ethical Guidelines for Research.

### **About this research study:**

- *The research study will be conducted at Sefako Makgatho Health Sciences University. The total number of participants to be recruited is 12 – 15.*

- *The research project aims to explore the knowledge, attitudes and practices of academic and admission staff on the inclusion of students with physical disabilities in the School of Health Care Sciences at Sefako Makgatho Health Sciences University. It is envisaged that the study results will help the researcher to gain a better understanding of the knowledge, attitudes and practices of academic and admission staff on the inclusion of Students with Physical Disabilities.*
- *You will be asked to answer/respond to questions about the study topic. The interviewing process will be scheduled at your convenience, and will be conducted in an office free of external disturbances to allow free flow of the interview.*
- *You have been purposively sampled to take part in the research study. This means that you have been selected non-randomly with a particular purpose in mind, e.g. the defined purpose of being uniquely involved in the student admission processes.*

**Why have you been invited to participate?**

- *You have been invited because you have more than one year working experience in your current position in the School of Health Care Sciences or in the admission department.*

**What will your responsibilities be?**

- *Your responsibilities are to give honest responses to the questions asked*

**Will you benefit from taking part in this research?**

- *You will not benefit directly in the research study, but it may potentially benefit students with disabilities.*

**Are there any risks involved in your taking part in this research?**

- *There are no known medical risks or discomforts associated with this research study.*

**If you do not agree to take part, what alternatives do you have?**

- *Your participation in this research study is voluntary and you may withdraw from participating in the research study any time.*

**Who will have access to your medical records?**

- *There are no medical records involved, but the information collected will be treated as confidential and protected. If it is used in a publication or thesis, the identity of the participants will remain anonymous. The researcher will record your responses using an audio recorder and transcribe the recorded responses into a written text to enable him to have valid and reliable data (transcript). The transcript will only be viewed by the researcher and authorized study supervisors at the Stellenbosch University.*

- *I understand that the results of this study will be kept confidential unless I ask that they be released. The results of this study may be published in professional journals or presented at professional conferences, but my record or identity will not be revealed unless required by law.*

**What will happen in the unlikely event of some form injury occurring as a direct result of your taking part in this research study?**

- *No form of injury is likely to occur as a result of you taking part in this research study.*

**Will you be paid to take part in this study and are there any costs involved?**

- *You will not be remunerated for participation in the research study.*

**Is there anything else that you should know or do?**

- You can contact Dr Martha Geiger Tel 082 440 8713 if you have any further queries or encounter any problems.
- You can contact the Health Research Ethics Committee at 021-938 9207 if you have any concerns or complaints that have not been adequately addressed by your study doctor.
- You will receive a copy of this information and consent form for your own records.

**Declaration by participant**

**By signing below, I ..... agree to take part in a research study as entitled above . I declare that:**

- I have read or the researcher had read to me this information and consent form and it is written in a language with which I am fluent and comfortable.
- I have had a chance to ask questions and all my questions have been adequately answered.
- I understand that taking part in this study is **voluntary** and I have not been pressurised to take part.
- I may choose to leave the study at any time and will not be penalised or prejudiced in any way.
- I may be asked to leave the study before it has finished, if the study doctor or researcher feels it is in my best interests, or if I do not follow the study plan, as agreed to.

Signed at (*place*) ..... On (*date*) ..... 2018.

.....

.....

**Signature of participant**

**Signature of witness**

**Declaration by investigator**

I (*name*) ..... declare that:

- I explained the information in this document to .....
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did not use an interpreter.

Signed at (*place*) ..... On (*date*) ..... 2018.

.....

.....

**Signature of investigator**

**Signature of witness**

## APPENDIX 3: ETHICS CLEARANCE FROM STELLENBOSCH UNIVERSITY



### Health Research Ethics Committee (HREC)

Approval Notice

New Application

17/09/2018

Project ID :7386

HREC Reference # S18/05/114

Title: A case study to explore KAP of academic and admission staff on the inclusion of students with physical disabilities in the SHCS at SMU

Dear Mr MASHUDU Mphahoni

The New Application received on 03/09/2018 11:12 was reviewed by members of Health Research Ethics Committee via expedited review procedures on 17/09/2018 and was approved.

Please note the following information about your approved research protocol:

Protocol Approval Period: This project has approval for 12 months from the date of this letter.

Please remember to use your project ID (7386) on any documents or correspondence with the HREC concerning your research protocol.

Please note that the HREC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

#### After Ethical Review

Translation of the informed consent document(s) to the language(s) applicable to your study participants should now be submitted to the HREC.

