Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents

Refilwe Elizabeth Morwane

A thesis in partial fulfilment of the requirements for the degree of

Philosophiae Doctor in
Augmentative and Alternative Communication

in the Centre for Augmentative and Alternative Communication

FACULTY OF HUMANITIES
UNIVERSITY OF PRETORIA

Supervisor: Prof. Shakila Dada
Co-Supervisor: Prof. Juan Bornman

14 November 2021

DECLARATION OF ORIGINALITY – UNIVERSITY OF PRETORIA

The Department of **Centre for Augmentative and Alternative Communication** places great emphasis upon integrity and ethical conduct in the preparation of all written work submitted for academic evaluation.

Academics teach you about referencing techniques and how to avoid plagiarism; it is your responsibility to act on this knowledge. If you are at any stage uncertain as to what is required, you should speak to your lecturer before any written work is submitted.

You are guilty of plagiarism if you copy something from another author's work (e.g., a book, an article or a website) without acknowledging the source and pass it off as your own. In effect you are stealing something that belongs to someone else. This is not only the case when you copy work word-for-word (verbatim) but also when you submit someone else's work in a slightly altered form (paraphrase) or use a line of argument without acknowledging it.

Students who commit plagiarism will not be given any credit for plagiarised work. The matter may also be referred to the Disciplinary Committee (Students) for a ruling. Plagiarism is regarded as a serious contravention of the University's rules and can lead to expulsion from the University.

The declaration which follows must accompany all written work submitted while you are a student of the **Centre for Augmentative and Alternative Communication.** No written work will be accepted unless the declaration has been completed and submitted.

Full names and surname of student: **Refilwe Elizabeth Morwane.**

Student number: **27511856**.

Topic of work: **Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents**

 Declaration

1. I understand what plagiarism is and am aware of the University's policy in this regard.
2. I declare that this **thesis** is my own original work. Where other people's work has been used (either from a printed source, Internet, or any other source), this has been properly acknowledged and referenced in accordance with departmental requirements.

SIGNATURE: *R. Morwane*   **DATE:** 14 November 2021

ETHICS STATEMENT

The author/researcher, whose name appears on the title page of this dissertation, has obtained, for the research described in this work, the applicable research ethics approval.

The author/researcher declares that she has observed the ethical standards required in terms of the University of Pretoria's Code of ethics for researchers and the Policy guidelines for responsible research.

ACKNOWLEDGEMENTS

This PhD journey has been a spiritual one. I have grown, not only academically and professionally, but also on a personal level. First of all, I would like to acknowledge the guidance of Ntate Ramasedi and my ancestors who have been guiding me through the process as well as reminding me of the vision of attaining this PhD. I am eternally grateful, Lesedi Kganya!

In order to achieve this tremendous milestone, I received help and guidance from angels on earth. I would like to express my deepest gratitude to the following people:

To my supervisors, I am fortunate to have been guided by excellent researchers in the field.

- Prof. Shakila Dada, my primary supervisor and current Director of the Centre for Augmentative and Alternative Communication (AAC)– *Mo ntsamaisa bosigo ke moleboga bosele* (My protector during the night, I show gratitude in the day). You saw potential in me which I did not believe existed. Thank you for the encouragement, guidance, and exposure to the multiple learning opportunities. Your firm leadership and vision got me here. Thank you once again for believing in this research topic and for steering this PhD to completion. May Allah continuously bless you!
- Prof. Juan Bornman, my secondary supervisor, and former Director of the Centre for AAC – thank you for your mentorship and developing the researcher in me, who today has completed a PhD. Thank you for all the encouragement. Bless you!

Prof. Maximus Sefotho for being the inspiration behind the research in the employment of persons with disabilities. Ke leboha haholo Ntate!

To the staff at the Centre for AAC – thank you for giving so selflessly and supporting me in this journey.

- Ms Constance Ntuli, my colleague and friend. You were the inspiration behind the research project. Thank you for your kind words and the laughs when I needed them the most. Mr Terrence Mahlangu, you have seen me in tears a number of times. My focus became clearer when we shared an office, as you always reminded me to talk less and work more.
- Prof. Kerstin Tönsing, you were my first encounter with an excellent researcher. You are a true inspiration, a force. Ke a leboga! To Dr Alecia Samuels, thank you for the mentorship and being the fun one in this difficult journey. You have pushed my thinking to greater heights. To Dr Ensa Johnson, ours is a unique relationship. Thank you for being part of my research journey.
- My other colleagues, Robyn White, Karin Van Niekerk, Enid Moolman, and Liza Siefe. Thank you for your love and support.

To my family, thank you for believing in me and cheering me on.

- My sister, Mmabatho the deputy parent – you are amazingly strong. I most times sit in awe and wonder where you get your strength from. Thank you for being part of the PhD journey and for being the one who always had to encourage and keep my morale up. Thank you for helping me organise our lives so that the PhD became possible. *A pula tsa mahlogonolo di go nele!*
- My mother, for having loved me always. Thank you also to my brother Khutso. You always made sure to call and ask how my chapter writing was going. Thank you for being my research assistant when the admin became overwhelming. Just like your birth, you are a blessing, *mothomotlholo!*

To my friends in the PhD journey, Maria, Katherine, Njabulo, Portia, Phuti, Kundi, Anushka, and Adele. Thank you, ladies, for being amazing. My sounding board and advisor, Dr Onkgopotse Madumo – you always knew what to say to me. Thank you, my friend.

To my fellow PhD students, both from the Centre for AAC and from the SAHUDA/NIHSS programme – you have truly ensured that this journey is one to remember. I learned so much from each and every one of you. Thank you for all your inputs and encouragement over the years.

To all the participants in this study – I am profoundly grateful for the knowledge shared and time taken to help me understand the research area investigated. I know I could not offer much in return. May God richly bless you.

To everyone that I forget to mention by name, I thank you from the depth of my heart.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

Abstract

Globally, persons with disabilities are facing exclusion from participation in the labour market. In South Africa, the employment rate of persons with severe communication disabilities remains low despite the implementation of legislation and policy initiatives to promote their economic participation. This study aimed first to determine barriers to and facilitators of employment of persons with severe communication disabilities, as perceived from the perspective of persons with severe communication disabilities themselves and specialised recruitment agents. Secondly, the study explored SRAs as facilitators to the employment of persons with severe communication disabilities. The study adopted a qualitative case study design with participants purposefully selected in order to provide an in-depth understanding of the issue under investigation. The International Classification of Functioning, Disability and Health (ICF) was used as a conceptual framework and therefore guided the study. Participants comprised 24 persons with severe communication disabilities (13 unemployed and 11 employed) and 25 specialised recruitment agents (SRAs). Data was collected using semi-structured interviews and conversational qualitative content analysis used in data analysis. Factors that hindered and facilitated the employment of persons with severe communication disabilities were linked to the ICF codes. Barriers most often reported by both groups of participants were related to the type of disability, lack of access to education and employment opportunities, and the presence of negative attitudes.

On the other hand, facilitating factors most reported were related to employment and rehabilitative services, policy and legislation, and positive personal traits. Four roles SRAs assume that facilitate a successful placement of persons with severe communication disabilities were identified. These included a consultation, placement, support, and training role. The study concludes by proposing a guiding placement checklist based on the ICF. This guiding placement checklist proposes strategies for successfully placing and retaining persons with severe communication disabilities in employment.

Keywords: barriers, disability, employment, facilitators, international classification of functioning disability and health, low- and middle-income countries, placement services, specialised recruitment agents, societal participation.

CHAPTER 1

PROBLEM STATEMENT AND RATIONALE

"Disability is articulated as a struggle, an unnecessary burden that one must overcome to the soundtrack of a string crescendo. But disabled lives are multi-faceted – brimming with personality, pride, ambition, love, empathy, and wit." Burke (2019)

1.1. Introduction

This chapter presents the problem statement and rationale of the study. This is followed by a description of the study's purpose, terminology, abbreviations and acronyms, and a list of the trademarked material and equipment used in the thesis. The chapter concludes with an overview of the overall thesis and an outline of the focus of each chapter.

1.2. Problem Statement and Rationale

The World Health Organization (WHO) estimates that persons with disabilities constitute approximately 15% of the world's total population (United Nations [UN], 2018; WHO & World Bank, 2011). This translates to between 110 and 190 million people who are living with some form of disability. The prevalence of disability has increased dramatically from the previous 1970 WHO report, which provided an estimate of 10% (WHO, 1981). Alarmingly, 80% of the population living with a disability are reportedly located in low- and middle-income countries (LMICs), particularly Africa and Asia (WHO & World Bank, 2011). However, prevalence rates in these LMICs vary from country to country and are also significantly influenced by the specific country's political, social, and economic status (Mitra et al., 2013; Mitra & Sambamoorthi, 2014). High levels of unemployment (80-90%) are observed in some LMICs, particularly for persons with severe disabilities (United Nations, 2018). This is due to factors identified at the different ecological system levels. For example, at the macro level, they include some governments' lack of political will, absence of or poor implementation of policies, and a general lack of essential services (Mizunoya et al., 2016; Mizunoya et al., 2018; Palmer et al., 2019). On a micro level, notable barriers to participation in the labour market are reportedly due to the lack of education, poor health, and the severity of disability (Maart et al., 2019; Tripney et al., 2019; Visagie et al., 2017).

Mizunoya and Mitra (2013) explored differences in employment rates between persons with and without disabilities in 15 LMICs. A significant economic gap was observed, with a wider gap found for persons with severe disabilities living in abject poverty. The relationship between disability and poverty is well documented, with one being both the cause and a consequence of the other, thereby creating a vicious cycle (Banks et al., 2017; Groce et al., 2011; Palmer et al., 2019). Therefore, it is not surprising that persons with severe disabilities are generally found to be the most marginalised group in society. Employment, it appears, plays a meaningful role in alleviating poverty and facilitating inclusion and participation in everyday life situations (Coutinho et al., 2008; Duffy et al., 2016). The stable income that comes from being employed offers financial security and therefore enables independent living. Equally, society views being employed as being active and productive (Darcy et al., 2016).

Perhaps the most critical feature of being employed is its contribution to the development of self-identity and a feeling of satisfaction with life (Blustein, 2008). When viewed in this light, participation in employment for persons with disabilities facilitates financial independence and participation in their community (Amado et al., 2013). Article 23 of the United Nation's Universal Declaration of Human Rights recognises the right to work for everyone, regardless of the presence of disability (United Nations General Assembly, 1948). Furthermore, this article emphasises the right of individuals to be provided with safe and just working conditions and to be protected from unemployment (Chirwa, 2018). The right to work is a fundamental right. Therefore, excluding persons with severe disabilities from participation in employment is a violation of this human right (Harpur, 2012; Liisberg, 2017).

Persons with severe communication disabilities encounter barriers when attempting to participate in the labour market (Khayatzadeh-Mahani et al., 2019; Perućica et al., 2018). It is perceived that employers fear potential lawsuits, they have concerns about the capability of persons with severe disabilities to complete work tasks, and they are worried about the costs related to accommodations (Engelbrecht et al., 2017; Kocman et al., 2018). Compared to individuals with a less severe disability, persons with severe communication disabilities are more likely to lack educational qualifications and the necessary communication skills to enable them to enter the labour market (Bryen et al., 2007; Harmuth et al., 2018). Notably, those employed occupy low-paying positions with limited opportunities for growth and advancement in their careers (Lindsay et al., 2015; Mizunoya et al., 2016; Mizunoya & Mitra, 2013). Due to the complexities that accompany severe communication disabilities, this population category

presents with the worst education and employment outcomes (Lindsay, 2011; Sefotho et al., 2019), which is why they are often considered part of the so-called NEET group: Not in Education, Employment or Training (International Labour Office [ILO], 2013). Given the importance of education and other skills to enable economic participation, persons with severe communication disabilities are at risk of being socially isolated and susceptible to poverty-stricken living conditions (Mitra et al., 2013; Mitra & Sambamoorthi, 2014).

The World Bank (2020) ranked South Africa (SA) as an "upper-middle-income country" due to its stable political climate, emerging economy, and availability of sustainable services and systems (i.e., health, education, and employment), coupled with a well-established legal framework (Du Plessis, 2017; Marumoagae, 2012; Van Reenen & Combrinck, 2011). Nevertheless, SA is still included under the broader LMIC classification (World Bank, 2020) and is referred to as an LMIC. Important to note that SA has a high Gini coefficient, implying an unequal society where the gap between rich and poor is large (Bosch & Koch, 2020; World Bank, 2015). Currently, unemployment rates in SA are at an all-time high (30.8%) (Statistics SA, 2020). However, unemployment of persons with severe disabilities is considerably higher and estimated to be over 80% (Dlamini, 2014).Under the Employment Equity Act of 1998 (adapted in 2015), an employment quota of 2% was set for persons with disabilities by the South African government to facilitate the participation of persons with disabilities in competitive employment. However, the latest report of the Commission for Employment Equity (CEE) (2019-2020) indicated a 0.9% representation of South Africans with disabilities at various levels and in various positions (Department of Labour, 2020).

The attainment of a low employment quota indicates that the economic participation of individuals with disabilities in the labour market remains a challenge (Christianson, 2012). Notably, persons with disabilities in SA still face marginalisation and lack of employment opportunities despite a comprehensive disability legal framework being in place (Du Plessis, 2017). Unfortunately, data on persons with disabilities in employment in the various South African companies and government departments presented in the Employment Equity reports do not include a description of the types of disabilities represented (Department of Labour, 2020). Research by Kocman et al. (2018) and Schneider and Nkoli (2011) nevertheless shows that employers tend to hire persons with physical disabilities resulting from spinal injuries rather than individuals with intellectual, and cognitive disabilities. Many employers assume that less severe disabilities are more manageable, require fewer accommodations within the

workplace, and result in fewer financial implications for the company (Houtenville & Kalargyrou, 2012; Nicholas et al., 2019).

With the observed failure by South African private companies and government departments to attain the set 2% employment quota, there was a pressing need for radical and more practical strategies of attracting candidates for job positions (National Council of and for Persons with Disabilities [NCPD], 2016). Employers sought the assistance of recruitment agencies to attract talent to match available job positions by offering them a commission for every successful placement. This led to the mushrooming of independent agencies offering disability employment services. Most of which were driven by persons with disabilities themselves (National Council of and for Persons with Disabilities, 2016). The agents from these agencies are referred to in this study as specialised recruitment agents (SRAs). Although a dedicated employment service portal was created to assist government departments with the recruitment and placement of persons with disabilities, employers rely on independent SRAs and non-profit disability organisations to access potential candidates (Department of Public Service and Administration, 2012).

The utilisation of SRAs is widely reported in the literature, and they are known to bridge the gap between employers seeking candidates and persons with disabilities seeking employment (Erickson et al., 2014; Gewurtz et al., 2016; Roggero et al., 2006). The SRAs also play a pivotal role in reinforcing the financial benefit to employers on hiring persons with disabilities (Rashid et al., 2020). They therefore can facilitate the employment persons with severe communication disabilities (Hedley et al., 2017; Nicholas et al., 2015).

There is currently a paucity of published data on the services provided by these SRAs in the South African context. Therefore, this study will first explore the current barriers experienced by persons with severe communication disabilities in securing employment in SA and the factors that facilitate successful employment. Furthermore, the roles of SRAs in the employment of persons with severe communication disabilities and facilitating strategies they use will be explored. Such information will be used to develop a proposed guiding checklist for the successful placement of persons with severe communication disabilities.

1.3.   Purpose of the study

The aim of this study was to firstly, determine barriers to and facilitators of employment of persons with severe communication disabilities by obtaining multiple perspectives: persons with severe communication disabilities and SRAs. Secondly, explore the roles of SRAs as facilitators to the employment of persons with severe communication disabilities. Lastly, propose a guiding placement checklist to guide successful placement of persons with severe communication disabilities based on the World Health Organisation's International Classification of Functioning, Disability and Health (ICF) framework.

1.4.   Terminology

The following terms are used frequently in this study and therefore require clarification.

1.4.1. *Augmentative and Alternative Communication*

Augmentative and alternative communication (AAC) is an area of clinical practice that addresses the needs of individuals with significant and complex communication disorders characterised by impairments in speech-language production and/or comprehension, including spoken and written modes of communication (American Speech-Language-Hearing Association [ASHA], 2020). AAC, therefore, refers to communication methods other than verbal language (i.e., speech) that are used to supplement or replace the use of verbal language. This can include the use of pictures, line drawings, written text (i.e. traditional orthography), manual signs and gestures, sign language, and speech-generating devices such as laptops and tablets (Bornman & Tönsing, 2019). In this study, AAC refers to specific communication methods used by individuals with severe communication disabilities as an alternative method to communicate and to supplement unintelligible speech (Bianquin et al., 2018).

1.4.2.   *Barriers and Facilitators*

In the ICF, barriers are defined as factors or conditions within a person's environment that can hinder everyday functioning and participation. On the other hand, facilitators refer to factors that enhance functioning and participation within one's environment (WHO, 2011). Although the absence of a barrier does not automatically imply a facilitator, the absence or lack of a facilitating factor can be a barrier (Kostanjsek, 2011). In this study, barriers and facilitators are described across all three domains of the ICF, that is, in the body function and structure

domain, the activity and participation domain, and the contextual factors domain (i.e., environmental and personal factors) (Bruyère et al., 2005).

1.4.3. Codes

In qualitative inquiry, a code typically refers to "a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldaña, 2013, p.3). This study derived codes from semi-structured interview transcripts and ranged in length from a single word to a phrase. An example of how codes were derived from raw data is provided in Table 1.1.

Table 1.1

Description of Codes

Participant	Interview excerpt	Code	Barrier − or facilitator +
EMPWD 019	I think it is hard for a person that is disabled to find a job, the first problem is transport. Finding a taxi to take you to work is very hard.	Inaccessible transportation	−

1.4.4. Disability

This study adopted the definition of disability used by WHO's (2001) International Classification of Functioning, Disability and Health (ICF), which views disability as a complex interplay between an individual's condition, daily activities, personal characteristics and environmental factors (Kostanjsek, 2011b; Üstün et al., 2003). This definition is also justified in that the WHO is an international institution with an international research reputation. It can be assumed that its definition is based on an empirical investigation conducted across several continents, and therefore can be used to generalise the circumstances of the notion of disability globally.

1.4.5. Employment

Persons in employment are defined as all those individuals of working age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit. They comprise employed persons both "at work", that is, who are in a job for at least one hour, and "not at work", that is, due to temporary absence from a job or to working-

time arrangements (such as shift work, flexitime, and compensatory leave for overtime) (International Labour Organization, 2020). Employment can be either formal or informal.

Formal employment: This refers to government-based or private-owned paid work (including quasi-corporate enterprises), non-profit institutions, unincorporated enterprises owned by government units, and those private unincorporated enterprises producing goods or services for sale or barter which are not part of the informal sector (International Labour Organisation, 2020). Usually, a work agreement or contract exists with set wages or salary, insurance, and benefits. The government regulates this type of employment.

Informal employment: This is work in private unincorporated enterprises (excluding quasi-corporations), that is, enterprises owned by individuals or households that are not constituted as separate legal entities independently of their owners, and for which no complete accounts are available that would permit a financial separation of the production activities of the enterprise from the other activities of its owner(s) (International Labour Organisation, 2020). Unlike formal employment, contracts might not exist, and enterprises are not registered and regulated by the government.

In this study, employment is defined as having paid employment in either the formal or informal sector (including self-employment and conducting volunteer work that either involves or does not involve remuneration).

1.4.6. *International Classification of Functioning, Disability and Health Framework*

The International Classification of Functioning, Disability and Health (ICF) is a framework developed by WHO (2001). Specific aims of the ICF include the establishment of a standard measurement tool of health and health-related conditions that can be understood by practitioners, researchers, policymakers and the general public (Heerkens et al., 2004; Kostanjsek, 2011; Üstün et al., 2003). Therefore, the ICF provides a consistent and universal tool for describing disability, which is valuable specifically for LMICs where multiple measures and definitions are typically used (Stucki et al., 2019).

The ICF serves as a framework to organise information about an individual's experiences with both the medical and social aspects of their lives and the impact on their functioning (Bornman, 2004; Perenboom & Chorus, 2003). Within the ICF, items related to

participation in employment, make it an ideal framework to determine information beyond the medical diagnosis (Homa, 2007; Southwick & Grizzell, 2020). The framework, therefore, provides a synthesised way to gather data and was thus used as a conceptual framework in this study.

1.4.7. Labour Market

The labour market is known as the job market, where there is a supply (employees) and demand (employers) for labour (Mitra, 2010). It is a crucial component of any country's economy and is intricately tied to capital, goods, and services (Hayes, 2020). In LMICs like SA, the labour market is described as dualistic in nature due to the presence of both a formal and an informal sector (Heintz & Posel, 2008). In countries like Kenya, Ghana and Ethiopia, the labour market consists of approximately 90% of the informal sector (African Development Report, 2015). In the present study, the labour market refers to both the formal and informal sectors.

1.4.8. Learnership Programmes

The Skills Development Act (No. 97 of 1998; Amended 2003) defines learnerships as a structured learning component that includes practical work experience of a specified nature and duration. Learnerships in SA comprises paraprofessional vocational education and training programmes that combine theory and practical experience (Schneider & Nkoli, 2011; Sing & Govender, 2007). A person who completes a learnership will have a qualification that is registered with the National Qualifications Framework (NQF) that signals occupational competence in that particular field (South African Qualifications Authority [SAQA], 2019). In SA, learnerships are created to accommodate different levels of academic qualifications. They are not only for those who have completed their high school education, that is, those who have matriculated or completed Grade 12.

1.4.9. Reasonable Accommodations

According to the South African Human rights Council (SAHRC), the following definition for reasonable accommodations is provided: "*Reasonable accommodation means necessary and appropriate modification and adjustments in a workplace not imposing a disproportionate or undue burden to the employer, where needed in a particular case, to ensure*

to persons with disabilities the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms" (SAHRC Disability Toolkit, 2018, p. 4). For persons with severe communication disabilities, modifications and adjustments may include physical work environments, job requirement modifications, assistive technology, personal assistance, and the training of employers and employees about disability and disability etiquette (Beukelman & Light, 2020; Padkapayeva et al., 2016).

1.4.10. Recruitment

According to Agustina et al. (2019), recruitment refers to the process of searching for prospective employees to fill job positions. This process also includes encouraging and motivating candidates to apply for these job positions. In this study, recruitment and sourcing are used interchangeably to highlight the process of scouting for talent and connecting applicants to advertised job positions.

1.4.11. Services and Roles

Services in this study refer to work provided in exchange for remuneration. The services include various activities related to the placement of candidates with disabilities in employment. On the other hand, roles refer to the function assumed, or part played by an individual (i.e., SRAs) in the placement process. The different types of services, similar in scope, function and outcome, are grouped as roles in the study. Therefore, the roles of SRAs in this study are based on the types of services they provide in the placement process of individuals with severe communication disabilities.

1.4.12. Severe Communication Disability

According to ASHA (2020), a communication disability is "an impairment in the ability to send, process, and comprehend concepts or verbal, non-verbal and graphic symbol systems". Communication disability may range in severity from mild to profound (Bornman & Tönsing, 2019). In this study, persons with severe communication disabilities are described as individuals who present with limited verbal language and therefore rely on AAC to either augment or as an alternative method to communicate their needs (Bianquin et al., 2018). It is acknowledged that this population is more likely to present with secondary

and co-morbid conditions (e.g., medical, intellectual, and/or physical disability) (Bornman & Tönsing, 2019).

Various developmental and acquired conditions may result in a severe communication disability. The most common developmental conditions are cerebral palsy, autism spectrum disorder, and intellectual disabilities (e.g., Down syndrome) (Beukelman & Light, 2020). Common acquired conditions include stroke, traumatic brain injury, spinal cord injuries, amyotrophic lateral sclerosis, and multiple sclerosis (Beukelman & Light, 2020). It is important to note that the focus of this study, is not on a specific diagnosis (as per the ICF) – for example, cerebral palsy – but rather on the limitations on activities and restrictions in participation as a result of impaired functioning (Bruyère et al., 2005). In the study, both developmental and acquired disabilities are included.

An impairment refers to impacted functioning at body function and body structure level (Howe, 2008; Threats, 2006), while disability refers to how the impairment impacts on participation in major life areas such as employment (activity and participation) and the influence of the environment on their limitations in functioning (Kostanjsek, 2011b; Üstün et al., 2003). Although the participants in this study used AAC communication devices and strategies to communicate their daily needs, and scored between Level II - III on the Communication Function Classification System (CFCS) (Hidecker et al., 2011), they still experienced barriers in participating in education and employment.

1.4.13. Specialised Recruitment Agents

Specialised recruitment agents (SRAs) provide disability and employment support services such as recruitment, placement of persons with disabilities, marketing of candidates to employers, and provision of disability sensitivity training programmes (Kulkarni & Kote, 2014; Kulkarni & Scullion, 2015; Wiggett-Barnard & Swartz, 2012). Thus, they act as intermediaries between persons with disabilities who are actively seeking employment and employers seeking to hire persons with disabilities (Roggero et al., 2006). In this study, the services offered by SRAs primarily focus on placement in the formal sector, though at times they also assist with placement in informal employment such as volunteer position and skills development programmes. The SRAs do not require a professional qualification to practice as SRAs and can therefore be from any professional background, that is, disability advocate with a matric qualification or an individual with a marketing bachelor's degree.

1.4.14. Working-age Population

The set working-age varies from country to country based on national laws and practices (International Labour Organisation, 2020). In SA, according to Sections 43-48 of the Basic Conditions of Employment Act of 1997, the legal working age is restricted to 15 years, with work considered unsuitable for children only allowed for individuals 18 years and older. In this study, the working-age population is considered to be 18 years and older, as this is the age at which most young adults complete their school education in SA (that is, Grade 12 or equivalent) and start transitioning to the world of work.

1.5.   Abbreviations and Acronyms

AAC	Augmentative and Alternative Communication
ADA	Americans with Disabilities Act
APSO	African Professional Staffing Organisation
ASD	Autism Spectrum Disorder
ASHA	American Speech-Language-Hearing Association
B-BBEE	Broad-Based Black Economic Empowerment
CFCS	Communication Function Classification System
CP	Cerebral Palsy
CRPD	Convention on the Rights of Persons with Disabilities
CV	Curriculum Vitae
DPO	Disabled Persons' Organisation
DPSA	Disabled People of South Africa
EEA	Employment Equity Act
EPWD	Employed Participant with a Disability
GMFCS	Gross Motor Function Classification System
GPAPD	Gauteng Provincial Association for Persons with Disabilities
HICs	High-Income Countries
HIV/AIDS	Human Immune-Deficiency Virus/Acquired Immune Deficiency Syndrome
HPCSA	Health Professions Council of South Africa
HR/s	Human Resource/s
ICIDH	International Classification of Impairments, Disabilities and Handicaps
ICF	International Classification of Functioning, Disability and Health

ILO	International Labour Organization
LMICs	Low- and Middle-Income Countries
NCPD	National Council of and for Persons with Disabilities
NEET	Not in Education, Employment or Training
NPO	Non-profit Organisation
NQF	National Qualifications Framework
MACS	Manual Ability Classification System
MDGs	Millennium Development Goals
OT	Occupational Therapist / Occupational Therapy
PEPUDA	Promotion of Equality and Prevention of Unfair Discrimination Act
SA	South Africa
SABPP	South African Board for People Practice
SADA	South African Disability Alliance
SAE4D	South African Employers for Disability
SAHRC	South African Human Rights Commission
SAQA	South African Qualifications Authority
SETAs	Sector Education and Training Authorities
SCD	Severe communication disability
SDGs	Sustainable Development Goals
SLT	Speech-Language Therapist / Speech-Language Therapy
SRA/s	Specialised Recruitment Agent/s
TAG	Technical Assistance Guidelines
UK	United Kingdom
UN	United Nations
USA	United States of America
UPWD	Unemployed Participant With a Disability
WHO	World Health Organization
WPRPD	White Paper on the Rights of Persons with Disabilities

1.6.   List of Trademarked Material and Equipment

ATLAS.ti™	A qualitative data analysis and research software developed in Germany, Berlin, D-10719.

Facebook Messenger™	A mobile messaging App that is used for instant messaging. The App is developed by Facebook Inc. Menlopark California, United States of America. https://www.messenger.com/
Gigabyte™	Computer hardware developed, which includes laptops and tablets. Developed in Taiwan. https://www.gigabyte.co.za
Google™	A search engine of various forms of data such as articles, images, videos, etc. http://google.com
Grid 3™	A communication system that allows control of technology and the environment through alternative means of communications. Developed by Thinksmartbox. https://thinksmartbox.com
Olympus-DM-650™	A digital voice recorder developed by Olympus technologies. https://www.olympus-global.com
Qualtrics™	A survey development software. Developed in Washington, United States of America. https://www.qualtrics.com
Skype™	A telecommunications application that provides a platform for voice calls, videoconferencing, and instant messaging. https://www.skype.com
SPSS™	A statistical package for social science, that is used for quantitative analysis of data. Developed by IBM. https://www.ibm.coma
WhatsApp™	An application that allows users to send text and voice messages, make voice and video calls, and share images, and documents. WhatsApp Inc. 650 Castro Street, Suite 120–219, Mountain View, California, 94041, USA. https://www.whatsapp.com
Zoom™	Teleconferencing Software developed by Zoom video communications. the software offers a platform for virtual meetings, chats, phone calling and other online events such as webinars. https://zoom.com

1.7.   Outline of Chapters

The thesis is divided into seven chapters which are outlined below:

Chapter 1: Problem Statement and Rationale

The chapter serves as an orientation to the research topic under investigation and provides the problem statement and rationale for the study. It also provides a list of the terminology and abbreviations used throughout the thesis. Furthermore, a list of trademarked

material and equipment used in the study is provided. The chapter concludes by delineating the outline of all the chapters in the thesis.

Chapter 2: Conceptual Framework

This chapter starts by reviewing models of disability and how they inform perceptions regarding how disability is perceived. Following the discussion of these models, the study's adoption of one conceptual framework is introduced, namely the International Classification of Functioning, Disability, and Health (ICF) as a framework is described. The chapter ends with a particular focus on the ICF's importance in understanding barriers to and facilitators of employment of persons with severe communication disabilities from a multi-faceted approach is highlighted.

Chapter 3: Literature Review

Chapter 3 reviews the literature on the employment of persons with disabilities globally and in LMICs. The discussion emphasises pioneering legislation that facilitated changes in policies to include the participation of persons with disabilities in education and employment. An in-depth discussion of the employment of persons with severe communication disabilities in the South African context is presented. In addition, the employment status of persons with disabilities in LMICs is presented. The discussion is based on findings from a scoping review of the literature on barriers to and facilitators of employment of persons with disabilities in LMICs. In addition, the roles of SRAs as facilitators to the employment of persons with disabilities is highlighted.

Chapter 4: Methodology

This chapter outlines the aims, design, position of the researcher as well as the ethical consideration in this study. It also discusses the participant selection and description, materials, and data collection methods. Furthermore, the phases of the study are described. Phase 1 aimed to determine the barriers to and facilitators of employment of persons with disabilities from the perspective of persons with severe communication disabilities who are employed and unemployed. Phase 2 is divided into three sub-sections, that is 2a, 2b, and 2c. Phase 2a aimed to determine the barriers to and facilitators of employment of persons with disabilities from the perspective of SRAs. Phase 2b explored the placement process followed by SRAs during the placement of persons with severe communication disabilities. Phase 2c, explored the roles of SRAs in facilitating the successful placement of persons with severe communication disabilities. Finally, Phase 3 explored the strategies that ensure successful placement of candidates with a severe communication disability.

The chapter also includes a discussion on how the trustworthiness and credibility of the data were ensured. At the end of the chapter, a reflection of the data collection and analysis procedures by the researcher is stipulated.

Chapter 5: Findings

This chapter serves as an introduction to Chapter 6, where the study findings are interpreted and discussed. The findings were presented according to the phases of the study. Phase 1 and 2a highlighted the barriers to and facilitators of employment of persons with severe communication needs. In Phase 2b, a description of the strategies used by SRAs to support the successful employment of a candidate with a severe communication disability were emphasised. The findings from Phase 2c provided a description of the services provided by SRAs in the South African context and the roles they assume in facilitating the employment of persons with severe communication disabilities. In Phase 3, the findings from Phase 1 and 2 are collated to highlight facilitating strategies for a successful placement of candidates with severe communication disabilities.

Chapter 6: Discussion

Chapter 6 discusses the findings reached in Chapter 5 and relates them to what exists in the literature. Based on the findings of the study, a proposed guiding placement checklist is suggested for SRAs to use during the placement of persons with severe communication disabilities. In addition, the use of the proposed guiding placement checklist is demonstrated.

Chapter 7: Conclusions

This chapter concludes the thesis as a whole. It revisits the study's main aim, evaluates the research methodology used, and provides general summary from the findings. The strengths and limitations followed by the clinical implications of the study are discussed in detail. Finally, the recommendations for future research, based on the findings of this study, are also made.

1.8.   Summary

This chapter discussed the rationale for the study, which was to explore the barriers to and the facilitators of the employment of persons with severe communication disabilities. It also briefly highlighted the employment of persons with disabilities globally and the

consequence of their economic inactivity. Next, the terminology, acronyms, and abbreviations used in the thesis were described. In addition, a description of a list of material and equipment trademarked that was used in the study was provided. The chapter concluded with an outline of the chapters into which the thesis has been divided.

CHAPTER 2

CONCEPTUAL FRAMEWORK

2.1.   Introduction

This chapter aims to provide a critical discussion of various models of disability that culminated in the adoption of a conceptual framework for this study. In the critique of these models of disability, a link is provided to the long-held negative stance about disability which hinders the economic participation of persons with disabilities globally. Following a discussion of the most prominent models of disability, the International Classification of Disability, Health, and Function (ICF) framework is discussed as a suitable framework for understanding barriers to and facilitators of employment of persons with severe communication disabilities. Furthermore, the ICF is described, and its appropriateness as a conceptual framework for this study is discussed.

2.2. Overview of Disability Models

Various beliefs and theories exist globally regarding disability (Andrews, 2017). Models of disability are widely used to conceptualise disability and provide a platform from which disability can be viewed and ultimately defined (Dirth & Branscombe, 2017; Shakespeare, 2006). Since these models determine and shape the self-identity of persons with disabilities, they can unfortunately also be drivers and reinforcers of prejudice (Llewellyn & Hogan, 2000; Smart, 2009). Concerning the employment of persons with disabilities, employers' adoption of a specific model of disability determines their beliefs and perceptions regarding disability. It thus influences recruitment and hiring practices and the level of inclusion of persons with disabilities in the workplace (Humpage, 2007). The aim of critically analysing each model of disability is to determine whether it provides a framework for defining and understanding disability and exploring the multifaceted nature of factors influencing the employment of persons with severe communication. Several models of disability exist in the literature (Retief & Letšosa, 2018); however, in this thesis, five prominent models relevant to the employment of persons with disabilities are discussed.

2.2.1. *The Moral/Religious Model of Disability*

The moral/religious model of disability is one of the oldest models of disability (Bennett & Volpe, 2018). Historically, disability was viewed as punishment from the Divine for sinful acts and moral wrongdoing (Bryan & Henderson, 2011). Society perceived an individual with a disability as demonic, evil, or cursed (Retief & Letšosa, 2018). Despite the global shift in beliefs about the causes of disability, superstitious beliefs are still predominant in many LMICs like South Africa (Rohwerder, 2018). Figure 2.1 shows the superstitious beliefs associated with the moral/religious model.

Figure 2.1. *The Moral/Religious Model of Disability*
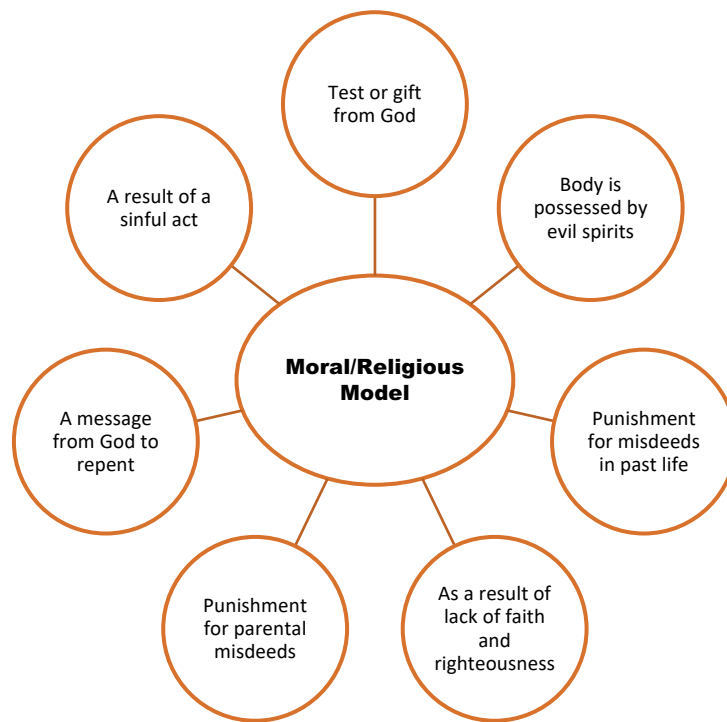
Note. The points highlighted in Figure 2.1 are summarised from the literature on moral/religious models of disability as discussed in this section. The figure is therefore not derived from a single source.

The consequence of such a superstitious stance about disability explains why communities do not support and encourage the participation of persons with disabilities as equal members of society. In LMICs, different cultural and religious groups have different perceptions of the causes of disability, and thus they hold different beliefs (Rohwerder, 2018;

Sadiki et al., 2021). In some instances, the belief is not culture specific but disability specific, that is, it may be that an individual with is disability held in high regard or rejected (Boston et al., 2015). These perceptions, unfortunately, influence caregivers' medical seeking behaviour (Wegner & Rhoda, 2015). In SA, it is reported that many families only seek intervention for their children with severe communication disabilities very late in life, which inevitably causes them to lose out on critical periods of development (Saloojee et al., 2007). In extreme cases, some individuals with disabilities may even reach adulthood, having never attended school, which inevitably results in poor employment outcomes (Cramm et al., 2013). It thus appears that time is spent by the caregivers attempting to cure the disability either religiously, through the church, or using traditional African medicine provided by a Sangoma or traditional healer (Tigere & Makhubele, 2019).

The literature reports negative societal beliefs and discrimination as significant barriers to the employment of persons with disabilities (Gewurtz et al., 2016; Vornholt et al., 2018). From the viewpoint of this model, employers perceive the employment of persons with disabilities not as a right afforded to everyone but rather as an act of their goodwill. Therefore, in this model, participation in education and employment is not seen as a probability for persons with disabilities, and the odds of being employed are even lower for individuals with a severe disability. A consequence of the religious model is that it views persons with disabilities as objects of pity who cannot possibly contribute to the economy in any meaningful way (Fitzgerald & Clapton, 1997). The low representation of persons with disabilities in employment is attributed mainly to engrained discriminatory beliefs. Evidence indicates that persons with severe communication disabilities experience higher stigmatisation levels than other types of disabilities (Eide et al., 2008; Maart et al., 2007). It is, therefore, not surprising that they experience marginalisation from participating in education and employment (Mitra, 2018).

2.2.2. *The Medical Model of Disability*

As developments in science occurred, an increased understanding of the causes of disability ensued, and a shift in discourse from the religious belief of the causes of disability to a medical-based understanding of disability followed (Oliver, 1990). The medical model holds the belief that disability is the result of impairment in body function and body structure (Haegele & Hodge, 2016). Hence the focus is exclusively on the impairment itself and

disregards the disabling influence of the social, economic, and attitudinal environment in which the individual functions (Jahan & Ellibidy, 2017). Figure 2.2 summarises the beliefs associated with this model.

Figure 2.2. *The Medical Model of Disability*
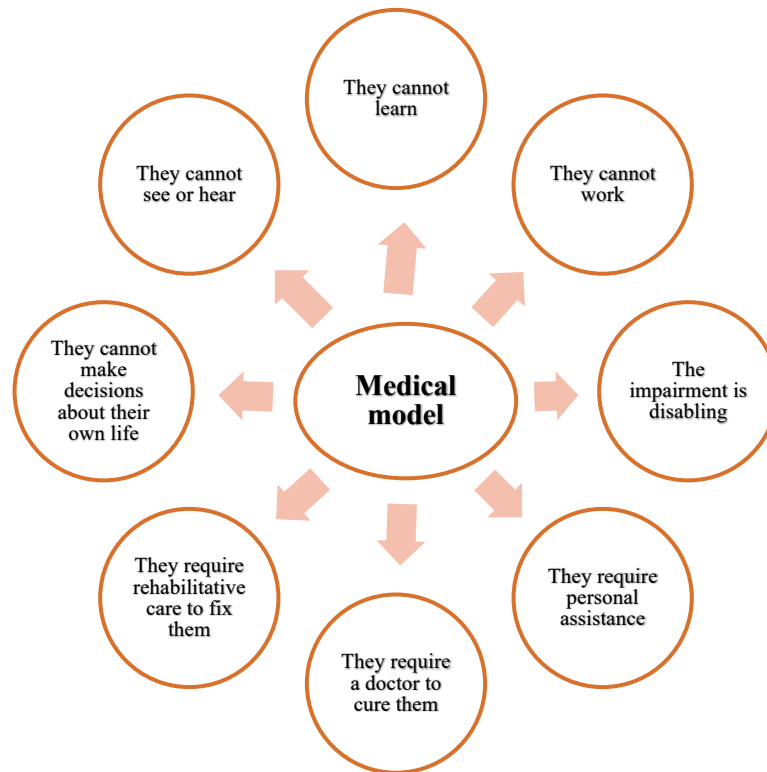
Note. The points highlighted in Figure 2.2 are summarised from the literature on medical models of disability as discussed in this section. The figure is therefore not derived from a single source.

Responses to intervention in the medical model aim to prevent, cure, and treat the impairment, thereby placing complete control in the hands of medical professionals (Humpage, 2007). These medical professionals determine whether treatment and rehabilitative care to reduce the debilitating effects of the impairment are possible for an individual (Retief & Letšosa, 2018). In the case of individuals with severe communication disabilities, multiple medical and rehabilitative interventions are required over sustained periods of time, resulting in this category of disability being classified as persons who cannot undergo mainstream education and participate in the open labour market (Andrews, 2017).

Examples of models based on principles of the medical model of disability include the rehabilitation model supported by rehabilitation professionals such as speech-language

therapists (SLTs) (Marks, 1997) and the WHO's International Classification of Impairments, Disabilities and Handicaps (ICIDH) (WHO, 1980). In the ICIDH, disability was addressed by using terms such as Impairment (any loss or abnormality of psychological, physiological, anatomical structure or function), Handicap (any disadvantage resulting from an impairment or a disability that limits or prevents the fulfilment of a role that is normal for that individual), and disability (any restriction or lack of ability resulting from an impairment to perform an activity in the manner or within the range considered normal for a human being). Figure 2.3 demonstrates the ICDIH model.

Figure 2.3. *The International Classification of Impairments, Disabilities and Handicaps Model of Disability*
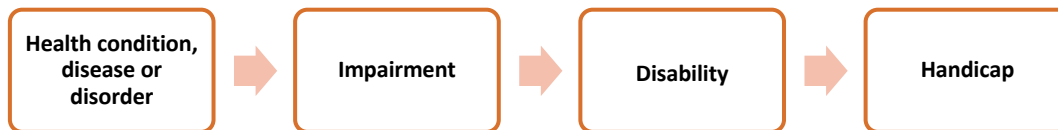
Note. The figure demonstrates the linear progression of disability taken from the World Health Organisation (1998) ICIDH model of disability

The ICIDH model depicts disability as a linear process whereby an individual's condition results in an impairment, which then causes a disability, which may later result in a handicap. Although this was undeniably a substantial step towards perceiving disability outside of the impairment alone, the ICIDH model failed to describe the impact of the impairment on an individual's participation in the social, economic and attitudinal environment (Andrews, 2017; Marks, 1997).

Globally, policymakers are guided by the medical model of disability to estimate the prevalence of disability, services, treatment, and medical benefits required for different types of disabilities (Marks, 1997). Unfortunately, this approach dehumanises individuals with a disability by placing their diagnosis before their personhood (Dirth & Branscombe, 2017). Similar to the moral/religious model, this model focuses on disability at an individual or body level and thus does not consider limitations on and restrictions to participation in employment imposed by the environment (Jahan & Ellibidy, 2017). The model also perceives persons with disabilities as defective and inferior to their able-bodied counterparts. For this reason, the medical model, although not intentional, perpetuates and reinforces ableism prejudices and misconceptions about persons with disabilities (Shyman, 2016).

In SA, the medical model is used by medical and rehabilitation practitioners to determine a diagnosis and subsequent eligibility for disability grants where individuals with disabilities are scored according to incapacity level (Kidd et al., 2018; Walsham et al., 2019). Persons with severe communication disabilities may present with multiple impairments and are likely to receive a high incapacity score, warranting them being unable to work and thus eligible for a government social grant (Jelsma et al., 2008; Kidd et al., 2018). The focus is on the disability rather than on capability, which again highlights the model's deficit-based approach towards disability (Andrew, 2017). An indication of the use of a medical model in SA to define disability is viewed in Section 1 of the Code of Good Practice of 2002:

> *An individual is considered disabled provided they fulfil the following criteria outlined by this definition: (i) having a physical or mental impairment; (ii) which is long term or recurring; and (iii) which substantially limits their prospects of entry into or advancement in employment.*

It is important to note that this definition does not consider any factors outside of the impairment and is currently used by employers and SRAs to determine the candidate's eligibility for employment equity (i.e., considered disabled or not).

2.2.3. *The Social Model of Disability*

The social model of disability emerged from civil rights movements in the United Kingdom (UK) and the United States of America (USA) in the 1960s and 1970s (Oliver, 1990). In 1975, the UK organisation, Union of the Physically Impaired Against Segregation (UPIAS, 1976), advocated for independent living and equal rights for persons with disabilities. They argued that the oppression and exclusion of persons with disabilities in education and the economy violated their human rights (Harpur, 2017; Tregaskis, 2002). They also argued that policies developed for persons with disabilities were not established in consultation with them. These arguments gave rise to the philosophy and slogan of the disability rights movement in SA in the 1990s: "*nothing about us without us*" (Charlton, 2000, p. 3).

In contrast to the medical model, the social model posits that disability occurs due to barriers within the person's specific environment (social, economic, and attitudinal). The environment, and not the presence of impairment at a body level, is perceived as disabling.

(Barnes, 2000; Shakespeare, 2017). Figure 2.4 provides an outline of factors identified as disabling in the social model.

Figure 2.4. *The Social Model of Disability*
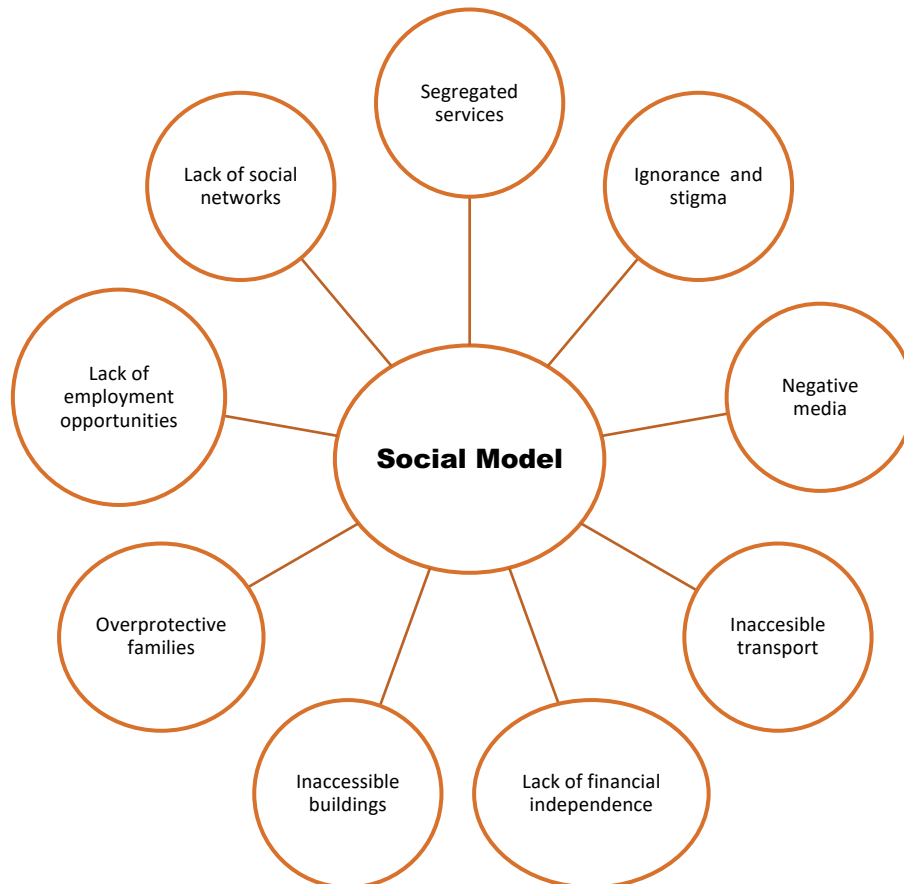
Note. The social model of disability depicts barriers as emanating from the environment. The points highlighted in this figure are summarised from the literature on the social model of disability. The figure is therefore not derived from a single source.

Notably, the social model has been instrumental in liberating persons with disabilities globally by effecting change in education and labour policies to include persons with disabilities (Barnes, 2012). Furthermore, the model shows the change in derogatory terms and advocates correct and unbiased terminology when referring to persons with disabilities (placing the person before the disability by referring to 'person with a severe communication disability) (Beaudry, 2016). Undoubtedly, this shift in the view of persons with disabilities contributed substantially to addressing the opposing views regarding disability. Therefore, the social model

is more in line with a human rights approach to disability than either the moral/religious or medical models of disability (Degener, 2017).

Perhaps what is unique about the development of the social model of disability is that it was driven by persons with disabilities themselves (Barnes, 2012). However, it is important to highlight that this group of persons with disabilities consisted mainly of white males in wheelchairs. Consequently, their views were not necessarily representative of the diverse needs and unique challenges that individuals from diverse cultural groups, economic backgrounds, gender/sexuality orientation, and with different disabilities face in their daily life situations (Beaudry, 2016). The biggest challenge with the social model defining disability and impairment in terms of a consequence of societal barriers is that it excludes individuals such as those with severe communication disabilities, whose experiences and restrictions experienced are different from individuals who present with a physical disability due to for example, a spinal injury (Owens, 2015). Within the employment landscape of persons with disabilities, white men, most typically those with a physical disability, have high representation in various positions (including top management positions) today in SA (Department of Labour, 2020).

For persons with severe disabilities, activity limitations and participation restrictions occur as a result of the presence of severe impairment at a body level (Humpage, 2007). The social model does not engage with the embodied experience and thus centres its definition of disability on social constructivism (Anastasiou & Kauffman, 2013). Similar to the medical model, there is a separation of the body from the environment. Warranted, principles of the social model are crucial in understanding barriers that exist within an individual's environment. However, the social model disregards the influence of an individual's diagnosis on their everyday functioning (Shakespeare, 2010). In disability and rehabilitation studies, both the biological and personal characteristics that hinder and facilitate environmental factors are considered together as they provide a holistic picture of the needs of the individual with a disability (Jahan & Ellibidy, 2017). Therefore, both the medical and social aspects are imperative when determining factors that hinder or facilitate participation in the environment.

The imprints of the social model of disability are reflected in crucial policies in SA, such as in the Code of Good Practice of 2002 and the White Paper on the Rights of Persons with Disabilities (2015).

2.2.4. *The Human Rights Model*

The human rights model focuses on the inherent dignity of every human being, regardless of race, gender and disability (Degener, 2017). Human rights are fundamental rights and cannot be taken away or gained as a result of the presence or absence of an impairment (Harpur, 2012). The model incorporates both sets of human rights, namely, political and economic rights and social and cultural rights (De Schutter, 2019). This model is perceived as an improvement on the social model of disability and, in most instances, is referred to as synonymous with the social model (Lawson & Beckett, 2021).

However, key differences between the social and human rights models of disability were identified by Degener (2016). Firstly, unlike the social model, the human rights model recognises the impact of the impairment on an individual with a disability. Therefore, even with societal barriers removed as suggested by the social model, persons with severe communication disabilities (for instance) will still require medical and rehabilitative support to enjoy full equal rights. Secondly, although the social model brought about civil rights and anti-discrimination laws for persons with disabilities, it did not approach disability rights from a human rights perspective. For instance, the availability and access to education and participation in the labour market is the right of every human being and should be provided regardless of the presence or absence of a disability. Therefore, unlike the social model, the human rights model requires corrective measures and steps to be taken to realise these rights (Lawson & Beckett, 2021; West, 2017).

The focus of the human rights model is depicted in Figure 2.5.

Figure 2.5. *The Human Rights Model of Disability*

Note. Figure 2.5 summarises the focus of the human rights model as presented in the literature and not derived from a single source.

An example of a human rights model is the Convention on the Rights of Persons with Disabilities (CRPD) (United Nations, 2006), which is regarded as a human rights treaty (Degener, 2016; Harpur, 2017). The purpose of the treaty is to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity (Dominguez-Redondo, 2020; Fernandez et al., 2017). The CRPD aims to achieve its purpose through eight guiding principles described in Article 3: Facilitating equality of opportunity and accessibility, complete and adequate participation, and inclusion in society (United Nations, 2006).

One of the goals specifically aimed at enhancing economic participation of persons with disabilities is addressed by Article 27, which states the following:

"...persons with disabilities have a right to work and to gain a living on an equal basis with others. State parties are encouraged to prohibit discrimination in employment-related matters, promote self-employment, entrepreneurship and starting one's own business,

encourage and promote employment of persons with disabilities in the public and private sector, and ensure reasonable accommodation is provided in the workplace when needed" (United Nations, 2006, p. 19-20).

Approximately 164 countries worldwide have ratified the CRPD, and over thirty countries have adopted its optional protocol (United Nations, 2016). SA is a signatory of the CRPD and ratified the Convention in 2008. Being a signatory shows a commitment by state parties to the terms as outlined in the CRPD (i.e., a commitment to improving the education and employment opportunities for persons with disabilities), while ratification of the Convention means South Africa is legally bound by the terms outlined in the CRPD. Important to note, however, is that the realisation of these disability rights comes with its own challenges. Many countries have failed at an implementation level, resulting in gross violation of human rights (Du Plessis, 2017; Marumoagae, 2012). In SA, steps taken to ensure participation of persons with disabilities in employment are observed in anti-discrimination laws such as the Promotion of Equality and Prevention of Unfair Discrimination (PEPUDA) Act of 2000 (Department of Justice, 2000) and policies such as the White Paper on the rights of persons with disabilities (Department of Social Development, 2015). A rights-based model is more relevant in LMICs, as persons with disabilities can hold their government accountable for realising its human rights obligations.

2.2.5. *The Economic Model of Disability*

The economic model of disability, which is built on the principles of both the medical and social model (Zajadacz, 2015), is widely used by economists. Although the model takes into consideration the social benefit of employment for persons with disabilities, their capability to work and, therefore, their contribution to the economy is seen as the first priority and subsequently stands at the core of this model (Jongbloed, 2003). As described by Armstrong et al. (2006, p. 151), the economic model focuses on the "*various disabling effects of an impairment on a person's capabilities, and in particular on labour and employment capabilities*". The economic model defines disability in terms of an individual with an inability to work (Hubbard, 2004). The focus shifts from a compliance-based and rights-based approach to that which is driven by the market demand, with persons with disabilities being viewed as valuable contributors to the economy (Forrester & Davis, 2011). Therefore, the economic model balances the economic development of its particular government while promoting

economic independence and facilitating the social integration of persons with disabilities. Therefore, the employment of persons with disabilities means less reliance on government funds and greater contribution to taxes. The approach of the economic model is summarised in Figure 2.6.

Governments often utilise the economic model to determine the distribution of social benefits for those who are unable to participate fully in work (Jongbloed, 2003). Of course, this model has been heavily criticised for dehumanising individuals with disabilities and reducing them to mere numbers and objects (Oliver, 2013; Retief & Letšosa, 2018). The economic model takes pride in its social approach to disability. However, it echoes the practice of the medical model as it employs deficit-based assessments, albeit with employment rather than a rehabilitation focus, as is done in the medical model (Zajadacz, 2015).

In SA, the use of the economic model is observed in the social security grant system and the allocation of subsidies and skills development opportunities in the form of learnerships (Department of Social Development, 2020). Since these benefits are housed in different government departments that often do not communicate with one another, this results in fragmented services (Kidd et al., 2018). Depending on their income level, an individual who opts for employment may lose their social security benefit, which is immensely challenging to reapply for (Kidd et al., 2018; Mitra, 2008; Schneider & Nkoli, 2011). Employment opportunities for persons with disabilities are not only limited, but when available, they are often temporary in nature (Mizunoya & Mitra, 2013). Social security benefits are not only a secure and reliable form of income but are also associated with attractive benefits such as access to free health services (Kidd et al., 2018; Walsham et al., 2019). For this reason, persons with disabilities may be reluctant to apply for jobs (Mitra, 2008).

Figure 2.6. *The Economic Model of Disability*
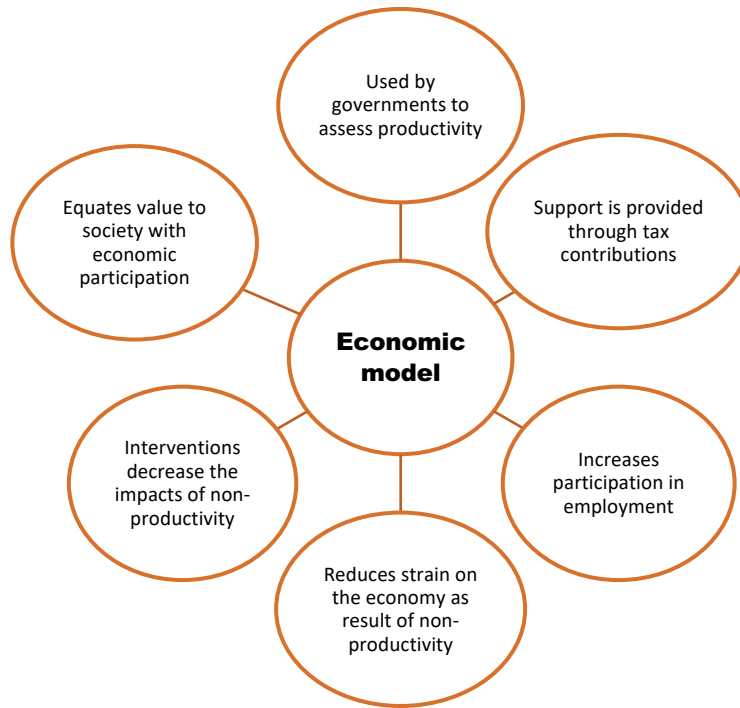
Note. The approach of the economic model summary is derived from the sources discussed in this section. Figure 2.6 is therefore not derived from a single source.

As previously suggested, persons with severe communication disabilities – due to the complexities of their disability – are often categorised as belonging to the population category that is unable to work and is therefore eligible for financial assistance from the government's social security benefits in the form of disability grants (Walsham et al., 2019). These disability grants are, however, not designed to eradicate poverty, nor do they promote economic independence (Mitra, 2008). In SA, social security benefits such as disability grants are often used to provide daily needs such as food, transport, and paying personal assistants (Graham, 2020). In some families, disability grants serve as the only source of income (Lygnegård et al., 2013; Mitra, 2010; Schneider & Nkoli, 2011).

The economic model (just like the social model of disability on which its principles are based) does not favour disabilities that are complex and severe in nature, such as those presented by a severe communication disability (Retief & Letšosa, 2018). This is evident in exclusionary recruitment policies followed by some employers, which have strict

specifications of individuals they are willing to hire (Kocman et al., 2018; Perućica et al., 2018). This indicates unconscious forms of bias from employers (Friedman, 2020).

2.2.6. *Biopsychosocial Model of Disability*

Unlike the medical and social model of disability, where disability is understood based solely on either biological or social factors, disability is understood in the biopsychosocial model in terms of three levels of functions. In this model, they are referred to as dimensions, namely biological (e.g., impaired hearing, speech, memory, and mobility), psychological (e.g., cognition, emotions, and attitudes) and social (e.g., physical, economic, and attitudinal environment) dimensions. (Engel, 1981; Pilgrim, 2002). The domains of the biopsychosocial model are depicted in Figure 2.7.

The biopsychosocial model was first introduced in 1977 by George Engel, an American psychiatrist who highlighted the importance and influence of these three dimensions on functioning and participation (Engel, 1981; 1977). Engel advocated using this model in the general health system, rehabilitation, and education (Frazier, 2020). Although the biopsychosocial model highlights the interconnectedness of the three dimensions and their impact on functioning, it is important to note that each dimension is viewed independently (Adler, 2009; Epstein & Borrell-Carrio, 2005). This means an individual can be considered to present with a disability in one dimension and not in another (Frazier, 2020; Jahan & Ellibidy, 2017). Therefore, the model does not provide a holistic approach to intervention that considers the individual's preferences and needs. The focus, therefore, lies in prioritising one domain over the other (Ghaemi, 2009).

The biopsychosocial model did not gain popularity as it was overshadowed by a framework built on its principles (consisting of three domains), the ICIDH, which the WHO developed in the late 1970s, shown in Figure 2.3 (Jahan & Ellibidy, 2017). However, the biopsychosocial model continues to be relevant to date, with its application evident in medical fields such as psychiatry and psychology (Adler, 2009; Frazier, 2020; Ghaemi, 2009).

Figure 2.7. *The Biopsychosocial Model of George Engel (1977)*
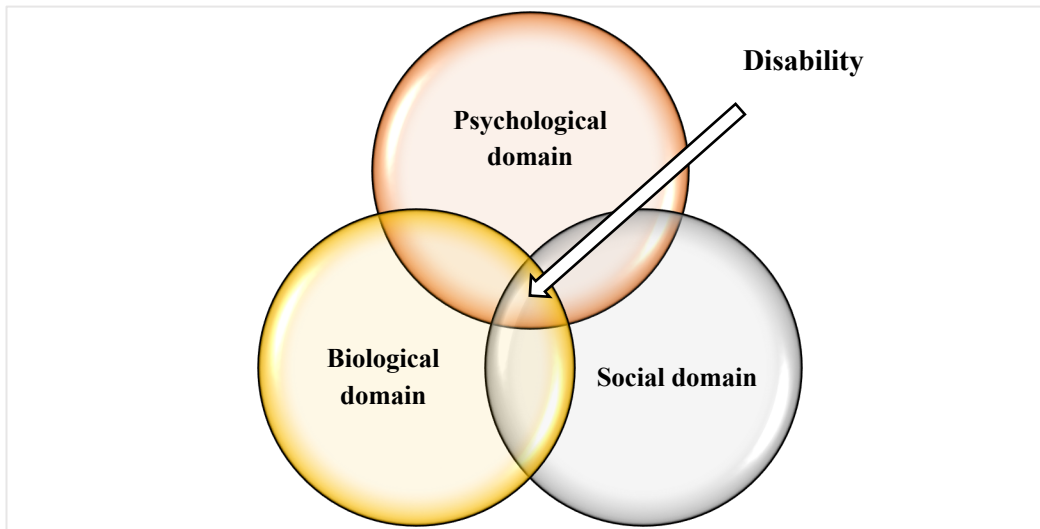
Note. The figure demonstrates the interconnectedness of the three dimensions as described by Engel (1977)

2.2.7. *The International Classification of Functioning, Disability and Health (ICF) Framework*

The ICIDH (World Health Organisation, 1980), as previously discussed, was critiqued for its heavy medical focus, even though its initial intentions were to follow a biopsychosocial approach to disability (Marks, 1997). Multiple revisions of the model were undertaken under the name International Classification of Functioning and Disability (ICIDH-2), but this was later abandoned for the name, the International Classification of Functioning, Disability and Health (ICF) (Gray & Hendershot, 2000; Simeonsson et al., 2000). The ICF conceptualises disability through three levels of functioning (referred to in this model as domains): body function and body structure (impairment); activity and participation; as well as contextual factors (environmental and personal factors) (Ustün et al., 2003) (see Figure 2.8). In some texts, the environmental and personal factors are combined and referred to as the contextual domain.

The ICF offers a review of the World Health Organisations' definition of disability and thus conceptualises disability (based on functioning) as an "*umbrella term for impairments, activity limitations and participation restrictions that denotes the negative aspects of the interaction between a person's health condition and their environmental and personal factors*"

31

(World Health Organisation, 2001, p. 11). Disability is therefore viewed as a negative outcome of an individual's condition as a result of the interaction at either one or all three domains, and not solely as a result of impairment at the body level (Kostanjsek, 2011b; Stucki et al., 2002). This is different from the ICIDH, where disability was understood as a limitation in an individual's activity due to presence of an impairment.

Figure 2.8 demonstrates the dynamic and complex interplay of the three domains of the ICF factors and their ability to either facilitate or hinder participation, depending on the combination of factors and the environment.

Figure 2.8. *Demonstration of the International Classification Functioning of Disability and Health (ICF) Framework depicting the interconnectedness of the four domains*
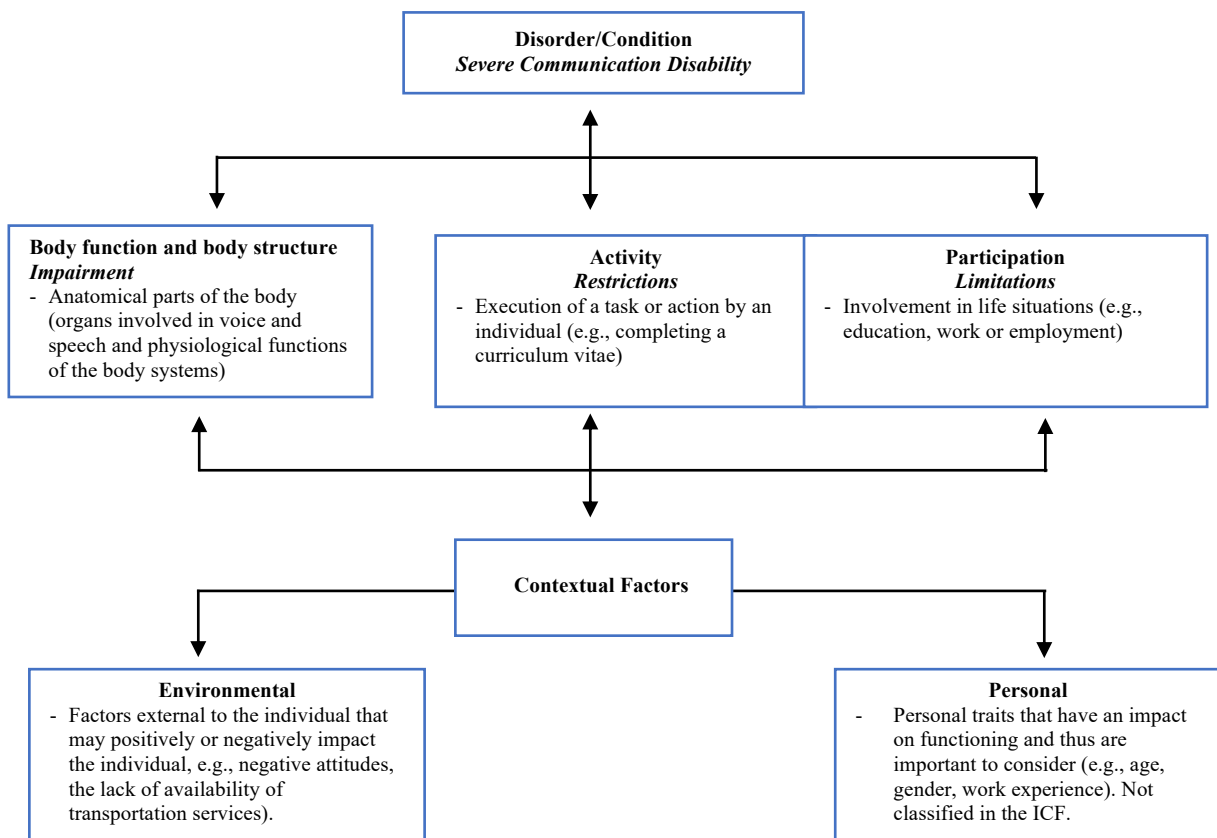
Note. Taken from the World Health Organisation (2001: p. 18). Copyright 2001 by the World Health Organisation.

The ICF assumes an asset-based approach, which is evident from its focus on identifying barriers and facilitators to participation instead of simply stating the individual's limitations in functioning (Bornman, 2004). In addition, in the ICF, functioning is not determined by an individual's background, environment, and the severity of the impairment; in fact, persons with disabilities are seen as key role players in their intervention. The model's neutrality stance is based on principles of equality, and therefore, the rights of all humans are recognised and respected.

Specific aims of the ICF include establishing a standard measurement tool of health and health-related conditions that can be understood by practitioners, researchers, policymakers, and the general public (Heerkens et al., 2004). The ICF, therefore, provides a consistent and universal tool for describing disability, which means data on disability can be compared globally. This is valuable, specifically for LMICs, where multiple measures and definitions for disability are typically used (Abdel Malek et al., 2020; Madden & Bundy, 2019; Mitra et al., 2013).

2.3. Overview of the International Classification of Functioning, Disability and Health (ICF) Framework

The ICF is organised into two parts (World Health Organisation, 2011). Part 1 describes functioning and disability and includes two domains (a) body functions and body structure, and (b) activities and participation. Part 2 describes the context, which includes context factors domains, (c) environmental and (d) personal factors. An overview of the ICF provided in Table 2.1 indicates how a change in body function and body structure results in participation limitations in respect of various activities, which can either be enhanced or hindered by the environment. The description of the ICF is based on the ICF manual and the Procedural Manual and Guide for a Standardised Application of the ICF (World Health Organisation, 2002).

Table 2.1

An Overview of the International Classification of Functioning, Disability and Health Framework

	Part 1 Functioning and Disability		Part 2 Context	
			Contextual factors	
Domains	Body functions and body structures	Activities and participation	Environmental Factors	Personal Factors
Definitions	Body functions Body structures	Task completion and activities of daily living	External factors influencing functioning and disability	Internal factors influencing functioning and disability
Constructs	Physiological changes (i.e., change in body functions) Anatomical changes (e.g., change in body structures)	Capacity: executing tasks in a standardised context Performance: executing tasks in an individual's everyday environment	Barriers to and facilitators of participation in the physical, social, attitudinal, and economic environment	Characteristics and traits of an individual that facilitate or hinder participation
Chapters and Classification	8 chapters b1-b8 s1-s8	9 chapters d1-d9	5 chapters e1-e5	Not classified in the ICF
Level of functioning	Body level	Individual and societal level	Environmental factors	Personal factors

2.3.1. *Taxonomy of the ICF*

The domains of the ICF – that is, body functions and body structures; activities and participation; and contextual factors (environmental factors and personal factors) are organised according to taxonomic principles and a hierarchical structure (World Health Organisation, 2002). The first level includes a list of the chapter headings and an overview of the different areas of functioning. Policymakers use this level to provide a broader description of barriers experienced by persons with disabilities (Cerniauskaite et al., 2011). Each chapter further contains the second, third, and fourth levels of classification and provides a description of each level of functioning. These levels are represented by numeric codes that describe specific areas of functioning (Heerkens et al., 2004). The personal factors are not classified in the ICF (although it impacts functioning) (Simeonsson et al., 2014) and therefore is not described any further in the framework.

In order to facilitate a more explicit description of the classification system, an example is given in Table 2.2 below of an individual with a severe communication disability requiring support in completing a curriculum vitae (CV). In this example, the hierarchical structure of the ICF is indicated by coding the activities level classification only.

Table 2.2

The Hierarchical Structure of the International Classification Functioning of Disability and Health (ICF) Framework

Classification	Chapter	
	Code	**Description**
1st Level	d8 –	Major life areas
2nd Level	d845 –	Acquiring, keeping and terminating a job
3rd Level	d8450 –	Seeking employment

Note. The hierarchal structure is described as outlined in the ICF manual (World Health Organisation, 2002). The analysis in this study is conducted by linking codes identified to the 2nd level classification.

2.3.2. *Part 1: Functioning and Disability*

The first part of the ICF provides information at an individual level and includes two domains: body function and body structure and activity and participation (World Health Organisation, 2002).

2.3.2.1. Body Function and Body Structure. This domain significantly influences a person's ability to participate in daily life activities such as employment (Hästbacka et al., 2016). This first domain refers to impairment at the body level and is described according to the level of impairment, that is, severity and comprises eight chapters (Howe, 2008). The body function provides a description of physiological and psychological functioning, while body structure refers to the anatomic parts such as organs and limbs (Threats, 2006). Impairment in structure involves an anomaly, defect or loss in body structures. Impairment can be permanent or temporary in nature, as well as progressive or regressive. However, the presence of an impairment is not necessarily a predictor or determinant of functioning (Geyh et al., 2004). Limitations imposed by an impairment can be overcome by introducing alternative ways of executing tasks, for example, assistive technology, to compensate for the loss of function (Coelho et al., 2013).

Persons with a severe communication disability, when described according to the ICF, the individuals are describe as presenting with an impairment in any body structure and/or body function that would negatively impact communication (McCormack & Worrall, 2008). These include body functions such as hearing, vision, speech, language and cognition, as well as functions related to alternative means of communicating such as facial expression, body language, gestures, sign language and braille (O'Halloran et al., 2008). From the description, it can be understood that a severe communication disability involves a severe impairment in the expression and/or reception of language (Threats & Worrall, 2004). Depending on the severity of the communication impairment, an individual might require augmentative and alternative communication (AAC) to communicate their daily needs and to interact with others in the workplace (Bornman & Tönsing, 2019).

The selection and choice of the type of AAC technology to be used largely depends on an individual's motor abilities, literacy and cognitive skills (Light & McNaughton, 2015). AAC systems may be divided into two broad categories: unaided and aided communication (Elsahar et al., 2019). Unaided communication only requires the body for interaction (e.g., natural gestures, manual signs, fingerspelling, sign languages, facial expressions, and vocalisations), while aided communication requires external aids (e.g., real objects, photographs, line drawings and written text). The latter ranges from basic, low-technology (e.g., paper-based communication boards) to advanced high-technology systems (e.g., speech-generating devices) (Elsahar et al., 2019).

The body function and body structure categories are designed to be used in conjunction with other domains of the ICF, such as the activity and participation domain (see Table 2.1). Therefore, the description of impairment is merely to determine individual needs such as accommodations in the workplace and is not used for purposes of diagnosis (Üstün et al., 2003). For classification and diagnosis, the ICD-10 (International Classification of Diseases) is utilised. Measurements of change in function are classified using qualifiers. These qualifiers indicate degrees of severity, where 0 indicates "NO impairment", 3 indicates "SEVERE impairment", and 4 indicates "COMPLETE impairment" (World Health Organisation, 2001). For example, an individual with a severe communication disability can be assigned the code b16710.2 within the body function. The code b16710 indicates the expression of spoken language, while the 2 after the code is the qualifier that indicates the severity of impairment

(World Health Organisation, 2001). The ratings, therefore, indicate that the more severe the disability, the greater the limitations and restrictions in participation (McCormack & Worrall, 2008).

2.3.2.2. **Activity and Participation.** This domain refers to functioning at both the individual and societal level as a result of the impairment in body function and body structure (see Table 2.1) (Arvidsson et al., 2014). Activity refers to an individual's execution of a task or action (e.g., participation in a job interview) (World Health Organisation, 2001). Activity limitations refer to difficulties experienced when carrying out tasks on a daily basis (e.g., difficulties in completing a curriculum vitae). On the other hand, participation refers to the involvement and engagement in life situations such as employment. It includes what an individual does together with others, how engaged they are, and what they consider meaningful (e.g., socialising in the workplace) (Arvidsson et al., 2014; Imms et al., 2016). Participation restrictions refer to difficulties with involvement in the mentioned life situations and spheres of life. Despite a clear description of and differentiation between the two components, the terms activity and participation can be difficult to distinguish, and in most instances, they are used interchangeably or together (Escorpizo, Finger, et al., 2011; Nordenfelt, 2003).

The ICF activities and participation is a highly relevant domain for SRAs as it comprises of areas such major life areas (i.e., education, work, and employment (Erickson et al., 2014; Nützi et al., 2017). Just like in the body function and body structure domain, qualifiers are used to describe the severity of functioning using similar ratings as described. Two qualifiers are used to describe the activity and participation domain (i.e., performance-subjective measurement), what the individual is able to do in his/her environment, and another qualifier describes capacity (the individual's highest level of functioning based on objective measurements, for example, tests used by SRAs) (Homa, 2007; Jang et al., 2014). The distinction between capacity and performance is vital for SRAs since a candidate might report they are able to complete a specific task, but fail to do so when placed in employment due to the presence of barriers such as an unsupportive work environment (Finger et al., 2012; Glässel et al., 2011).

2.3.3.   Part 2: Context

The second part of the ICF describes contextual factors that represent the background information about an individual's life and living situation (World Health Organisation, 2001). These factors comprise of: personal factors and environmental factors. These factors may present as either barriers or facilitators to participation in employment.

2.3.3.1. Personal Factors. These factors are not classified in the ICF, as they are not directly related to a person's health condition and health status, although they influence how an individual functions in everyday life (Simeonsson et al., 2014). Personal factors refer to the features of the individual that may have an impact on their experience of disability. These include gender, age, education, cultural background, the onset of disability, exposure, and employment experience (Leonardi et al., 2016; Müller & Geyh, 2015). Although the ICF does not describe how personal factors act as barriers or facilitators to participation, their impact on functioning is undeniable.

Glässel et al. (2011) explored the lived experiences of 26 persons in a vocational rehabilitation programme with regard to their functioning and contextual factors, guided by questions linked to the ICF domains. The findings indicated that out of 4813 concepts linked to 160 different second-level ICF categories from the domains of the ICF (that is, the body function and body structure, activity and participation, and personal and environmental factors), 864 concepts were assigned to the personal factor domain (Glässel et al., 2011). These findings reiterate the importance of considering personal factors and emphasise their influence on participation in employment.

Furthermore, to understand this phenomenon, the personal factor of education can be used as an example. Individuals with a low level of education are limited in terms of the types of jobs available to them and thereby present with an increased challenge in entering the labour market (Hästbacka et al., 2016; Mizunoya et al., 2016). Moreover, jobs that require low-level qualifications offer poor remuneration and limited growth opportunities for career advancement (Kulkarni & Gopakumar, 2014). When looked at in terms of the ICF, one specific personal factor – education – becomes an important consideration when describing a person's capability regarding participating in employment. Muller and Geyh (2015) caution that information from personal factors (e.g., their gender or culture) cannot be used to deny persons with disabilities access to services and opportunities. Important

information that SRAs can extrapolate from this domain includes educational qualification, positive self-esteem, problem-solving skills to handle challenges in the workplace, and adapting to the demands of the working environment (Glässel et al., 2011).

2.3.3.2. **Environmental Factors.** These factors cover the physical, social, economic, and attitudinal environments where persons with disabilities live and conduct their lives (Bornman, 2004). In the ICF, the environmental factors are organised from the immediate environment (e.g., settings at home or the workplace) to the general environment (e.g., legislation and policy quotas on employment of persons with disabilities) (Schneider et al., 2009). The characteristics of specific environments are therefore external to the individual and cannot be controlled by them (Bornman, 2004). As discussed earlier in this chapter, just like other domains of the ICF, the environmental factors interact with the body function and structure and the activities and participation domains (see Figure 2.8 and Table 2.1).

There are five chapters within the environmental factors as part of the contextual factors domain, namely: (i) products and technology; (ii) natural environment; (iii) support and relationships; (iv) attitudes; and (v) services, systems, and policies (World Health Organisation, 2001). Each of these chapters, depending on their presence (availability) or absence (lack of), affects the individual – either positively or negatively (Stucki et al., 2002; Üstün et al., 2003). Similar to the other domains of the ICF, the environmental factors uses qualifiers with ratings to describe the degree of barriers (-0 = NO barrier, to -4 = COMPLETE barrier), or facilitators (+0 = NO facilitator, to +4 = COMPLETE facilitator). The ratings in the environmental factors can either be coded with other domains such as the activity and participation domain or separately on their own (World Health Organisation, 2011). Information from these ratings guides SRAs on where to provide accommodations for a candidate seeking employment (Dreaver et al., 2020; Homa, 2007). The most common accommodation strategies identified in the literature include accessible physical environment; assistive technology; adaptation of job requirements (e.g., flexible hours, working from home); provision of personal assistance; and disability awareness training (Padkapayeva et al., 2017; Zolna et al., 2008).

The five chapters dealing with the environmental factors in relation to the employment of persons with severe communication disabilities are presented in this section.

2.3.3.2.1.   *Chapter 1: Products and Technology.* Chapter 1 describes products and technology used for communication, education and employment (Heinemann et al., 2016). Persons with severe communication disabilities may require multiple accommodations such as assistive technology for communication, mobility, and work (McNaughton & Bryen, 2002; Richardson et al., 2019). Assistive technology that persons with severe communication disabilities may require includes communication devices and assistive software and applications (McNaughton & Arnold, 2010). Also included in this chapter is the built environment, which covers information related to the accessibility of buildings due to the availability of lifts, ramps, and signage for those with poor cognition or persons with severe communication disabilities (Heerkens et al., 2004). Again, for persons with severe communication disabilities who may also present with mobility impairment, accessible workspaces (individual work stations, desks, and communal areas such as cafeterias and boardrooms) are imperative in ensuring that participation occurs (Cawood & Visagie, 2015; Lindsay, 2011; McNaughton & Arnold, 2010).

2.3.3.2.2.   *Chapter 2: Natural Environment.* This chapter describes factors within the natural environment (e.g., geographical landscape and climate) and human-made changes to the environment (e.g., adapted walkways, signage, and the built environment) (Heinemann et al., 2016). The factors within this domain that may influence the functioning of persons with disabilities include inaccessible workspaces and disturbances in the natural environment that may disrupt an individual's day-to-day life (Cerniauskaite et al., 2011; Visagie et al., 2017). According to Hammel et al. (2015), social access is hugely important for persons with disabilities. Social interaction is equally valuable in retaining employment. The information from this ICF chapter provides key information for the successful employment of persons with severe disabilities such as ASD. The success in the employment of these persons relies heavily on an accessible and supportive environment (e.g., presence of lighting or the degree of noise and changes in routine (Harmuth et al., 2018; Nicholas et al., 2019; Scott et al., 2018). Important to note is that both Chapter 1 (products and technology) and Chapter 2 (natural environment) of the environmental factors report on the built environment. This is often confusing, as persons with disabilities list them together and perceive them as interconnected and complementary (Hammel et al., 2015; Visagie et al., 2017).

2.3.3.2.3. ***Chapter 3: Support and Relationships.*** Chapter 3 describes the practical, physical or emotional support, nurturing, protection and assistance from the surroundings. This includes support and assistance from family, colleagues, and employers (Khan & Pallant, 2007). In the reviewed literature, successful employment, particularly for persons with severe disabilities, is dependent on support not only from family, friends and community members but also from colleagues and employers (Kocman et al., 2018; Lindsay et al., 2016). Such support is crucial for persons with severe communication disabilities who experience difficulty establishing and maintaining friendships (Richardson et al., 2019; Sefotho et al., 2019). Information on the support for a candidate available within the family and workplace is an important consideration when an SRA wishes to ensure successful placement and integration of an individual with a severe communication disability in employment (McNaughton & Arnold, 2010).

2.3.3.2.4. ***Chapter 4: Attitudes.*** This chapter describes the values and beliefs regarding the individual from people in their surroundings such as family, community members, and colleagues (Kostanjsek, 2011b). Negative attitudes and prevailing stereotypes regarding the capability of persons with disabilities to work often result in an unwelcoming, and in extreme cases, a toxic work environment (Erickson et al., 2014). Correspondingly, supportive employers and an inclusive culture within the workplace ensure the successful placement of persons with disabilities in employment (Bryen et al., 2007; Kulkarni, 2016). Disability awareness training is an example of a strategy that can assist in alleviating and reducing the negative attitudes from other employees (Gewurtz et al., 2016; Houtenville & Kalargyrou, 2012; Wiggett-Barnard & Swartz, 2012).

2.3.3.2.5. ***Chapter 5: Services, Systems, and Policies.*** This chapter describes services provided by society (e.g., SRAs and medical practitioners), systems (organisation and control services, that is, administrations and authorities) and policies (governing and regulating systems) that are related to media, education, employment and health, as well as policies concerning the legislation and other laws of a country (Escorpizo, Finger et al., 2011; Hammel et al., 2015; Maart et al., 2007). The chapter suggests that the utilisation of SRAs by companies supports the better understanding of the employee with a disability. The SRAs offer disability desensitisation programmes and training on implementing reasonable accommodations (Kulkarni & Kote, 2014; Wiggett-Barnard & Swartz, 2012). An in-depth discussion of the services of SRAs to employers and persons with disabilities is provided in Chapter 3 of the thesis.

2.4. The Selection of a Conceptual Framework of the Study

This section provides a critique of the previously discussed models of disability in this chapter as potential conceptual frameworks of the study in relation to the ICF. Furthermore, the suitability of the ICF as a framework and critique of its use in LMICs is discussed.

2.4.1. *Critique of the Models of Disability*

The different models of disability discussed in this chapter highlight different aspects that have an impact on the participation of persons with disabilities in employment. The moral/religious model of disability highlights prevailing misconceptions about the capability of persons with severe disabilities, their impact on employers' hiring practices, and the retainment of persons with disabilities in employment. The medical model (although limiting in its approach) places particular focus on the impairment itself. Rehabilitative and medical intervention is a key driver of participation of persons with severe disabilities in various work-related activities. However, the societal barriers that the medical model ignores are highlighted in the social model of disability as important to consider in facilitating participation in employment.

The human rights model further adds to the social model and argues that the establishment of legislation that protects the rights of individuals with disabilities is fundamental in eradicating societal barriers. Lastly, the economic model, which is also based on the social model of disability principles, describes how work is perceived in economic terms. The economic model attempts to facilitate the economic participation of persons with disabilities through government subsidies and incentives to companies and organisations. However, the economic model in its approach towards who is considered productive, disadvantages persons with severe communication disabilities.

None of the models individually explains the relationship between the impairment (body function and body structure domain), restrictions and limitations in participating in employment imposed by the impairment (activity and participation domain), and contextual factors that may facilitate or hinder participation in employment (environmental factors domain and personal factors domain). However, it is important to note that components of each model of disability are crucial in understanding the barriers and facilitators of employment of persons with severe communication disabilities (Van Brakel & Officer, 2008).