Please note you can submit your progress report through the online ethics application process, available at: [Links Application Form Direct Link](#) and the application should be submitted to the HREC before the year has expired. Please see [Forms and Instructions](#) on our HREC website ([www.sun.ac.za/healthresearchethics](http://www.sun.ac.za/healthresearchethics)) for guidance on how to submit a progress report.

The HREC will then consider the continuation of the project for a further year (if necessary). Annually a number of projects may be selected randomly for an external audit.

#### Provincial and City of Cape Town Approval

Please note that for research at a primary or secondary healthcare facility, permission must still be obtained from the relevant authorities (Western Cape Department of Health and/or City Health) to conduct the research as stated in the protocol. Please consult the Western Cape Government website for access to the online Health Research Approval Process, see: <https://www.westerncape.gov.za/general-publication/health-research-approval-process>. Research that will be conducted at any tertiary academic institution requires approval from the relevant hospital manager. Ethics approval is required BEFORE approval can be obtained from these health authorities.

We wish you the best as you conduct your research.

For standard HREC forms and instructions, please visit: [Forms and Instructions](#) on our HREC website <https://applyethics.sun.ac.za/ProjectView/index/7386>

If you have any questions or need further assistance, please contact the HREC office at 021 938 9677.

Yours sincerely,

  
Miss Edje Richard  
Health Research Ethics Committee 1 (HREC1)

National Health Research Ethics Council (NHREC) Registration Number:

REC-130408-012 (HREC1)-REC-230208-010 (HREC2)

Federal Wide Assurance Number: 00001372

Office of Human Research Protections (OHRP) Institutional Review Board (IRB) Number:  
IRB0005240 (HREC1)-IRB0005239 (HREC2)

The Health Research Ethics Committee (HREC) complies with the SA National Health Act No. 61 of 2003 as it pertains to health research. The HREC abides by the ethical norms and principles for research, established by the World Medical Association (2013), Declaration of Helsinki: Ethical Principles for

Medical Research Involving Human Subjects; the South African Department of Health (2006). Guidelines for Good Practice in the Conduct of Clinical Trials with Human Participants in South Africa (2nd edition); as well as the Department of Health (2015). Ethics in Health Research: Principles, Processes and Structures (2nd edition).

*The Health Research Ethics Committee reviews research involving human subjects conducted or supported by the Department of Health and Human Services, or other federal departments or agencies that apply the Federal Policy for the Protection of Human Subjects to such research (United States Code of Federal Regulations Title 45 Part 46); and/or clinical investigations regulated by the Food and Drug Administration (FDA) of the Department of Health and Human Services.*

## APPENDIX 4: SMU PERMISSION TO CONDUCT RESEARCH



SEFAKO MAKGATHO  
HEALTH SCIENCES UNIVERSITY

Research & Postgraduate Studies Directorate  
Sefako Makgatho University Research Ethics Committee (SMUREC)

Mr MR Mphohoni  
Department of Occupational Therapy  
P.O Box 6158  
Medunsa, 0204

Dear Mr Mphohoni

**RE: APPLICATION FOR PERMISSION TO CONDUCT A RESEARCH STUDY AT SEFAKO MAKGATHO HEALTH SCIENCES UNIVERSITY (SMU)**

SMUREC NOTED your letter dated 14 August 2018 requesting permission to collect data at SMU.

SMUREC NOTED that the researcher has received approval for his proposal from University of Stellenbosch Research Ethics Committee.

**Study Title:** A case study to explore the knowledge, attitudes and practices of academic and admission staff on the inclusion of students with physical disabilities in the School of Health Care Sciences (SHCS) at Sefako Makgatho Health Sciences University (SMU)

**Researcher:** Mr M Mphohoni  
**University:** University of Stellenbosch  
**Research Type:** Masters in Rehabilitation Studies (by coursework)  
**Ethical Clearance Number:** HREC Reference #S18/05/114  
**Approval letter date:** 17 September 2018

SMUREC NOTED the ethics approval and **GRANTED** reciprocal clearance to allow the researcher access to obtain data for the above mentioned study by interviewing admission staff and academic staff from the School of Health Care Sciences and SMU library.

Yours Sincerely,

PROF GA OGUNBANJO  
CHAIRPERSON SMUREC



SEFAKO MAKGATHO  
HEALTH SCIENCES UNIVERSITY  
SMU Research Ethics Committee  
Chairperson  
Date: 04/10/2018

04 October 2018

Molotlegi Street, Ga-Rankuwa  
Pretoria, Gauteng  
PO Box 163, Medunsa, 0204  
[www.smu.ac.za](http://www.smu.ac.za)

Telephone: +27 12 521 5617 / 3698  
Facsimile: +27 12 521 3749  
Email: [lorato.phirs@smu.ac.za](mailto:lorato.phirs@smu.ac.za)