2.4.2. Suitability of the International Classification of Functioning, Disability and Health as a Conceptual Framework for this Study

The ICF integrates essential components of the medical and social models of disability and has consequently been reported as suitable for use as a framework of disability in the literature (Cerniauskaite et al., 2011; Finger et al., 2012; Momsen et al., 2019). Although the ICF has been highly praised, its relevance to LMIC contexts has been criticised. This is mainly due to the model's view of the environment as disabling and not necessarily as a cause of disability (Howell, 2006). In LMICs, there is a strong association between poverty, health, and disability (Parnes et al., 2009). For instance, the spreading of certain diseases can be due to lack of access to or availability of health services (e.g., lack of access to medication, rehabilitation and assistive devices) and poor living situations (e.g., malnutrition and poor water and sanitation) (Mitra et al., 2013). When viewed in this light, the environment can be a cause of disability. A good example is the high prevalence of cerebral palsy in LMICs, which is known to be a consequence of limited/no access to health care (Abdel Malek et al., 2020).

Although the ICF is based on the tenets of Engel's biopsychosocial model where an approach to intervention begins with understanding the individual's biological, psychological and social dimensions, in the ICF, physical factors such as socioeconomic background are not emphasised in the same way as biological factors, despite their impact on participation (Jahan & Ellibidy, 2017). Also, personal factors, which are critical when considering factors that hinder participation, are not addressed in a meaningful way compared to other factors (Müller & Geyh, 2015).

Nevertheless, the ICF is currently the most widely accepted and relatively comprehensive model of disability and therefore, it is used in various sectors and disciplines across the globe (Vornholt et al., 2018). The World Health Organisation officially adopted the ICF's definition of disability and was also used in the first-ever World Disability Report published jointly by the World Health Organisation and the World Bank (2011). As the biopsychosocial model of disability, the ICF provides a broad perspective of disability and presents an opportunity to examine an individual's specific characteristics, impairment, and environmental influence on their functioning and disability (Escorpizo, Reneman, et al., 2011).

According to existing literature, persons with severe communication disabilities experience barriers to accessing employment opportunities. These barriers include the presence

of negative societal attitudes (Bryen et al., 2007; McNaughton & Arnold, 2010), the lack of supports such as assistive technology, specific workplace supports and access to trained rehabilitation practitioners, poor educational preparations (Lindsay et al., 2015), and the lack of employment opportunities that can accommodate them (Sefotho et al., 2019). Adversely, the availability of supports and employment opportunities, as well as the lack of negative attitudes facilitates participation in employment.

Seemingly, the barriers and facilitators to employment of persons with severe communication disabilities can be conceptualised using the ICF. Harmuth et al. (2018) and Scott et al. (2018), both explored factors that were barriers to and facilitators of employment of persons with severe communication disabilities and used the ICF categories to identify and describe these factors. The facilitating and hindering factors were identified in all domains of the ICF. Important to note, that these factors were mainly found in the environment, where issues related to negative attitudes, supports required in the workplace, communication difficulties with employers and colleagues, as well as the lack of education and employment opportunities are highlighted.

Multiple studies found a significant association between domains of the ICF, body function/structure, activity and participation, and contextual factors (personal and environmental factors), and employment outcomes of persons with disabilities (Escorpizo, Finger, et al., 2011; Glässel et al., 2011; Harmuth et al., 2018; Scott et al., 2018; Wang & Lin, 2013). For instance, Escorpizo, Finger, et al. (2011) conducted a systematic review of the literature to identify measures used in vocational rehabilitation and linked them to the ICF. Out of the 87 identified ICF categories, 31 were related to body functions and none to the body structure; 43 were related to activities and participation, and 13 were related to environmental factors.

Glässel et al. (2011), explored the perceptions of 26 individuals in a vocational training programme and linked 66 concepts to the body function (53) and body structure (13) domain, 51 to the activity and participation domain, and 43 to environmental factors as part of the contextual factor domain. A significant amount was linked to personal factors (contextual factor domain) (18%). Again, a Taiwanese study by Wang and Ling (2013) explored whether the specific domains of the ICF were associated with employment outcome measures in over 2000 individuals with disabilities. An association was found in all three domains, with a

significant association with personal factors (marital status and educational qualifications) being a major predictor of successful employment.

Furthermore, the ICF has been reported as a suitable framework in the placement of persons with disabilities by SRAs. Southwick and Grizzell (2020) demonstrated the use of the ICF in case studies and indicated its suitability to assist in the identification of interventions required by individuals with a disability, the implementation of effective placement strategies, and the assessment of employment outcomes. Likewise, Homa (2007) highlighted in a conceptual paper the ICF's compatibility to the ecological systems-based approach used by vocational rehabilitation practitioners such as SRAs to determine suitable placement in employment. Finger et al. (2012) further demonstrated that the ICF recognises that the successful employment of persons with disabilities involves multiple systems that significantly impact participation. Likewise, when used as a framework, the concepts described within the ICF (impairment at body level; restrictions inactivity; limitations in participation; personal and environment) guide the design, analysis, and interpretation of the study's findings.

In view of these studies that successfully utilised the ICF to understand the employment of persons with disabilities, the ICF will be used as a conceptual framework for this study. It provides a comprehensive and synthesised way to gather and present data and can thus be used to achieve the study's objectives.

2.5. Summary

This chapter provided an in-depth critical discussion of some of the most prominent models of disability. These models were critiqued in terms of their stance on disability, their influence on the participation of persons with disabilities in employment, and their ability to effectively provide a holistic understanding of disability. This critique was conducted to determine each model's key characteristics and dynamics and its suitability as a conceptual framework for understanding disability and to explore barriers and facilitators of participation in employment. The chapter concluded with a thorough description of the ICF as the proposed conceptual framework to guide this study. Furthermore, a discussion of the ICF's application to the employment of persons with severe communication disabilities was presented.

CHAPTER 3

LITERATURE REVIEW

3.1.   Introduction

This chapter reviews the literature related to the employment of persons with severe communication disabilities. It begins with a background discussion on the employment of persons with disabilities globally and then narrows it down to the employment of persons with severe communication disabilities. Next, the chapter continues to outline fundamental employment legislation of the employment of persons with disabilities in the South African context. Due to a paucity of research related to the employment of persons with severe communication disabilities in LMICs, a scoping review that explored the barriers to and facilitators of employment persons with disabilities in LMICs was conducted. The findings of the scoping review are presented in this chapter. Finally, a critical discussion of the roles of SRAs are described.

3.2.   Disability and Employment: A Global Perspective

Growing industrialisation and urbanisation caused a shift in the meaning of work, and work has therefore become synonymous with remunerated labour (Barnes, 2003). In recent decades, employment has emerged as a practice designed for individuals who possess specific skills and capabilities, excluding those without them (Oliver, 1990). Most labour market policies have, however, transformed since and they now integrate previously excluded individuals such as women and persons with disabilities in order to uphold human rights and improve economic development (Barnes, 2012). One of the pioneering pieces of international legislation was the USA's Rehabilitation Act of 1973, followed almost two decades later by the Americans with Disabilities Act (ADA) of 1990 (Acemoglu & Angrist, 2001).

The ADA's (1990) main goal was to increase employment opportunities for persons with disabilities in the labour market. As a result of the ADA (1990), persons with disabilities were able to take legal action against any discrimination to which they were subjected in places of employment (Ameri et al., 2018; Kruse & Schur, 2003). Surprisingly, however, no increase was observed in the employment of persons with disabilities following the enactment of the ADA – quite contrary to expectations (Victor et al., 2017). One of the reasons for this was the

harsh penalties that came with non-compliance as outlined by the ADA Act, which resulted in employers being hesitant to hire persons with disabilities (O'Brien et al., 2003). In view of these challenges, the ADA was amended to the ADA Amendments Act of 2008 (ADAAA), which clarified the definition of disability and the types of disabilities protected under the Act (Blue, 2012). Similar policies are observed in other HICs such as the UK and Australia that adopted the ADA (1990) and subsequently also the amended Act (ADAAA, 2008). In spite of these legislative efforts, the 2017 USA National Council on Disability report revealed that only 32% of persons with disabilities of working-age people were employed, compared to 73% of their peers without disabilities (National Council on Disability, 2017).

A number of international legal instruments, such as the CRPD, codified the right to work for persons with disabilities (United Nations, 2006). Well-aligned with the CRPD is the United Nations' seventeen (17) Sustainable Development Goals (SDGs) (United Nations, 2016). Again, adopting the SDGs shows the sustained commitment by countries globally to improve the plight of the marginalised. The SDGs succeeded the Millennium Development Goals (MDGs), which aimed to eradicate poverty and improve the livelihood of the marginalised population globally (United Nations, 2015). Unfortunately, the success of the MDGs was not experienced equally across the globe. The 17 SDGs focus on enhancing economic development, environmental sustainability, and social inclusion in HICs and LMICs (Richardson et al., 2019). Goal 8 of the SDGs specifically aims to promote inclusive and sustainable economic growth, with great emphasis on achieving decent and productive employment for all, including those with disabilities. The SDGs differ from the CRPD (United Nations, 2008) in that, persons with disabilities are not the main population and focus of the goal outcomes, but rather one of the marginalised populations described in the indicators (Winkler & Satterwhite, 2017). As the SDGs does not have a disability-inclusive agenda – disability is integrated into the different goals with specific markers and targets. Similar to the CRPD, the SDGs are in line with South Africa's legislation.

To address specific barriers to the participation of persons with disabilities in the social and economic environment, the African Decade of Persons with Disabilities (1999-2009) was proposed as a model based on similar 'decades initiatives' in other regions of the world (African Union, 2010). The decade was later extended for a further 10 years (that is, 2010-2019) by the first African Union Conference of Ministers of Social Development who congregated in Namibia in 2008. The goal of the extended African Decade of Persons with

Disabilities (2009-2019) was to facilitate the "*full participation, equality, inclusion and empowerment of people with disabilities in Africa*" (African Union, 2012, p. 9). One of the main focuses was to formulate policies that would facilitate the economic participation of persons with disabilities in Africa and thus obligate initiatives at the government level (United Nations, 2006). LMICs such as SA have since incorporated anti-discrimination clauses in their constitution and legislation to protect the rights of persons with disabilities and ensure their participation in employment (Republic of South Africa, 2020; World Health Organisation, 2011). Despite well-intentioned efforts, these initiatives have not translated into a visible change in the lives of persons with disabilities in LMICs – even less so for those with severe disabilities (Mitra, 2018).

3.3. Disability and Employment in South Africa

Pre-1994, the lives of persons with severe disabilities in SA were linked to high poverty levels, with many living in underdeveloped areas where health care, rehabilitative services, and employment opportunities were scarce (Bhorat et al., 2012; Igei, 2018; Schneider & Nkoli, 2011). However, following the first democratic government elections, provision was made in Section 9 of the Constitution of South Africa to prohibit discrimination against any person based on race, gender and/or disability (Van Reenen & Combrinck, 2011). It is estimated that approximately 3 million people are living with some form of disability in South Africa (Statistics South Africa, 2020), 5% of which represents persons with severe disabilities. Due to complexities in defining and conceptualising disability (which affect measures of disability), exact statistics on disability are not available (Mitra, 2008).

Disability prevalence rates in SA are associated with race and economic status (Leibbrandt et al., 2010). The black African population accounts for the highest proportion of persons with disabilities, with disability most prevalent in rural areas of provinces like the Northern Cape and the Free State (Gathiram, 2008). Indeed, individuals with disabilities live in poverty-stricken conditions (Statistics SA, 2017a; 2017b).

Statistics South Africa (2014) describes disability according to seven types of impairments (seeing, hearing, walking, remembering, concentrating, self-care, and communication), which are categorised according to three levels of severity (mild, moderate, and severe). In the 2011 Census report, it was mentioned that persons with severe disabilities were not only correlated to decreased economic participation, but they were also found to be

more disadvantaged when compared to other types of disability (Statistics SA, 2014). Cerebral palsy (CP) accounts for a significant percentage of the population with severe disability, where 1/10 000 births result in CP (Donald et al., 2014). CP is a congenital neurodevelopmental disability characterised by multiple impairments that impact mobility, communication, hearing and vision, and it also presents with co-occurring medical conditions such as epilepsy (Malek et al., 2020; Rosenbaum et al., 2007). High prevalence rates of CP in South Africa are reported in rural areas such as Mpumalanga, the Eastern Cape and KwaZulu-Natal, where living conditions are poor and access to services and health information is limited (Loeb et al., 2008; Saloojee et al., 2007). This can be understood within the context and the link between disability and poverty outlined in the literature (Banks et al., 2017; Palmer, 2011).

The focus in the upcoming sections is on individuals with severe disabilities, which includes the population with severe communication disabilities. However, due to the literature cited in this section not specifically referring to persons with severe communication disabilities, the focus is therefore on severe disabilities. Where the literature presented refers specifically to individuals with severe communication disabilities, an emphasis will be made.

3.3.1. *Education of Persons with Severe Disabilities in South Africa*

A 2015 report by the Department of Education estimated that approximately 500 000 children with disabilities were not in school, 67% of which included children with severe disabilities (Department of Education, 2015). It is important to highlight that, compared to their peers, children with severe disabilities tend to start their schooling when they are older (Philpott & McLaren, 2011). According to Statistic South Africa (2014), over 40% of individuals aged 20 years and older who presented with severe disabilities had not been in school, approximately 5% had received some basic education, while only 17% had completed high school (with numbers lower in rural areas are even lower). Basic education for children with severe disabilities in SA is predominantly poor, and many public schools are in dilapidated condition (Moodley, 2017). The quality of education for children with severe disabilities is generally inadequate (Department of Social Development, Department of Women, Children and People with Disabilities & UNICEF, 2012).

Like many other countries, SA bought into the benefits of inclusive education (Armstrong et al., 2011) and subsequently, White Paper 6 on Inclusive Education was introduced in 2001. The main goal of White Paper 6 is towards "*the development of an inclusive*

education and training system that will uncover and address barriers to learning and recognise and accommodate the diverse range of learning needs" (Department of Education, 2001, p. 12). It was envisioned that this goal would be achieved by turning away from segregated education and moving towards inclusive full-service schools that could accommodate the learning needs of children with disabilities by providing an adapted curriculum and trained teachers (Donohue & Bornman, 2014). Identified barriers to the realisation of inclusive education in SA are related to factors such as inadequate knowledge about inclusive education and the skills and training required for the implementation of inclusive education; lack of educational and teacher support as well as insufficient facilities and resources such as assistive technologies (Dada, Kathard, et al., 2017; Swart et al., 2002). Almost three decades after democracy, children with disabilities are still in 'segregated' special schools in SA (Bornman, 2017). Furthermore, the available full-service schools are ill-resourced, with teachers lacking the skills and knowledge to work with learners with severe disabilities (Moodley, 2017; Mophosho & Dada, 2015; Simkins, 2013).

The lack of quality education negatively influence the advancement of persons with severe disabilities to post-primary education (Graham et al., 2013; Ocampo, 2004). The local Department of Higher Education report indicated that only 1% of the total enrolment in 22 out of 26 public universities were students with disabilities (Department of Higher Education and Training, 2014). It is unknown whether the 1% includes persons with severe disabilities, given the hurdles experienced in their schooling. The reported lack of comprehensive, inclusive policies at universities also played a role in the low admission of students with disabilities (Ramaahlo et al., 2018). Furthermore, vocational programmes such as supported employment and disability employment services in SA are hugely underdeveloped (Lorenzo et al., 2007). More specifically, the vocational training programmes for individuals with severe disabilities are usually in the form of informal training workshops housed in shelters in communities (Ebrahim et al., 2020; Schneider, 2006). Tinta et al. (2020) investigated barriers experienced by persons with disabilities participating in a sheltered employment workshop. Their findings indicate challenges related to the lack of resources, diverse skills training in the programme, and the lack of consultation on the type of activities participants would like to engage in. Notably, persons with severe disabilities experienced the most barriers in participating in the various programmes due to a lack of accommodations and assistive technology (Tinta et al., 2020). Also, these vocational training programmes do not offer skills training in line with current economic needs (Soeker et al., 2018; Schneider, 2006)

3.3.2. *Access to Health Care for Persons with Severe Disabilities in South Africa*

Persons with severe disabilities, more specifically those situated in rural and remote areas, face multiple challenges in accessing health care (Eide et al., 2015; Vergunst et al., 2017). This means persons with severe disabilities have limited access to medical treatment and surgeries required (Iemmi et al., 2015). According to Article 26 of the CRPD, governments should take measures to "*enable persons with disabilities to attain and maintain maximum independence, full physical, mental, social and vocational ability, and full inclusion and participation in all aspects of life*". This includes ensuring intervention services and programmes in areas of education, health, employment, and social services (United Nations, 2006).

SA offers free access to health care services and assistive technology to persons with disabilities as part of their social security benefits (Van Rooy et al., 2012). Despite SA's free access to basic health care and the implementation of community-based rehabilitation services, there are many barriers to accessing rehabilitative services. Those reported in the literature include distance and transportation challenges and affordability of the services (Maart et al., 2013; Visagie et al., 2017). An essential health service required by persons with severe disabilities is rehabilitation, which includes services from a speech-language therapist, occupational therapist, and physiotherapist (Ebrahim et al., 2020). Rehabilitation is pivotal for improving functioning through various intervention approaches, and assistive technology is recommended for mobility, education and employment (Donohue & Bornman, 2014; Shakespeare et al., 2018).

Rehabilitation is pivotal for improving functioning through various intervention approaches, and recommendation of assistive technology for mobility, education, communication, and employment (Donohue & Bornman, 2014; Hanass-Hancock et al., 2017). Undeniably, rehabilitation plays a key role in facilitating participation in employment (Niekerk et al., 2021). However, currently in SA there are challenges in the implementation of rehabilitation services. The services are mostly inaccessible to persons with disabilities, with the rehabilitation teams, lacking key rehabilitation professionals (Department of Health, 2017). Pillay and colleagues (2020) highlight the shortage of rehabilitation professionals in SA in medical and educational contexts. Of the 1065 registered SLTs, about 64% practice privately. It should also be pointed out that these SLTs are located in urban areas. For instance, in the

North-West province, only 13 registered SLTs were identified (Pillay et al., 2020). Furthermore, it should be noted that most registered professionals lacked knowledge of AAC and were thus not able to efficiently provide AAC intervention and training (Dada et al., 2017).

Saloojee et al. (2007) explored the education and health needs of 156 children with severe disabilities from the Orange Farm Township in the Gauteng province of SA. They found that 50% of these children were not in school, and only 30% were receiving the required intervention (speech-language therapy, occupational therapy, and physiotherapy). Even more, concerning was that only 64 of 233 assistive devices such as wheelchairs and communication devices required by the children had been allocated to them. The lack of assistive devices negatively impacts the children's functioning, and ultimately, their participation in everyday activities (Morwane et al., 2019; Niekerk et al., 2021).

3.3.3. *Employment of Persons with Severe Disabilities in South Africa*

Unemployment of the youth (those aged between 18-35 years) in SA is markedly high, with the latest estimates provided by Statista (2020) to be at 60.1%. Of course, persons with disabilities are most affected by the economic climate and therefore present with higher economic inactivity rates than their able-bodied counterparts. Statistics South Africa (2014) report on persons with disabilities estimates a markedly high unemployment rate for persons with disabilities of approximately 80%. The current literature in SA affirms the exclusion of persons with severe disabilities from participating in the labour market (Cramm et al., 2013; Lorenzo & Cramm, 2012; Ned & Lorenzo, 2016; Sefotho et al., 2019). Although the 2018-2019 Commission for Employment Equity indicates a steady increase in the representation of persons with disabilities in government and private companies, this occurs from a basis of gross underrepresentation of persons with severe disabilities (Department of Labour, 2020). Sefotho and colleagues (2019) explored the experiences of eight youths with severe communication disabilities with regard to life, education and employment. Only one of the eight was employed, with the unemployment of the rest of the participants emphasising the lack of employment opportunities for them.

3.3.3.1. Employment-related Legislation in South Africa. SA actively participates in continental and international initiatives aimed at improving the lives of persons with disabilities, such as the Africa Decade of People with Disabilities and the United Nations' CRPD and SDGs. In addition, SA has a comprehensive legal framework that aims to enhance

and facilitate the lives of all its citizens, including persons with disabilities (Du Plessis, 2017; Sing, 2012; Van Reenen & Combrinck, 2011).

3.3.3.1.1.   *White Paper on the Rights of Persons with Disabilities (WPRPD).* The WPRPD (Department of Social Development, 2015) aims to improve access to education, health services, employment opportunities, and inclusion in the society of persons with disabilities. The White Paper emanated from an integration of the Integrated National Disability Strategy (Department of Social Development, 1997), obligations outlined in the CRPD (United Nations, 2006), provision of the Continental Plan of Action for the African Decade of Persons with Disabilities (2009-2019), the South African legislation and policy frameworks, as well as the National Development Plan 2030. Unfortunately, the WPRPD is merely a draft law and, therefore, not enforceable (Du Plessis, 2017; Department of Social Development, 2015; Van Reenen & Combrinck, 2011). This means that the SA government cannot be held liable for the lack of implementation of the goals outlined in this White Paper.

3.3.3.1.2.   *Employment Equity Act 55 of 1998 (EEA).* The Employment Equity Act 55 of 1998 is the main law that aims to protect individuals in the workplace against discrimination and promote fair treatment in the workplace. The EEA is linked to Section 9 of the South African Constitution, which recognises every citizen's human dignity and worth and thus promotes equal treatment of persons with disabilities in the workplace. It mandates employers from private and government-owned organisations to increase job opportunities for marginalised population categories such as persons with disabilities by encouraging recruitment and retainment and supporting skills development aimed at advancing their career (Department of Social Development, 2020; Ngwena, 1997). This legislation is linked to the current existence of learnership programmes in South African companies.

3.3.3.1.3.   *Promotion of Equality and Prevention of Unfair Discrimination Act.* The Promotion of Equality and Prevention of Unfair Discrimination Act of 2000 (PEPUDA) (Department of Justice, 2000) is an anti-discrimination law that emanates from the EEA and ensures prevention, prohibition, and the elimination of unfair discrimination. Unfair treatment and discrimination can range from inaccessible work environments to the use of hateful language and harassment of persons with disabilities in the workplace. According to PEPUDA, no person, organisation or even government may mistreat another individual based on their race, gender or disability. Therefore, denial and failure to provide reasonable accommodation to enable functioning are unlawful. This legislation is key to shifting the thinking of employers away from a charitable model of thinking. The employment of persons with disabilities is

perceived as a charitable act, recognising their right as citizens of SA and as employees who can contribute to the organisation's success.

3.3.3.1.4. *Practical guidelines that assist in the fulfilment of stipulations in the EEA (1998).* The South African Department of Labour created practical resources to assist government departments and private companies to understand the management of persons with disabilities in employment and to realise stipulations in the EEA of 1998. First, the Code of Good Practice of 2002 provides guidelines to organisations on how to go about implementing fair practices in the workplace (Department of Labour, 2002). It further breaks down the definition of disability as formulated by the EEA and elaborates on conditions classified as a disability in the workplace. The definition of a disability is, however, based on the medical model and does not assume a capacity approach. In addition, the Code provides steps towards successfully retaining persons with disabilities by outlining detailed procedures to be followed from the point-of-recruitment phase up to when they are placed in a position. The Code presumably guides the placement process followed by specialised recruitment agents (SRAs).

Second, the Technical Assistance Guidelines on the Employment of Persons with Disabilities of 2004 (Department of Labour, 2004) was designed with the intention to complement the Code of Good Practice (Department of Labour, 2002). The TAG provides detailed and step-by-step practical guidelines and examples to organisations on ways to promote equality and the fair treatment of employees with disabilities so as to achieve diversity quotas set by the EEA. In addition, a definition of reasonable accommodation is provided, and examples of types of reasonable accommodation are outlined. Guidelines on medical testing and assessments, recruitment and placement procedures, and grounds for Termination Are Also Included.

3.3.3.1.5. *Strategies and Policies Aimed at Skills Development.* The Skills Development Act, No. 97 of 1998, provides a framework for improving the skills of the South African workforce through national and local workplace strategies and by providing various education and training opportunities. Persons with disabilities are offered opportunities to acquire skills and qualifications through a wide range of learnerships designed to transition into the labour market and gain entrepreneurial skills. Funding is received from the National Skills Fund, as the Skills Development Levies Act of 1999 mandates employers to contribute 4% of employees' earnings into this fund (Schneider, 2006).

Under the Skills Development Act of 1998, the South African government creates opportunities for acquiring qualifications and the opportunity to enter formal employment

through learnerships (Schneider & Nkoli, 2011). Therefore, companies receive subsidies on the learnerships and an added tax benefit for employing persons with disabilities. In reality, most persons with severe disabilities do not meet the minimum productivity level required by companies (due to multiple factors such as poor job placement and lack of accommodations), thereby causing an extra strain on the subsidy budget (McNaughton & Arnold, 2010; Zajadacz, 2015). For economists, it makes more financial sense to place individuals with a disability on a social security benefit to save on the subsidy (Forrester & Davis, 2011).

This practice is, however, perceived as discriminatory, as it perpetuates the stigmatisation of persons with severe disabilities. Economists are torn between ensuring practices that make economic sense (that is, sensible and efficient allocation of social benefits) and fulfilling their societal obligation of promoting the participation of persons with disabilities in employment (Retief & Letšosa, 2018). To curb the issue of persons with disabilities losing their disability grants, the South African government has arranged learnership stipends to an amount that does not exceed the income level required to qualify for a social security benefit (Department of Labour, 2020). Although this action is taken with good intentions, it results in persons with disabilities being hired only in low-paying and temporary learnerships.

3.3.4. *Scoping Review of the Literature*

From the previous discussion on the current status of persons with severe disabilities in SA, it has become evident that difficulties experienced to participating in major life areas are linked to the lack of access and limited availability of inclusive and well-equipped educational facilities, medical and rehabilitative care, and availability of employment opportunities (Cawood & Visagie, 2015; Maart et al., 2007; Van Rooy et al., 2012; Vergunst et al., 2017; Visagie et al., 2017). There is, however, currently limited evidence on what hinders and facilitates the employment of persons with severe communication disabilities, specifically in SA.

The available research is based on studies mainly conducted in HICs. Currently, factors reported in the HIC literature which are found to be hindering are related to the type and severity of disability (Carter et al., 2011, 2012; Graham et al., 2018; Lindsay, 2011; Scott et al., 2018), lack or limited education and vocational related skills (Bryen et al., 2007; Hanif et al., 2017; Lindsay et al., 2012, 2014), the presence of negative attitudes (Khayatzadeh-Mahani et al., 2019; Kocman et al., 2018; Nicholas et al., 2019), as well as the lack of employment

opportunities for the population (Ju et al., 2012; Lindsay et al., 2014). Facilitators, on the other hand, include the availability of supports such as transportation and employment services (Harmuth et al., 2018; McNaughton et al., 2002; Richardson et al., 2019; Trembath et al., 2010), and the availability of policies and legislation that supports economic participation (Khayatzadeh-Mahani et al., 2019; Kocman et al., 2018; Padkapayeva et al., 2016). Due to differences in the availability of resources and supports in the differing contexts, that is, HICs and LMICs, context-specific information cannot be drawn from this data.

The paucity of research, therefore, necessitated a scoping review of studies conducted in LMICs. The scoping review, however, focused on the barriers to and facilitators of employment of individuals with disabilities broadly in LMICs and not only on severe communication disabilities. Furthermore, the ICF was used as a framework to understand the barriers and facilitators, which is congruent with the conceptual framework in this study. Several of the following paragraphs were adapted from an excerpt of the pre-print version of "Barriers to and facilitators of employment of persons with disabilities in low- and middle-income countries: A scoping review" by Morwane, Dada and Bornman (2021), published in the African Journal of Disability (https://doi.org/10.4102/ajod.v10i0.833) (See Appendix A for the full published manuscript).

The review was guided by the following research question: What are the barriers to and facilitators of employment persons with disabilities in LMICs? A methodology for scoping reviews as outlined by Tricco et al. (2018) was followed. The excerpt from the published scoping review study starts in Section 3.3.4.1.

3.3.4.1.**Search Strategy and Inclusion Criteria.** A multi-faceted search strategy was utilised, including a systematic search of multiple electronic databases from 2008 to April 2020. The inclusion of multiple databases was included in order to avoid database bias (Munn et al., 2018). This included multiple databases such as Africa Wide Information, CINAHL, EconLit, ERIC, MEDLINE, and PsychInfo Search terms were determined according to their suitability for each electronic database. The search strategy included a combination of key PCC (population, construct and context) concepts, such as *disability* (population), *employment* (construct*),* and *LMICs* (context) as indicated by the World Bank's country income classification system (2019-2020). Following completion of the search, relevant studies related to the

employment of persons with disabilities in LMICs were included using the exclusion and inclusion criteria outlined in Table 3.1.

Table 3.1

Inclusion and Exclusion Criteria

Inclusion criteria	Exclusion criteria
Persons with disabilities with childhood and acquired disabilities. Female and male participants who are economically active that is, individuals who are considered economically active and were therefore 15 years and older.	Individuals with a disability due to ageing, chronic medical conditions such as HIV/AIDS, stroke and dementia, or psychiatric disorders. Children (0-15 years old) with disabilities and people older than 60 years.
Published peer-reviewed research studies dated from 2008 to April 2020.	Non-peer-reviewed articles as well as peer-reviewed articles published before the year 2008.
Studies following quantitative, qualitative, and mixed-method designs.	Policy reports, analyses, dissertations and book chapters, editorials, opinion pieces, scoping, and systematic reviews.
Only articles published in English.	Articles published in languages other than English.
Studies reporting on employment, recruitment, hiring, and vocational training of persons with disabilities, customised employment, and self-employment.	Studies reporting on psychiatric/mental and medical disabilities, as well as studies reporting on transitioning from school to work, and on return to work.
Studies conducted in LMICs as listed in the World Bank (2019-2020) income classification. Studies that compared data between HICs and LMICs, provided the data could be segregated.	Studies conducted in HICs.

A total of 1490 potentially relevant peer-reviewed studies were obtained from the literature search. Covidence[TM], a web-based software platform was used for reviewing identified articles (Babineau, 2014). Following the exclusion of duplicates, a total of 1300 studies were screened by the researcher and the study supervisor at a title level. Finally, following the screening at an abstract level, a total of 70 studies were assessed for eligibility, of which 32 met the inclusion criteria. Disagreements at abstract, title and full-text level were discussed until consensus was reached. The review process as charted in Figure 3.1 followed the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) (Tricco et al., 2018).

Figure 3.1. *PRISMA-ScR Diagram Depicting Inclusion of Studies in the Current Scoping Review*
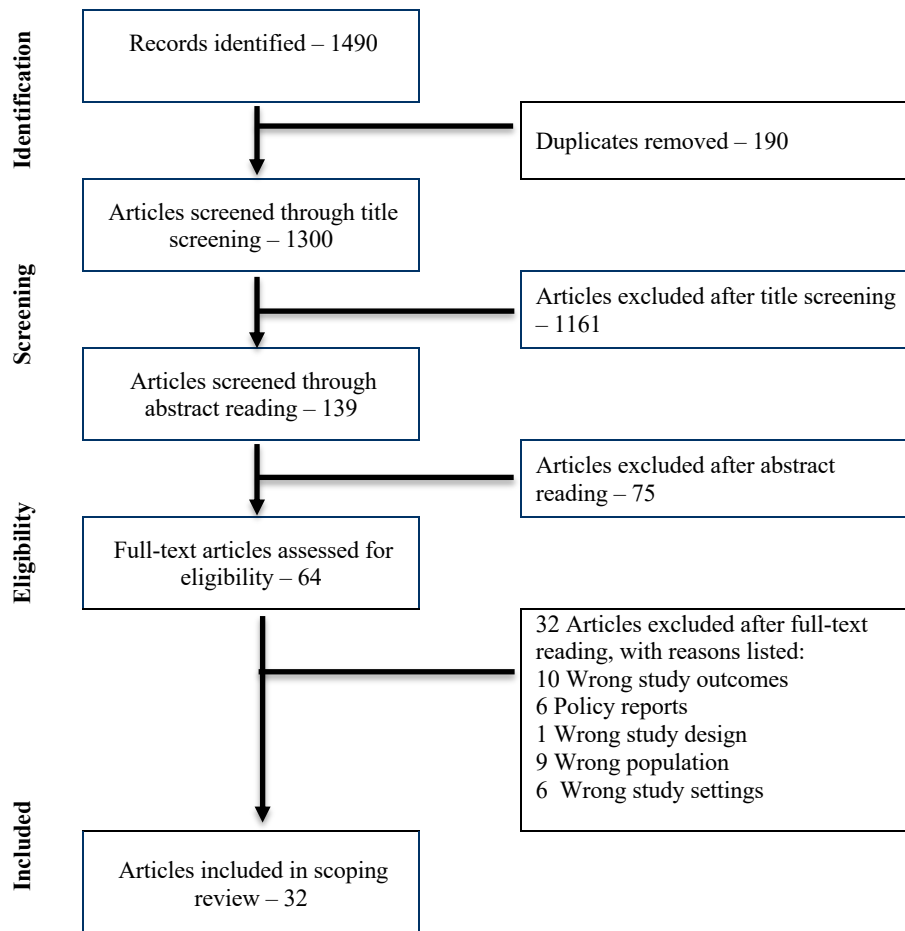
Note. Figure 3.1 is based on the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) as described by Tricco et al. (2018).

        3.3.4.2. **Data Extraction.** A data extraction tool was developed and used to extract data from the outcomes of the included studies. The data extraction tool included information on the population, type of disability, study aims, design, context, and the outcomes of the studies. Table 3.2 indicates the outline of the findings according to the data extraction tool. Two raters conducted data extraction. A computer-aided qualitative data analysis program, Atlas.ti[8TM] software was used to analyse the data thematically (Friese et al., 2018). Following the linking rules as described by Cieza et al. (2019), the identified codes were organised according to the second-level category classification of the ICF. The ICF was used as the conceptual framework for the scoping review, and findings were reported using the domains of the ICF as overarching

themes. The first-rater coded independently, with the second-rater coding 20% of the data that was randomly selected and assigned to them. Where there were any disagreements in coding, conflicts were resolved by the two raters by re-coding the data together.

3.3.5. *Findings from the Scoping Review*

Thirty-two studies were included in the final analysis, of which 21 were from upper-middle-income countries, nine from lower-middle-income countries, and two studies from low-income countries. Only six studies were from SA. The vast majority of studies (n=23) reported on barriers to employment, while only nine studies reported on facilitators of employment. The study outcomes of the included studies were related to the experiences of persons with disabilities and the views of employers with regard to economic participation (n=31); two studies dealt with vocational training (Malle et al., 2015; Yusof et al., 2014), and one focused on integrative employment (dos Santos Rodrigues et al., 2013).

The included studies covered various types of disability such as sensory, intellectual, physical, learning, communication, and multiple disabilities. Important to note that the vast majority of the studies included participants with sensory disabilities, specifically with visual disabilities (n=8). The included studies had a representation of persons with disabilities themselves (n=27), seven studies explored the views of employers, family members (n=3), recruitment agencies, and other stakeholders (researchers and educators). The included studies also had a representation of both male and female participants, with three studies focusing only on women with disabilities (Amin & Abdullah, 2017; Bualar, 2014; Naami et al., 2012). A summary of the studies included in the scoping review is represented in Table 3.2.

Table 3.2

Summary of Findings from Studies on Barriers to And Facilitators of Employment of Persons with Disabilities in LMICs

Authors and year of publication	Aim of the study	Study design: Methods	Participants	Low- and middle-income country
Agyei-Okyere, Nketsia, Opoku, Torgbenu, Alupo, and Odame (2019)	To document the perceptions and experiences of persons with disabilities concerning farming activities.	Qualitative: Individual interviews and focus group discussions	19 persons with disabilities	Ghana

Authors and year of publication	Aim of the study	Study design: Methods	Participants	Low- and middle-income country
Amin and Abdullah (2017)	To explore how Malaysian women with physical impairment experience opportunities for employment.	Qualitative: Individual interviews	33 Malaysian women with physical disabilities	Malaysia
Bhanushali (2016)	To explore the socioeconomic conditions of persons with disabilities who are self-employed.	Quantitative: Survey	200 persons with hearing, speech, and physical disabilities	India
Bengisu and Balta (2011)	To determine a collective expert view on key issues regarding the employment of the workforce with disabilities in the hospitality industry.	Delphi Survey	43 participants in three groups i) Researchers and disability experts ii) Career experts iii) Managers	Turkey
Bengisu, Izbirak, and Mackieh (2008)	To determine the physical, attitudinal and organisational barriers faced by persons who are visually impaired.	Quantitative: Survey	144 employed and 54 unemployed persons with visual disabilities	Turkey
Bualar (2014)	To investigate the barriers affecting the employment opportunities of rural women with physical disabilities.	Qualitative: Semi-structured interviews	10 women with physical disabilities	Thailand
Coelho, Sampaio, Luz, and Mancini (2013)	To explore the factors that present as restrictions in the workplace as experienced by persons with disabilities.	Qualitative: Semi-structured interviews and observations	30 employed persons with disabilities	Brazil
Harun, Din, Rasdi, and Shamsuddin (2020)	To describe the employment experiences of persons with learning disabilities.	Quantitative: Survey	90 young persons with learning disabilities	Malaysia
Cramm, Nieboer, Finkenflügel, and Lorenzo (2013)	To compare barriers to employment among disabled and non-disabled youth.	Quantitative: Survey	466 youth with a disability and 523 youth without a disability	South Africa
Dos Santos Rodrigues, Luecking, Glat, and Daquera (2013)	To explore the use of youth apprenticeships and customised employment to improve workforce outcomes among persons with disabilities.	Qualitative: Case study	2 persons with disabilities	Brazil
Gudlavalleti, John, Allagh, Sagar, Kamalakannan, and Ramachandra (2014)	To explore the health needs and barriers to accessing health services by persons with disabilities.	Quantitative: Survey	839 persons with disabilities (physical, visual, hearing, and intellectual disabilities) matched to 1153 persons without disabilities	India
Khoo, Tiun, and Lee (2013)	To explore the experiences regarding employment of persons with physical disabilities.	Mixed-method: Semi-structured interviews and surveys	287 persons with physical disabilities	Malaysia
Maja, Mann, Sing, Steyn, and Naidoo (2011)	To identify the knowledge, attitudes, and experiences of employers when hiring persons with disabilities.	Qualitative: Individual interviews	3 managers and 2 companies	South Africa
Malle, Pirttimaa, and Saloviita (2015)	To investigate prevailing challenges and opportunities for the participation of students with disabilities in vocational education programmes.	Mixed-method: Individual interviews, observations, and surveys	110 trainers 28 students with disabilities 30 administrators	Ethiopia
Marsay (2014)	To explore ways of facilitating gainful employment for persons with disabilities.	Qualitative: Individual interviews	14 persons with physical, intellectual,	South Africa

Authors and year of publication	Aim of the study	Study design: Methods	Participants	Low- and middle-income country
			medical, learning, and sensory disabilities	
Lamichhane (2012)	To explore the life-changing experiences of persons with disabilities brought by employment.	Quantitative: Survey	423 persons with visual, hearing, and physical disabilities	Nepal
Lee, Abdullah, and Mey (2011)	To identify drivers and inhibitors of employment for persons with disabilities.	Qualitative: Structured interviews	24 teachers with a visual disability	Malaysia
Naami, Hayashi, and Liese (2012)	To describe the issues associated with the unemployment of women with physical disabilities in Tamale, Ghana.	Qualitative: Individual interviews, and focus group discussions	24 women with physical disabilities 14 disability stakeholders	Ghana
Ned and Lorenzo (2016)	To describe the capacity of service providers in facilitating the participation of disabled youth in economic development opportunities.	Qualitative: Individual interviews and focus group discussions	4 family members 6 service providers	South Africa
Opoku, Mprah, Dogbe, Moitui, and Badu (2017)	To explore barriers to employment of persons with disabilities.	Qualitative: Semi-structured interviews	30 persons with physical, hearing, and visual disabilities	Kenya
Opoku, Mprah, Mckenzie, Sakah, and Badu (2017)	To examine, from the perspectives of participants, the life experiences of persons with disabilities seven years after the ratification of the CRPD.	Qualitative: Focus group discussions	36 persons with sensory and physical disabilities	Cameroon
Potgieter, Coetzee, and Ximba (2017)	To explore the perceptions of individuals living with a disability with regard to career advancement challenges they face in the workplace.	Qualitative: Semi-structured interviews	15 employed persons with disabilities	South Africa
Saigal and Narayan (2014)	To identify various physical barriers limiting the accessibility of persons with disabilities in the formal sector.	Quantitative: Survey	50 employed persons with visual and physical disabilities	India
Ta, Wah, and Leng (2011)	To investigate employers' perspectives towards employing persons with disabilities and to identify factors that promote or hinder the gainful employment of persons with disabilities.	Quantitative: Survey	39 employers from private companies	Malaysia
Ta and Leng (2013)	To explore and understand the challenges that are encountered by Malaysians with disabilities in the world of employment.	Mixed-method: Survey, face-to-face interviews and focus group discussion	478 persons with physical, intellectual, and sensory disabilities 39 employers	Malaysia
Toldrá and Santos (2013)	To identify facilitators and barriers faced by persons with disabilities in the workforce.	Qualitative: Semi-structured interviews	10 employees with disabilities	Brazil
Wiggett-Barnard and Swartz (2012)	To identify facilitating factors for the entry of persons with disabilities into the labour market.	Quantitative: Survey	86 human resource managers	South Africa
Wolffe, Ajuwon, and Kelly (2013a)	To evaluate the work experiences of employed individuals with visual impairments	Qualitative: Interviews	172 employed blind or partially sighted adults	Nigeria
Wolffe, Ajuwon, and Kelly (2013b)	To report on the status of individuals in Nigeria who are visually impaired and successfully employed.	Quantitative: Survey	172 employed blind or partially sighted adults	Nigeria

Authors and year of publication	Aim of the study	Study design: Methods	Participants	Low- and middle-income country
Yazıcı, Şişman and Kocabaş (2011)	To determine disabled people's problems in the world of work.	Quantitative: Two separate surveys	32 companies 31 employers 421 persons with disabilities	Turkey
Yusof, Ali, and Salleh (2014)	To identify the employability and working patterns of vocational school leavers with disabilities.	Quantitative: Survey	99 students with sensory and learning disabilities	Malaysia
Yusof, Ali, and Salleh (2015)	To explore the views of employers who hired youth workers with disabilities	Qualitative: Semi-structured interviews	3 employers	Malaysia

Thirteen studies reported on factors within the body function and body structure domain, which included the type and severity of disability (n=8), and health conditions (n=5). Fifteen studies reported on factors within the activity and participation domain, including admission to schooling (n=8) and work and employment (n=7). Twenty-two studies reported on personal factors, namely educational qualifications and vocational skills (n=20), gender and age (n=11), and three studies reported on the onset of the disability and marital status. Most of the studies reported on factors within the environment (n=28). The presence of attitudes was reported as a major contributing factor to the unemployment of persons with disabilities (n=20), while other factors were linked to services and systems (n=14), policy and legislation (n=10), natural and built environment (n=9), products and technology (n=7), and support and relationships (n=7).

Table 3.3 provides a summary of the factors linked to the categories of the ICF.

Table 3.3

Identified Factors Within the ICF Domains

Domains of the ICF	Number of studies	Included studies
Body function and body structure		
Type and severity of disability	n=8	Amin & Abdullah, 2017; Bengisu & Balta, 2011; Bhanushali, 2016; Lamichhane, 2012; Maja et al., 2011; Ned & Lorenzo, 2016; Wolffe et al., 2013b; Yazıcı et al., 2011
Health condition	n=5	(Bualar, 2014; Coelho et al., 2013; Cramm et al., 2013; Gudlavalleti et al., 2014; Ta et al., 2011)

Domains of the ICF	Number of studies	Included studies
Activity and participation		
Schooling	n=8	Bhanushali, 2016; Coelho et al., 2013; Cramm et al., 2013; Lee et al., 2011; Malle et al., 2015; Opoku et al., 2017a; Yazıcı et al., 2011; Yusof et al., 2014; Yusof et al., 2015
Work and employment	n=7	Agyei-Okyere et al., 2019; Amin & Abdullah, 2017; Bhanushali, 2016; Cramm et al., 2013; Harun et al., 2020; Khoo et al., 2013; Ta & Leng, 2013
Environmental factors		
Attitudes	*n=20*	(Abdullah & Mey, 2011; Amin & Abdullah, 2017; Bengisu et al., 2008; Bengisu & Balta, 2011; Bualar, 2014; Coelho et al., 2013; Cramm et al., 2013; Khoo et al., 2013; Maja et al., 2011; Malle et al., 2015; Marsay, 2014; Naami et al., 2012; Ned & Lorenzo, 2016; Opoku, Mprah, Dogbe, et al., 2017; Opoku, Mprah, Mckenzie, et al., 2017; Potgieter et al., 2017; Ta et al., 2011; Ta & Leng, 2013; Toldrá & Santos, 2013; Yazıcı et al., 2011)
Services and systems	n=14	(Amin & Abdullah, 2017; Bengisu et al., 2008; Bualar, 2014; Coelho et al., 2013; Cramm et al., 2013; Gudlavalleti et al., 2014; Khoo et al., 2013; Malle et al., 2015; Marsay, 2014; Naami et al., 2012; Ta & Leng, 2013; Wiggett-Barnard & Swartz, 2012; K. Wolffe et al., 2013a; Yazıcı et al., 2011)
Policy and legislation	n=10	Amin & Abdullah, 2017; Harun et al., 2020; Lamichhane, 2012; Lee et al., 2011; Malle et al., 2015; Marsay, 2014; Saigal & Narayan, 2014; Wiggett-Barnard & Swartz, 2012; Wolffe et al., 2013a; Yazıcı et al., 2011
Natural and built environment	n=9	(Amin & Abdullah, 2017; Bengisu et al., 2008; Bualar, 2014; Lamichhane, 2012; Saigal & Narayan, 2014; Ta & Leng, 2013; Toldrá & Santos, 2013; Wiggett-Barnard & Swartz, 2012; Yazıcı et al., 2011)
Products and technology	n=7	(Agyei-Okyere et al., 2019; Bengisu et al., 2008; Coelho et al., 2013; Saigal & Narayan, 2014; K. Wolffe et al., 2013b, 2013a; Yazıcı et al., 2011)
Support and relationships	n=7	(Abdullah & Mey, 2011; Bengisu et al., 2008; Bualar, 2014; Harun et al., 2020; Marsay, 2014; Opoku, Mprah, Dogbe, et al., 2017; Ta & Leng, 2013)
Personal factors		
Educational qualifications and vocational skills	n=20	(Abdullah & Mey, 2011; Amin & Abdullah, 2017; Bengisu et al., 2008; Bengisu & Balta, 2011; Bhanushali, 2016; Bualar, 2014; Coelho et al., 2013; Cramm et al., 2013; Khoo et al., 2013; Lamichhane, 2012; Maja et al., 2011; Naami et al., 2012; Opoku, Mprah, Dogbe, et al., 2017; Opoku, Mprah, Mckenzie, et al., 2017; Ta et al., 2011; Ta & Leng, 2013; Toldrá & Santos, 2013; K. Wolffe et al., 2013a, 2013b; Yazıcı et al., 2011)

Domains of the ICF	Number of studies	Included studies
Gender and age	n=11	(Bengisu & Balta, 2011; Bhanushali, 2016; Bualar, 2014; Coelho et al., 2013; Gudlavalleti et al., 2014; Harun et al., 2020; Naami et al., 2012; Ta & Leng, 2013; Wolffe et al., 2013b, 2013a; Yazıcı et al., 2011)
Disability onset	n=3	(Coelho et al., 2013; K. Wolffe et al., 2013a, 2013b)
Marital status	n=3	(Bengisu et al., 2008; K. Wolffe et al., 2013a; Yazıcı et al., 2011)

3.3.5.1.Body Function and Body Structure. The severity of disability and type of disability was mentioned in the included studies as barriers to employment.

Although the findings in the scoping review did not specifically refer to persons with severe communication disabilities, some studies, like that of Yazıcı et al., 2011), observed that employers' hiring preference was for candidates who presented with no impairment in vision and hearing, and who (most importantly) presented with effective communication skills (Yazıcı et al., 2011). In a South African study, Maja et al. (2011) interviewed six participants consisting of managers and recruitment officers (four employers from the banking and two from the motor sector) regarding perceived barriers to the employment of persons with disabilities. The managers from the motor sector reported on the restrictions imposed by the hazardous working environments for certain types of disabilities, such as those physical in nature. There was also an overwhelming focus on visual disabilities in the included studies, and within the broader disability population, individuals with this type of disability would appear to have increased employment opportunities.

Lamichhane (2012) found that 43.42% of persons with visual disabilities in their study were employed within the education profession. This was due to advocacy movements in the 1980s that called for the inclusion of persons with disabilities in education colleges and demanded the government provide support in terms of assistive technology and adapted material in that specific sector. Thus it seems that the inclusion of disability in the mainstream communities is heavily reliant on advocacy work.

Similarly, poor health was also mentioned as a barrier to participating in employment. This was despite the fact that the medical condition was excluded from the scoping review. Bualar (2014) found that persons with disabilities and with poor health required time away from work. Likewise, when Gudlavalleti et al. (2014) compared the health and employment outcomes of persons with disabilities in India, they found that 18.4% of 839 persons with disabilities who participated in their study required medical services more often than those without a disability. A study specifically conducted in SA by Cramm et al. (2013), which compared employment outcomes of youth with and without disabilities, found that the unemployment of the majority of the 523 youths with disabilities was associated with their poor health. Although the studies did not indicate it clearly, it can be assumed that the participants presented with a severe disability since they presented with co-morbid conditions.

3.3.5.2. Activity and Participation. In the review, the lack of access to basic education, higher education and vocational training was highlighted as a hindrance to positive future employment outcomes (Bhanushali, 2016; Cramm et al., 2013; Naami et al., 2012; Yazıcı et al., 2011; Yusof et al., 2014).

This was reported to impact the acquisition of job-related skills that are required for a person to be employed (Cramm et al., 2013; Lee et al., 2011). Indeed, the importance of having literacy skills such as the ability to read and write, as well as job-related skills such as the ability to use a computer, were reported as facilitators to being employed (Harun et al., 2020; Yusof et al., 2015; Coelho et al., 2013; Lee et al., 2011). Due to the lack of education for persons with severe disabilities, these literacy and job-related skills are often lacking. Malle et al. (2015) reported the lack of access to vocational training programmes, which explored challenges experienced by persons with visual disabilities in accessing vocational training colleges in Ethiopia. They found that most colleges lacked adapted learning material, trained educators, and resources to accommodate their learning needs (Malle et al., 2015). Again, the included studies suggested that training and employment opportunities are mostly reported for persons with visual disabilities (Malle et al., 2015; Wolffe et al., 2013a, 2013b).

In addition to the presence of a disability imposing a challenge in accessing employment opportunities, the included studies emphasised the lack of employment opportunities for all individuals with or without a disability as a barrier to economic participation in LMICs (Harun et al., 2020; Khoo et al., 2013; Ta & Leng, 2013). Some

governments were found to prioritise the employment of the skilled and able-bodied labour pool and to overlook those with disabilities (Khoo et al., 2013; Ned & Lorenzo, 2016). Where employment opportunities were available for persons with disabilities, it was in menial job positions that pay poorly (Agyei-Okyere et al., 2019; Amin & Abdullah, 2017; Bhanushali, 2016).

Potgieter et al. (2017) explored the perceptions of employed persons with disabilities in South African companies regarding the challenges experienced in advancing their careers. The study found that human resource practices, specifically those related to the creation of promotion opportunities, discriminated against employees with disabilities. The latter also reported they had reached a plateau in their career. The included studies focused on the formal paid employment mostly based in urban areas (Potgieter et al., 2017; Saigal & Narayan, 2014; Wiggett-Barnard & Swartz, 2012; Wolffe et al., 2013a). This is despite the fact that LMICs generally rely on the informal labour market, which often involves self-employment (e.g., farming) (Agyei-Okyere et al., 2019; Bhanushali, 2016). Alternative employment models mentioned were sheltered and supported employment for individuals with a severe disability (Amin & Abdullah, 2017; dos Santos Rodrigues et al., 2013).

Amin and Abdullah (2017), who explored barriers to employment experienced by women with disabilities in Malaysia, highlighted the fact that although sheltered workshops were easily accessible and suitable for persons with physical disabilities who had transport challenges, these sheltered workshops firstly remunerated poorly and secondly were located in remote and isolated areas, away from the business hubs where the most economic activity occurred.

3.3.5.3.**Personal Factors.** Factors that were barriers and facilitators to employment included educational qualifications, vocational skills, gender, age, and disability onset.

Low levels of education were found to impact individuals with disabilities acquiring employment (Coelho et al. 2013; Harun et al. 2020; Lee et al. 2011; Yusof et al. 2015). Similar findings were observed in Opoku et al. (2017a) and Toldrá and Santos (2013). Persons with severe disabilities were most impacted as they were more likely to lack the basic education and skills required for employment (Khoo et al., 2013).

In LMICs, gender appears to determine access to employment opportunities, with men more likely to be hired by employers (Bengisu & Balta, 2011; Bhanushali, 2016; Bualar, 2014). Women with disabilities encounter added challenges in their communities compared to their male counterparts. They experience double prejudice, firstly based on being female and secondly based on being a person with a disability (Amin & Abdullah, 2017; Lamichhane, 2012; Toldrá & Santos, 2013). Naami et al. (2012) examined issues associated with the unemployment of women with physical disabilities in Ghana and found that existing systems exclude the participation of women in education and employment. The South African studies only report on the prevalence of prejudice on persons with disabilities and not on prejudices being specific to a gender.

Interestingly, persons with acquired disabilities were more likely to be employed than those with developmental disabilities (Gudlavalleti et al., 2014; Harun et al., 2020). The challenges experienced by individuals with developmental disabilities in accessing healthcare and rehabilitation appear to be different. In the same light, those who were older were also more likely to be hired. This was due to multiple factors, such as that the young individuals with disabilities spent their earlier years acquiring education and skills (Coelho et al. 2013; Wolffe et al. 2013a, 2013b).

3.3.5.4.**Environmental Factors.** Factors reported as barriers and facilitators within the environments are presented according to the chapters within the environmental domain.

3.3.5.4.1. *Attitudes.* Negative societal attitudes were reported by most of the included studies as a significant barrier to the employment of persons with disabilities (see Table 3.3). From the review it appears that understanding disability based on the religious models of disability is still prevalent in LMICs. Families view disability as a curse and hide their family member with a disability from the community. In extreme cases, they even abandon their family member (Bualar, 2014; Harun et al., 2020; Ta & Leng, 2013). The child with a disability often does not receive education as they are not viewed as capable to work (Khoo et al., 2013; Naami et al., 2012).

Similar prejudices were observed with employers whose hiring practices were found to be influenced by their misconceptions about disability (Abdullah & Mey, 2011; Bengisu et al., 2008; Bualar, 2014; Toldrá & Santos, 2013). This emerged from other South African studies in the review were, in their approach to the employment of persons with disabilities, employers perceived them as incapable of holding certain job positions (Maja et al., 2011; Ned & Lorenzo, 2016; Potgieter et al., 2017).

In Ned and Lorenzo (2016), service providers from a South African municipality were interviewed on their capacity to facilitate the participation of youth with disabilities in economic activities. They found that persons with severe disabilities were perceived as suitable only for low-skilled jobs, while those with severe physical disabilities were perceived as unemployable.

In the study by Maja et al. (2011), the managers also complained about carrying the workload of employees with disabilities and therefore perceived them as incapable of completing work tasks. Marsay (2014), in contrast, found that the support from family members was a facilitator for securing employment for the family member with a disability. In her study, where she explored barriers experienced by employed persons with disabilities in various South African companies, 40% of the interviewed participants reported that family and friends were instrumental in securing and maintaining their employment.

3.3.5.4.2. *Legislation and Policy.* The lack of critical policies and legislation hinders the participation of persons with disabilities in employment. Results from the review reiterate the importance of the availability of legislation that protects the rights of persons with disabilities by promoting participation in life areas such as education and employment. The implementation of quotas to enforce the employment of persons with disabilities was a notable facilitator to employment (Amin & Abdullah, 2017; Harun et al., 2020; Lamichhane, 2012). Employees with a disability (49.9%) in Turkish companies were reportedly hired in response to the Turkish government's set quota of 3% (Yazıcı et al., 2011).

South African studies showed that the employment of persons with disabilities was facilitated by the obligatory employment quota, as none of the employers mentioned employment of persons with disabilities as a human right or as an act to achieve equity in the workplace (Maja et al., 2011; Marsay, 2014; Ned & Lorenzo, 2016; Potgieter et al., 2017). There were, however, challenges in the implementation of policies aimed at including persons with disabilities in employment-related activities.

Ned and Lorenzo (2016) observed that service providers were not able to develop effective strategies to include persons with disabilities in their community-related projects. Likewise, Maja et al. (2011) found that some of the interviewed companies lacked policies aimed at attracting persons with disabilities to their organisation. This is concerning, given the crucial role that legislation and policies play in eradicating discriminatory practices and advancing the inclusion of persons with disabilities in the labour market. Again, in Marsay (2012), the importance of an enabling environment to retain persons with disabilities in employment was highlighted by most employed participants.

3.3.5.4.3. *Services and Systems.* The availability of services and systems such as transportation and employment services are reported facilitators to employment. At the same time, the lack of these services is found to be a barrier.

The lack of access to transportation (Amin & Abdullah, 2017; Bualar, 2014; Khoo et al., 2013), health care (medical and rehabilitation services) (Bengisu et al., 2008; Coelho et al., 2013; Cramm et al., 2013) and communication (that is, media such as radio, television and newspapers) (Abdullah & Mey, 2011; Amin & Abdullah, 2017; Opoku, Mprah, Dogbe, et al., 2017) was reported as a barrier to economic participation. These findings were highlighted in a study by Lorenzo and Cramm (2012), who compared barriers to accessing livelihood assets of South African youth with and without disabilities. They found that youth with disabilities experienced greater challenges than their peers without disabilities in accessing rehabilitation services, information regarding employment opportunities, and affordable transportation, all of which negatively impacted being employed. In addition, the lack of assistive technology (needed in education and employment) and the inaccessibility of buildings hinder access to places of employment.

The availability of employment services (including services from SRAs) was highlighted as a facilitator to the employment of persons with disabilities in the included studies

(Bengisu et al., 2008; Cramm et al., 2013; Gudlavalleti et al., 2014; Theresa Lorenzo & Cramm, 2012). One study conducted in SA, specifically highlighted the role of SRAs as a facilitator to the employment of persons with disabilities (Wiggett-Barnard & Swartz, 2012). When Wiggett-Barnard and Swartz (2012) interviewed 200 HR managers from various South African companies about the facilitating strategies they employ to attract employees with disabilities, the use of SRAs was mentioned as a facilitating strategy by 61% of the managers.

This is the end of the excerpt of the pre-print version of "Barriers to and facilitators of employment of persons with disabilities in low and middle-income countries: A Scoping Review", authored by Morwane et al. (2021).

3.4.4. *Conclusions from the Scoping Review Findings*

Important to note that the studies in the scoping review did not offer a description of the services offered by SRAs and their role in facilitating the successful placement of individuals with severe disabilities, as this was not the scope of the review. However, the broader literature addresses this aspect. For example, Kulkarni and Kote (2014) interviewed 12 SRAs in India and explored their role. The authors grouped the roles of the SRAs into four categories, namely the trainer, the marketer, the partner, and the facilitator. Within these categories, roles that SRAs played included training, job shadowing, and marketing candidates with disabilities to employers. These roles impacted the candidate's placement either directly or indirectly, and in some cases, they were coupled with the engagement of employers. Important to note that this study is not included in the scoping review. The roles offered by the SRAs, as described by Kulkarni and Kote (2014), will be explored in this study to determine the roles of SRAs in SA. Figure 3.2 provides a summary of the SRA's roles.

Figure 3.2. *Roles of Specialised Recruitment agents in a Low- and Middle-Income Country as Described by Kulkarni and Kote (2014, p. 182)*

The Trainer

Development and design of training prorammes

- Provide career councelling and guidance-provide exposure of candidates to the world of work

-Offer training to candidates and employers

The Partner

Partner with employers

- Organise interaction between employers and candidates

-Provide on the job training

-Provide joint training with employers

The Facilitator

-Partnership with NGOs and government departments

-Inform candidates regarding government schemes available

The Marketer

Engage wth employers

-Offer sensitisation workshops

-Workplace solutions sensitisation

-General disability awareness

-Signalling success stories

3.5.   Summary

In this chapter, a brief discussion on the current status of employment of persons with disabilities, both globally and in LMICs was presented. In the discussion, key legislation that propelled reform in the participation of persons with disabilities globally were highlighted. The chapter also provided an indication of the current status of persons with severe disabilities in the South African context. In addition, the South African legal framework regarding employment (i.e., laws and policies) were outlined and its impact on facilitating the participation of persons with disabilities in the labour market were presented. In order to attain information on what hinders and/or facilitates the employment of persons with disabilities, findings from a scoping review conducted on barriers to and facilitators of employment of persons with disabilities were presented. From the findings of the scoping review, studies conducted specifically in South Africa were highlighted with the aim of extrapolating context specific data and identifying the gap in the literature in relation to the employment of persons

with severe disabilities and SRAs as important intermediaries between employers and potential employees with a disability.

The findings from the scoping review provided compelling evidence which propelled this study forward. Firstly, the findings were presented against the backdrop of the ICF as a conceptual framework and highlighted that barriers to the employment of persons with disabilities exist on an individual level (that is, related to the severity of the disability and personal related factors) and societal level (related to the negative attitudes, the lack of policy implementation and services and systems in education and transportation. This also indicated the suitability of the ICF as a framework to identify factors that hinder and facilitate participation by persons with disabilities in employment.

Secondly, the data on barriers to and facilitators to the employment of specifically persons with severe communication disabilities was sparsely represented in LMICs including SA. This observation could be indicative of the lack of employment of persons with severe disabilities in LMCs and more specifically in the SA context. It can thus be assumed that persons with severe disabilities encounter far worse marginalisation than individuals with other types of disabilities that are less severe in nature.

Thirdly, the findings from the scoping review provided some insights on the role of SRAs in facilitating the employment of persons with disabilities such as services provided by SRAs. Furthermore, the findings obtained from the scoping review deepened the understanding of the complex multi-faceted phenomenon under scrutiny in this thesis. Most importantly, the data from the scoping review, provided a starting point to the development of the research question and design approach followed in this thesis. The scoping review also guided the development of data collection tools which were used in this thesis.

Based on the findings from the literature review, there is paucity of data on what facilitates the employment of persons with severe communication disabilities. The study therefore aims to determine, what are the barriers to and facilitator of employment of persons with severe communication disabilities from the perspective of persons with severe communication disabilities themselves and SRAs?, and what are the roles of SRAs in facilitating the successful, placement of persons with disabilities?

CHAPTER 4

RESEARCH METHODOLOGY

4.1. Introduction

This chapter outlines the methodological approach followed in this study. The chapter begins by describing the main aim of the study and is followed by the sub-aims. Thereafter, the research design and position of the researcher are discussed. Next, the ethical considerations adhered to in the study are presented. This is followed by a description of the three phases of the study in terms of a discussion of the recruitment, sampling, and selection of the participants, material developed, and the data collection procedures for each phase. Phase 1 involves the identification of barriers to and facilitators of employment of persons with severe communication disabilities, as perceived by persons with severe communication disabilities themselves. Phase 2 comprised three sub-sections, namely, Phase 2a, to investigate the barriers to and facilitators of employment of persons with severe communication disabilities as perceived by specialised recruitment agents (SRAs); Phase 2b, to explore the roles of SRAs in facilitating the successful placement of persons with severe communication disabilities; and Phase 2c, to determine the placement process of persons with disabilities followed by SRAs. Phase 3 involves the development of the proposed guiding placement checklist based on data from the preceding two phases of the study guided by the International Classification of Functioning, Disability, and Health (ICF) Framework. Finally, an explanation of how trustworthiness was ensured in the study follows. The chapter concludes with the data analysis method, and the process of linking the findings to the ICF categories are detailed.

4.2. Aim of the study

4.2.1. Main aim of the study

The main aim of this study was to determine barriers to and facilitators of employment of persons with severe communication disabilities from multiple perspectives and to explore the placement process and roles of SRAs as facilitators to the employment of persons with severe communication disabilities.

4.2.2. Sub-Aims of the study

In order to achieve the main aim of the study, the following five sub-aims were delineated:

i) To determine the barriers to and facilitators of employment of persons with communication disabilities from the perspective of persons with severe communication disabilities who are employed and unemployed. This sub-aim is addressed in Phase 1.

ii) To determine the barriers to and facilitators of employment of persons with disabilities and persons with severe communication disabilities from the perspective of SRAs. This sub-aim is addressed in Phase 2a.

iii) To determine the roles of SRAs in facilitating the successful placement of persons with severe communication disabilities. This sub-aim is addressed in Phase 2b.

iv) To determine the placement process followed by SRAs in the placement of persons with severe communication disabilities. This sub-aim is addressed in Phase 2c.

v) To synthesise the data based on the ICF, develop a proposed guiding placement checklist that can facilitate the successful placement of candidates with severe communication disabilities. This sub-aim is addressed in Phase 3.

4.3.   Research Design

This study adopted a qualitative case study design (Creswell, 2014; Yin, 2014). Ebneyamini et al. (2018) define a case study design as *"an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not evident"* (p.1). The design provides the flexibility required in this study where various variables are investigated, and multiple sources of data are collected. The specific type of case study adopted was an exploratory, case study design with more than one unit or subunit of analysis (Grandy et al., 2010). In this study, participants with severe communication disabilities reporting on barriers to and facilitators of employment was considered a single unit of analysis, while the views of SRAs reporting on barriers to and facilitators of employment were perceived as another unit of analysis. The SRAs reporting on their services and roles and the placement process followed during the placement of candidates with severe communication disabilities were considered a third unit of analysis.

Fundamental principles of a qualitative case study design guided the data collection and analysis in this study. Firstly, utilising a qualitative case study design enabled the researcher to gain in-depth knowledge about the research area investigated by exploring participants' subjective experiences. It, therefore, provided insights and knowledge that might otherwise have been missed using other approaches (Creswell, 2014). Secondly, the researcher is immersed and reliant on the participant's view about the problem investigated (Walby, 2015). The researcher relied on the information provided by the participants to determine areas investigated in the study. Also, in the qualitative data collection process, the researcher is the key instrument (Flick, 2018). The researcher in this study conducted the interviews herself, thereby giving depth to the data collected. Since data from multiple sources can be collected in a qualitative case study design, this allows the study to benefit from diverse viewpoints (Bryman, 2016). For the current study, data were collected from two participant groups.

An added vital principle of the design employed is the advantage of interviewing participants in their natural environment where they are experiencing the phenomenon under investigation (Creswell & Poth, 2016). In this study, the participants were interviewed telephonically and positioned in a familiar environment – at home or in their office. A further added advantage is that the researcher collects data that is contextually relevant and culturally sensitive (Creswell & Poth, 2016). It should be noted, however, that data that is context-specific tends to be specific to a specific population. Consequently, generalisation of findings is not possible since people hold different views and are thus exposed to different experiences (Creswell, 2014). Data collected in this study is specific to the South African context and specific to the population with a severe communication disability and can therefore neither be generalised to other LMICs nor to HICs.

Lastly, understanding the context in which the research occurs provides a holistic awareness of factors that influence the participants' experiences (Bryman, 2016). In this study, understanding the barriers to and facilitators of participation within the environment is imperative. Another principle of qualitative case study is that it is an emergent design, which implies that it allows flexibility in the change of data collection methods (Creswell & Poth, 2016). In this study, adaptations had to be made during the actual process of data collection in Phase 1 in order to

accommodate the strict lockdown regulations implemented in SA due to the global Covid-19 pandemic.

4.4. Position of the Researcher

Researchers are always guided by certain assumptions or world views (i.e., paradigms) which impact on the decisions made regarding the research process and methodological approach they select (Kivunja & Kuyini, 2017). In qualitative research, researchers acknowledge their personal, social, political, or philosophical stance, which are likely to influence the process of data collection and its interpretation (Nowell et al., 2017; Morrow, 2005). This study followed a social constructivism paradigm with a phenomenological underpinning (Creswell & Poth, 2016). This paradigm allows for subjective conclusions and multiple realities to be gathered and is therefore different from positivism/post-positivism paradigms where knowledge is acquired through objective methods. In a constructivist/interpretative paradigm the researcher is guided by the participants' views regarding the research topic investigated while also considering the influence of their background and own experiences (Kamal, 2019). Be it so, the researcher's paradigm stance was transformative in nature and therefore viewed the unemployment of persons with communication disabilities as a violation of their human rights. Hence her epistemological stance was emancipatory (Sefotho, 2015) as through the findings of this study, she aims to support the economic participation of persons with communication disabilities. Moreover, the process of active self-reflection during the research process ensured that biases which can influence the quality of the study were addressed (Creswell, 2018).

In qualitative research, researchers acknowledge, their personal, social, political, or philosophical stance, are likely to influence the process of data collection and its interpretation (Nowell et al., 2017; Morrow, 2005). The process of active self-reflection during the research process ensures that biases which can influence the quality of the study are eliminated (Creswell, 2018). The researcher is a qualified SLT with a Master's degree in AAC who practices in the field of severe disability and works specifically with persons with severe communication disabilities. She has been working at the university as a lecturer in AAC for the past 8 years. The researcher also has experience interacting with persons with disabilities, other rehabilitation professionals, and individuals involved in the employment of persons with disabilities – such as SRAs.

Furthermore, the researcher is a member of a professional group based at a university that supports and provides mentorship to youths with severe communication disabilities and assists them with the development of skills required to attain employment or start their small businesses.

There were, however, no direct relationships such as personal relationships or contracts with the researcher that could result in a conflict of interest or perhaps impart bias on the research study. It should be noted that nine of the participants with disabilities in the study had a prior encounter with the researcher through mentorship programmes at the university. Their relationship with the researcher did not however result in any bias in reporting the findings, as the questions were related to experiences of being (un)employed. Nonetheless, and importantly, to conduct the study's design, the researcher drew on her experience and skill as a lecturer and researcher.

4.5.   Ethical Considerations

Ethics approval to conduct this study was granted by the Research Ethics Committee of the Faculty of Humanities at the University of Pretoria (see Appendix B). Since the researcher used software for survey development and distribution (Qualtrics^{TM}), for data analysis (SPSS^{TM} and Atlas.ti8^{TM}), and data collection (WhatsApp^{TM}), she adhered to guidelines and terms of service as stipulated in the products' policies, particularly to ensure the confidentiality of the data and privacy of the responses.

As the study used the ICF as a conceptual framework, the framework needed to be deployed in a way that would uphold human rights and dignity, especially for persons with severe communication disabilities (Bickenbach, 2012; Prusaczyk et al., 2017). The ethical guidelines followed in the ICF are in line with the ethical principles of the United Nation's CRPD (World Health Organisation, 2011) as outlined in the Belmont Report (1979). These include the ethical principles of research – respect for autonomy, beneficence, non-maleficence, justice, and privacy and confidentiality. The subsections below address the manner in which these ethical principles were adhered to and ensured in this study.

4.5.1. Autonomy

Respect for autonomy involves acknowledging an individual's ability to act on his or her own values and interests (Vanclay et al., 2013). Participants autonomy was respected by ensuring they understood their right to voluntary participation. They were informed that they would in no way be coerced to participate in the research. The participants were further informed of their right to withdraw at any point during the study. As this study also focused on a population category that is marginalised, that is, persons with severe communication disabilities, measures were taken to ensure that the participants were able to make informed and voluntary decisions about participating in the study (Haines, 2017). A clearly worded and simplified consent form supplemented by voice notes (audio messages) were provided to the participants with severe communication disabilities.

Prior to the commencement of the study, the participants were provided with a consent letter that outlined the full details of the study and all that would be expected of them. Again, for participants with disabilities, strategies were followed as suggested by the American Association of Person with Disabilities (2005), which included ensuring that information about the study is provided in an accessible and understandable format. In the present study, specific strategies were employed to ensure the inclusion of the participants' own voices and not that of their families. The information concerning the study and the consent letters were adapted to be easy to understand.

4.5.2. Justice

Justice refers to the equal distribution of benefits equally among participants (Jahn, 2011). In this study, the participants did not receive any benefits over those who did not participate in the study. In addition, the researcher ensured that participants were treated with respect during all interactions in the data collection process. Since asking the participants about their experiences and perceptions meant one became privy to their personal thoughts and space, adherence to ethical and good moral behaviour was paramount (Daley et al., 2013; Varkey, 2020).

4.5.3. Privacy and Confidentiality

In this study, the participants were informed of measures that were in place to ensure the protection of their privacy and the confidentiality of the information shared with the researcher.

Confidentiality meant that participants' characteristics, responses, opinions, and behaviours would not be shared with outside parties without participants' explicit permission (Hammersley, 2015). Therefore, the participants were assured that their decision to participate (or not) would not be disclosed to the organisations or disability groups they are affiliated with. To further ensure confidentiality, codes were assigned to all participants to not link them to their recorded data, which would be stored on a password-protected computer. Participants were also requested to consent for the data to be presented at conferences and published a manuscript, in which case no identifying information would be linked to the individuals.

Access to data collection was restricted to the researcher, the study supervisors, and the research assistant (second rater). Once the data was analysed and no longer in use, it was stored securely in a deidentified electronic format on a secure password-protected computer. Other data in a non-electronic format such as audiotapes, hand-written notes and interview transcripts are stored in a secured filing cabinet at the Centre for AAC, situated at the University of Pretoria. This data will be kept for a maximum of fifteen years subsequent to the publication of the first manuscript resulting from this study, and then it will be destroyed.

4.5.4. *Non-maleficence*

The principle of non-maleficence holds an obligation to not do harm others (Daley et al., 2013). The researcher was obligated to ensure that no risk or harm would be inflicted on the participants. The study's objectives were described to the participants and emphasised that the study would involve no risks or harmful practices. The participants were never exposed to harmful information or expected to share uncomfortable and psychologically harmful details about their lives.

4.5.5. *Beneficence*

On the other hand, beneficence refers to the moral obligation to act to the benefit of others (Varkey, 2020). The researcher informed the participants that the data received from the interviews does not only result in her completing her studies but has more significant societal benefits. They were, therefore, informed of the benefits of the outcomes of the study, which involved determining the factors that could act as facilitators for the employment of persons with severe communication

disabilities. The removal of these barriers and access to the facilitating factors may result in mainstreaming of disability and thus has a transformative outcome.

4.6. Phases of the Study

Individual semi-structured interviews were conducted in Phases 1 and 2 to explore the perspectives of persons with severe communication disabilities and SRAs on what hinders and facilitates employment of persons with disabilities. This type of interview afforded the flexibility for participants to provide information that would not likely be yielded in structured interviews (Newcomer et al., 2015). Furthermore, it provided the researcher with the opportunity to gain information regarding the values and experiences of the participants (Yin, 2009).

Figure 4.1 describes the aim of each phase as well as the methods employed.

Figure 4.1. *Sub-Aims of the Study Outlined According to the Phases of the Study*

Phase 1
To determine the barriers to and facilitators of employment of persons with disabilities from the perspective of persons with severe communication disabilities
Method: Individual semi-structured interviews conducted through WhatsApp™

Phase 2a
To determine the barriers to and facilitators of employment of persons with disabilities from the perspective of the SRAs
Method: Individual semi-structured telephonic interviews

Phase 3
To synthesise the data and propose a guiding placement checklist based on the ICF
Method: Data collation (from Phase 1, 2a and 2b and 2c)

Phase 2b
To explore the placement process followed by SRAs during the placement of persons with severe communication disabilities
Method: Individual semi-structured telephonic interviews

Phase 2c
To explore the services and roles provided by SRAs,
Method: Individual semi-structured telephonic interviews

**4.7.	Phase 1: Semi-structured Interviews with Persons with Severe Communication Disabilities.**

Phase 1 aimed to explore the barriers to and facilitators of employment of persons with severe communication disabilities as perceived by these individuals themselves.

*4.7.1.	Phase 1: Participants*

This section presents the participant sampling, selection procedures followed, and the participant description for Phase 1.

4.7.1.1.Phase 1: Participant Recruitment Strategy and Sampling. Purposive sampling was used to select participants with severe communication disabilities. Since the focus was on the population with specific experience in and knowledge of the phenomenon investigated, non-probability sampling was undertaken (Walby, 2015). Purposive sampling, although non-random, samples participants in a strategic manner so as to access only participants who provide information relevant to the research question (Bryman, 2012).

Participants were recruited through various disability advocacy groups (i.e., Disabled People of South Africa [DPSA]; Autism South Africa [ASA]; South African Disability Alliance [SADA]; and Gauteng Provincial Association for Persons with Disabilities [GPAPD]). The researcher also recruited participants through her professional network, which included therapists placed in schools with youths with disabilities and Facebook groups (e.g., linking persons with disabilities with employment opportunities). Upon receipt of the contact information of potential participants from the different networks, the researcher contacted potential participants through email, text messages and social media platforms such as WhatsApp^TM and Facebook Messenger^TM requesting their participation in the study. The contact information contained an information letter with complete details regarding the study and the researcher's contact information. The participants were provided with an option to send a text message, Facebook Messenger^TM or WhatsApp^TM message back, should they be interested in knowing more about the study or want to participate in the study.

The potential participants who responded were provided with an information letter again, accompanied by voice note messages (WhatsApp™ voice messages) to aid understanding. The voice notes gave a brief and simple description of the aims of the study. Furthermore, in the voice note messages, the researcher also introduced herself and explained to the participants how they could get involved in the study and what was expected of them.

Interviews only convened once informed consent had been sent via WhatsApp™ in the form of written messages (ranged from "I agree to be part of the study" to "yes, I would like to participate"). The researcher was mindful that not all persons with disabilities would have access to the internet. The participants who consented to be part of the study were therefore provided with internet data bundles to enable them to access the information letters and download voice notes sent via WhatsApp™. All the participants were provided with 2GB of data to avoid them running out of the data in the two-week process of responding to questions.

A total of 11 responses through the various disability advocacy groups was received, however only two met the selection criteria. Sixteen further participants were recommended by therapists and educators from the professional network contacted by the researcher, and 14 responded to the invitation to participate in the study. Eleven more participants responded to the Facebook™ post requesting individuals to participate in the study. Only eight, however, met the selection criteria. A breakdown of the participant responses is provided in Table 4.1.

A total of 24 participants, 13 unemployed (see Table 4.3) and 11 employed (see Table 4.4), participated in the study. In qualitative research, the recommended number of participants is 12 to18 participants before saturation is reached (Mason, 2010). As this study was exploratory in nature, a large enough sample size was required in order to gain a rich understanding of the phenomena under study (Vasileiou et al., 2018). The researcher therefore aimed to attain diverse perspectives from individuals from various contexts regarding the subject matter. For this reason, a large sample was therefore included in the study. The perspectives of the participants were gathered until data saturation was reached and responses started to converge (Creswell, 2014).

Table 4.1

Phase 1 Participant Responses

Recruitment strategy	Responses	Met criteria and consented
Disability advocacy groups	6	2
Professional network (Teachers and therapists)	16	14
Facebook™ page	11	8
Total	**43**	**24**

4.7.1.2. Phase 1: Participant Selection Criteria. Specific selection criteria were employed to recruit participants who were knowledgeable about the phenomena under investigation. Participants could be from any province in the country. Participants for this study were required to be 18 years or older, as this is the legal age of the economically active population in SA who are eligible for formal employment (Department of Labour, 2018). Furthermore, being 18 years and older means the individuals are able to legally give consent (Department of Labour, 2018). The participants were not required to speak a particular language and could communicate in any of SA's 11 official languages. Although the participants' literacy skills were not formally assessed, their ability to comprehend written information provided via WhatsAppTM, as well as reported level of education was used as an indicator of presenting with functional literacy skills. Furthermore, the questions were set to Flesch-Kincaid Grade Level 6, and hence functional literacy skills were required, as participants were required to type their responses, either by using text or graphic symbols or a combination thereof. The participants had to be either employed or seeking employment at the time of the study. Furthermore, the participants were required to have a communication device that would enable them to communicate responses to the interview questions.

The selection criteria employed in the study meant participants who were not on social media platforms, who did not own a communication device and who were not functionally literate, were excluded from participating in the study. This decision was made due to the restrictions imposed

by the Covid-19 lockdowns which negatively impacted face-to-face data collection, e.g., it was not possible to observe additional forms of unaided communication as bandwidth challenges made online video interviews difficult. Face-to-face data collection would have allowed for alternative data collection methods to accommodate participants who were not literate.

The selection criteria for the participants with severe communication disabilities is provided in Table 4.2.

Table 4.2

Selection Criteria for Persons with Severe Communication Disabilities

Criteria	Justification	Method
Aged 18 years and older	This is the legal age of the economically active population in SA who are eligible for formal employment (Department of Labour, 2018). Also, at this age, they are able to provide consent to participate in the study undependably.	Biographical questionnaire
Speak any official South African language	It was important for the study to have individuals from diverse backgrounds and cultures represented in the study. In SA, culture and language are interwoven (Rudwick, 2008). Each language group presents with its own culture and therefore engages in its unique practices and beliefs (Rohwerder, 2018; Sadiki et al., 2021). These influence views about disability (Tigere & Makhubele, 2019; Wegner & Rhoda, 2015).	Biographical questionnaire
Able to read and write/type	The study required the participants to understand information communicated to them and to respond in written format. This was due to the researcher attempting to obtain first-hand information from the participants and not responses provided by the caregivers or assistants. Research has indicated differences in reports related to participation from individuals with disabilities themselves and information from caregivers (Huus et al., 2015; Huus et al., 2021).	Biographical questionnaire
Employment status. This included both persons with severe communication disabilities who were employed or unemployed (i.e., have some employment-seeking experience).	The study required information from participants who had knowledge and experience of the area investigated. This was crucial for the validity of the study (Landridge, 2004).	Biographical questionnaire

Criteria	Justification	Method
Means to communicate using mobile technologies (e.g., own and use a phone or tablet).	The researcher needed to be able to fully comprehend information communicated by the participants (Landridge, 2004).	Self-report
Having WhatsApp™ installed on their phones and be able to operate it independently	Communication and semi-structured interviews were conducted via WhatsApp™	Self-report

4.7.1.3. Phase 1: Participant Description (N=24). According to the information obtained from the biographical questionnaires, 23 of the participants presented with CP, while one participant presented with a chronic medical condition. The participants' race was predominantly black. These findings are aligned with the general population ratio of black people in the country and the figures reported by Statistics South Africa (2014). Subsequently, a higher prevalence of disability is reported in the black population (Graham, 2020). Twenty of the participants lived at home with their families, three lived in their own homes, and one participant lived in a home for persons with disabilities.

None of the participants were married, although four reported they had romantic partners. Two of the participants were parents. Eighteen of the participants were from urban areas, and six were from rural areas. Twenty-three participants used their mobile devices (cellular phones) and typed messages on WhatsApp™ to communicate. Some used also used a text-to-speech application on their cell phones (e.g., speech assistant). Only one participant specifically used a dedicated AAC communication device, the Gigabyte™, with the Grid 3™ installed on the device.

4.7.1.3.1. *Unemployed Participants (n=13).* Thirteen unemployed participants participated in the study. Their ages ranged from 21 to 34 years old, and they represented six of the nine provinces of SA. All participants had attended schools for learners with special educational needs (i.e., "special schools"), with the exception of one participant who had received no formal school education. They held various educational qualifications, with eight presenting with a qualification of Grade 9 and lower, two having completed Matric (i.e., Grade 12), and two having achieved a post-matric qualification (attained from a college), while one did not attend any formal schooling. Five participants used a wheelchair for mobility (GMFCS level IV-V); the rest

were ambulatory (GMFCS level III). Four of the participants were male, with the majority (n=9) being female.

The participants all reported difficulty with communicating with unfamiliar people, however, they are able to effectively communicate with people familiar to them (CFCS level III). Six participants reported difficulty with hand function and difficulty directly accessing communication devices (MACS level V-IV), while the other participants reported limited difficulty using their hands for typing (MACS level III). Most of the participants' home language was either isiXhosa and Setswana.

Table 4.3 outlines the biographical information of the 13 unemployed participants.

Table 4.3

Biographical and Functional Skills Information of Unemployed Persons with Disabilities (n=13)

Participant code	Age Years	Gender	Home language	Schooling	Educational qualification	Primary diagnosis	Province	Unaided Communication skills	CFCS Communication (Aided)	GMFCS Gross motor skills	MACS Fine motor skills
UNPWD 001	26	Male	Xitsonga	Special school	Certificate	Cerebral palsy	Eastern Cape	Gestures and vocalisations	Level III	Level V	Level III
UNPWD 002	25	Female	IsiXhosa	Special school	Grade 12/Matric	Cerebral palsy	Gauteng	Dysarthric Speech	Level III	Level III	Level III
UNPWD 003	23	Female	Sesotho	Special school	Grade 9	Cerebral palsy	Gauteng	Dysarthric Speech	Level III	Level III	Level III
UNPWD 004	26	Male	IsiXhosa	Special school	< Grade 9	Cerebral palsy	Western Cape	Dysarthric Speech	Level III	Level III	Level IV
UNPWD 005	35	Female	Setswana	Informal training	No schooling	Cerebral palsy	North-West	Dysarthric Speech	Level III	Level III	Level III
UNPWD 006	33	Female	IsiXhosa	Special school	< Grade 9	Cerebral palsy	Eastern Cape	Verbalizations	Level III	Level III	Level II
UNPWD 007	23	Female	Setswana	Special school	Grade 9	Cerebral palsy	Mpumalanga	Dysarthric Speech	Level III	Level III	Level IV
UNPWD 008	21	Female	Other	Special school	Certificate	Cerebral palsy	Gauteng	Dysarthric Speech	Level III	Level V	Level V
UNPWD 009	24	Male	Setswana	Special school	Grade 9	Cerebral palsy	Mpumalanga	Verbalizations	Level III	Level III	Level IV
UNPWD 010	34	Female	IsiXhosa	Special school	< Grade 9	Cerebral palsy	Eastern Cape	Dysarthric Speech	Level III	Level V	Level V
UNPWD 011	21	Female	IsiXhosa	Special school	Grade 12/Matric	Cerebral palsy	Eastern Cape	Gestures and vocalisations	Level III	Level V	Level III
UNPWD 012	21	Female	Setswana	Special school	Grade 9	Cerebral palsy	North-West	Verbalizations	Level III	Level III	Level IV
UNPWD 013	24	Male	Setswana	Special school	Grade 9	Cerebral palsy	North-West	Dysarthric Speech	Level III	Level V	Level III

Note. *All unemployed participants with severe communication disabilities used their cell phones with installed WhatsAp^{TM} as a means of Aided communication.*

4.7.1.3.2.   *Employed Participants (n=11).* The definition of employment followed in this study (see Section 1.4.5) refers to both paid and unpaid employment, which can be formal or informal in nature. This means that employment forms related to volunteering and temporary job positions were also considered employed. The employed group comprised 11 participants, of whom only four were employed in informal employment (two worked 40 hours a week, one worked 20 hours a week, and another one worked on a freelance basis and hours varied from 20 hours to 40 hours per week). Three of the employed participants either had small-scale businesses or worked as volunteers for various disability groups. Seven of the participants also worked as mentors (once a week or when needed). The remuneration received from these mentorship positions were meant to cover transport and food costs for days when their services are required. The researcher observed that appointments in these disability organisations mainly resulted from personal networks and referrals from their teachers or therapists.

Participants' ages ranged from 23 to 40 years old. Six of the participants were females, and five were male. Participants mostly had completed Matric (n=7), with two of the participants have also obtained a post-matric qualification. The remaining two participants had a Grade 9 qualification. Five of the nine provinces were represented, with most participants residing in Gauteng (n=4). All but one participant who had an acquired disability due to a medical condition presented with CP. Six of the participants were ambulatory (GMFCS level I-III) and required limited assistance to take care of their daily needs. The remaining five used wheelchairs for mobility (GMFCS level IV-V) and required the help of personal assistants. Four participants reported they have some difficulty with communicating with individuals unfamiliar to them (CFCS level III). However, most of the participants (n=7) reported they are able to effectively communicate with familiar and unfamiliar people (CFCS level II). Five participants reported they presented with restricted hand function (MACS level IV-V), four with some restrictions with hand function (MACS level III), while two participants had good hand function and were, therefore, able to use their hands with no difficulty (MACS level I).

Table 4.4 outlines the biographical information as well as and information related to speech and motor function of the 11 employed participants.

Table 4.4

Biographical and Functional Skills Information of Employed Persons with Disabilities (n=11)

Code	Age years	Gender	Home language	Schooling	Educational qualification	Primary diagnosis	Province	Unaided Communication	CFCS Aided Communication	GMFCS Gross motor	MACS Fine motor	Employment position
EPWD 014	40	Female	Sesotho	Mainstream	Grade 12/Matric	Chronic medical	Gauteng	Gestures and vocalizations	Level III	Level I	Level I	Clerical administrator
EPWD 015	40	Male	Setswana	Special school	Grade 9	Cerebral palsy	Northern Cape	Dysarthric Speech	Level III	Level V	Level IV	Counsellor and disability advocate
EPWD 016	40	Male	isiZulu	Special school	Grade 12/Matric	Cerebral palsy	KwaZulu-Natal	Dysarthric Speech	Level III	Level V	Level V	Disability advocate and music artist
EPWD 017	23	Male	Xitsonga	Special school	Grade 12/Matric	Cerebral palsy	Mpumalanga	Dysarthric Speech	Level III	Level III	Level III	Assistant supervisor
EPWD 018	24	Female	Setswana	Special school	Certificate	Cerebral palsy	Gauteng	Dysarthric Speech	Level II	Level III	Level III	Writer and disability advocate
EPWD 019	34	Female	isiZulu	Special school	Grade 12/Matric	Cerebral palsy	Gauteng	Verbalizations	Level II	Level I	Level I	Administrator and disability advocate
EPWD 020	24	Male	Tshivenda	Special school	Grade 12/Matric	Cerebral palsy	Gauteng	Dysarthric Speech	Level II	Level V	Level IV	Self-employed and music artist
EPWD 021	37	Female	Afrikaans	Special school	Certificate	Cerebral palsy	Northern Cape	Dysarthric Speech	Level II	Level III	Level III	Office administrator
EPWD 022	30	Female	Setswana	Special school	Grade 9	Cerebral palsy	North-West	Verbalizations	Level II	Level V	Level V	Disability advocate
EPWD 023	26	Male	Tshivenda	Mainstream	Grade 12/Matric	Cerebral palsy	Limpopo	Dysarthric Speech	Level II	Level IV	Level III	Self-employed and volunteer counsellor
EPWD 024	33	Female	isiZulu	Special school	Grade 12/Matric	Cerebral palsy	KwaZulu-Natal	Gestures and vocalizations	Level II	Level III	Level V	Disability advocate Volunteer

Note. *All employed participants with severe communication disabilities used their cell phones with installed WhatsAp[TM] as a means of Aided communication.*

4.7.2. Development of WhatsApp^{TM} Interview Questions

Interview questions were derived from the interview questions used by Graham et al. (2018) and Shier et al. (2009). These questions were modified to capture the barriers to and facilitators of the employment of persons with severe communication disabilities in an LMIC. The modifications and newly added questions were guided by the findings from the scoping review by Morwane et al. (2021). Following the modifications and addition of new questions, the questions were structured according to the ICF.

The final semi-structured interview questions included questions specifically for persons with severe communication disabilities who were employed and those with severe communication disabilities who were unemployed. Care was taken to ensure that questions were not linguistically complex and allowed for follow-up questions to be asked. The questions and prompts were designed to accommodate the inclusion of sensitive questions (Creswell, 2014). The interview questions consisted of open-ended questions to ensure that in-depth information was elicited from the participants (Creswell & Creswell, 2017). The pre-testing process of the semi-structured interview questions included PhD students who served as a review panel and persons with severe communication disabilities who participated in cognitive interviews.

4.7.2.1. Panel Review of WhatsApp^{TM} Interview Questions. During the development of the WhatsApp^{TM} interview questions, the researcher sent the proposed questions for review to the study supervisor, who, following the questions' perusal, suggested it be sent out for review by a panel. The review panel was deemed necessary as questions had been adapted from studies conducted in HICs. The inclusion criteria for the review panel included, firstly, background knowledge in severe disability. Professionals needed to confirm reported barriers to and facilitators of the employment of persons with disabilities from the literature and relevance to this study. Secondly, the reviewers were required to have knowledge and experience of research on the employment of persons with disabilities. This was because they needed to have experience and knowledge in the field of disability to be able to report on existing barriers to and facilitators of the employment of persons with disabilities (Bryman, 2017). As fellow PhD students engaged in research related to disability and had background knowledge in the employment of persons with disabilities, they were invited to serve as a review panel.

A request letter was emailed to potential review panel members together with a consent letter and form outlining what is expected of them via the PhD student list-serve. Three students responded and reported that they met the inclusion criteria based on their professional appointments and research topics (i.e., both in the clinical and academic context). The review panel comprised of three professionals who had extensive knowledge in the field of disability. One participant was a psychologist at a government clinic, one project manager of intervention programmes for vulnerable youths in communities (also youth with disabilities), and one SLT providing intervention in schools to youth with severe disabilities. The review panel was requested to determine the relevance of the questions to the study's objective and the appropriateness of the questions for persons with severe communication disabilities who live in low socio-economic contexts.

The reviewing panel recommended that the questions accommodate the different types of disabilities (referring specifically to different types of diagnosis such as Down Syndrome and ASD). They further requested that consideration be given to the presence of caregivers or other individuals who understood the manner of communication of persons with a severe communication disability to fully capture the voice of the individuals with disabilities. Table 4.5 provides a description of the procedures followed by the review panel, the recommendations made, and the subsequent changes incorporated in the interview questions.

Two persons with severe communication disabilities finally appraised the semi-structured interview questions through cognitive interviews (see Section 4.9.1).

Table 4.5

Phase 1: WhatsApp^TM Interview Questions Feedback from Review Panel

Aim	Procedures followed	Feedback/Recommendations	Changes implemented
To determine the content validity of the interview questions.	Participants were requested to determine the relevance of the questions to the aim of the study.	The questions were found to be relevant to the study, and comments were made on the clarity and conciseness of the questions. It was also recommended that questions be ordered according to barriers and facilitators. There should be a balance between the questions related to barriers and facilitators.	Each question was linked to whether it measured a barrier to or facilitator of employment for persons with disabilities. This allowed for the questions to be aligned with the research aim. The study supervisor also approved the changes. For example, the facilitator question read: *"What do you think will help people with disabilities to find jobs?"* while the barrier question read: *"What do you think prevents persons with disabilities from finding a job?"*
To determine the conciseness and clarity of questions.	Participants were requested to rate every item for clarity and conciseness.	Participants recommended that some questions are rephrased, and South African specific terminology be used.	Changes made as recommended to improve the clarity and conciseness of the questions included less complex and ambiguous wording. The study supervisor also approved these changes. For example, the term "*interventionist"* rather than *"therapist*" was recommended.
To determine the length and complexity of questions.	Participants were requested to complete the survey and provide feedback on the questions' length and ease of comprehension.	The length of the survey was found to be appropriate.	The length and number of questions were taken into consideration when new questions were added.
To make recommendations for the addition of new questions, thereby maximising the content validity of the study.	Participants were requested to recommend questions that could be vital in answering the research question.	New questions related to the facilitators of employment for persons with disabilities were recommended.	Four more questions were added to the list of questions as recommended. • *What supports and services have you used to look for a job?* • *What service or supports have been helpful in your job search?* • *What information do you need in order to find a job?* • *Where will you go to find these supports and services?*

4.7.2.2. Cognitive interviews of WhatsApp™ Interview Questions. Cognitive interviews are conducted to further improve the questions' validity as suggested by Ouimet et al. (2004). Cognitive interviews ensure that interview questions measure what they intend to measure and that participants interpret the questions correctly and understand what is being asked (Peterson et al., 2017). Collins (2003, p. 3) emphasises that "*cognitive interviewing is meant to identify and analyse sources of response error… by focusing on the cognitive processes respondents use to answer questions…*". Face-to-face cognitive interviews were conducted with two employed persons with severe communication disabilities who did not participate in the main study.

Potential participants who met the selection criteria outlined in Table 4.6 were contacted via email and requested to participate in the cognitive interviews (see Appendix C). The aim of the study and all procedures were fully outlined in the information letter. Written consent was given before the commencement of the interviews, through signed reply slips emailed back to the researcher. The researcher used a "think-aloud" cognitive interviewing technique (Collins, 2003) in which participants were encouraged to "think aloud" or to verbally express their thought processes when responding to questions. The two participants rely mostly on their speech (which is intelligible to familiar partners) than on their AAC communication devices. They therefore use their communication devices to clear any misunderstanding in communication. The researcher observed and recorded these thought processes as the participants provided them. She also used verbal probing (i.e., asking probe questions to elicit detailed responses).

Following the cognitive interviews, the feedback and findings from the observations were recorded, and changes were made to the survey questions. The researcher was unable to make changes prior to the second interview as both interviews were conducted on the same day. Table 4.6 summarises the aim of the cognitive interviews, the comments made by the participants, and observations made by the researcher.

Table 4.6

Cognitive Interviews: Aims, Feedback, and Implementation of Recommendations Regarding the Semi-Structured Questions for Phase 1

Aims	Feedback	Implementation of recommendations
To determine whether the participants understood the questions.	Participants required prompting and further elaboration of the question in order to answer appropriately.	The researcher included relevant prompts to all questions. For example, following the question: "*What do you need to find and keep your ideal job*?" a probe was added: "*What steps do you need to take in order to find this ideal job?*"
To determine whether responses provided by participants were what had been intended by the researcher.	The participants needed probing in order to think more broadly than their immediate experienced challenges.	The researcher included relevant probing questions. For example, "*please tell explain further what you mean by …"."is there anything you would like to add?*"
To determine how participants interpreted the questions.	In the question "*Do you have any more information you would like to give me?*" participants added information that was not related to employment (e.g., information on their relationships).	Although one participant responded related to relationship status. not related to employment, the researcher decided not to include the question.
To determine the appropriateness of the length of the interview questions.	The participant with a communication disability took longer to answer and required breaks in between.	Face-to-face interview with participants with communication disabilities was difficult due to Civid-19 restrictions and therefore interviewing via WhatsApp was deemed more appropriate.

Note. The final WhatsApp™ interview questions for Phase 1 are described in Section 4.7.3.3.1.

4.7.3. *Phase 1: Materials*

This section discusses the material and equipment used in Phase 1 of the study. First, the ethics procedure materials are discussed (i.e., email invitation and information letter), followed by a discussion of material and equipment related to data collection.

4.7.3.1.Invitation Message and Information Letter. A message inviting prospective participants to form part of the study was sent via Facebook Messenger™ (see Appendix D). The messaged contained a link to the information letter (see Appendix E). outlining the aim of the study, the data collection procedures, and all potential risks and benefits of participating in the study. It also clearly outlined what would be expected from participants. The information letter was accompanied by a reply slip on which participants could indicate their willingness (or not) to participate in the study. The consent letter was formulated in an easy-to-understand format to guide the participants in understanding what they were giving consent for and what their rights as participants would entail.

4.7.3.2.Biographical Questionnaire. This questionnaire was used to gather background information on the participants. The questions were sent in batches via WhatsApp™. The questionnaire collected data regarding the participants' age, gender, type of disability, qualifications, assistive technology, and information about their schooling and the communication device they use (see Appendix F)

4.7.3.3.*Communication and Motor Function Checklist*. In order to measure and describe communication and motor skills, three classification systems were used and complied into a checklist (See Appendix G). The three classification systems are the Communication Function Classification System (CFCS) (Hidecker et al., 2011), Gross Motor Function Classification System (GMFCS) (Palisano et al., 2007), and Manual Ability Classification System (MACS) (Eliasson et al., 2006). The three classification systems classify limitations and restrictions at the activity and participation domain of the ICF (Compagnone et al., 2014; Hidecker et al., 2012). A detailed discussion on the link between the domains of the ICF is provided in Chapter 2.

The use of all three classification systems provided a more comprehensive description of the participants with severe communication disabilities who participated in the study. More importantly, the scales indicate how he severity of impairment in functioning impacts participation in activities such as employment.

There is a correlation across all the three classification systems with individuals presenting with severe functioning (Level V) (Compagnone et al., 2014). However, in much less severe instances (Level I-III), classification in one system does not provide a prediction of classification in the other systems found (Hidecker et al., 2012). The three classification systems have been validated in LMICs and are widely used by rehabilitation professionals, though they often do not focus on communication skills but only on motor functioning (Abdel Malek et al., 2020; Piscitelli et al., 2019). The researcher rated the scales together with the participants. The checklist consisted of three sections, namely, Section 1 of communication functioning (CFCS), Section 2 on gross motor functioning (GMFCS), and Section 3, on fine motor functioning (MACS):

i) Section 1: Communication Function Classification System

The participant's ability to effectively communicate their needs with familiar and unfamiliar partners was graded using the Communication Function Classification System (CFCS) (Hidecker et al., 2011). As the CFCS is developed based on the principles of the ICF and therefore requires that rating be based on best performance, in this case, with the use of AAC communication devices. Communication skills are rated across five levels. Level I indicate an individual is able to effectively receive and send messages to both familiar and unfamiliar communication partners. Level 5 on the other hand, means the individual seldom receives and sends information with familiar communication partners. Participants used unaided means of AAC to communicate their daily needs to their family, however, used aided means with unfamiliar partners (i.e., their AAC communication devices). The ratings are thus based on the effectiveness of their communication using their communication system.

ii) Section 2: Gross Motor Function Classification System - Expanded & Revised

In order to describe gross motor function (i.e., ambulation), the gross motor function classification system (GMFCS - E&R) was used (Palisano et al., 1997). Specifically, the expanded

and revised version is used with youth from ages 12 to 18 years (Palisano et al., 2008). Previous studies have indicated its validity and reliability in describing gross motor function with adults presenting with CP. The scale describes mobility function across five classification levels and provides information to rehabilitation professionals on the type of assistive technology for mobility and support required by an individual with CP. A Level I classification means an individual is ambulatory and does not require any support or assistive technology for mobility. Level V indicates a severe limitation in moving around independently even with the use of assistive technology.

iii) Section 3: Manual Ability Classification System

This scale describes an individual's ability to manipulate objects using their hands and thus provides an indication of fine motor skills (Eliasson et al., 2006). Similar to the GMFCS, the scale grades functioning across five levels. MACS Level I indicates the presence of some independent use of hands. MACS Level V indicates severely limited ability to perform simple fine motor skills and therefore indicates presence of a severe impairment in fine motor skills. Studies have found the MACS as a determinant of activity limitations and restrictions in the participation of young individuals (4-18 years). Scoring at a Level III-V shows challenges participating in major life areas such as employment (Donkervoort et al., 2007).

4.7.3.3.1. ***WhatsApp^TM Interview Questions.*** Individual semi-structured interviews with persons with communication disabilities consisted of questions that were guided by three studies that explored the barriers to and facilitator of employment of persons with disabilities in employment (Graham et al., 2018; Morwane et al., 2021; Shier et al., 2009). The questions were adapted from Graham et al. (2018). Separate questions as used by Graham et al (2018) in their study, were developed for both employed (see Appendix H) and unemployed (see Appendix I) participants with severe communication disabilities. The WhatsApp^TM interview questions for unemployed participants consisted of 14 questions and for employed participants, 16 questions in total.

See Table 4.7 for the final interview questions.

Table 4.7

Phase 1: WhatsApp^{TM} Interview Questions for Employed and Unemployed Participants

Interview questions		Link to aim of study	Justification for Inclusion
Unemployed	**Employed**		
Q1. What kind of job would you like to have?	Q1. Please tell me about the type of job that you do. Q9. Do you regard this as your ideal job? Why or why not?	Placement process	The questions was selected as it provides responses related to steps taken in the employment process (Kulkarni & Kote, 2014; Kulkarni & Scullion, 2015; Morwane et al., 2021). These questions therefore highlight facilitating factors in the employment search process and therefore, link to the placement process highlighted in Phase 2b of the study.
Q4. What services or supports weren't helpful in your job search? Q6. How has your disability affected you finding a job? Q7. How have your career choices been affected by your disability? Q11. What do you think prevents persons with disabilities from finding a job?	Q4. How did your disability affect you finding a job? Q10. How have your career choices been affected by your disability? Q13. What do you think prevents persons with disabilities from finding a job?	Barriers to employment	The questions were reviewed for their relevance to answering questions based on barriers to participation in employment (Graham et al., 2018; Morwane et al., 2021; Shier et al., 2009). The questions were therefore selected based on their relevance to answer the main research question (Creswell, 2014).
Q2. What supports and services have you used to look for a job? Q3. What service or support have been helpful in your job search? Q5. What information do you need in order to find a job? Q8. What supports and services do you need to find a job and stay employed?	Q2. Tell me about the steps you took to find your job? Q3. What were the most important things that helped you find a job? Q5. What helped you overcome your challenges in finding a job? Q6. What accommodations did you require in order to do your job?	Facilitators of employment	The questions were reviewed for their relevance to answering questions based on facilitators of participation in employment. The questions were therefore selected based on their relevance to answering the main research question (Graham et al., 2018; Morwane et al., 2021). The researcher also wanted to emphasise facilitators more than barriers. Previous research has seen a focus on barriers rather than facilitators (Ebuenyi et al., 2018; Tripney et al., 2019).

98

Interview questions		Link to aim of study	Justification for Inclusion
Unemployed	**Employed**		
Q9. Where will you go to find these supports and services?	Q7. What are the things that help you to do your job?		
Q10. What do you think will help people with disabilities find jobs?	Q8. What would help you do your job well?		
Q12. What advice would you give to someone with a disability who is looking for a job?	Q9. Do you regard this as your ideal job? Why or why not?		
Q15. What advice would you give to a professional who is helping persons with disabilities find jobs?	Q11. What do you need to find and keep your ideal job?		
Q14. What would you like to tell me that I have not asked?	Q16. What would you like to tell me that I have not asked?	Concluding question (transcript checking)	This question provided participants to highlight key issues that may have not been asked in the interview (Flick, 2018). It also provided an opportunity for the researcher to attain further information regarding the phenomena under study (Khothari, 2004). Furthermore, the researcher used this question during member checking (Yin, 2009).

4.7.4.   Phase 1: Equipment

4.7.4.1. Samsung Smartphone. Equipment used on the data collection of Phase 1 consisted of a Samsung Galaxy™ A72 Smartphone (Samsung, 2021). The smartphone allows for the installation of WhatsApp™ which was used for sending and receiving information regarding the study.

4.7.4.2. Atlas.ti8™. To systematically organise and analyse qualitative data, a qualitative data analysis software, Atlas.ti8™ was used. The software allowed for the content analysis process to be conducted by two coders. All data was saved on the software, and the data from Phases 1 and 2 were analysed using this software.

4.7.5.   Phase 1: Data Collection

Participants included both employed and unemployed persons with disabilities. The semi-structured interviews were conducted asynchronously via WhatsApp™. Both groups of participants were presented with similar interview questions. However, the employed participants were asked specific questions related to factors that helped them secure employment (e.g., "Please tell me about the steps you took to find your job?"). The same participants were also asked about the various challenges they experienced in the process of securing employment (e.g., "What helped you overcome your challenges in finding a job?").

The participants responded to questions based on their understanding of what hinders or facilitates the employment of persons with disabilities. Their responses were therefore not based on their current experience as employed individuals. For instance, when asked what supports persons with disabilities to gain employment, an unemployed participant may respond that they individuals should consider contacting an SRA for assistance. This is despite the unemployed individual themselves having never contacted an SRA and gained employment.

Data collection was completed with all 24 participants. Although the data collected from the participants had some commonalities, each participant provided a unique piece of information. Once participants consented to participate in the study, the researcher set an appointment with the

participants following receipt of their message, giving consent to participate in the study. The participants were asked to provide biographic information such as their date of birth and where they attended school.

These questions were also sent one at a time to the participant and were also accompanied by a voice note message. The participants, therefore, received questions in written and audio format. Where necessary, adjustments were made, such as sending more voice notes with further clarifications. This step was also used to gauge how well the participants would be able to respond to the questions through WhatsApp™. Most importantly, the participants were asked whether they were comfortable with the questions being in English. Only one participant asked that the voice note messages be in Setswana just so she is certain she understands what she is reading. Due to the nature of the education system in SA for persons with disabilities, the learners receive instruction either in English or Afrikaans (Bornman, 2017; Mophosho & Dada, 2015). Therefore, most individuals have written language proficiency in either of the two languages.

Upon answering the biographical related questions, the participants were also asked to describe their manner of communication and mobility. The researcher, therefore, asked them about their ability to communicate based on the CFCS scale. Also, the participants were asked if they could share a voice note message of them verbally communicating their name and surname. This assisted the researcher to confirm the rating that the participants provided. Similarly, to determine their motor function, the participants were asked to confirm their ability to move around based on the GMFCS scale and their ability to use their hands based on the MACS. The participants were able to describe how they walk and what their limitations are, whether they required assistance in activities of daily living such as washing and toileting. Most importantly, how they accessed their communication device.

Semi-structured interviews were conducted via WhatsApp™. The recruitment of potential participants with severe communication disabilities was a challenging process, particularly of employed participants. Initially, the researcher intended to interview participants in a face-to-face situation. However, due to the lockdowns that resulted from the Covid-19 pandemic, an alternative data collection method had to be decided upon. The researcher opted to conduct interviews on WhatsApp™ as opposed to the face-to-face interviews that had originally been intended.

Globally, a rapid shift in the adoption of mobile technologies such as smartphones and tablets, and their use became extremely popular in Africa occurred (Pindayi, 2017). Mobile technologies are installed with instant messaging software such as WhatsApp[TM], Facebook Messenger[TM], and WeChat, all of which allow for asynchronous, immediate, and constant communication. Evidently, WhatsApp[TM] proved to be the most popular of the instant messaging software and has approximately 2 billion users globally (Oberlo, 2020). This platform offers activities such as one-on-one and group chats, sharing media (e.g., pictures, documents and videos), calling, and sending voice notes (Kaufmann & Peil, 2020). The WhatsApp[TM] platform is data-efficient and has a tremendous cost-benefit, making it a suitable option in a country like SA where data costs are high (Tarisayi & Manhibi, 2017).

Nonetheless, a major disadvantage is that social media platforms are not specifically designed for research purposes, and therefore protection of data is not guaranteed (Paulus et al., 2017). However, when participants install and sign up for the use of WhatsApp[TM], a security feature known as end-to-end encryption is automatically installed to protect chats between the user and the individual they are communicating with (WhatsApp[TM] User Manual, 2020). This ensures that no one outside of their chat is able to read and access messages. In addition, shared messages are secured with a unique security code known only by the individual and recipient. Since these features are automatically installed and cannot be deactivated, they ensure some level of protection of the participants' data during data collection. None the less WhatsApp[TM] has been successfully used to collect qualitative data with confidentiality of the information shared on the platform protected (Batra, 2016; Seufert et al., 2016).

A South African study by Bornman et al. (2016) found that persons with severe communication disabilities from various economic backgrounds, age groups, and educational levels owned a smartphone device. Only 53.3% of their 11 participants needed adaptations to operate the device. Mobile technologies were reported to be used not only for daily communication but also for social networking and other activities (Bornman et al., 2016). Based on these findings and evidence from the literature that indicates that persons with severe disabilities actually own mobile devices that are often used for communicating their needs (Caron & Light, 2015; Morris & Bryen, 2015; McNaughton & Light, 2013), the researcher in the current study anticipated participants to own mobile devices. Regardless of this assumption, and before the commencement

of the interview, the participants were directly asked whether they owned a mobile or reliable communication device that could be used to communicate with the researcher. Interestingly, all participants in the study owned some mobile device (smartphone or tablet) on which a social media platform such as WhatsApp^{TM}, Facebook^{TM} and Facebook Messenger^{TM} had been installed.

The use of the WhatsApp^{TM} platform provided the researcher access to participants who lived across the country and who would have been geographically inaccessible for face-to-face interviews. An advantage of using WhatsApp^{TM} as an interview tool was its convenience for participants to respond to questions at any time, using either voice notes or written messages (Seufert et al., 2016). Another advantage was that the researcher was positioned at a remote place and not sitting next to the participants as they responded to questions. This reduced any discomfort or anxiety, as participants were able to comfortably respond to questions (Batra, 2016). The platform furthermore allowed the researcher to share information about the research through documents and voice notes.

The researcher recorded all questions in English and Setswana and shared them as voice note messages. The participants were sent only two written questions per day, accompanied by audio messages to allow them enough time to respond. They were also informed that they could respond at any time of the day as convenient to them. Although the participants had a period of two weeks to respond to questions, all submitted their responses within the space of a week. As the participants provided responses to the questions, new questions were sent. Probes were also sent via voice note messages to participants who provided unclear responses or appeared to have misunderstood the question.

The responses were also reviewed (form of transcript review), and the information provided was verified for accuracy where it was unclear. This was conducted by the researcher. Participants were asked whether the researcher correctly interpreted a response to a question. Where a question was misunderstood, participants were asked to elaborate further. When the last two questions were provided, the researcher indicated so in the messages. The participants were therefore asked to indicate when they were finished with responding to questions. This was due to some participants sending an incomplete question and only completing it the next day. The participants were asked

whether they were still comfortable with answering the interview questions in between the questions.

The final step involved thanking the participants and providing them with information on the researcher's next step in her research. At the end of the interview, participants were thanked and informed that they would receive communication from the researcher should any further information be required. Also, the participants were provided with a list of the SRAs to contact for possible placement in training or employment positions. Participants were also offered assistance with the completion of the curriculum vitae should they require assistance. The participants were again reminded that a summary of the findings once the thesis is completed will be provided.

The recruitment of potential participants with severe communication disabilities was a challenging process, particularly of participants who were employed. Initially, the researcher intended to interview participants in a face-to-face situation. However, due to the lockdowns that resulted from the Covid-19 pandemic, an alternative data collection method had to be decided upon. The researcher opted to conduct interviews on WhatsApp^{TM} as opposed to the face-to-face interviews that had originally been intended.

4.8. Phase 2: Semi-Structured Telephonic Interviews with Specialised Recruitment Agents

Telephonic semi-structured interviews were employed in Phase 2. This phase consisted of three sub-sections, namely, Phase 2a, 2b and 2c. The aim of Phase 2a was to explore the barriers to and facilitators of employment of persons with severe communication disabilities as reported by SRAs. Phase 2b aimed to determine the placement process followed by the SRAs. Phase 2c aimed to determine the roles of SRAs.

4.8.1. Phase 2: Participants

This section presents the participant sampling, selection procedures followed, and the participant description for Phase 2.

4.8.1.1.Phase 2: Recruitment Strategy and Sampling. Expert sampling was used to recruit SRAs. Unlike purposive sampling, where participants are selected based on their knowledge regarding the phenomenon investigated, expert sampling targets individuals who are known experts in the field of study that is of interest (Kumar, 2011). In the present study, SRAs were recruited based on their experience in the recruitment and job placement of persons with disabilities.

A list of SRAs in SA was obtained from a Google™ search (search terms included recruitment agencies that specialise in disability employment services) that yielded the contact information of the top ten recruitment agencies that offer disability employment services. The SRAs were then sent emails of invitation to participate in the study. A further recruitment method included contacting a disability employment organisation of which most of the SRAs are members, namely South African Employers for Disability (SAE4D). The researcher requested the study information to be shared through their member list-serve (Appendix J), but a list of member details was provided instead (Appendix K). This list mainly comprised human resource managers in private companies. Contact was made directly with these members by emailing letters of invitation to them.

The rest of the SRAs were accessed through disability advocacy groups that were contacted directly, such as Disabled People of South Africa [DPSA]; Autism South Africa [ASA]; South African Disability Alliance [SADA]; and Gauteng Provincial Association for Persons with Disabilities [GPAPD]), and Facebook™ pages of disability groups. A total of 62 invitations were sent through the various networks mentioned. Thirty-seven participants did not meet the selection criteria as they were not in direct contact with candidates and employers and were in positions such as director, disability advocate, or community worker. In the end, 25 SRAs participated in the study. The SRAs were appointed in various recruitment agencies that specialised in disability employment services and offer different types of services. The researcher therefore included a large sample size to capture the different roles assumed by the SRAs based in different contexts as well as to ensure that data saturation occurred (Creswell, 2014).

Table 4.8 indicates the responses obtained from the different organisations approached.

Table 4.8

Phase 2: Participant Responses Related to Recruitment Drive

Recruitment strategy	Invitations sent	Responses	Met criteria
Disability advocacy groups	1 email per organisation	8	3
SAE4D network	152	4	4
Google™	20	12	10
Facebook™ page	14	8	6
Total participants			**N=25**

Note. SAE4D network also included details of directors and CEOs of organisations. They were thus requested to refer the invitations to the SRAs appointed in their companies.

4.8.1.2. Phase 2: Selection Criteria. A selection criterion was employed to recruit SRAs to participate in the study. The SRAs were required to currently be practising and providing disability and employment support services. Second, they we were also required to have at least six months' working experience. Table 4.9 shows the selection criteria for the SRAs.

Table 4.9

Participants' Selection Criteria for Specialised Recruitment Agents

Inclusion criteria	Justification	Method of data collection
SRAs with experience of working with persons with disabilities	SRAs were required to have knowledge about the research area under investigation (Kumar, 2011).	SRAs were discovered under the Google register of SRAs in SA and various disability advocacy groups. SRAs also confirmed their profession.
At least six months' experience in recruitment and placement of persons with disabilities	Recruitment agents were required to have experience of the process of recruitment and placement of persons with disabilities in employment so as to be able to answer the research question (Bryman, 2017).	Self-report

4.8.1.3. Description of Participants. According to the information obtained from the biographical questionnaires, the 25 SRAs were from diverse backgrounds and provided services in various South African languages. They were mostly female (n=17). The majority of the participants were black (n=13), white (n=10), Indian (n=1) and one coloured person. Fifteen of the SRAs reported that they had experience with the job placement of persons with severe communications disabilities, and six SRAs stated that they had limited experience. The remainder (n=2) reported they were specialising in the placement of persons with visual disabilities. Four of the SRAs were themselves persons living with a disability.

Twelve SRAs mentioned they only provided services to private companies, while the rest stated that they were providing services to both private companies and government departments. The SRAs used various strategies to recruit or source candidates to be placed in advertised job positions. This included word of mouth (n=7); social media platforms (n=5) such as WhatsApp™ and Facebook; contacting disability rights groups (n=5); and posting advertisements in newspapers (n=4). The most popular (albeit least effective) method mentioned was making contact with schools (n=15) and requesting information of matriculants. The SRAs held different professional job titles, with the most frequently mentioned title being recruitment officer (n=5) (Table 4.10). The recruitment agencies were mostly identified as privately-owned companies (n=16), five were non-profit organisations (NPOs), and four were Disabled Persons' Organisations (DPOs). Nine of the SRAs were not part of a professional body, while three were members of APSO (African Professional Staffing Organisations), and one a member of SABPP (South African Board for People Practice). Being an SRA does not emanate from a professional qualification, and therefore the SRAs presented with varying qualifications. Twenty-two of the SRAs had a post-Matric qualification.

The SRAs differed in years of experience and their years of operation ranged from one year to 38 years. Seven SRAs had ten years and more of professional experience in the field of disability employment services. The SRAs mainly operated in urban metropoles, that is, Johannesburg and Pretoria (n=13), Durban (n=11), and Cape Town (n=9) and they mostly sourced the job candidates from township areas and surrounding towns. It is important to note that one SRA might be employed by a recruitment agency with offices in more than one province. Table 4.10 provides a detailed description of the 25 SRAs who participated in the study.

Table 4.10

Profile of Specialised Recruitment Agents Who Participated in the Study (N=25)

Participant	Type of agency	Age	Gender	Race	Educational qualifications	Appointed position /job title	Years of experience	Services provided by SRAs			
								Pre-placement	Job-Placement	Post-placement	Training
SRA 001	Private company	42	Female	Black	Degree	Talent Specialist	15	x		x	X
SRA 002	DPO	55	Female	White	Certificate	Placement and Access Officer	38	x	x	x	X
SRA 003	Private company	42	Female	Black	Honours degree	Wellness Officer	5	x	x		
SRA 004	Private company	27	Female	Black	Honours degree	Recruitment Officer	3	x	x	x	
SRA 005	Private company	36	Female	Coloured	Honours degree	Recruitment Specialist	20	x	x		
SRA 006	Private company	45	Female	White	Diploma	Recruitment Specialist	9	x	x	x	X
SRA 007	Private company	24	Male	White	Honours degree	Recruitment Lead	3	x	x		
SRA 008	Private company	33	Female	White	Diploma	Disability Inclusion Manager	9	x	x		
SRA 009	NPO	36	Female	White	Grade 12/Matric	Recruitment Officer	14	X	x		
SRA 010	NPO	41	Male	Black	Diploma	Recruitment Officer	3	X			
SRA 011	DPO	41	Male	Black	Diploma	General Manager	14	X	x	x	X
SRA 012	DPO	34	Female	White	Certificate	Recruitment Manager	5	X	x	x	X
SRA 013	Private company	39	Female	Black	Diploma	Equity Talent Specialist	10	X	x	x	X

Participant	Type of agency	Age	Gender	Race	Educational qualifications	Appointed position /job title	Years of experience	Services provided by SRAs			
								Pre-placement	Job-Placement	Post-placement	Training
SRA 014	NPO	48	Male	Black	Honours degree	Employment Equity Specialist	5	x	x	x	X
SRA 015	Private company	54	Female	White	Diploma	Disability and Diversity Consultant	4	x	x	x	X
SRA 016	Private company	32	Male	White	Grade 12/Matric	Recruitment Coordinator	1	x			
SRA 017	NPO	30	Male	White	Grade 12/Matric	Recruitment Officer	2	x			
SRA 018	DPO	27	Male	Black	Diploma	Recruitment Officer	1	x	x		
SRA 019	Private company	34	Female	Black	Diploma	Recruitment officer	5	x	x		
SRA 020	Private company	34	Female	Indian	Diploma	Disability and Diversity Consultant	5	x	x	x	
SRA 021	Private company	32	Female	White	Diploma	Recruitment Specialist	4	x	x	x	X
SRA 022	Private company	37	Females	Black	Degree	Talent Acquisition Officer	14	x	x	x	
SRA 023	Private company	33	Male	Black	Certificate	Talent Manager	7	x	x		
SRA 024	Private company	44	Female	Black	Diploma	Recruitment Consultant	4	x	x	x	
SRA 025	NPO	31	Female	Black	Diploma	Talent Acquisition Specialist	5	x	x	x	
						Total		*n=25*	*n=21*	*n=14*	*n=9*

Note. Eight SRAs from the 25 offered services in all placement stages.

The placement process is presented according to four placement stages that were developed based on the reviewed literature (Agustina et al., 2019; Daniel et al., 2014) and details provided by the SRAs. The four stages of placement are pre-placement (recruitment); job placement (actual placement in a job position); post-placement (support offered following a placement); and training (to support integration of persons with disabilities in organisations). In the analysis these four stages are described in relation to the domains of the ICF.

Not all SRAs who participated in the study offered services in all four stages. An indication of the SRAs who provided services in the different placement stages is provided in Table 4.10. A total of eight of the SRAs provided services in all four placement stages. All 25 SRAs offered services in the pre-placement stage (conducting recruitments), 21 in the job placement stage, and 14 in the post-employment stage. Nine SRAs provided services in the training stage only.

4.8.2. *Phase 2: Material Development*

The development of the WhatsApp™ interview questions and schedule are described in the sections below.

4.8.2.1. Development of Telephonic Semi-Structured Interview Questions for SRAs. The interview questions were adapted from two studies investigating the roles and services provided by SRAs in a LMIC (Kulkarni & Kote, 2014; Kulkarni & Scullion, 2015). Further questions added were guided by data from scoping review by Morwane et al. (2021). Furthermore, as suggested by Dillman et al. (2009) the questions were structured according to the conceptual framework (ICF), which guided the development of the questions. Careful consideration was made on the number of questions asked, the use of understandable terms and language, avoidance of double-barrelled questions, as well as following and ensuring the correct use of language (Dillman et al., 2009).

The interview questions for the three phases of this study were first developed on a Microsoft™ Word document and submitted for review to the study supervisor who made suggestions and comments on the questions. Once the questions had been reviewed and changes had been implemented as recommended, the telephonic questions were embedded in the

Qualtrics[TM] web-based survey software. The software was used to create a uniform outline of the questions and allow the members of the review panel ease of use when they reviewed the questions. Furthermore, the software allowed the researcher to capture biographical information in the software for analysis and record keeping. Qualtrics[TM] software has been used successfully by professionals, and positive experiences have been reported (van Niekerk et al., 2019). More so, it allows the easy completion of questions on a personal computer, laptop, or mobile phone. The questions were first pre-tested by review Panel B and then a pilot study was conducted.

4.8.2.2. Review Panel of Telephonic Semi-Structured Interview Questions for Phase 2. After the development and final approval by the study supervisor of the telephonic interview questions, the finalised questions were emailed for review by the reviewer Panel B. The inclusion criterion for Panel B participants was that they should have extensive knowledge in the field of severe disability, this includes issues related to the employment of individuals with disability. As in Phase 1, a group of PhD students who were all registered for research projects related to severe communication disability (i.e., registered PhD in AAC or severe disability) and who were practitioners in the field of severe disability also participated in Phase 2. They were approached to review the telephonic interview questions, as it was deduced that they possessed extensive knowledge on the topic under investigation and that they were acquainted with the conceptual underpinning of the interview questions (Grant & Booth, 2009).

The review panel members were sent information via Qualtrics[TM], letters with detail about the aim of the study). From a class of 15, ten PhD students responded favourably to the invitation to review the telephonic interview questions. The ten review panel members comprised of six speech-language therapists, two psychologists, an occupational therapist, a teacher, and an audiologist. Review panel members could provide consent on Qualtrics. They were requested to review the four sections of the questionnaire and comment on the relevance, clarity and conciseness of the questions as recommended by DeVellis (2016) (see Appendix L).

The four sections included questions related to biographic information (Section 1), the profile of the SRAs and the services they provide to employers and candidates with disabilities (Section 2), as well as questions related to barriers and facilitators to the employment of persons with severe communication disabilities (Section 3). In addition, the questions related to the

placement process followed by SRAs were reviewed and finally, the hypothetical case study (that included an individual with a severe communication disability) and follow-up questions were reviewed (Section 4).

Feedback obtained from Reviewer Panel B was considered and changes were implemented as recommended. Detailed information on the aims, procedures followed, feedback provided, and changes implemented is provided in Table 4.11.

Table 4.11

Phase 2: Review Panel B Feedback on the Telephonic Semi-Structured Interview Questions

Aim	Procedures followed	Feedback/Recommendations	Changes implemented
To determine the content validity of the survey instrument in relation to the objective of the study	Participants were provided with information on the conceptual underpinning of the study and requested to comment on the validity of the questions. The participants therefore had to comment on whether questions were related to barriers or facilitators of employment for persons with disabilities.	Recommendations were made about the inclusion of questions related to facilitators of employment for persons with disabilities.	The recommendations were discussed with the study supervisor and literature was revisited in order to review the questions as follows: • *What specific activities do you think would help a person with disability to secure employment?* • *What do you think are facilitators or things that enable the employment of persons with disabilities?*
To determine the conciseness and clarity of questions	Participants were requested to rate every question for clarity and conciseness.	Minor recommendations were made, such as rephrasing and making minor grammatical adjustments. The addition of examples to some questions was also suggested.	The recommended questions were rephrased, and examples were added to enhance understanding.
To determine the length and complexity of questions	Participants were requested to complete the survey and provide feedback on the length and ease of comprehension of the questions.	The length of the telephonic interview questions was reported to be of appropriate length, even with the addition of the biographical information section.	No changes were made after the expert panel review.
To make recommendations for the addition of new questions	Participants were requested to make recommendations about questions that could be vital in answering the research question.	Recommendations were made for the inclusion of items related to facilitators of employment for persons with disabilities.	The recommendations were discussed with the study supervisor and literature was revisited in order to review the questions included.
To eliminate irrelevant questions	Participants were requested to eliminate questions that did not contribute to answering the research question.	No questions were eliminated	No changes were made after the expert panel review.

4.8.2.3. Pilot Testing of Telephonic Semi-Structured Interview Questions. Pilot testing of the telephonic interview was conducted by two SRAs following the SRAs. The inclusion criteria followed were similar to the criteria for selecting SRAs in the study as outlined in Section 4.8.2.3. The aim of the pilot study was to determine the feasibility of the questions as well as the appropriateness and relevance of the question items, and to put to trial the proposed data collection and data analysis procedures (Khothari, 2004). The pilot interview questionnaire that was provided to the participants consisted of four sections with a total of 45 questions. The four sections were divided similar to the reviewed questions in the previous section, that is, Section 1 consisted of the biographic questions, Section 2 contained questions for Phase 2a, Section 3 contained questions for Phase 2b, while Section 4 contained questions for Phase 2c. The two SRAs completed the questionnaire sent and made comments upon completion of the questions.

Table 4.12 outlines the aims, procedures, and recommendations from the findings of the pilot study. The SRAs did not make any recommendations and only suggested changes relating to grammar and phrasing of questions to enhance clarity (see Appendix M for pilot questions).

Table 4.12

Phase 2: Aims, Procedures, Findings, and Recommendations of the Pilot Study involving SRAs

Aims	Procedures	Findings	Recommendations
To evaluate the appropriateness of selection criteria for the participants.	Contact was made with SRAs listed on Google. The participants recruited were asked about their experience as SRAs in the field.	An initial inclusion criterion of one year's experience was set. However, the reviewers suggested that the period be reduced to six months, as most agencies hire SRAs who are new in the profession.	After consulting the study supervisors, the inclusion criterion of one year's work experience was changed to six months. The change was made to ensure an adequate number of potential participants.
To ensure the questionnaire items accurately addressed the research questions.	The participants were requested to provide feedback regarding the relevance of the interview questions with regard to the sub-aims of the study.	The participants did not report any questions that were not relevant. Positive feedback was provided in this regard.	No changes were recommended.
To determine the clarity of the interview questions.	The participants were requested to provide feedback on the clarity of the questions by commenting on their comprehensiveness.	It was suggested that Q17 "*What services as a specialised recruitment agency do you offer?*" be rephrased as follows: "*As a specialised recruitment agency, what services do you offer?*" It was also suggested that Q24 "*What specific activities do you think help a person with disability secure employment?*" be rephrased as "*What specific activities do you think would help a person with disability to secure employment?*"	These two questions were amended, and the changes were incorporated in the questionnaire.
To determine the time taken to complete the interview.	Time was set from the beginning of the interview to determine the length of time taken to complete the interview. The participants were also requested to provide feedback on the appropriateness of the length of the interview.	The length of the interview was found to be appropriate; the reviewers were happy that it did not take them more than 60 minutes to complete the interview, given the number of questions.	No changes were made.

Aims	Procedures	Findings	Recommendations
To explore the feasibility of the data collection procedures.	The process followed to receive consent from the participants was trialled. Participants were sent consent forms via email and requested to scan and return the signed forms by email.	The participants suggested that an electronic consent form be created to enable participants to provide consent electronically.	Consent letters and forms were loaded on Qualtrics^{TM} as a hyperlink and an option was provided where the participants could provide consent electronically (by clicking an option that says they consent to participating in the study).
	The data collection process, from recruitment, interview scheduling and conduction of the interview, was trialled.	It was observed that the data collection process would require more time than initially anticipated by the researcher. More time was provided for the participants to answer questions, as two questions were provided per day.	It was recommended that more time be allocated for the data collection process. An added two weeks was subsequently scheduled for data collection.
	To determine the appropriateness of the call recorder and the clarity of the recorded conversation. A call recording app and voice recorder were simultaneously used to record the telephonic interviews and to determine which option provided the more accurate recordings.	It was found that the call recorder depends on an internet connection and does not provide consistent recording of the conversation for an hour. In the second interview, the recording was not clear, and only the researcher's voice was heard. The voice recorder recorded the interview questions appropriately and captured the reviewer on speaker clearly.	It was decided to use an alternative call recording app, and to use the voice recorder for back-up.
To determine the appropriateness of the data analysis procedure.	The process of transferring collected data to a data analysis software program was trialled to determine its suitability for this study.	Data was uploaded to the Atlas.ti8^{TM} software and analysis of responses conducted. The time taken to complete this procedure was recorded, as qualitative data analysis is considered time consuming.	The researcher was advised to seek assistance with the transfer of data to the software, as it was very time consuming.

4.8.3. Phase 2: Materials

This section discusses the material used in Phase 2 of the study. First the material related to the ethics procedure is discussed (i.e., permission and consent material) followed by a discussion on material and equipment related to data collection.

4.8.3.1. Permission Letter to Recruit Participants from Organisations. A permission letter was emailed to request the contact information of potential of SRAs within organisations and disability advocacy groups. The letters were therefore sent to the organisation for employers SAE4D, and disability advocacy groups DPSA, Autism SA, SADA, and GPAPD (see Appendix N).

4.8.3.2. Invitation via Qualtrics[TM]. An automated email (see Appendix O) programmed on Qualtrics[TM] was sent to prospective SRAs. In the email, an information letter was attached which provided details about the purpose of the study, a short description of the research procedures, as well as what would be expected of prospective participants. The software was used to increase the ease with which the SRAs could provide consent.

4.8.3.3. Biographical Questionnaire. The SRAs' background information was captured by the use of a custom-designed biographical questionnaire also distributed via Qualtrics[TM] (see Appendix P). This questionnaire recorded data related to aspects such as working experience, type of employment, support services offered, provinces in which they have offices, where candidates are recruited from, as well as the organisation or company they are part of.

4.8.3.4. Hypothetical Case Study. A hypothetical case study was developed for Phase 2c of the study (see Appendix Q). The case study and the questions pertaining to it were read to the SRAs during the telephonic interview. This hypothetical case study was based on an individual with a severe communication disability who was seeking for employment and thus approaches the SRAs. The aim of the hypothetical case study was to elucidate the possible accommodations that will be required by the candidate and thereby highlighting barriers and facilitators to a successful placement in employment.

The development of the hypothetical case study was guided by the ICF. This was with the intention that the components (e.g., qualification of the candidate, and impairment in speech) of the case study be linked to the factors in the domains of the ICF (i.e., body structure and function, activity and participation, and contextual factors). As highlighted in Chapter 2, the ICF has been recommended as a suitable tool for use by SRAs during placement of candidates in employment (Homa, 2007; Momsen et al., 2019; Southwick & Grizzell, 2020).

4.8.3.5. **Telephonic Semi-Structured Interview Questions.** The telephonic interview questions were developed to include questions related to the subsections of Phase 2 (see Appendix R). The development of the interview question development were guided by two studies based on the roles and services provided by SRAs in a LMIC (i.e., India which similar to SA is classified as an upper-middle income country) (Kulkarni & Kote, 2014; Kulkarni & Scullion, 2015). However, none of the questions derived from the studies as all questions were newly developed.

From the final telephonic semi-structured interview questions (Table 4.13), 11 questions (Q22-Q31) were related to Phase 2a, five questions (Q17-Q21) were related to Phase 2b, while two questions (Q33 and Q34) were related to Phase 2c of the study.

Table 4.13

Phase 2: Telephonic Semi-Structured Interview Questions for Unemployed and Employed Participants

Interview question	Justification for Inclusion
Phase 2a: Barriers to and facilitators of employment (Questions 22-31)	
Q22. What do you think are the barriers or challenges faced by persons with disabilities in finding employment? (e.g., lack of education, lack of support, etc.) Q23. What do you think are facilitators or things that enable the employment of persons with disabilities? (e.g., availability of policy and guidelines, government initiatives, etc. Q24. What specific activities do you think would help a person with disability secure employment? (e.g., attending training workshops, undergoing vocation training or job preparation training, being exposed to in-job training, etc.) Q25. What employment opportunities (type of jobs) are mainly available for persons with disabilities? Q26. What are the challenges of finding employment for different types of disabilities? (e.g., persons with ASD vs persons with CP) Q27. What accommodations have you requested for a person with a disability you placed in employment? (e.g., purchase of assistive technology, physical adaptations, printing documents in Braille) You may state the type of disability you requested accommodations for. Q28. What advice would you give to youth with disabilities preparing to transition from school to work? Q29. What advice would you give to a professional who is helping persons with disabilities to be employed? Q30. What do you think employers could do to respond better disability employment issues? Q31. What do you think government could do different to improve disability employment issues?	The questions were reviewed for their relevance to answering questions based on facilitators of participation in employment. The questions were therefore selected based on their relevance to answering the main research question. The researcher focused on questions related to facilitators rather than barriers. Studies report more on barriers than facilitators (Lindsay, 2011; Lindsay, McDougall, Menna-Dack, et al., 2015; Morwane et al., 2021).

Interview question	Justification for Inclusion
Phase 2c: Roles of specialised recruitment agents (Questions 17-21)	
Q17. What services as a specialised recruitment agency do you offer? (e.g., recruitment, job training, job placement, employer training, etc.? Q18. What services do you provide to a person with a disability who is already placed in employment? Q19.What are the steps you take to recruit someone with a disability? (e.g., do you contact schools you work with, databases searched, etc.) Q20. What support do you offer a person with a disability seeking employment and approaching your agency for the first time? (e.g., CV preparation, interview preparation, etc.) Q21. What service and support do you provide to potential employers seeking to employ a person with a disability?	The questions were selected as they provide information on the services provided by SRAs in the SA context. The questions therefore answer the questions of roles assumed by SRAs in the successful placement of individuals with severe communication disabilities. In previous studies, a description of the current practices of SRAs provided an indication of the roles of SRAs (Kulkarni & Kote, 2014; Kulkarni & Scullion, 2015).
Phase 2b: Placement process followed by specialised recruitment agents	
Q33. I would like you to think about clients you see on a regular basis in your office when answering the questions, i am going to ask you. Kindly let me know what are the steps you take to recruit and place a person with a disability in employment? Probe 1: Please start with the recruitment process, interview, and then placement. Probe 2: What are the strategies of support that you offered that worked or did not work? Q34. I am going to ask you what you think should be the steps one should take in order to recruit and place a person with a disability from a hypothetical case study I am going to read to you now. Just like the previous question, please start with the recruitment process, interview, and then placement.	Question 33 was included with the aim of determining the steps taken to during placement a candidate with various types of disabilities. Thereafter question 34, aimed to specifically focus on an individual with a severe communication disability. The components of the hypothetical case study highlight possible barriers and facilitators to being placed in a job position.

Interview question	Justification for Inclusion
Concluding question (after Phase2a and 2b sub-section) (Question 32)	
Q32. Is there any other information you would like to add?	This question provided the SRAs with an opportunity to highlight key issues that may have not been asked in the interview. It also provided an opportunity for the research to attain further information regarding the phenomena under study. Furthermore, the researcher used this question for member checking.

4.8.4. Phase 2: Equipment

4.8.4.1. Qualtrics™. Qualtrics is a survey development software which was used to design the flow of the interview questions. The software was further used for the piloting of the interview questions and capturing of biographic information provided by the SRAs in the main study. The software also provided the SRAs with an opportunity to preview the questions on request. The consent procedure was also completed via Qualtrics™.

4.8.4.2. Samsung Smartphone. This cellular phone was used to conduct the telephonic interviews with the SRAs. The device also allowed for a call recording app which recorded the conversations between the researcher and the participants by using a call recording application installed on the device. These recordings were transferred to a OneDrive™ folder and stored securely.

4.8.4.3. Olympus DM-650™ Digital Voice Recorder. A digital voice recorder was used as a back up to record the telephonic interviews. This was due to the voice recorder's ability to record voices clearly despite any bad connection or presence of background noise. The recordings for each participant are stored as single file and it is easy to transfer to a OneDrive folder where they were stored securely.

4.8.4.4. Atlas.ti8™ . Similar to Phase 1, qualitative data from Phase 2 were analysed using the qualitative analysis software Atlas.ti8™

4.8.5. Phase 2: Data Collection

The telephonic interview questions were divided according to the three subsections of Phase 2. Telephonic semi-structured interviews were conducted in Phase 2 of the study. SRAs were able to complete their interviews in a single sitting at a specified time. The telephonic interviews were therefore synchronous.

Traditionally, interviews in qualitative studies are conducted face-to-face (Creswell & Poth, 2016) Such a direct encounter allows the researcher to build rapport and obtain richer data

(Flick, 2018). In face-to-face interviews, the researcher is also able to observe and gather body language and cues from participants, which enables them to prompt and adjust questions as required. For this reason, telephonic interviews are criticised for lacking contextual information and opportunity to probe, interpret and yield data (Trier-Bieniek, 2012). However, previous research studies reported no evidence that face-to-face interviews resulted in more reliable data than telephonic interviews (Farooq & de Villiers, 2017; Novick, 2008; Vogl, 2013). These studies further shows more benefits of utilising telephonic interviews such as minimised traveling and related costs, while ensuring safety, privacy and confidentiality (Farooq & de Villiers, 2017; Novick, 2008; Vogl, 2013).

Businesses such as recruitment agencies use numerous options for communication such as telephone communication, emailing, social media, and text messages. Although telephonic communication is considered slow and outdated compared to the use of newer media such as Zoom™, Skype™ and WhatsApp™, it is still considered a more personal manner to engage with clients (Donohue, 2020). The presence of the human voice adds a personal element to the conversation; furthermore, cues such as uneasiness or friendliness are easily picked up from a telephonic conversation (Sime, 2019). In the South African context, businesses still utilise telephonic communication and consider this medium an important business component. This is due to the telephone's benefits in connecting the client to a human voice and the potential for queries and concerns to be resolved during a single conversation at a much quicker turnaround time (Donohue, 2020; Sime, 2019). Since the SRAs connect with clients on a daily basis in their business using telephonic communication, it was assumed they would not have any concerns about being interviewed over the telephone.

Before commencing with the telephonic semi-structured interviews, SRAs were asked to respond to their willingness to participate by providing consent on Qualtrics™ . They also provided biographic information in this manner. Appointments were sent via Google™ calendar and interviews were conducted only telephonically. The participants were asked to be in a secluded space so as to avoid any form of interruption. The researcher was positioned in a boardroom and made calls telephonically using a Samsung cellular phone.

The call was placed on speaker to allow backup recording on an Olympus DM-650TM digital voice recorder to occur. Both environments (i.e., the researcher and participant) were therefore secluded and allowed for private telephonic conversations to occur. Prior to starting any audio-recording, permission was sought from the participants. Participants were further informed that their personal information would not be recorded on the transcripts and that codes would be used as identifiers. Also, participants were informed of their right to skip any questions that they perceived as uncomfortable to answer. Prior to the interview they were asked to complete biographical information on Qualtrics^{TM}.

After completion of the interview questions in Phase 1, the participants then answered questions related to what they think hinders and facilitates employment of persons with disabilities (Phase 2a) and thereafter, the placement process followed during the placement of a candidate.

Phase 2a involved the collection of data related barriers and facilitators of employment of persons with severe communication disabilities. The SRAs were interviewed for a period of 40 minutes, which included the time taken to answer questions related to the biographical information. In the last 15-20 minutes, the participants answered questions related to Phase 2b where they were requested to provide information on the process followed during the placement in employment of a candidate with a disability. This information included a step-by-step description from the point of recruitment to the final stage of being placed in a job. This information was not specific to a type of disability and was therefore generalised to all candidates with disabilities who approached the SRAs for placement services. Next, all the SRAs (whether they had previously supported an individual with a severe communication disability or not) were provided with a written hypothetical case study. As in the previous question, the SRAs were asked to describe a detailed step-by-step process they would follow from the recruitment to the successful placement of the candidate. In the description, they were asked to outline strategies that would aided her successful placement, such as various supports provided to both the potential employer and the candidate.

After every section, a review of the responses was conducted, in the form of a transcript review, and participants were asked to verify the accuracy of the information they had provided. At the end of the interview, participants were thanked and informed that they would receive communication from the researcher should any further information be required.

4.9. Trustworthiness

Studies that adopt a qualitative case study design are often criticised for lacking credibility and scientific rigour since (as in the case of this study) findings are based on the analysis and interpretation of the researcher (Yin, 2009). However, certain steps can be taken to ensure the trustworthiness (i.e., rigor) of a study, thereby enhancing the degree of confidence in the data, the analysis, and methods employed to ensure the quality of a study (Connelly, 2016; Creswell & Poth, 2016). In this study, a full description of the data collection and analysis procedures is provided as a final research report in order to enable readers to gain an understanding of how the data was collected and processed. This also ensures that findings are not viewed as a mere collection and description of the researcher's personal opinions (Morrow, 2005; Shenton, 2004). Multiple aspects have therefore purposefully been described in detail in this study to allow replication to occur to a reasonable extent.

There are four main strategies reported by Lincoln and Guba (1985), that can be implemented to ensure the trustworthiness of a study. These strategies include credibility, transferability, dependability, confirmability, and authenticity (Houghton et al., 2013; Kyngäs et al., 2020). The strategies were ensured in all three phases of the study.

4.9.1. Credibility

According to Lincoln and Guba (1985), credibility is one of the most crucial factors in establishing trustworthiness. Credibility refers to the confidence that is placed in the findings of the study and is comparable to internal validity in quantitative research (Yin, 2013). The manner in which credibility as ensured in the study is described in-depth in Table 4.14.

Table 4.14

Techniques Used to Ensure Credibility in the Current Study

Technique employed to ensure credibility	Description of technique in the current study
Participants selected and sampling strategy used (Houghton et al., 2013)	Purposive and expert sampling was used in the study to ensure representation of participants that are knowledgeable in the research area investigated (Bryman, 2012; Kumar, 2011). Participants included persons with severe communication disabilities who were employed as well as unemployed. They provided information based on their lived experiences. This therefore meant they presented with sufficient knowledge about the subject matter (Prosek & Gibson, 2021). The study aimed to determine the processes followed by currently practising SRAs who had extensive knowledge of the recruitment and placement of persons with disabilities. Due to the high volumes of clients, they interact with, even professionals who had only for a short period been appointed as SRAs were well versed in the research area investigated.
The use of established data collection and analysis methods (Elo et al., 2014)	Semi-structured interviews were employed to collect data in the study - a method frequently used in qualitative studies (Creswell & Poth, 2016). More importantly, a suitable qualitative data analysis method, content analysis was used with a semi-structured method to analyse data from the semi-structured interviews. The established step-by step process followed an inductive and deductive analysis ensured credibility in the interpretation of data (Azungah, 2018; Elo & Kyngäs, 2008).
Use of a second coder (Connelly, 2016)	Interrater reliability is an important component for validity (Eagan et al., 2020; McAlister et al., 2017).Data was checked by a second coder to ensure it had been recorded and analysed consistently and accurately. Thirty per cent (30%) of interview transcripts were independently coded by a second coder to reduce investigator bias as well as to ensure consistency of the coding procedure. Codes independently decided by the researcher were also independently checked by the second rater.
Member checking (Yin, 2013)	Member checking was conducted to ensure the accuracy of responses recorded (Dandridge, 2004; Flick, 2018). During the semi-structured interviews, the researcher requested clarification of the information provided by asking participants to elaborate or expand on the responses provided. Before commencing with the questions, the researcher clarified the information provided and requested the participants to confirm the accuracy of responses.
Expert and peer scrutiny of the research study (Morrow, 2005)	The coding process was reviewed by the second rater and study supervisor. The second rater independently trialled two transcripts in the different phases in order to review the codes developed. She compared her codes and the codes of the researcher. Both the researcher and second rater had experience of data analysis in previous research projects where they had worked together. The data collection instruments in this study underwent a reviewing process which included cognitive interviewing and piloting.
The use of an interview schedule (Kyngäs et al., 2020)	An interview schedule was developed to provide detailed steps in the interview process (Elo et al., 2014). This guided the researcher in collecting data in a consistent manner though with some flexibility.
Debriefing session with study supervisor (Amankwaa, 2016)	Bi-monthly meeting with the study supervisor were held to discuss various areas of the research project. This included discussion of the data collection and analysis procedures. The study supervisor who is an expert in the field of study and an established researcher guided the process by constantly reviewing the project.

4.9.2. *Transferability*

Transferability refers to the extent to which findings can be applied to other contexts and situations and is related to external validity in quantitative research (Barbour, 2018). In qualitative research, participants represent a small number of representatives of a particular group (Creswell, 2014). Since the findings are indicative of a particular population and context, it is not possible to make generalisations (Walby, 2015). However, in order to allow the study to be replicated in another context, transferability was ensured (Creswell & Poth, 2016). The manner in which transferability was ensured in the study is described in Table 4.15.

Table 4.15

Techniques Used to Ensure Transferability in the Current Study

Technique employed to ensure transferability	Description of technique in the current study
Thick description of the research process (Shenton, 2004b)	A detailed description of the research process was provided in order to allow future replication of the study in other contexts (Schreier, 2018). This included a thick description of the participants in the study, context of the study, as well as the data collection and analysis methods used. This was conducted with the aim of creating confidence in the study being conducted in other contexts (Prosek & Gibson, 2021).
Thick description of participants used in the study (Connelly, 2016)	A detailed profile of the persons with severe communication disabilities and the SRAs were provided in order to describe their specific characteristics relevant to the purpose of the study. This includes their qualifications, area in which they reside and how it impacts on access to or/and provision of crucial services.
Thick description of the study context (Houghton et al., 2013)	A description of the South African context was provided to emphasise on the current factors that are facilitating or hindering to participating in the labour market.
Thick description of data collection procedures (Amankwaa, 2016)	The procedure follow in the data collection process was described in detail. This included a description from ethics approval, recruitment strategy to the conduction of interviews in each phase. Furthermore, the order and manner in which data was collected (through the use of an interview schedule) were also described in each phase. In the discussion of the procedures, the data collection methods and tools were also described and their reason for selection in this study provided.
Thick description of data analysis procedures (Kyngäs et al., 2020)	A step-by-step description of the analysis process was provided. Content analysis approaches used that is inductive and deductive analysis follow a systematic process, this therefore provided a description of the data analysis process in each phase of the study.

4.9.3. Dependability

Dependability refers to whether the same results would be obtained if the same study were to be repeated, using the same data collection methods and participants (Dandridge, 2004). Dependability therefore refers to issues of reliability (Yin, 2009). Table 4.16 provides a description of the techniques employed in the current study to ensure dependability.

Table 4.16

Techniques Used to Ensure Dependability in the Current Study

Technique employed to ensure dependability	Description of technique in the current study
Reflective appraisal of the project (Houghton et al., 2013)	Full reflection on the research methods employed in the different phases data collection methods and analysis procedure was conducted. The reflection and challenges encountered in the research process are delineated in the limitations chapter.
The operational detail of data gathering (Shenton, 2004)	A detailed description of what was done during the field work is provided in in the study. This included the indication of the time taken to collect data, period of data collection, and schedules related to data collection planning.
Audit trail (Connelly, 2016)	The researcher kept record of the decision made throughout the research process. These outlined the rationale for selection of research design, methodology and organisation of findings. The audit trail therefore added rigour to the research process as it provides readers to discern how conclusions were made (Houghton et al., 2013)
Enquiry audits (Amankwaa, 2016)	Inquiry audits were conducted by having researchers who are not part of the study examine the process and the findings. PhD students who were part of the same programme as the researcher audited various section of the thesis through online class discussions (every two months) and face-to-face classes (twice a year). The purpose of an inquiry audits is to determine whether or not the findings of the study, interpretations made and conclusions are supported by the data (Elo et al., 2014).

4.9.4. Confirmability

Confirmability refers to the researcher's ability to be objective when collecting and analysing data (Creswell, 2014). In order to ensure the confirmability of the study, the researcher has to ensure that findings are as far as possible based on the participants' responses rather than

on her interpretation, which may be flawed by biases and preferences (Creswell & Poth, 2016). The manner in which conformability was ensured in the study is described in Table 4.17.

Table 4.17

Techniques Used to Ensure Confirmability in the Current Study

Technique employed to ensure confirmability	Description of technique in the current study
Reflexivity (Morrow, 2005)	Reflexivity refers to refers to researchers' continuous introspection about their position in the study and what they stand to gain from conducting the study (Bhavnani et al., 2014). In this study, the researcher constantly examined the impact of her own professional background as a SLT, her life experiences, assumptions about the phenomenon investigated and how these affected her research practices with regard to data collection, analysis and interpretation. It was vital to understand that the researcher's stance, based on her experience of interacting with both youth with disabilities and various practitioners, could well result in biased interpretation of findings and therefore inaccurate conclusions (Palaganas et al., 2017).
Methodological description (Shenton, 2004)	Once again, a description of the research process (including data collection and analysis) as well as an audit trail was provided. This ensures the reader follows the step-by-step process followed and understands why certain decisions were made and how procedures were followed (Kyngäs et al., 2020)

4.10. Data Analysis Procedures

The data analysis procedures for all three phases of the study are described in this section.

4.10.1. Quantitative Data Analysis

The quantitative data which included the biographic information and close ended questions from Phase 1 and 2a were entered into Qualtrics™. This was conducted to allow for easy retrieval of data regarding the participants.

4.10.2. Qualitative Data Analysis

Data was collected using qualitative approaches and the meaning derived from the data was guided by a strict protocol to ensure rigour and consistency (Elo et al., 2014). A deductive and inductive approach to content analysis was followed in the study. Deductive analysis was employed in Phase 1 and 2a of the study, while inductive analysis was employed for Phase 2b and 2c of the study. Each approach to data analysis will be described in this section by following three stages of content analysis process as described by Elo and Kyngäs (2008). First, data from Phase 1 was analysed (i.e., the preparation stage), then Phase 2a (i.e., the organization stage) , and lastly Phase 2b and 2c (i.e., the reporting stage).

4.10.2.1.   **Preparation Stage.** This stage involved getting to know the data. Data transcription is considered an important step in qualitative data analysis (Flick, 2014). To begin the process, the researcher conducted the transcription herself and the second rater checked the transcriptions for accuracy. Important to note that the second rater signed a non-disclosure agreement form prior to transcribing the interviews (see Appendix S). The interview responses (i.e., WhatsApp^{TM} chats) were exported, and transferred to a Microsoft Word^{TM} document, and then prepared to be uploaded to a software program, Atlas.ti8^{TM}. The software was used for qualitative data analysis (Friese et al., 2018). As the researcher collected the data herself and therefore had the opportunity to actively engage with the data. The engagement with the data provided the researcher with a glimpse of the categories which were emerging in relation to factors reported as barriers to or facilitators of participation in employment. The preparation phase follows the same process for both deductive and indictive data analysis.

4.10.2.2.   **Organisation Stage.** The organization stage involves the coding process. The process will be discussed individually for each approach to content analysis.

4.10.2.2.1.   *Deductive Content Analysis.* Data analysis for Phase 1 and 2a was analysed deductively. This means that coding was based on pre-existing theory, in the case of this study, the ICF. In this stage the researcher and second rater and developed priori categories based on the ICF. Currently core set and code set exist for various types of disabilities to guide intervention. For example, priori categories in the body function and body structure, activity and limitation, and

environmental factors were based on existing categories linked to vocational rehabilitation. The core set list was accessed from the ICF core manual for clinical practice (Cieza et al, 2020).

Coding was conducted firstly, by the researcher herself, and secondly by the second rater. They trialled the coding process by independently coding two randomly selected transcripts from Phase 1 (EPWD 024) and 2a (SRA 024) of the study. The identified codes were therefore linked to the corresponding ICF classification code. The linking process followed the linking rules as outlined by Cieza et al. (2019). No acronyms in the form of keycodes were used. Codes not classified were written in full (e.g., health condition, and personal factor).

An example of the deductive analysis process is outlined in Table 4.18. The codes identified were coded for existence and not for frequency (i.e., how many times a specific code is mentioned by a participant). Each code was coded once as mentioned by one participant. The frequency however was counted on a specific code's existence in the entire data (N=25) to determine whether this code is either a major facilitator or barrier.

Table 4.18

Phase 1 and 2a: Deductive Content Analysis Process

Phase of the study	Interview Question	Transcript (participant response)	Code identified	ICF Second Level Classification	Domain of the ICF
Phase 1 ***Participant code EPWD 024***	What do you think will help people with disabilities find jobs?	*"Support and training on how to get the job that can accommodate my disability."*	Employment seeking support	d 845 Acquiring, keeping and terminating employment	Activity and participation domain
Phase 2a ***Participant* code SRA 024**	What do you think are facilitators or things that enable the employment of persons with disabilities?	Persons with disabilities who have educational qualifications are easily placed. It happens if they have undergone vocational training and receive work preparation training.	1. Post-school education 2. Vocational training 3. Work preparation training	d 820 School education d 825 Vocational training d 840 Apprenticeship (work preparation)	Activity and participation domain Personal factor (Qualifications or vocational skills)

4.10.2.2.2. ***Inductive Content Analysis.*** The data analysis approach for Phase 2b and 2c was conducted inductively. The data from the two subsections was analysed to determine the following, i) the placement process followed by SRAs, which provided details on the services provided by SRAs in the different placement stages, ii) the roles assumed by SRAs in order for placement to be successful, and finally iii) the components of the placement process described using the ICF.

Similar to the previous phase, the coding was conducted by two coders, firstly by the researcher herself, and secondly by a second rater. The two coders sat down together prior to commencing with the analysis of data to discuss the coding process. Coding was conducted in batches independently by each coder. To begin the process, an open coding process was employed which involved systematic analysis of data as codes are derived from the raw data (that is, concepts identified were labelled and defined) (Elo et al., 2014). At the end of the open coding process, a coding list was generated.

The researcher's supervisor acted as the reviewer of the coding process and provided feedback regarding the coding list. At the end of the coding of each phase of the study, the researcher and second rater convened to discuss the disagreements. The coding list was subsequently reviewed, and redundant codes were deleted. The second step involved categorisation. Connections between the codes was made and codes with similar meaning were categorised to form generic codes. To further condense the categories to determine main categories, these generic categories were grouped according to commonality of issues addressed (i.e., abstraction process) (Elo et al., 2014). Finally, these main categories were reviewed to determine whether they captured the concepts highlighted in the data and have relevance in terms of answering the research question.

i)   Phase 2b: Placement process coding procedure

The placement process followed by SRAs for candidates with diverse disabilities were coded following the inductive analysis process described. In order to determine the steps followed, four stages of employment were derived from the literature (Agustina et al., 2019; Daniel et al., 2014). The stages were developed to guide the process, but the final definition of each employment
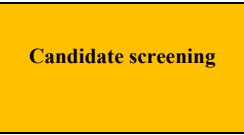
stage was based on the definition derived from the data (i.e., based on data provided by the SRAs). The four stages consisted firstly of the pre-placement stage, where sourcing or recruitment of clients occurs. The second stage, the job-placement stage, included services provided post recruitment such as being placed in a job position. The third stage, the post-employment stage, involved services offered following placement in a job position. The fourth and final stage, the training stage, involved services provided to support the integration of persons with disabilities in organisations such as provision of disability awareness training.

The coding process for the step-by-step placement process described for the hypothetical case study was coded in a similar manner as outlined in Table 4.19 (i.e., inductively). Following that coding of the placement process, the information gathered, and strategies employed during the placement process of the candidate in the hypothetical case study was also inductively analysed. The codes developed for the information gathered and strategies employed were therefore linked to the second level classification categories of the ICF. The two coders coded two transcripts together in order to trial the analysis of the components.

The linking process of the findings obtained in the placement process followed a deductive approach. For example, in the beginning stage, which is the pre-placement stage, some of the information gathered included information related to accommodations required such as a communication device and transportation to the workplace. These accommodations correspond to the ICF categories classified under the environmental factors (contextual factors domain), assistive technology for communication and transportation services. Table 4.20 provides a description of the coding process followed when linking the components of the placement process to the categories of the domains of the ICF.

Table 4.19

Phase 2b: Inductive Content Analysis Process

Interview Question	Transcription	Open coding	Categorisation	Abstraction
	Responses to questions	*Codes*	*Categories*	*Main category*
33.1. Kindly let me know what are the steps you take to recruit and place a person with a disability in employment?	*"Provide on-on-one interview with the candidate: assess communication skills"* SRA 008 *"They answer questions about their challenges and accommodations they require"* SRA 004	**Conduct candidate screening** **Determine need for reasonable**	**Candidate screening**	**Job placement stage**
	"Candidates are taken through a mock interview" SRA 012 *"Prepare them beforehand for the job interview, discuss about things they should say and not say"* SRA 006	**Conduct mock interview** **Preparation for main interview**	**Interview prepartion**	
	"Once completed job advertisements are sent to them ... and we help them decide on a suitable one" SRA 015 *"The candidate's CV and skills are matched to a job position"* SRA 014	**Support job selection process** **Match person with disability to job position**	**Job match**	

Note. Coding process followed for Phase 2b, was described according to the placement stages.

Table 4.20

Phase 2b: Linking Process Followed in the Hypothetical Case Study

Interview question	Transcript	Linking process (Deductive)			
Job placement stage					
	Responses from the participant	**Information gathered**	**Facilitating strategy used**	**ICF second level classification categories**	**Domain of the ICF**
34. I am going to ask you what you think should be the steps one should take in order to recruit and place a person with a disability from a hypothetical case study I am going to read to you now. Just like the previous question, please start with the recruitment process, interview, and then placement.	*"I would ask if she needed accommodations, but she already has her iPad to use for communication and will be provided with her own work on a computer"* SRA 006	Determine availability of Assistive technology	- Ensuring availability of own communication device - Ensuring availability of computer for working	e 120 Assistive technology for mobility e 125 Assistive technology for communication e 135 Assistive technology for employment	Environmental factors (Contextual factor domain)
	"After the interview preparation, we ask whether the candidate knows how to get to work, sometimes we can assist, other times, the companies provide the candidates with transport" SRA 011	Ensure availability of transport to the workplace	-Organising shuttle/transport to/from work - Inform about transportation available to work -ensuring candidate knows how to get to work independently	d 470 using transportation e 540 transport services	Environmental factors (Contextual factors domain)

ii) Phase 2b: Services and roles of SRAs coding procedure

The SRAs were asked to report on services they provided to both employers and candidates with disabilities. The activities and tasks reported were coded, and codes which had similar meaning were categorised together. The categories provided a list of broad services (see Appendix T). Finally, based on the list of broad services, the services which had a commonality in function were grouped together and main categories formed (e.g., consultation role). These main categories depicted roles of SRAs.

Table 4.21 details the coding process followed in to determine roles of SRAs.

Table 4.21

Phase 2c: Inductive Content Analysis Process

Interview Question	Transcription	Open coding	Categorisation	Abstraction
	Response from participants	*Codes*	*Categories*	*Main category*
17. What services as a specialised recruitment agency do you offer?	*"Provide on the job coaching"* SRA 013 *"we provide extra support in equipment training"* SRA 004	Support in completing a job task Support in the use of assistive technology	On the-job-support	
	"We provide work readiness programme" SRA 005 *"Provide support for 2 weeks to settle in"* SRA 015	Training offered before employment Training offered before withdrawal of support	Induction training	Support Role
	"we offer support in the workpalce" SRA 025 *"Provide advice on challenges they encountered"* SRA 009	Support on a daily basis to complete tasks Support throughout the duration of the placement contract	On-going support	

iii) Phase 3: Proposed Guiding Placement Checklist.

In Phase 3, a proposed guiding placement checklist for candidates with severe communication disabilities was developed based on the findings in Phase 1 and Phase 2 (2a, 2b, and 2c). The coding process is demonstrated in Table 4.22. The examples are built from the coding process in each phase (See Table 4.18 to Table 4.21) to provide a clear understanding of the linkages made. The coding process for Phase 3 is provided in Table 4.22.

Table 4.22

Coding Process for the Proposed Guiding Placement Checklist

Domain of the ICF	Categories (factors considered to be barriers or facilitators)		Phase 2b (Table 4.19)	Phase 2b (Table 4.20)	Phase 2c (Table 4.21)
	Phase	**ICF Second level classification**	**Stages of employment**	**Accommodations or facilitating strategies**	**Roles of SRA**
Activity and participation	Phase 1 (Table 4.18)	d 840 Apprenticeship (work preparation)	Training stage	On-the-job training	Support role
Activity and participation	Phase 2a Table 4.18)	d 845 Acquiring, keeping and terminating employment (Job seeking process)	Pre-placement stage	CV compilation or completion support	Placement role

4.10.2.3. Reporting the findings. The final stage involved writing a thesis based on the findings. The description of the main categories was used as a basis for the discussion, which highlighted the i) barriers to and facilitators of employment of persons with severe communication disabilities, ii) roles of SRAs iii) strategies used by SRA for a successful placement. The categories were duly substantiated by the participants' verbatim quotes. Phase 3 findings were reported in a form of a proposed guiding placement checklist. The checklist was not trialled with the SRAs.

4.11. Summary

This chapter describes the main aim and sub-aim of the study. The case study design employed in the study is described and the aim of each phase of the study. This is followed by a description of the recruitment and selection process, participants in the study, materials and equipment used, as well as the data collection process. The data analysis procedures used for

the study are described in terms of the deductive and inductive content analysis was employed and allowed the organisation of data according to comprehensive categories that were linked to the categories of the domains of the ICF. In addition, an in-depth discussion was provided of how the trustworthiness and credibility of the study findings had been ensured. This chapter presented the link between phases and depicted the integration of data that addresses the main objective of the study.

CHAPTER 5

FINDINGS

"A lot of people have gone further than they thought they could because somebody thought they could", Unknown author

5.1.   Introduction

This chapter presents the findings from all three phases of the study. First presented are the findings from Phase 1 in which barriers to and facilitators of employment of persons with severe communication disabilities as reported by persons with severe communication disabilities themselves. Second are findings from Phase 2a, which provides a perspective of the SRAs. The chapter then proceeds to provide the findings from Phase 2b highlighting the placement process followed by SRAs. Subsequently, findings from Phase 2c are presented, depicting the services and roles of SRAs. Lastly, in Phase 3, the findings from the two phases (Phase 1 and 2) were collated to identify the factors that hinder and facilitate the placement of candidates with severe communication disabilities.

5.2.   Findings from the Three Phases of the Study

The data is presented using the domains of the ICF as broad headings, that is, body function and body structure, activity and participation, contextual factors (personal and environmental factors). Identified barriers and facilitators are presented together. Where a barrier is discussed, it is indicated by "*the lack of*" (using a – symbol in the tables that follow) and when a facilitator is mentioned, it is indicated by "*the availability of" (*using a + symbol in the tables that follow).

Direct quotations are italicised to indicate that an experience is direct from the participant. The data source from where the quotations originate is also provided, using the participants' codes. For example, in Phase 1, where persons with severe communication disabilities are quoted, an alpha-numeric code is provided: EPWD refers to the employed participant with a disability, and UNPWD refers to the unemployed participant with a disability, while the numeric code (e.g., 001) refers to the participant number. The participant codes are indicated in Phase 2 and Phase 3 with an acronym SRA referring to a specialised

recruitment agent followed by a participant number (e.g., 001). The participant numbers correlate with the descriptions provided in Table 4.3 and Table 4.4 for employed and unemployed persons with severe communication disabilities, respectively, and in Table 4.10 for SRAs.

The coding of factors identified in Phase 1 and 2a is based on the number of participants who mention a particular barrier or facilitator. Therefore, the frequency is not based on the number of times a factor is mentioned but rather on the number of participants who mention it. For example, 14 participants mentioned poor transportation services as a barrier to reaching places of employment. This will therefore be indicated as n=14. In Phase 2b, the frequency is based on the number of SRAs who provided a specific service. For example, 14 SRAs provide placement services. Again, when referring to the number of SRA out of the 25, an indication will be made in this manner, n=14.

5.3. Phase 1: Barriers to and Facilitators of Employment of Persons with Disabilities from the Perspective ff Persons with Severe Communication Disabilities

The research question that guided Phase 1 of the study was: "*What are the barriers to and facilitators of employment of persons with disabilities from the perspective of persons with severe communication disabilities?*"

Findings from both employed and unemployed participants with severe communication disabilities are presented together. Where an important construct was specific to a particular participant group, an indication was made specifying that a particular participant is either employed (EPWD) or unemployed (UNPWD).

In this study, participants with severe communication disabilities mainly consisted of persons diagnosed with CP who presented with limited hand function in either one or both hands. The four participants who were in paid, full-time formal employment had the ability to use their hands (MACS Level I-III) and were ambulatory (GMCFS Level I-III) (see Table 4.3).

Facilitating and hindering factors to employment were identified in all three domains of the ICF. A total of 24 factors were identified as either facilitating or hindering. Twelve of the 24 participants reported on factors in the body function and body structure domain. The total number of participants who mentioned each category specifically included 12 for the severity of disability, 10 for the type of disability, and one poor health condition. Seventeen of

the 24 participants reported on factors in the activity and participation domain. The number of participants who alluded to each category included 17 for vocational training and work preparation training, 15 for work and employment, ten for communication skills, seven access to school education, and five for self-employment. The categories mentioned by 20 of the participants were environmental factors in the contextual domain. These categories were negative attitudes from employers and colleagues, as mentioned by 20 participants, services, systems, and policies mentioned by 11, the natural and built environment mentioned, support and relationships mentioned by 7, and products and technology mentioned by 6. All 24 participants mentioned categories in some way related to personal factor in the contextual domain. The most mentioned category being educational qualifications, mentioned by 24, and 11 related to personal traits.

This section presents the findings of the identified factors across the three domains of the ICF, with an indication of how many of the participants mentioned factors within each domain. These factors were then linked to the second-level classification of the domains of the ICF.

5.3.1. *Body Function and Body Structure*

Under the body function and body structure domain, the type of disability reported as a barrier was linked to identified categories, voice and speech functions (b310), seeing functions (b210), and hearing functions (b230). Another reported barrier, namely the severity of the disability, was also linked to identified categories, namely voice and speech functions again (b310), rhythm functions (b330), and mobility of joint functions (b710).

Table 5.1 provides a description of the identified barriers expressed as categories. No facilitators were mentioned in this domain.

Table 5.1

Identified Barriers to and Facilitators of employment in the Body Function and Body Structure Domain Reported by Persons with Severe Communication Disabilities (N=24)

Domains of the ICF: Body function and Body structure n=12			
Identified barriers expressed as categories	**Second-level classification code**	**Barrier** -	**Facilitator** +
Type of disability n=12		-	
Communication disability	b310 Voice and speech functions		
Blindness or visual disability	b210 Seeing functions		
Hearing disability	b230 Hearing functions		
Severity of disability n=10		-	
Severe communication disability	b310 Voice and speech functions		
	b330 Speech and rhythm functions		
Severe physical disability	b710 Mobility of joint functions		
	b765 Involuntary movement functions		
Poor health condition n=1	Not classified	-	

Note. The barriers are highlighted as – and the facilitators as +. The participants reported the factors as either a facilitator or barrier while at other times an emphasis was made on both.

5.3.1.1. **Type of Disability.** The participants found that having a disability that employers considered as being less complex increases an individual's probability of being employed: "*As a disabled person who needs a lot of help like me, it's hard to get a job because you need to take someone to help you. With the speech problem that I have, I have to take my laptop with me to talk to people, so it is not easy to get a job*" (EPWD 015) and "*I cannot fit in, in workplaces because of my disability*" (UNPWD 001). The participants also emphasised that their friends who have a disability that is not similar to theirs (i.e., not presenting with a severe communication disability) were able to apply for jobs and are hired: "*The things that assist a person with a disability to have a job is when he/she has a better disability*" (EPWD 015). The participants who had multiple disabilities also found it challenging to find and access employment opportunities that provided the accommodations they needed: "*I cannot find a job that accommodates my kind of disability*" (UNPWD 008).

5.3.1.2. **Severity of Disability.** Participants were aware that the severity of their disability limited their career choices and access to employment opportunities. This was in relation to the severity of their motor disability, which included restricted movement and hand use and a speech disability. Furthermore, the participants reported on their inability to use speech to communicate with potential employers: "*Because I have a speech impairment,*

uncontrollable movements and I'm in a wheelchair, so it's difficult for me to find a job" (UNPWD 013); *"My disability limits my ability as some jobs require fluent talking skills and thus do not give us an opportunity to work"* (UNPWD 003); *"I can't speak well, I use communication device to communicate which I operate with my mouth"* (EMPWD 018) and *"I can't speak and I can't write"* (UNPWD 002).

5.3.1.3.Health Condition. The condition of one's health can be hindering to being employed. One participant who had previously been employed mentioned that poor health in addition to the presence of a disability, made it challenging to stay employed: *"Ever since my accident, I was not well to work like I used to"* (EPWD 022). The rest of the participants did not mention any challenges related to their health.

5.3.2. Activity and Participation

Under the activity and participation domain, ten barriers were identified linked to categories in the ICF. These included vocational training (d825), which was mentioned most frequently, remunerative work (d850) and motor skills walking (d450), moving around (d455), hand use (d440) and hand and arm use (d445), as well as communication-related factors such as speaking (d310). Other factors that were also mentioned included school education (d820), acquiring and keeping a job (d845), work preparation (d840), and remunerative work (self-employment) (d850).

Table 5.2 provides a description of the identified barriers and facilitators expressed as categories in the activity and participation domain.

Table 5.2

Identified Barriers to and Facilitators of Employment in the Activity and Participation Domain as reported by Persons with Severe Communication Disabilities (N=24)

Domains of the ICF themes: Activity and participation n=17			
Identified barriers and facilitators expressed as categories	**Second-level classification code**	**Barrier** -	**Facilitator** +
Vocational training n = 17	d825 vocational training	-	
Employment opportunities n=15	d850 remunerative work	-	
Motor skills n=14		-	
Mobility	d 450 walking	-	

Domains of the ICF themes: Activity and participation n=17			
Identified barriers and facilitators expressed as categories	**Second-level classification code**	**Barrier -**	**Facilitator +**
	d455 moving around		
Hand function	d 440 hand use d445 hand and arm use	-	
Communication related skills n=10	d310 speaking	-	
School education n=7	d820 school education		+
Seeking employment n=5	d845 acquiring and keeping a job	-	
Work preparation training n=5	d840 work preparation		+
Self-employment n=4	d850 remunerative work	-	+

5.3.2.1. Vocational Training. Vocational training was considered important for the development of skills that can secure employment. However, it was reported that no opportunities for skills and work preparation training were offered by the special schools the participants attended: *"Special schools need to offer opportunities for training and prepare learners for work"* (EPWD 024); *"Persons with disabilities need to be offered opportunities for training at school to prepare us for work"* (EPWD 009) and "*We need skills like computer skills, sewing, baking, carpentry and many more in order for them to get jobs or to start a business*" (UNPWD 013).

5.3.2.2. Employment Opportunities. Participants discussed the general lack of employment opportunities in SA, as a notable barrier to finding employment. However, they emphasised that persons with disabilities were even more impacted by the lack of employment opportunities in the country. A participant who functions as a disability advocate and who has never been formally employed mentioned that: *"I have never worked (employed full time) in my life. It is very difficult to get a job as a person with a disability"* (EPWD 018). This viewpoint was reiterated by another participant who stated: *"Persons with a disability can't find a job because of their disability"* (UNPWD 004).

For those individuals in employment, there is a lack of advancement in their career and appointed in job positions that are poorly remunerated: *"I would like to find a job that is challenging with good salary and benefits"* (EPWD 014) and "*The only issue is that I am employed in the same position for a long time, and the company doesn't have any benefits … I am fighting to get a permanent job with benefits so that I can be able to buy myself a house, a car, and maybe have medical aid. I sometimes I feel uncomfortable to use public transport"* (EPWD 017).

Employment opportunities available for individuals with disabilities are in the form of learnerships (i.e., apprenticeship programmes or internships). However, these learnerships were not viewed as helpful as they do not result in permanent employment: *"Companies must stop giving us learnerships"* (UNPWD 002) and *'I think after you complete a learnership, they must give you a job"* (EPWD 024). It was also emphasised that these learnerships should provide opportunities for permanent employment: *"I have completed a third learnership and received no offer for a permanent position"* (UNPWD 002) and "*I need a job, not just a learnership*" (UNPWD 003). As most employment positions require some sort of work experience, the participants mentioned that it was important for learnership programmes to be accommodative of persons with severe communication disabilities in order for them to also gain work experience: *Learnerships are needed in order to help persons with disabilities gain more knowledge and experience"* (UNPWD 001).

5.3.2.3. Motor Skills. Again, the inability to move around independently and use their hands for typing/writing was considered by participants as a barrier to being employed: *"I cannot walk, I cannot write"* (UNPWD 004). *"I can't work well with my hands, and that limits my opportunities"* (UNPWD 002) and "*My hands can't work well*" (EPWD 018).

5.3.2.4. Communication Skills. The lack of communication skills is linked to the inability to use speech for communication. Participants reported their limited ability to communicate with potential colleagues and employers as a barrier: "*My disability is a barrier for me because how can I communicate with people at the workplace even though I use my device to speak but my device will breakdown someday, and I'll be stranded"* (UNPWD 012); *"I have speech impairment"* (UNPWD 003) and *"...this limits my ability due some jobs require fluent talking skills"* (UNPWD 002). Frustration and fear over the inability to communicate with their colleagues and employer were also mentioned: *"They did not understand me, I could not communicate with them"* (UNPWD 010) and *"I won't be given a chance to express myself fully"* (UNPWD 008).

5.3.2.5. Seeking Employment. When participants were asked about what they considered important when searching for a job, they mentioned the importance of having a complete curriculum vitae: *"You need to prepare a CV and hand it out to employers"* (EPWD 023). As emphasised by the participants, having a CV should also be coupled with being proactive about searching for employment: *"Do not just sit at home and wait for somebody to*

call you. You must ask around about job" (UNPWD 009); *"Go out and interact with people"* (EPWD 023) and *"I think going to big companies and giving people CVs at these companies you get a job"* (UNPWD 013).

5.3.2.6. Work Preparation Training. Participants further suggested that rehabilitation therapists and teachers at school should play a role in providing skills training and preparing them for work: "*My advice to speech therapists, occupational therapists and the teachers that are teaching learners with disabilities would be they must teach learners with disabilities practical things that will enable them to qualify for jobs in the near future"* (UNPWD 012). Support from therapists and teachers should also include the provision of career guidance as it prepares persons with disabilities to start thinking about the world of work. However, this was mentioned to only occur at the end of their school education. One participant argued that learners in special needs school are only informed about career choices at the end of their school careers when they prepare to exit the school system: "*Learners can't wait until Grade 12 to think about their careers, start early so they can know which career path to follo*w" (EPWD 015).

5.3.2.7. Self-Employment. Self-employment was mentioned as an alternative form of employment that persons with disabilities needed to consider. This resulted from the realisation that formal employment is not accessible for individuals with severe communication disabilities: *"Persons with disabilities must improve themselves with their potential or gifts which they have, to create their own employment"* (EPWD 023). However, the participants mentioned that the curriculum taught in the special needs schools they attended does not provide training in entrepreneurship and management of businesses: *"Special schools don't teach the education needed to get a proper job. Some of us want to open businesses, but we don't have the knowledge to do so. Sometimes I get emotional when I think about this "* (EPWD 020). Participants also mentioned that financial support from the government and family members was required in order for them to fund their small businesses. Most importantly, they also indicated that guidance was required on how to raise funds on their own to start a business: *"We need support (i.e., persons with disabilities) in order to start their businesses"* (EPWD 023) and *"They need to learn to improve themselves with their potential or gifts which they have, and also to create employment for themselves and others like them"* (EPWD 026).

5.3.3. *Environmental Factors*

The factors indicated by the participants are presented according to the environmental chapters as outlined in the environmental factors in the ICF.

Table 5.3 provides a description of the identified barriers and facilitators expressed as categories related to environmental factors in the contextual domain.

Table 5.3

Identified Barriers to and Facilitators of Employment in the Contextual Domain of the ICF as reported by Persons with Severe Communication Disabilities (N=24)

Domains of the ICF: Environmental factors N=24				
Chapter in the Environmental domain	**Identified barriers and facilitators expressed as categories**	**Second-level classification code**	**Barrier -**	**Facilitator +**
Attitudes n=20	Employer negative attitudes	e430 employers	-	
	Co-worker negative attitudes	e425 colleagues	-	
Services, systems, and policies n=11	Employment	e590 labour and employment systems	-	
	Rehabilitation	e580 health services and systems	-	
	Transportation	e540 transportation services and systems	-	
	Legislation and policy	e550 legal services and systems		+
		e570 social security services and systems		+
Built environment n=7	Accessibility of buildings and workspaces	e155 design, construction of buildings		+
Support and relationships n=7	Support from family and friends	e310 immediate family		+
	Support from friends	e320 friends		+
	Support from colleagues	e325 colleagues	-	+
	Support from people in the community	e330 people in position of power		+
	Support from therapists and educators	e355 health professionals	-	+
	Support therapists and educators	e360 other professionals	_	+
Products and technology n=6	Assistive technology for work	e125 products and technology for communication		+
	Assistive technology for communication (communication device)	e135 product and technology for employment		+

Domains of the ICF: Environmental factors N=24				
Chapter in the Environmental domain	**Identified barriers and facilitators expressed as categories**	**Second-level classification code**	**Barrier -**	**Facilitator +**
	Assistive technology for mobility	e120 Products and technology for personal indoor and outdoor mobility and transportation		

Note. The barriers are highlighted as – and the facilitators as +. The participants reported the factors as either a facilitator or barrier while at other times an emphasis was placed on both.

5.3.3.1. Attitudes. Negative attitudes were reported to be the single biggest barrier for persons with disabilities to be employed and stay employed. These included negative attitudes from employers, colleagues, and community members. Categories of the ICF identified related to negative attitudes were linked to negative attitudes by employers (e430), which was most frequently mentioned, and negative attitudes by colleagues (e425).

Participants indicated that employers are not willing to hire persons with disabilities due to a lack of understanding of disability and prevailing ignorance regarding disability: *"Employers do not have the knowledge and information about disability. They focus on the disability. They don't focus on the ability that disabled people have"* (EPWD 015). Further concerns were raised as to whether employers have an interest or willingness to hire individuals with disabilities: *"I do not think that some of the companies want a person with a disability to work there"* (EPWD 019); *"Do they (companies) even need persons with disabilities?"* (UNPWD 003) and *"They only want normal people and persons with disabilities are left behind and not hired"* (EPWD 021).

It was also reported that employers do not afford persons with disabilities an opportunity to demonstrate their abilities: *"Employers do not approve of us despite our qualifications"* (EPWD 018); *"They take a look at you and think you won't be able to do your job properly"* (EPWD 024) and *"They do not give us people with a disability a chance as some companies are ignorant when it comes to such issues"* (UNPWD 003). Often when participants applied for jobs, they did not even receive a response from employers following their submission of job applications: *"My disability has affected my opportunities in finding a job because, when employers see me, they judge on my appearance, or when I speak, they will*

hardly hear me and get frustrated, and they never respond on how the interview went" (UNPWD 002).

Similarly, two employed participants indicated that they experienced challenges with colleagues who found it difficult to accept them in the workplace: *"People in the workplace itself are not clued-up regarding persons with disabilities"* (EPWD 021); *"They find it hard to adjust to work with people that have a disability"* (EPWD 017).

5.3.3.2. Services, Systems, and Policies. The participants mentioned various services as essential to support the employment of persons with disabilities. These services included the availability of labour and employment systems (e590), health services and systems (e580), transportation services and systems (e540), legal services and systems (e550), as well as social security services and systems (e570).

5.3.3.2.1.   Employment Services and Systems. Employment services such as the services of SRAs was reported as a crucial facilitator: *"Recruitment agents (i.e., SRAs) helped people who were physically challenged to source for jobs, develop curriculum vitaes, and also submitting curriculum vitae on behalf of these people* (UNPWD 012) and *"I got my job via an agency"* (EPWD 014). Participants further mentioned that services provided by SRAs were scarcer in remote and undeveloped areas: *"I don't know how to find those resources that will help me to find a job because I live in a disadvantaged area"* (UNPWD 012). There were also no resources or places where participants could seek information about available job opportunities in remote areas. Participants also reported: *"Here there are no people around to help people like me"* (EPWD 022); *"I don't know about any support services available here [rural areas]"* (UNPWD 008); *"I don't know how to find those resources that will help me to find a job because I live in a disadvantaged community which it can't help me with resources that I need"* (UNPWD 013) and *"Support services should be available not only in big towns but in small towns and rural areas"* (EPWD 023).

The participants also suggested the development of community-based disability services where persons with disabilities could obtain information regarding available employment and skills training opportunities. These organisations were also reported to provide support to persons with disabilities by completing CVs: *"We need walk-in Centres that assist recruit persons with disabilities for available employment opportunities"* (EPWD 019). These centres could also serve as institutions that offer youth empowerment services and equip the youth with entrepreneurial skills: *"Community centres should serve as business hubs which*

help/equip persons with disabilities to become entrepreneurs" (EPWD 019) and "offer y*outh empowerment programs as well as parents' training workshops for parents with children with disabilities*" (EPWD 015). Unfortunately, these services were not available in rural and disadvantaged areas. This is an important drawback, as many persons with disabilities live in these areas: *"Where I live, there is nothing like that here"* (EPWD 024).

5.3.3.2.2. **Education Services and Systems.** Participants also reported the lack of access to well-resourced schools as a barrier to acquiring the necessary education and skills for persons with disabilities. They further pointed out that attending a special school limited them in terms of the type of school subjects they could study: "*I went to a special school (school for learners with disabilities) to complete my education. Because of my disability, I did not gain access to a mainstream school*" (EPWD 017). It was reported that in these schools, the subjects that are offered are limited: "*The subjects I wanted to study were not in the special school. So, I needed to adjust where I was*" (EPWD 017). Due to the lack of available schools that cater for persons with disabilities in their area, some participants indicated they were not able to complete their school education: "*I didn't finish school. There was no school to go to. So, I am not able to get higher qualifications in order to get my dream job*" (EPWD 023) and "*I attended school from Grade 6 till Grade 9. Then I got sick and failed Grade 9. The school said that I must do home-schooling. It's been a long time now, 2017*" (EPWD 014). Participants from rural areas attended schools in metropolitan areas and returned home to the rural areas where skills training institutions for persons with disabilities are not available upon completion of their school education.

5.3.3.2.3. **Transport Services and Systems.** The lack of accessible transport was a reported barrier and affected participants when they wanted to access places of prospective employment.

Participants mentioned: *"Transportation has affected me a lot because I can't go out and look for a job"* (EPWD 008); *"Finding a taxi to take you to work is very hard"* (UNPWD 009); *"I think it's hard for a person that is disabled to find a job. The first problem is transport. Finding a taxi to take you to work is very hard. Taxi drivers aren't that kind to wait for a disabled person"* (EPWD 016) and *"When people with disability go seek jobs, there is no access to public transport"* (EPWD 015).

Furthermore, the cost of hiring private transport that accommodates their wheelchairs and a personal assistant is challenging: *"I have to go with somebody to help me in a taxi. I need help with my wheelchair, and most of the time, I have to use a normal wheelchair (instead of their motorised wheelchair which is bigger) when I go with somebody. I spent a lot of money"* (EPWD 015) and "*Taxis give us problems when we want to go somewhere. We must pay double the taxi fare*" (EPWD 016). A participant added that public transportation that is accessible to persons with disabilities is needed. This form of transportation must also be affordable: "*We need a transport service which has the same service and functions as Uber, but with fare like the public transportation*" (EPWD 014). An employed participant mentioned that it was very helpful that her employer offered a shuttle service to get her to and from work: "*My employer got me access to the company shuttle to get to work and home easily*" (EPWD 019).

5.3.3.2.4.   ***Health Services and Systems.*** Additionally, rehabilitation services such as speech-language therapy were mentioned by two participants as a facilitator to attaining employment. AAC intervention was mentioned as crucial from an early stage of school. Furthermore, the participants recognised the importance of crucial intervention such as occupational therapy and physiotherapy: "*Leaners must have assistance at school like AAC early on*" (EPWD 015) and *"My advice to speech therapists, occupational therapists, and the teachers that are teaching learners with disabilities is that they must teach learners with disabilities practical things that will enable them to qualify for jobs in the near future. The speech therapists must do exercises with learners with a speech impairment to improve their speech. Occupational therapists must work with speech-language therapists to help learners or people with speech impairment with devices that will help them in workplaces"* (UNPWD 012).

5.3.3.2.5.   ***Legislation and Policy.*** The factors discussed related to legislation and policies included the lack of government support, implementation of policies, and corruption.

Participants mentioned that the government has an obligation to create job opportunities for persons with disabilities: *"We need help from the government"* (EPWD 005); *"We need to push the government to help persons with disabilities* (EPWD 023); "*Our government must not sit down and expect people to find jobs on their own*" (EPWD 024) and "*Government must create opportunities for people living with disabilities to find a job*" (UNPWD 009). However, the government is not actively creating programmes and employment opportunities for persons with disabilities: *"There are no jobs. They're telling us lies to go to certain places, but there's nothing there for us. There's nothing suitable for us"* (EPWD 020) and "*The government does*

not care about us that drop out the school" (UNPWD 006). Furthermore, one participant mentioned the limited budget set aside by the government for persons with disabilities as a challenge: *"Everything to do with a disability is lacking at the present moment"* (EPWD 023).

Challenges resulting from corruption hindered participants from ethically securing a job: "*In order to secure a job, you need to pay the manager or CEO to give you a job*" (EPWD 022). One participant suggested that individuals with political connections found it easier to find employment. "*It's who you know, my dear*" (EPWD 023) and "*If you personally don't know anyone who can help you, chances are you won't get in. This is the biggest problem about the system. No one is willing to share the information"* (EPWD 020).

Individuals who are not South African citizens were reported to be excluded from most job opportunities: "*I am Nigerian, my nationality is a problem*" (UNPWD 008).

5.3.3.3.Support and Relationships. Support from family, friends, colleagues, community members were reported as facilitators. Facilitators expressed as categories linked to the ICF were, immediate family (e310), friends (e320), colleagues and community members (e325), people in positions of power (e330), health professionals (e355), and other professionals (e360).

Family and friends were considered an important facilitator towards securing employment: "*My family assist with searching for a job as they know me better than anyone and know which type of job I need*" (UNPWD 0012); "*I get information about learnerships and internships from my best friend"* (UNPWD 009) and "*I had a good friend who worked at a big company. She always kept me updated on vacancies that I could apply for*" (EPWD 023). Adversely, some parents were also reported to be a barrier to the individuals with disabilities searching for employment: *"Parents should allow children with disabilities to go to school in order to be able to work one day*" (EPWD 018).

Support from community members was mentioned as another facilitator to finding a job and for staying employed. One participant mentioned that he heard about employment opportunities from a member of his community: "*Someone from my community told me they were seeking for persons with disabilities to employ and referred me to the local police station*" (EPWD 023). Support from professionals such as therapists and teachers were also mentioned as vital. Most participants had a close relationship with their SLT and OT: *"My speech*

therapist gave me the confidence to face the crowd in class because I didn't have confidence" (EPWD 019); "*My speech therapist was a gift from God because I struggled with coping at work*" (EPWD 014); *"I worked with my occupational therapist to search for jobs. I went and attended workshops for persons with disabilities*" (UNPWD 008) and "*My former teacher helped me find my first job*" (UNPWD 004).

In the context of the workplace, support from human resources divisions ensured participants stayed in a job. One participant mentioned that they approached their human resource manager for support and assistance when they experienced challenges with their colleagues: "*I went to my human resource manager for support because at first, I felt very unwelcome in my workplace*" (EPWD 022).

5.3.3.4. Natural and Built Environment. Persons with disabilities mentioned that they required accommodations such as accessible work environments, availability of personal assistants, modifications of job tasks and available supervision. The facilitator linked to the natural and built environment was expressed as the ICF's design and construction of buildings (e155).

When applying for an employment opportunity, individuals were advised to first confirm whether the company building was accessible to wheelchairs: "*Always ensure the company is wheelchair friendly*" (EPWD 023). A participant added that an ideal company is "*one that has space to move around*" (EPWD 024). The need for an assistant to move around was also mentioned. This participant stated: "*The last resource that I'll need is a personal assistant that will help me to go to the toilet, feed me, help me with my device and write notes at meetings*" (UNPWD 012). The participant reported that they would prefer such an assistant to be a person who understands their needs and their manner of communication. Employed persons with disabilities also required assistance and accommodations in the workplace such as supervision and a set routine. One participant mentioned she receives a detailed to-do list: "*I am given a list of things to do from the secretary and from people or colleagues in my department*" and appreciated that colleagues assist her with coping with job tasks: "*the secretary and people in the office make work easier*" (EPWD 021).

Job task modifications were also helpful in facilitating the completion of work: "*My job is perfect as it is not strenuous as compared to lifting things and standing for a long period of time*" (EPWD 019) and "*What helps me is being by myself, working alone*" (EPWD 019). Similarly, it was found that a supportive work environment ensured the retainment of persons

with disabilities in employment: "*When working with a person with a disability, you must not be difficult. Colleagues must be proud of you and work together nicely with the staff members. My ideal job is to just feel needed and appreciated*" (EPWD 022). Employers and employees should undergo disability sensitisation training in order to learn how to work with a person with a disability: "*Management and staff be given training on how to work with a person with a disability*" (EPWD 017).

5.3.3.5. Products and Technology. Categories linked to this chapter included products and technology for mobility (e120), communication (e125), and employment (e135).

The participants mentioned the assistive technology that they use for communication (AAC devices), work (laptops and desktops) and mobility (wheelchairs) as important facilitators that could help stay employed: "*The resources that could be helpful for people like me to stay employed are a communication device that I'll be using to communicate with my colleagues every day, another one an electric wheelchair that I'll be using to push myself to meetings and the office*" (UNPWD 012); "*My computer helps me get a lot done*" (EPWD 019); "*I need a computer*" (EPWD 030) and "*...a laptop*" (UNPWD 011).

The assistive technology required for work also provides access to the internet, which is required in order to search for a job: "*The most helpful tools when I'm looking for a job is the internet because most jobs are advertised online*" (UNPWD 012); "*I have a laptop however I do not have access to the internet. I need data*" (UNPWD 001) and "*It will help you to search on the internet*" (UNPWD 009). Social media platforms such as Facebook™ and WhatsApp™ have groups for persons with disabilities where jobs are advertised: "*I joined a Facebook and WhatsApp™ group to look for a job, but I still don't have a job [formal job]*" (EPWD 023). Furthermore, internet data bundles were required for participants to be able to access the internet: "*I need data to search for a job on the internet, I do not have data as we speak*" (UNPWD 001).

5.3.4. Personal Factors

Traits such as good self-esteem, confidence, optimism, and perseverance were reported to be key facilitators to acquiring employment and staying employed. The most frequently mentioned personal factor was having the necessary qualification (i.e., education).

Table 5.4 provides a description of the identified categories in the personal factor domain.

Table 5.4

Identified Barriers to and Facilitators of Employment in the Contextual factor Domain, Personal Factors as reported by Persons with Severe Communication Disabilities (N=24)

Domains of the ICF themes: Personal factors N=24			
Identified barriers and facilitators expressed as categories	**Second-level classification code**	**Barrier -**	**Facilitator +**
Educational qualifications and vocational skills N=24	Not classified in the ICF	-	+
Personal traits n=19 *Self-esteem* *Motivation* *Confidence* *Knowledge*	Not classified in the ICF	-	+

Note. The barriers are highlighted as – and the facilitators as +. The participants reported the factors as either a facilitator or barrier while at other times an emphasis was placed on both.

5.3.4.1. Educational Qualifications and Vocational skills. The lack of educational qualifications and work-related skills negatively impacted access to employment opportunities. Participants were aware they required at least a Grade12/Matric certificate to find a job: "*The most difficult thing about getting a job is qualifications*" (UNPWD 002), while another revealed: "*Some of us don't have those necessary qualifications because we went to special schools*" (EPWD 020). Participants also suspected that employers did not consider their applications for advertised work positions: "*Companies can't hire someone who has a disability and didn't finish the school"* (UNPWD 006); "*The thing is, if you have no qualifications, you are nothing*" (UNPWD 005) and *"I did not finish high school. So, I think companies will not hire someone who has a disability and didn't finish school"* (UNPWD 006). Similarly, the employed participants highlighted having qualifications as a facilitator to finding a job: "*Qualifications and the work experience helped me find the job*" (EPWD 019).

5.3.4.1.1.   Personal Traits. Participants also mentioned personal traits such as having self-esteem and confidence as drivers when seeking initial employment and when continuing to seek employment if not successful: "*If you have a disability, but you don't have the confidence and the willpower to make a stand to work, to show that you are capable and*

not just disabled, then doors will open for you eventually" (EPWD 023). The participants also emphasised the importance of staying motivated and encouraging themselves: "They *must not look down on themselves because of their disability. They need to encourage and believe themselves first before the employers do*" (EPWD 026) and "*I think confidence and ambition. If we can have the confidence within ourselves, it will be easier for people to look past our disabilities and not feel like we are unable to meet the requirements that are needed*" (UNPWD 003).

Other positive traits mentioned included being optimistic and flexible. The participants emphasised the importance of individuals being adaptable to different situations and work demands: "*Optimism is just as important. Persons with disabilities must not give up. Nothing good comes easy. They must keep looking for a job*" (UNPWD 005); "*You need to be a quick learner*" (EPWD 023) and have an "*independent mindset*" (EPWD 022). An employed participant also highlighted that, individuals should be committed to being employed and persevere through the process: "*A person must be willing to work"* (EPWD 017); "*You need to stay in the job. You need to do what is supposed to be done*" (EPWD 016) and "*You must never give up because it is difficult to find jobs, nothing comes easy in life*" (UNPWD 002).

The lack of knowledge about where to seek information about available employment opportunities was reported to hinder employment. The majority of participants did not know of available employment opportunities. They also lacked knowledge of where to start searching for a job and services that might support them in acquiring a job: "*Don't know who to ask for help. I need to find work*" (UNPWD 005). Before being employed, one of the participants was not aware that one had to apply for advertised positions: *"I have never thought of searching for a job before being offered an opportunity to work. I never thought I would find a job like this one*" (EPWD 019).

5.4.   Phase 2a: Barriers to And Facilitators of Employment of Persons with Disabilities Through the Perspectives of SRAs

Phase 2a reports on the findings obtained from interviews with SRAs. The phase was guided by the research question: "*What are the barriers to and facilitators of employment of persons with disabilities*?"

Factors reported as barriers and facilitators were reported in all three domains of the ICF. Fourteen of the 25 SRAs reported on categories in the body function and body structure domain. Fourteen specifically mentioned the type of disability, which was understood to be related to impairment in motor function and sensory skills. Fifteen of the 25 SRAs reported on categories in the activity and participation domain. These were related to communication skills as mentioned by 17 SRAs, vocational training and walking mentioned by 15, and eight mentioned work preparation. All 25 of the SRA's reported categories in the contextual factor domain, environmental factors which were then linked to the relevant chapters. Twenty SRAs specifically mentioned categories related to the presence of negative attitudes by employers and colleagues, 18 mentioned services, systems, and policies, while 12 highlighted, assistive technology and the natural and built environment.

This section provides a presentation of the findings across the three domains of the ICF with an indication of how many of the SRAs mentioned barriers and facilitators within each of the domains. The barriers and facilitators identified are presented as categories are linked to the categories of the ICF.

5.4.1. *Body Function and Body Structure*

The categories identified within the body function domain were related to sensory disabilities, namely, seeing functions (b210) and hearing functions (b230); psychiatric disabilities including solving problems (b125), higher-level cognitive functions (b164), undertaking multiple tasks (b220), and handling stress (b240); physical disability with movement-related functions, namely mobility and joint functions (b710), as well as epilepsy expressed as consciousness functions (b110).

Table 5.5 describes categories in the body function and body structure domain reported as barriers and facilitators expressed as ICF categories.

Table 5.5

Identified Barriers to and Facilitators of Employment in the Body Function and Body Structure Domain as Reported by SRAs (N=25)

Domains of the ICF: Body functions and body structure *n=14*				
Barriers and facilitators expressed as categories	**Number of participants**	**ICF codes** **Second-level classification**	**Barrier -**	**Facilitator +**
Type of disability				
Sensory disabilities	*n=14*	b210 seeing functions b230 hearing functions	-	
Psychiatric disabilities *Problem solving abilities* *Handle multiple tasks* *Handling work-related stress*	*n=9*	b125 solving problems b164 higher-level cognitive functions b220 undertaking multiple tasks b240 handling stress	-	
Physical disability	*n=6*	b710 mobility and joint functions	-	
Epilepsy *Loss of consciousness*	*n=6*	b110 consciousness functions		+

Note. The barriers are highlighted as – and the facilitators as +. The participant reported the factors as either a facilitator or barrier while at other times an emphasis was placed on both.

5.4.1.1. Type of Disability. When the SRAs were asked what type of disability was the most challenging to place in employment, they mentioned persons with sensory disabilities, particularly those with visual disabilities. This was due to the fact that most companies do not have accommodations for persons with visual disabilities: *"This is despite the candidates coming into employment with their assistive technology"* (SRA 024). Second on the list were individuals with psychiatric disabilities (e.g., bipolar mood disorder): *"Persons with bipolar are harder to place, clients complain about their memory"* (SRA 004). This group was followed by persons presenting with physical disabilities: *"Persons with cerebral palsy often have accessibility issues"* (SRA 005). Important to note that physical disabilities generally refer to individuals who have suffered spinal injuries.

Disabilities that were reported as 'easy' to place (as mentioned by one SRA) were persons with epilepsy (especially if the seizures are sporadic and/or controlled with medication), as these individuals are otherwise considered fully functional. The SRAs did not mention persons with a severe communication disability in the list of individuals challenging to place, and when asked regarding this, they explained that it depended on the severity of the disability. Also, individuals with a severe communication disability often do not approach the

SRAs to be assisted with placement in a position: "*More often than not, we do not receive applications from persons with disabilities for most of the advertised positions. Secondly the environment is not ready to accommodate the disabled*" (SRA 014). SRAs emphasised that they do not target a specific group of individuals presenting with certain types of disabilities. They simply rely on work positions advertised and work specifications sent by employers.

5.4.1.2. Severity of Disability. The SRAs focused on the type of disability rather than on the severity of the disability. Therefore, there was no specific mention of the impact of severely restricted functioning on a candidate being placed in an employment position.

5.4.2. *Activity and Participation*

In the activity and participation domain, four chapters were represented. Communication skills that were considered crucial to a successful placement were linked to ICF second-level categories, specifically communication-spoken messages (d310), speaking (d330), and conversation (d350). A barrier related to employment opportunities was linked to remunerative work (d850), while vocational training (d825) was mentioned as a facilitator. The importance of work preparation (d840) was linked to career guidance. Categories related to mobility were linked to walking (d450) and moving around (d455).

Table 5.6 provides a description of the barriers and facilitators expressed as linked ICF categories.

Table 5.6

Identified Barriers to and Facilitators of Employment in the Activity and Participation Domain as Reported by SRAs (N=25)

Domains of the ICF: Activity and participation n= 15				
Barriers and facilitators expressed as categories	**Number of participants**	**ICF codes Second-level classification**	**Barrier -**	**Facilitator +**
Communication skills	*n=18*		-	
Communication comprehension		d310 communication-spoken messages	-	
Speech		d330 speaking	-	
Conversation skills		d350 conversation	-	

Domains of the ICF: Activity and participation n= 15				
Barriers and facilitators expressed as categories	**Number of participants**	**ICF codes** **Second-level classification**	**Barrier** **-**	**Facilitator** **+**
Employment opportunities	*n=15*	d850 remunerative work	-	
Vocational training	*n=11*	d825 vocational training		+
Mobility	*n=9*	d 450 walking d455 moving around	-	+
Career guidance	*n=8*	d840 work preparation	-	

Note. The barriers are highlighted as – and the facilitators as +. The participant reported the factors as either a facilitator or barrier while at other times an emphasis was placed on both.

5.4.2.1. Communication Skills. The lack of communication skills was mentioned as a barrier to interacting and communicating with employers. The SRAs mentioned that most candidates were not able to communicate with employers and therefore needed to work on their communication skills: *"Participants do know how to communicate with employers and colleagues" (*SRA 007); and "*They need to work on their communication skills"* (SRA 008). Professional skills were highlighted as facilitators of successful placement. SRAs mentioned that when persons with disabilities were called for an interview, they came in looking unprofessional: *"Most candidates do not know how to behave professionally"* (SRA 023). The candidates' lack of professionalism would often come across as not interested in being employed: *"Persons with disabilities should be reliable, given that they don't have too many opportunities afforded to them"* (SRA 013).

The candidates were, therefore, cautioned to take pride in how they present themselves to employers: *"The most important thing would be to pay attention to self-presentation, body image, and should present themselves at their best"* (SRA 008). It was also suggested that candidates be exposed to work through volunteering in order for them to be exposed to the business world and business manners: *"Persons with disabilities to do job shadowing, to pick up on professional etiquette and have exposure to the work environment"* (SRA 007).

5.4.2.2. Employment Opportunities. The SRAs, similar to the persons with disabilities in Phase 1, also mentioned the lack of permanent employment opportunities for persons with disabilities in SA. However, instead of the challenge being linked to the economy, employers were regarded as the barrier in this instance. SRAs reported specifications for open positions

provided by employers as non-inclusive of candidates with disabilities. The challenge was reported to be blamed on the requirements by employers for job positions advertised: *"Companies put out unfair minimum job requirements"* (SRA 015).

Furthermore, the positions were not permanent and were mostly low entry jobs that required no formal qualifications. Although learnerships were praised for providing skills and experience, the SRAs indicated concern over the fact that only learnerships were advertised. At the same time, permanent placements are rare: *"The industry only puts out learnerships with no intentions to hire persons with disabilities permanently and most often candidates have been on learnerships before. Currently, no permanent positions are available, only learnerships"* (SRA 002). More so, these learnerships only accommodate certain age groups: *"Another challenge is that most disabled people seeking employment are older than 30. You would find that a client has a 12-month learnership looking for people who are 22 years old—meanwhile, some disabled people who are 33 years and never worked"* (SRA 025).

The SRAs also mentioned the challenge of career advancement for persons with disabilities. It was mentioned that: *"besides securing entry-level employment for persons with disabilities, career advancement and progression is also an area that employers must tackle"* (SRA 018). Furthermore, the SRAs mentioned the importance of a *"good quality job, meaningful/suitable placement"* (SRA 009). It was mentioned that participants needed to apply for jobs that they found enjoyable and *"not take jobs because they are motivated by financial reasons"* (SRA 008). In support of this view, it was mentioned that: *"skills development training provided needed to translate into the individual's career interests and needs"* (SRA 015).

Persons with disabilities should receive some form of career guidance to assist them in planning for their future careers. *"Candidates needed to be provided with career planning to assist them to "figure out what they were interested in"* (SRA 014). Persons with disabilities in Phase 1 mentioned that they lack the necessary knowledge about available employment opportunities available. Adversely, SRAs mentioned the persons with disabilities do not seek information regarding open employment opportunities, nor do they seek their assistance in applying for these employment positions: *"There were many opportunities for people with disabilities. However, most career seekers with disabilities are sometimes not leveraging on those opportunities"* (SRA 013).

5.4.2.3. Vocational Training. Nine SRAs mentioned vocational training as an important facilitator: *"It is beneficial for candidates to attend training workshops, undergoes vocation training or some sort of job preparation training"* (SRA 002). The SRAs furthermore reported that special needs schools needed to pay attention to the provision of work preparation training for learners with disabilities in their schools. This, they emphasised, must be done well in advance, not in the final year of school. The special needs schools were also encouraged to contact different agencies and liaise with SRAs for information on work preparation training opportunities: *"The educators must check different platforms for information regarding work preparation training"* (SRA 014). It was also reiterated that vocational training colleges should not focus only on training within the schools without exposing learners to the world of work: *"Colleges should offer more than work readiness training; they should prepare individuals with disabilities for the open labour market, most importantly prepare them from high school"* (SRA 006).

5.4.3. Environmental Factors

In the contextual domain the environmental factors represented by the SRAs dominated the discussion and are presented according to the chapters of the environment as outlined in the ICF, the conceptual framework of this study. The summary of categories reported as hindering and/or facilitating are provided in Table 5.7.

Table 5.7

Identified Barriers to and Facilitators of Employment of Persons with Disabilities in the Environmental Factor Domain as Reported by SRAS (N=25)

Domains of the ICF	Categories identified	Number of participants	ICF codes Second-level classification	Barrier -	Facilitator +
Environmental factors *N=25*					
Attitudes	Negative attitudes from employers	*n=20*	e430 people in position of power	-	
	Negative attitudes from employers		e425 colleagues		
Services, systems, and policies	Employment services	*n=18*	e590 labour and employment services		+
	Inclusive schools	*n=14*	e585 education and training	-	+
	Accessible transportation	*n=12*	e540 transportation	-	

Domains of the ICF	Categories identified	Number of participants	ICF codes Second-level classification	Barrier -	Facilitator +
	Rehabilitation services	*n=7*	e580 health services	-	
	Legislation and Policy				
	Company policies	*n=14*	e550 legal policies		+
	Quota enforcement	*n=17*		-	+
	Government support		e550 legal systems		
		n=8	e570 social security services and systems	-	+
Natural and built environment	Accessible work environments	*n=17*	e155 design, construction of buildings	-	
Products and technology	Availability of assistive technology for employment	*n=14*	e135 product and technology for employment	-	

Note. The barriers are highlighted as – and the facilitators as +. The participant reported the factors as either a facilitator or barrier while at other times an emphasis was placed on both.

5.4.3.1. Attitudes. Negative attitudes from employers were the most frequently mentioned barrier. Categories related to negative attitudes linked to the ICF second-level categories included negative attitudes from employers (e430), which was most frequently mentioned, as well as negative attitudes colleagues (e425).

The lack of awareness regarding disability was reported as a barrier to successful job placements. The SRAs mentioned that most employers do not have experience of an employee with a disability: *"They do not know that persons with disabilities are able to work"* (SRA 002) and *"Employers see the disability first and not their ability"* (SRA 010). The barrier, therefore, mostly lies with the employers who do not hire persons with disabilities due to their prevailing misconceptions regarding disability: *"The candidates have no barriers, and it is largely the client (employer) not understanding disability"* (SRA 019). The SRAs also mentioned that employers were not enlightened about the benefits and business value of hiring persons with disabilities: *"Employers should look at persons with disabilities as an untapped labour pool"* (SRA 006).

As the employers are business-focused, the SRAs suspected that they view the employment of persons with disabilities as a potential financial loss to the company: *"The business model is purely driven by profits"* (SRA 005), and thus, *"employers are not open to accepting people with disabilities in the workplace"* (SRA 023). SRAs added that in most

cases, candidates do not disclose their disability to the employer or do not request accommodations due to fear of being stigmatised: *"Candidates do not disclose as they fear the employer's ignorance and stereotyping (especially unseen disabilities, for example, psychiatric disabilities)"* (SRA 015).

Efforts have been made to educate employers and eradicate the stigmatisation of persons with disabilities: *"We try to motivate for employment of persons with disabilities, but there is no willingness to accommodate them by employers"* (SRA 005). On the other hand, it is recommended that candidates are prepared to cope in a discriminatory workplace through induction or work readiness training: *"Work readiness would help persons with disabilities to cope. However, work environments are not the same, and dependent on the managers in charge"* (SRA 016).

Contrary to most of the findings indicated, one of the SRAs mentioned an observed positive change with regard to the employment of persons with disabilities: *"There is more motivation by companies to hire persons with disabilities than in the past years"* (SRA 005).

5.4.3.2. Products and Technology. Accommodations reported by the SRAs were related to the purchase of assistive technology. These were linked to products and technology for employment (e135). There was no specific mention of assistive technology for mobility and communication. The focus appeared to only be on assistive technology for work.

Reasonable accommodations included requests for assistive technology for communication and employment. When SRAs were asked if they had previously requested reasonable accommodations for a candidate, a few confirmed that they had been successful in the past. Requests included accessible physical modifications, assistive technology for persons with sensory disabilities, and the use of interpreters. Some SRAs, however, mentioned they often relied on what the employer wanted and did not make special requests. One SRA mentioned: *"I have never requested for accommodations before. Companies do not agree to buy or incur expenses"* (SRA 004). Another SRA echoed this sentiment: *"Employers are often concerned about the budget"* (SRA 011).

SRAs also revealed that employers greatly feared the costs related to providing reasonable accommodations. However, as observed by the SRAs, most accommodations were minimal and did not require an extensive budget. Due to past experiences of accommodations

made and candidates being not retained in positions, it was reported that employers were now hesitant to approve requests for accommodations: *"Initially, companies were accommodative. Now companies are not willing to pay, based on previous experience"* (SRA 005). When sourcing candidates for employers, specifications are now provided to avoid attracting candidates that may require accommodation: *"There are strict specifications of the type of disability employers are willing to accommodate"* (SRA 002); *"employers avoid hiring certain types of disabilities"* (SRA 009); *"The minimum job requirements provided exclude disabilities that require modifications in the job specifications provided"* (SRA 015) and *"The main challenge is accommodation and lack of understanding of different types of disabilities. Employers struggle to understand challenges experienced by a candidate, for instance, with cerebral palsy"* (SRA 024).

5.4.3.3. *Natural and Built Environment.* SRAs emphasised on the accessible physical environments. Identified categories were linked to the design, construction of buildings (e155).

The SRAs also reported challenges related to the workplace and buildings being inaccessible to candidates in wheelchairs: *"Most private companies are in buildings that are not wheelchair accessible"* (SRA 006). The SRAs also reported challenges related to the workplace and buildings being inaccessible to candidates in wheelchairs: *"Most private companies are in buildings that are not wheelchair accessible"* (SRA 006). It was agreed that often companies did not have the necessary assistive technology for the different types of disabilities. In some cases, it was advised that *"training is required in order to operate such equipment"* (SRA 008).

5.4.3.4. **Services and Systems.** The services, systems and policies discussed include those related to education, employment, transportation, and legislation and policy. These were linked to labour and employment services (e590), education and training (e585), transportation (e540), and health services (e580).

SRAs mentioned the lack of accessible schools for persons with disabilities as a barrier to candidates acquiring the skills required to access employment opportunities: *"The lack of functional school education results in candidates lacking the appropriate qualifications required"*. *"A lot of persons with disabilities faced challenges in life, in finding schools, and places for their education"* (SRA 007). There was concern over the framework of qualifications in special needs schools, as they often do not offer classes up to Grade 12 level,

and therefore learners leave school without obtaining a Grade 12 school leavers certificate (i.e., matriculating). This hampers candidates' efforts to attain sponsorships, as available bursary schemes require candidates who have matriculated and performed well: *"Special schools should have the same framework of qualifications as mainstream schools"* (SRA 008). It was also mentioned that the school curriculum should include some form of preparation for work. This was because persons with disabilities *"require work preparation training before being placed at work"* (SRA 024).

SRAs also mentioned transportation as one of the challenges experienced by candidates when trying to reach the interview venue or workplace: *"Most do not proceed beyond the call for interviews as they have no way to reach our offices"* (SRA 015). However, some SRAs mentioned that candidates could be offered transport assistance should there be funding available and a shuttle service operating in the candidate's area: *"Transport assistance is provided as the use of public transport by persons with a disability is difficult"* (SRA 023).

Other services that the SRAs considered essential for facilitating the employment of persons with disabilities included communication and rehabilitation services. Information regarding employment opportunities provided to the public was often not accessible to persons with disabilities: *"Candidates do not know where to access information"* (SRA 007) and *"The communication about available employment opportunities are not in an accessible format"* (SRA 003). This view was supported by other SRAs who mentioned: *"The way things are described are not in simple terms"* (SRA 015) and *"advertising mediums used does not reach all"* (SRA 006). An SRA advised that it was important to ensure that candidates were informed about available employment positions and training opportunities in view of this challenge: *"Communication mediums should ensure persons with disabilities have access to all necessary interventions"* (SRA 002). Language (i.e., comprehension of verbal and written English) was pointed out as a serious barrier, particularly for candidates who have not received any school education. It was reported that most of them did not understand what was being communicated to them, and employers required all candidates to be able to read information in English.

Some of the SRAs emphasised that candidates should have a relationship with the SRAs themselves in order for them to get the best help available. One SRA mentioned: *"Candidates must know that SRAs can help them"* (SRA 024). Another one suggested that candidates *"should drop CVs at different recruitment agencies and build a relationship with the SRAs"* (SRA 004). In addition, although challenges related to rehabilitation services were rarely

mentioned, four SRAs highlighted this factor: *"It would help if they [persons with disabilities] would receive assistance early in life"* (SRA 002). They were referring to receiving rehabilitation services such as SLT, OT, and physiotherapy.

5.4.3.5. Legislation and Policy. The SRAs mainly reported on company policies being a barrier to the inclusion of persons with disabilities in employment, the lack of enforcement of legislation such as the employment quota, and the lack of support from the government in facilitating the economic participation of persons with disabilities. These were linked to ICF categories, legal systems (e550), and social security services and systems (e570).

5.4.3.5.1. ***Company Policies.*** SRAs mentioned company policies may be a barrier to integrating persons with disabilities in the workplace. It was mentioned that company policies were not open to change, and company culture was often not willing to accommodate employees with disabilities. Furthermore, the SRAs reported frustration over companies unwilling to accept candidates who do not possess the required qualifications: *"Why are companies not hiring those with a degree/qualification? Why are they not accommodated?"* (SRA 004) and *"It is important for them (employers) to also make a true effort to employ and support persons with disabilities"* (SRA 001). It was mentioned that the challenge lies in the recruitment phase where screening tools used by companies are not flexible enough.

Also, "*companies set high key performance indicators which are difficult for persons with disabilities to achieve"* (SRA 006) and *"Human resource was not interacting with management on employment strategies to accommodate persons with disabilities"* (SRA 021). A suggestion was made to hold human resources divisions accountable. Most importantly, it was suggested that companies should be innovative and develop strategies to attract suitable candidates with disabilities.

When SRAs were asked what they thought employers could do to improve and increase the successful placement of persons with disabilities in their companies, 18 recommended the provision of disability sensitisation training, 11 highlighted, a disability recruitment strategy plan, and seven focused on training regarding disability employment legislation.

These strategies are summarised in Table 5.8.

Table 5.8 *Strategies Recommended by SRAs (N=25) for Facilitating the Integration of Persons with Disabilities in Formal Employment*

Training provided	Strategies employed
Training on disability sensitisation (n=18)	• Top management to undergo diversity training. • Provide training on how to integrate persons with disabilities in the workplace. • Provide training on how to create a diverse and inclusive culture in the organisation. • Make SRAs advocates for disability and create campaigns around disability.
Training on planning a disability recruitment strategy (n=11)	• Create a recruitment strategy focused on disability. • Regularly review company policies. See why the current model does not work and brainstorm how to make changes to facilitate employment. • Have designated posts for persons with disabilities in their respective companies.
Training on disability employment legislation (n=7)	• Educate employers about the benefits of hiring persons with disabilities. • Provide training on policies surrounding the employment of persons with disabilities, such as the EEA. • Offer training on the types of disabilities and accommodations required by each type of disability.

5.4.3.5.2. ***Enforcement of employment quota.*** The lack of enforcement of current laws and policies set out by the government to facilitate the employment of persons with disabilities is a notable barrier. SRAs stated that employment quotas were not implemented in companies. Moreover, even the set quotas did not bring about the necessary change: *"Companies should try to employ someone with disabilities, without using them for point-scoring"* (SRA 023). Companies have not been able to reach the target set by the government: *"The government should consider deliberate and rigorous internal monitoring and evaluation by employment equity committees"* (SRA 013); *"They should make the criteria more strict"* (SRA 009); *"Government must enforce harsher punishment"* (SRA 011) and *"heavy penalties for companies who are not meeting their employment quota of persons with disabilities"* (SRA 015).

The SRAs provided recommendations for change, such as that the government should consider the introduction of new alternative laws. It was suggested that companies that are reaching the target and making an effort to include persons with disabilities in their companies should receive government rewards: *"Government should also put a positive spinoff and award*

companies that employ persons with disabilities" (SRA 007) and *"The government should also consider creating a move from a BBEE to a transformation agenda"* (SRA 021).

5.4.3.5.3. **Government Support.** Support from the government was reported as a facilitator. This support was in the form of the provision of *"subsidies for unemployed persons with disabilities"* (SRA 004) and *"more programmes for persons with disabilities"* (SRA 011). One SRA mentioned that *"A clearer goal is needed from the government regarding persons with disabilities" (SRA 017)*. Another suggested that: *"government should have an established relationship with private companies and SRAs"* (SRA 005)*. Furthermore, medical assessments required by employers in order to prove the presence of a disability are expensive for candidates to acquire. One SRA reported that: *"Medical reports from doctors are also challenging because they cost money and most rely on government grants to survive and not having a doctors' certificate closes doors for most especially those with visible disabilities"* (SRA 024).

5.4.4. Personal Factors

Categories identified in the personal factors were related to educational qualifications and vocational skills and personal traits such as knowledge, self-confidence, and motivation to seek employment and stay employed. Table 5.9 provides an indication of the personal factors reported by SRAs.

Table 5.9

Identified Barriers to and Facilitators of Employment in the Contextual factor Domain, Personal factors, as Reported by SRAs (N=25)

Domains of the ICF: Personal factors				
Categories identified	**Number of participants**	**ICF codes Second-level classification**	**Barrier -**	**Facilitator +**
Educational qualifications and work-related skills	*n=21*	Not classified in the ICF	-	
Personal traits *Determination* *Confidence* *Professionalism*	*n=9*	Not classified in the ICF	-	

5.4.4.1.1.   Educational Qualification. Educational qualifications were mentioned as the most important facilitator that enhanced the chances of a successful placement. However, it was found that most candidates lacked educational qualifications: *"We normally find people meeting the employers` specifications but then the qualification is not met, I mean most of them do not get an opportunity to even finish matric"* (SRA 025). SRAs advised persons with disabilities to ensure that they complete their school education and matriculate. They added that most candidates presented with poor literacy skills: *"Most candidates cannot read and write"* (SRA 016).

It was revealed that most of the jobs required qualifications and the minimum requirement for learnership placements were a matric qualification. Therefore, candidates with matric and post-matric qualifications were easier to place in job positions: "*SETAs are also not ensuring that learnerships utilise accessible learning materials. SETAs must ensure that all learners with disabilities are taken through a full learnership NQF program. Most learnerships never go beyond NQF level 5, which denies the learners the opportunity to gain the NQF level 8 qualification"* (SRA 013).

5.4.4.1.2.   Personal Traits. Positive personal traits such as having good self-esteem and confidence were reported as facilitating factors. It was mentioned that it was important for candidates to *"work on self-confidence and be able to complete tasks"* (SRA 012). It was mentioned by an SRA that most persons with disabilities were impatient with themselves and that *"if they fail at a task, they give up"* (SRA 003). Therefore, patience and belief in oneself were regarded as key to successful employment: "*If the person is motivated and eager, it works for them and results in successful employment"* (SRA 009), and *"Opportunities are there. Your attitude towards life is the key to your success"* (SRA 001). SRAs also reported on the ability of candidates to speak out, enquire, and ask for assistance when needed. They were strongly advised to "*communicate, be flexible about finding solutions, don't assume what is being requested of you"* (SRA 015), and "*They must not be afraid to ask and enquire"* (SRA 004).

5.5.   Phase 2b: Placement Process of Persons with Severe Communication Disabilities in Employment

In Phase 2b, the placement process followed by SRAs in the placement of persons with severe communication disabilities were explored. Phase 2b was guided by the research question, namely: "*What are the processes followed during the recruitment and placement of persons with severe communication disabilities in employment?*".

This sub-section discusses the placement process that was adhered to by SRAs, firstly with persons with diverse disabilities who approached their recruitment agencies for assistance in job placement, and secondly, with the client described in a hypothetical case study. The SRAs were requested to describe the placement of clients who approached their recruitment agencies for assistance in securing employment. The process is presented according to four placement stages: pre-placement (recruitment), job-placement (entering a job position), post-placement (support offered following a placement), and training (provided to support the integration of persons with disabilities in organisations). Not all SRAs who participated in the study offered services in the four placement stages.

Fifteen of the 25 SRAs worked in all four stages of their placement process. All 25 SRAs offered services in the pre-placement stage, with only three offering services in the pre-placement stage (in other words, they only did recruitment). Nineteen SRAs provided services in the job placement stage. Some agencies only recruited candidates and did not offer job placement services. However, they offered post-placement services (such as work readiness programmes), and altogether 22 SRAs offered training services.

Figure 5.1 provides a summary of the placement process and lists the activities in each stage.

Figure 5.1. *Placement Process Followed by SRAs (N=25) During the Placement of Persons with Disabilities*

- Provide disability awareness training to companies
- Provide support to employer for integration of persons with a disability

1. Pre-placement (n=25)

- Search for potential candidates
- Advertise available job positions
- Gather candidate's information
- Perform vetting of information

4. Training (n=16)

2. Job placement (n=19)

- Provide induction training
- Provide support to candidate in job position
- Provide ongoing support
- Handle possible disputes
- Offer work readiness training

3. Post-placement (n=22)

- Do screening
- Hold mock interview
- Determine need for reasonable accommodations
- Match candidate with disability to job position
- Prepare candidate to undergo an interview

Note. The activities described by the SRAs in the different stages are colour coded to signify the placement stage in which they occurred. The colours also correlate to the roles of the SRAs depicted in Figure 5.2 and 5.3.

5.5.1. Pre-placement Stage

All the SRAs engaged in the pre-placement stage, which involves the recruitment or sourcing of candidates. The placement process was mentioned to begin with a request received from the employers for candidates: *"This stage starts with a request from the employers"* (SRA 002). In cases where the SRAs needed to scout for talent, strategies described in Section 4.8.2.4 were implemented. The SRAs relied on multiple strategies to recruit potential candidates: "*We rely on various strategies, the most effective of which being word of mouth"* (SRA 007). Another added: *"We have a database of information of potential candidates which we have created over the years"* (SRA 005). The candidates had to send through their CVs, and once these were received, they were contacted by the SRAs. Candidates were also requested to send through necessary documentation such as doctors' certificates.

The SRAs indicated that they used different modes of communication to interact with the potential candidates, with phone calls and WhatsApp™ messaging being the most common

and frequently used: *"We send a WhatsApp^TM message to the candidates informing them about available opportunities. If they do not have a WhatsApp^TM, then they receive a phone call"* (SRA 004). Upon receipt of the requested information and documents, the SRAs proceeded with the vetting of the documents: *"After receiving documents from candidates, we assess whether the candidates meet the definition of disability under the Employment Equity Act"* (SRA 001).

Candidates were subsequently requested to answer questions about their challenges and accommodations required (e.g., a desktop computer with an adapted keyboard). According to the SRAs, the most common accommodations requested were assistive technology and personal assistance. Candidates who did not have an appropriate CV were assisted to develop one to ensure that their documents would be presentable (i.e., contain accurate details) and complete. Once the mentioned steps had been completed, candidates were introduced to available job positions that matched their skills level. In other instances, candidates were asked to provide information on the type of work they were interested in.

5.5.2. *Job-placement Stage*

The second stage involved screening candidates for a specific job position in which they have shown an interest. *"Candidates undergo a screening process. First, they get to write a competency test"* (SRA 009) to determine competency in terms of literacy, communication, and problem-solving skills. Once completed, *"candidates are taken through a mock interview"* (SRA 012). This process aimed to prepare the candidates for the actual interview and ensure that they would know what to say and what not to say. They were also given the opportunity to ask questions about the job they hoped to be interviewed for and to state any possible concerns. The matter of non-professionalism was addressed, and guidance was given on appropriate behaviour and dress code: "*We also provide feedback on how to dress and behave in a professional environment"* (SRA 003). Once the process was completed, the candidate's information was shared with the employer: *"The candidate's CV and skills are matched to a job position and sent to the potential employer"* (SRA 014). Lastly, *"an interview is scheduled, and the SRAs ensure the candidate has sufficient information about the place of interview and is aware on how to get there"* (SRA 017). Important to note is that for most SRAs (n=14), this stage only involved vetting the documents received, organising the CVs, and sending information regarding the potential candidates directly to the employers.

5.5.3.   Post-placement Stage

Once the potential employer has selected the candidate for the position, salary negotiations and information about the job position were communicated with the SRAs. When an agreement was reached, the companies would send through income offers to the SRAs, and an agreement would be reached. From there, a candidate was offered induction training to support them in understanding what was required of them: *"We offer work readiness programme as part of our skill development training before placing candidates"* (SRA 015). Ongoing support was provided to the candidates once placed, and this was reported to last between three weeks and three months. One SRA mentioned that "*we provide support for two weeks to allow candidates to settle in"* (SRA 022). In the case of learnership programmes, support lasts for the duration of the learnership, in most cases for one year. In addition to on-the-job support, further support included handling any challenges that might arise during the placement: *"We offer support and resolve challenges within their appointed positions, which includes resolving conflicts, request for change in career and guidance"* (SRA 018).

5.5.4.   Training Stage

This stage, unlike the other stages, can occur before or after placement. Only four SRAs mentioned that following placement of a candidate, employers would invite them to support the candidate to become integrated in the workplace: *"We offer disability equality training workshops which mostly deal with integration of persons with disabilities in the companies*" (SRA 011). Another explained that they *"provide guidelines on managing employees with a disability"* (SRA 006), while a third one revealed that they *"provide training for both employers and employees"* (SRA 003). According to the SRAs, they provided different types of training such as sensitisation training, assisting companies with the development of recruitment strategies, and support in understanding legislation and policies related to the employment of persons with disabilities. The content of these training programmes is listed and described in Table 5.8. The training is, however, provided on request and not necessarily immediately following a placement.

5.5.5.   Placement Process: Hypothetical Case Study

The SRAs were requested to describe the placement process specifically focused on a candidate on with a severe communication disability. This candidate was presented in the form

of a hypothetical case study (Appendix O). Only eight SRAs reported having had experience in the placement of an individual similar to the candidate described in the hypothetical case study.

Similar to the previous section (Section 5.2.3.1), the SRAs described the placement process across the four placement stages: pre-placement, job-placement, post-placement, and the training stage. The emphasis in this section is the strategies that facilitate employment during the placement process. The placement process – focussed on facilitation strategies - for an individual with severe communication disabilities is indicated in Table 5.10.

Table 5.10

Placement Process Followed by SRAs During the Placement of Persons with a Severe Communication Disability in the Hypothetical Case Study.

Stages of Employment	Information gathered/strategies employed	Identified categories
		Vocational competence
Pre-placement stage	o Diagnosis information	- Type of disability
	o Medical Information	- Health condition
	o Capabilities and limitations: Vocational skills	- Language
		- Communication skills
		- Literacy skills
		- Problem solving skills
	o Qualification and work experience	- School education
	o Determine positive traits	- Confidence
		- Motivation
Job-placement stage	o Assist with curriculum vitae development/completion	- Job seeking support
	o Determine readiness for job interview	- Interview preparation support
	o Provide a list of employment positions	- Job selection support
	o Accommodations required	- Reasonable accommodations
	o Determine if transportation required	- Transportation support
	o Determine support system available	- Support from family
		- support from friends
		- Support from the potential employer
	o Assessment of environmental accessibility	- Accessibility audit
Post-employment stage	o Determine need for on-the-job support	- On the job support
		- Follow-up on placement
Training stage	o Development of a disability awareness training	- Employer sensitisation

From Table 5.10, it is thus clear that specific information is gathered across the four different placement stages to guide placement. Based on the information gathered, strategies to ensure a successful placement are implemented. Therefore, it is evident that it is insufficient to only gather information during the pre-placement stage when attempting to facilitate and secure placement.

5.5.5.1. Pre-placement Stage. Nevertheless, in the pre-placement stage, the SRAs mentioned they would gather information to determine the vocational competence of the candidate. This included information regarding their diagnosis and any further medical information. Furthermore, information regarding their capabilities and limitations is collected. There was an emphasis by all the SRAs on the importance of assessing the candidates' communication skills; and thus, ability to communicate with the employer and other employees effectively using their communication device and written messages: *"It is important that she is able to communicate with the employer"* (SRA 008) and "*Once we are certain she is able to answer questions and communicate with the employer, we sent her for the interview*" (SRA 010).

Furthermore, information regarding the candidates' qualifications and work experience is gathered. Lastly, an observation on personal attributes, such as how resilient, motivated and confident the candidate is, will occur during interaction with the candidate, for instance, during career counselling or mock interview.

5.5.5.2. Job-placement Stage. The SRAs first mentioned the importance of perceiving the candidate as capable. One SRA mentioned that: *"Firstly, I would find a role suitable for her. Find a job in the department such as data capturing and focus on a strength-based approach"* (SRA 003). Some SRAs mentioned that they perceived the candidate as an easy to place individual due to the communication disability being the only disability she presents with. One SRA stated, *"I would not have difficulty finding a position for this candidate… she seems to be doing well, judging from how you explain the situation. The thing is, I have a disability myself. So, for me, I wouldn't see anything wrong with hiring her"* (SRA 025).

The SRAs mostly considered the candidate for a position in an administrative position, with some SRAs emphasising for the position to not be in direct contact with other people. In this view, one SRA mentioned that: *"I would find a work environment where the candidate won't have to deal with customer related issues"* (SRA 024); "*She will be placed in a position*

where she will not need to be verbal. A suitable job position would be in HR and not call centre" (SRA 002) and *"I would find her a job in the department such as data capturing"* (SRA 003). Furthermore, SRAs mentioned they would offer job-seeking support and, at a later stage, job selection support: *"A list of possible job positions will be given to her, and I will help her decide which job would be a suitable match for her"* (SRA 017).

The SRAs further focussed on establishing accommodations required by the candidate. Information gathered, therefore, included requirements for assistive technology for communication and work and the need for workstation modifications. There was, however, no mention of accommodations required for job task and schedule modification by any of the SRAs: *"She has her own iPad (communication device), was able to work on a regular desktop that does not require modifications, and she is able to use her hands"* (SRA 019) and "*Apart from her not being able speaking, she has no other challenges"* (SRA 025).

In addition, SRAs specifically mentioned the importance of enquiring with the candidate whether there is a family member or individual that was supporting the candidate through the employment process: *"The caregiver provides information on the challenges the candidate provides with, and if the candidate is able to answer all questions, they state their challenges"* (SRA 004) and *"It helps that they have someone that accompanies them to our offices and helps them"* (SRA 015). The SRAs again mentioned that they would offer transportation support to the candidate should they require that, while the rest reported that they would only assist the candidate with information on how to commute to work: "*We will find out from the employer if they offer transport for her to get to work"* (SRA 025).

5.5.5.3. Post-employment Stage. The SRAs mentioned they would consider placing the candidate in a work environment that has had an accessibility audit and is inclusive of individuals with disabilities: *"We would consider placing her in one of our long-term clients' companies"* (SRA 014) and *"Depending on how well she copes with stressful, we would place her in companies that we already have a relationship with"* (SRA 020). Further support mentioned by seven SRAs included the provision of induction training and providing and on-the-job support to ensure the candidate is able to perform job-related tasks: *"We will make sure she understands what is expected of her"* (SRA 021) and *"Once the candidate is appointed, she is supported for two weeks to allow her to settle in*" (SRA 004).

5.5.5.4.Training Stage. Depending on the employer, the SRAs mentioned the employer might invite them to provide a disability awareness training to the company (i.e., to employer and employees): "*We can also offer training to the employees and employers in the company she is placed in*" (SRA 013). As the SRAs previously mentioned, this ensures that the candidate will be integrated. Training was rarely mentioned in the placement process of the hypothetical case study.

5.5.6. *Placement Process Linked to the ICF*

In the body function and body structure domain, information gathered is used to determine vocational competence. This included information on the health status, medical history, capability, and limitations of the candidate. The information gathered related to this domain is only collected in the pre-placement stage. The ICF categories linked to this domain included, movement-related functions, mobility of joint functions (b170), and sensory, seeing (b210), and hearing functions (b230).

In this domain, information is gathered in the three-placement stages. The ICF categories linked to the pre-placement were related to communication and included, speaking (d330), conversation (d350), d163 reading (d163), writing (d170), and problem solving (d175). In the job placement stage, the categories linked were acquiring and keeping a job (d845), acquiring skills (d155), work preparation(d840).

Identified categories linked to the environmental factors' domain were reported in all four placement stages. In the pre-placement stage, identified categories were linked to assistive technology in mobility (e120), communication (e125), and assistive technology for employment (e135). In the job-placement stage, identified categories were related to services by SRAs and professionals such as teachers and therapist. These were linked to labour and employment (e590), systems, health services and systems (e580), transportation services and systems (e540), legal services and systems (e550), and social security services and systems (e570). The post-placement stage involved the provision of training and task completion support. These were linked to acquiring and keeping a job (d845), e590 labour and employment services (e590), acquiring skills (d155), and work preparation (d840).

Personal factors identified included having confidence, motivation, and the ability to handle challenges at work. Other categories identified included having educational

qualifications and work-related skills. Information related to the personal factor domain was only collected in the pre-placement stage. This information forms part of the assessment of vocational competence.

Table 5.11 outlines categories linked to the ICF identified in the four placement stages.

Table 5.11

Process Followed by SRAs During the Placement of Persons with A Severe Communication Disability Linked to the ICF Indicating Facilitating Strategies to a Successful Placement (N=25)

Domains of the ICF	Placement stage	Facilitating strategy	Categories identified	ICF categories
1. Body function and body structure	**Pre-placement stage**	Vocational competence: functional skills	o Motor function	b710 mobility of joint functions
			o Sensory function	b 210 seeing functions b 230 hearing functions
			o Health condition	Not classified
2. Activity and participation	**Pre-placement stage**	Vocational competence: Vocational skills	o Communication	d330 speaking d350 conversation
			o Literacy skills	d163 reading d170 writing
			o Problem solving skills	d175 problem solving
	Job-placement stage	Employment seeking support	o Drafting and completion of CV	d845 acquiring and keeping a job
			o Interview preparation/mock interview	
			o Job selection	
			o Job-seeking support	
		Work preparation support	o Induction training	d 155 acquiring skills d 840 apprenticeship (work preparation)
		Job task modifications	o Flexible schedule	d220 Undertaking multiple tasks
			o Negotiating workload	d230 Carrying out daily routine
	Post-placement support	Support by SRAs	o On-the-job support	d845 acquiring and keeping a job
			o Ongoing job support	e590 Labour and employment services
			o On-the-job training	d 155 acquiring skills d 840 apprenticeship (work preparation)

Domains of the ICF	Placement stage	Facilitating strategy	Categories identified	ICF categories
Contextual domain: Environmental factors	*Pre-placement*	Availability of assistive technology	o Availability of wheelchair	e 120 assistive technology mobility
			o Availability communication device	e125 assistive technology for communication
			o Availability of software or work equipment own	e135 assistive technology for employment
		Transportation to work	o Explore about transport	e540 transportation
			o Organise transport to/from work	
	Job-placement stage	Support network	o Connecting with family members or friends	e310 immediate family e320 friends
			o Selecting a supportive work environment	e330 people in position of power
			o Availability of supervision	e325 colleagues
			o Collaborating with rehabilitation therapists where applicable	e355 Health professionals
			o Collaborating with teachers where applicable	e360 other professionals
			o Support from SRAs	
	Post-employment stage	Accessibility of work environment	o Environment audits	e590 Labour and employment services, systems, and policies
	Training stage	Providing training to employers and colleagues	o Disability awareness training	e590 Labour and employment services, systems, and policies
Contextual domain: Personal factors	*Pre-placement stage*	Personality traits	o Confidence	Not classified in the ICF
			o Motivation	
			o Ability to handle challenges at work	
		Qualifications	o School education	
			o Work-related skills	

5.6.   Phase 2c: Roles of SRAs

In order to determine the roles of SRAs, which are facilitating the employment of persons with severe communication disabilities, participants were asked what services they provide to both employers and clients with disabilities. Also, the activities mentioned in the placement process were analysed to determine the description of these services.

This subsection presents the services provided by SRAs to candidates with severe communication disabilities and potential employers.

5.6.1.   Services Provided to Candidates with Disabilities by SRAs

The SRAs offer various services to candidates with severe communication disabilities. A total of ten different services were identified that are offered to candidates across the four placement stages. Placement services and employment seeking assistance are the two most prevalent services provided. Often the candidates do not have an idea of a career path they want to follow. Services provided should therefore also include support in selecting a career path: *"We provide career counselling in order to guide their job selection decision and determine their career options"* (SRA 021) and *"Career counselling may also involve discussions about career planning"* (SRA 017). Also, marketing of their skills to potential employers. At times employers reject a candidate when they do not meet the specifications provided: "*We load their profile on our database and then forward to companies to consider the suggested person"* (SRA 019) and *"We try to sell the candidate to the employer; we make them see the capabilities first before the disability"* (SRA 017).

Training is also provided in the form of induction training to ensure that candidates understand what is expected of them. The candidate is familiarised with the specific job description and job-related tasks, and the candidate is then introduced to the employment environment and colleagues: *"Training is offered before they are placed in a job position to ensure they are prepared"* (SRA 004).

Efforts are also made to ensure that the candidate is retained in the job position through the provision of ongoing support: *"We offer support in the form of job coaching to the appointed person. Regular follow-ups are conducted in the form of phone calls and support is provided when needed* (SRA 016). Services related to the application of disability parking disks, and support with tax rebate applications are also provided: *"I sometimes assist with*

application of disability-friendly parking disks" (SRA 015) and "*We help them with tax rebate applications for costs incurred as individuals with disabilities"* (SRA 002).

Figure 5.2 summarises the reported services provided by SRAs to candidates with severe communication disabilities.

Figure 5.2. *Services Provided to Candidates with Disabilities by SRAs*
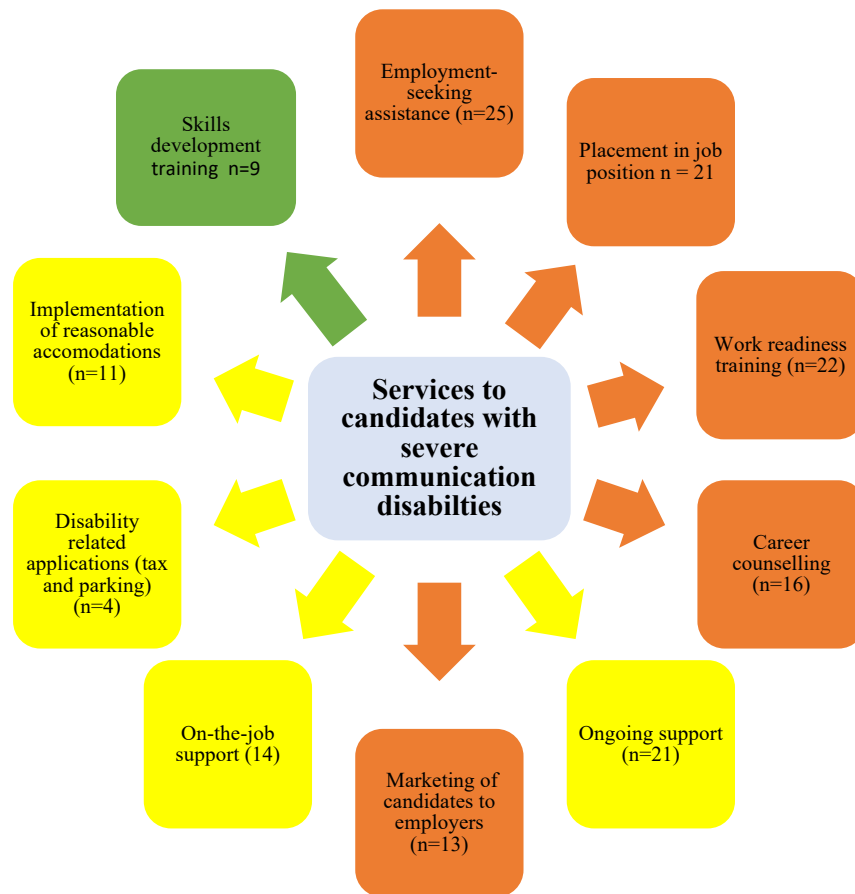
5.6.2. *Services Provided to Employers*

Twelve different services were identified that are offered to employers across the four placement stages. Recruitment or sourcing is the main service that SRAs provide to employers.

These services included recruitment or sourcing of candidates. Companies find it difficult to source suitable candidates and hence approach SRAs to assist with recruiting and

securing these candidates: *"The companies approach us with a request for a candidate to place in available job positions. Specifications are offered, and we go and source for the candidate"* (SRA 018) *and "We first search for people already in our database and see if they meet the job requirements"* (SRA 007).

The SRAs support employers with the development of an employment equity plan and recruitment strategy. This plan outlines the company's plan to reach equity targets, that is, how they intend to implement affirmative action regarding hiring persons with disabilities. This plan and strategy outline strategies to be used that will ensure that suitable candidates are attracted to apply for the advertised job positions and are retained in the company: *"It also includes evaluating the company's disability employment equity plan to see whether it is aligned with the stipulations of the EEA (1998)* (SRA 023) and *"Broad-Based Black Economic Empowerment (B-BBEE) scorecard"* (SRA 001).

SRAs also offer strategies to facilitate retainment of candidates with disabilities through disability awareness training: *"We offer a series of workshops to the employers and employees on understanding disability"* (SRA 004); *"Disability sensitisation training is important for successful integration of the candidate"* (SRA 001); *"We offer integration training as well a disability awareness sensitisation training"* (SRA 015); *"Provide guidelines on managing persons with disabilities"* (SRA 011), and *"...disability equality training workshops, which mostly deals with the integration of persons with disabilities"* (SRA 012).

The SRAs conduct an evaluation of the accessibility of the work environment, in other words, they perform a physical accessibility audit. This is to ensure that candidates who use wheelchairs for mobility can be placed in those companies.

More services offered services include support with the implementation of reasonable accommodations: *"We advise the client of reasonable accommodation required by each candidate; We support them with using the equipment (assistive technology) and software ordered"* (SRA 021). Other services offered by SRAs to employers are to coordinate learnership programmes for them and the skills development program.

Figure 5.3 provides a summary of the reported services provided by SRAs to employers.

Figure 5.3. *Services Provided to Employers by SRAs*
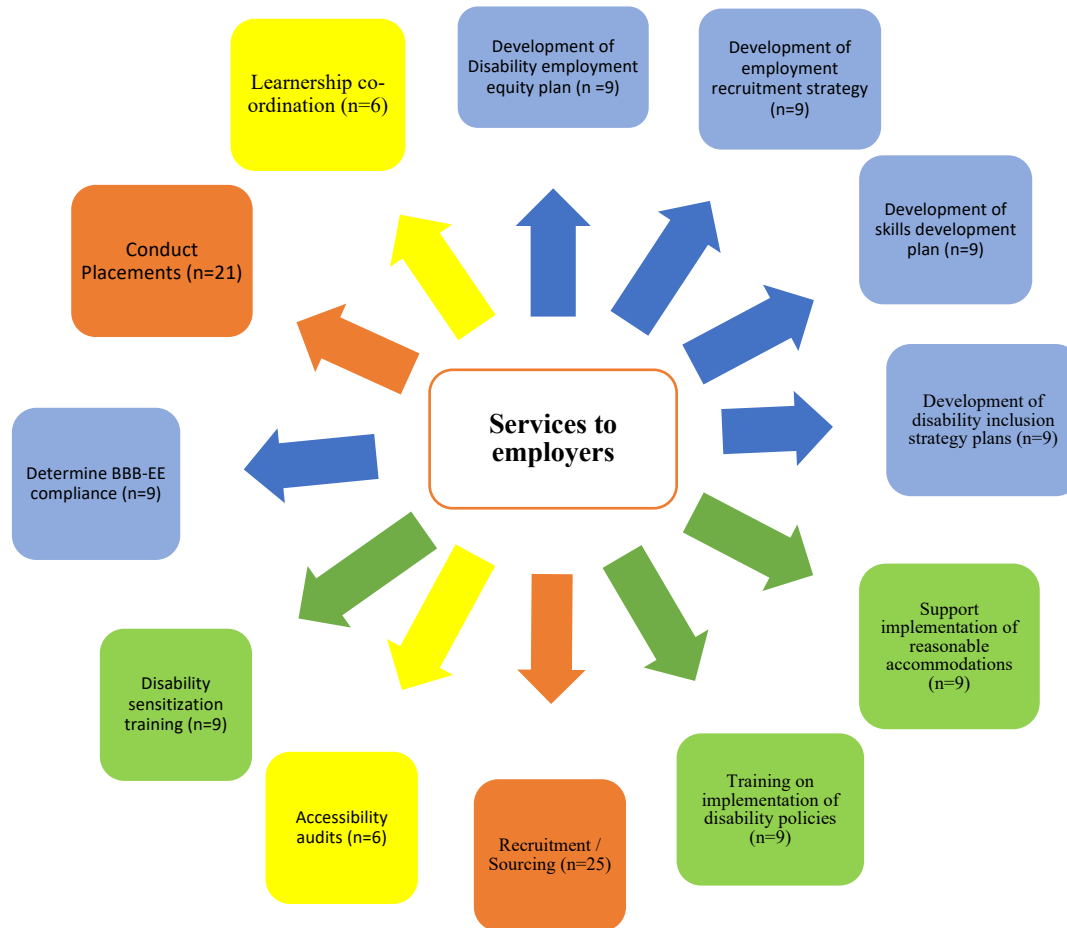
5.6.3. *Roles of SRAs*

Roles of the SRAs were determined from the services provided to candidates with severe communication disabilities and employers as described in Section 5.2.4.2. These services were grouped together based on their similarity in function. Four roles were determined: the consultation role, the placement role, the support role, and the trainer role. Figure 5.4 depicts the synthesis of services provided by SRAs as indicated in Figure 5.2 (i.e., services provided to candidates with severe communication disabilities) and Figure 5.3 (i.e., services provided to employers).

5.6.3.1. Consultation Role. In this role, the provision of services is related to consultation services regarding disability in the workplace. The employers seek counsel regarding crucial legislation and policy to ensure that they are compliant with the necessary

regulations. This role involves direct interaction of the SRA with the employer and not with the candidate. Services, therefore, include, conducting environmental audits and providing support in the development and/or evaluation of disability recruitment plan and strategy.

5.6.3.2.**Placement Role**. This role involves services aimed at recruitment or sourcing and placement of candidates in job positions. This role is offered to candidates, through employment seeking assistance. Additionally, this role includes support in marketing the candidate's skills to potential employers, offering career counselling and induction training. As indicated in Figure 5.4, the SRAs mostly assume a placement role.

5.6.3.3.**Support Role.** The SRA's support role extends to the provision of support to both the employer and the candidate once placement has been finalised, and it typically includes the provision of on-the-job support and ongoing support for a specified period. For SRAs who co-ordinate learnership programmes, all matters related to the placement are handled by them, such as managing the payroll, handling disputes, and approving leave applications. Other forms of support include the implementation of reasonable accommodations and support in the use of assistive technology. For certain individuals with disabilities, SRAs are approached for support in applying for a tax rebate and for disability parking disks.

5.6.3.4.**Trainer Role.** The trainer role involves the provision of training in the form of workshops and seminars to both employers and employees on disability-related matters. This role is different from the consultation role, where support is provided directly to the employer. Training workshops are provided to enhance an understanding of the relevant employment legislation (e.g., the TAG and the Code), awareness about disability, and disability sensitisation training.

Figure 5.4 provides a description of the roles assumed by SRAs.

Figure 5.4. *Roles of SRAs Based on the Services Provided to Individuals with Severe Communication Needs and Employers*

Consultation role
- Develop employment recruitment strategy
- Develop disability employment equity plan
- Develop skills development plan
- Develop disability inclusion strategy plan
- Determine BBB-EE compliance

Placement role
- Recruitment or sourcing
- Provide employment-seeking assistance
- Placement in job position
- Provide work readiness training
- Provide career counselling
- Market candidates's skills to employers

Support role
- Learnership co-ordination
- Accessibility audits
- Support implementation of reasonable accommodations
- Ongoing support
- Disability related applications (tax and parking)
- On-the-job support

Trainer role
- Training in understanding reasonable accomodations
- Training in disability sensitization
- Training on implementation of disability policies
- Training on skills development

Note. The services outlined in Figures 5.2 and 5.3 are colour-coded to align with the roles in this figure. For example, all services coded in yellow, refer to the support role. The colour codes also indicate at what placement stage the roles are observed (see Figure 5.1).

5.7.   Phase 3: Development of a Proposed Guiding Placement Checklist

Phase 3 aimed to develop a proposed guiding placement checklist based on a synthesis of the data from phases Phase 1 and 2 (2a, 2b, and 2c) of the study. Phase 1 and 2a provided factors that hinder or facilitate the employment of persons with severe communication disabilities. Phase 2b outlined placement stages that depict services provided at a specific placement stage. Phase 2c provided data on facilitating strategies. Table 5.12 depicts the collated data from the phases.

Table 5.12

Synthesised Findings from Phase 1, Phase 2 (2a, 2b and 2c)

Domain	Categories Identified Phase 1 and 2 a	ICF Second Level Classification	Facilitating Strategy Phase 2 b	Employment Stage Phase 2c
Body function and Body structure domain	***Sensory skills***	b210 seeing function	Assistive technology (e.g., braille machine, adapted computer software and keyboards)	Pre-placement stage
		b230 hearing functions		
	Impairment in speech	b310 voice and speech functions	Assistive technology for communication	
Activity and participation domain	***Motor function***	d440 fine hand use	Assistive technology for work (e.g., adapted keyboard, mouse, and use of adaptive switches)	
		d445 hand and arm use		
		d450 walking	Assistive technology for mobility (e.g., walking frame and wheelchair)	
		d455 moving around		
	Literacy skills	d166 reading	Job match considerations Augmentative and alternative means of communication	
		d170 writing		
	Communication skills	d310 understanding spoken messages	Job match considerations Augmentative and alternative means of communication	
		d315 understanding non-verbal messages		
	Problem-solving skills	d175 solving problems	Work preparation support • Induction training	
		d240 handling stress and other psychological demands	• On-the-job support • On-the-job training	
	Social skills	d350 conversation	• Ongoing job support Organise social activities in the workplace	
		d710 basic interpersonal interactions		

189

Domain	Categories Identified Phase 1 and 2 a	ICF Second Level Classification	Facilitating Strategy Phase 2 b	Employment Stage Phase 2c
	Job seeking support	d845 acquiring. keeping and terminating a job	Support in job application process • Drafting and completion of CV • Interview preparation/mock interview • Job selection • Job-seeking support	
Contextual domain: Environmental Factors	*Accessibility of work environment*			
	Physical environment	e155 accessible buildings e240 light e250 sound	Conduct accessibility audits Consideration of non-over-stimulation environment (e.g., provision of sensory room)	
	Assistive technology required	e125 technology for communication e130 technology for education e135 technology for employment	Provision of necessary assistive technology	
	Attitudes	e430 attitudes of people in positions of authority E425 attitudes of colleagues	Provision of disability awareness training to employers and employees Provision of disability sensitisation training Work preparation support • Induction training • On-the-job support • On-the-job training • Ongoing job support	
	Support system	e310 immediate family e320 friends e325 acquaintances, peers, colleagues, and community members e330 people in positions of authority	Support network • Connecting with family member or friend • Selecting a supportive work environment • Collaborating with teachers where applicable Collaborating with rehabilitative therapists where applicable Support from employer	

Domain	Categories Identified Phase 1 and 2 a	ICF Second Level Classification	Facilitating Strategy Phase 2 b	Employment Stage Phase 2c
		e340 personal care providers and personal assistants		
		e355 health professionals		
		e360 other professionals		
	Services and systems	e540 transportation services and systems	Transportation to work • Organising shuttle/transport to and from work • Inform about transportation available to work	
		e570 social security services	Refer to social development for social benefit queries	
	Health condition	e580 health services	Determine medication taken related to Condition (e.g., anticonvulsant drugs to control epilepsy)	
		e355 health professionals	Provision of mental health services Provision of extended healthcare Referral to medical professional when candidate is not in good health Seek advice from rehabilitation professionals	
Contextual domain: Personal factors	*Personal traits*	motivation	Provision of career counselling Induction training Work preparation support • Induction training • On-the-job support • On-the-job training • Ongoing job support Provision of skills training opportunities	
		confidence		
		knowledge about career path		

5.8.   Summary

This chapter presented findings from the three phases of the study. The findings from Phase 1 and 2a highlighted the barriers to and facilitators of employment of persons with severe communication needs. The conceptual framework of the study guided the presentation of the findings. Barriers as well as facilitators were reported mainly in the environmental domain, as is clear from the findings in both Phases 1 and 2a. The relevant factors were summarised and presented systematically using the second-level classification of the ICF, since the aim was to use universal language in the description of hindering and facilitating factors.

The findings obtained from Phase 2b provided a description of the strategies that SRAs used to support the successful employment of a candidate with a severe communication disability were highlighted. The findings from Phase 2c on the other hand, provided a description of the services provided by SRAs in the South African context and the roles they assume in facilitating employment of persons with disabilities.

Finally, Phase 3 is described in terms of the synthesis of findings from Phase 1 and 2 of the study. A summary is provided linking a successful placement of a candidate with severe commutation disabilities.

CHAPTER 6

DISCUSSION

6.1.   Introduction

This chapter discusses the findings of the study as presented in Chapter 5. The findings are interpreted and compared to the findings that emerged from the available literature. Also, based on the synthesised findings from Phase 1 and 2, a proposed guiding placement checklist is conceptualised. This framework is undergirded by the ICF and provides strategies to be considered during the placement of persons with severe communication disabilities in employment.

6.2.   Summary of Findings

This study aimed to explore the barriers and facilitators of employment of persons with severe communication disabilities through the perspective of persons with severe communication disabilities themselves and those of SRAs. The aim of the study was attained through three phases. Phase 1 explored the barriers to and facilitators of employment of persons with severe communication disabilities, while Phase 2a explored the perceptions of SRAs. From these two phases, factors that were reported as either facilitating or hindering the participation of persons with severe communication disabilities were identified. Phase 2b aimed to explore facilitating strategies that ensure successful employment by exploring the placement process followed by SRAs. The outcome of this phase provided information on the services provided by SRAs in the four placement stages. Phase 2c aimed to explore the services and roles of SRAs. The findings indicated how the roles of SRAs facilitate the successful placement and retainment of persons with disabilities. Finally, Phase 3, which aimed to develop a proposed guiding placement checklist for persons with severe communication disabilities, outlined factors to consider and accommodations that ensure a successful placement. This was based on collating the factors identified in Phase 1 and 2a, facilitating and hindering factors identified in the placement process and the detailed placement stages from Phase 2b, and facilitating strategies from Phase 2c.

The factors identified in Phases 1 and 2 were linked to the ICF categories. The summary of identified factors from the phases demonstrates that the domains within the ICF are reciprocal and interconnected (Kostanjsek, 2011). For persons with severe communication disabilities, severe impairment in speech and motor function (body function and body structure, impacts participation in major life areas such as education and employment (activity and participation) (Threats & Worrall, 2004). Also, engagement in these areas is further intensified by environmental (physical, cultural, social environment) and personal factors that can either facilitate or hinder participation (Scott et al., 2018).

The contextual domain (i.e., environmental, and personal factors) were most frequently reported as barriers or facilitators to participation in employment. Within the environmental factors, negative attitudes, accessible environments, assistive technology, services and systems (in education, employment, transportation, health, and legal), and social support were mentioned. Most frequently mentioned personal factors were educational qualifications and vocational skills. The identified factors are no different from what is reported in the existing literature regarding barriers and facilitators of employment of persons with disabilities (Ebuenyi et al., 2018; Morwane et al., 2021; Tripney et al., 2019).

A summary of the factors from Phase 1 and 2 linked to ICF categories are indicated in Figure 6.1.

Figure 6.1. *Summary of the Integrated Findings from Phase 1 and 2 of the Study Expressed in Terms of the ICF*
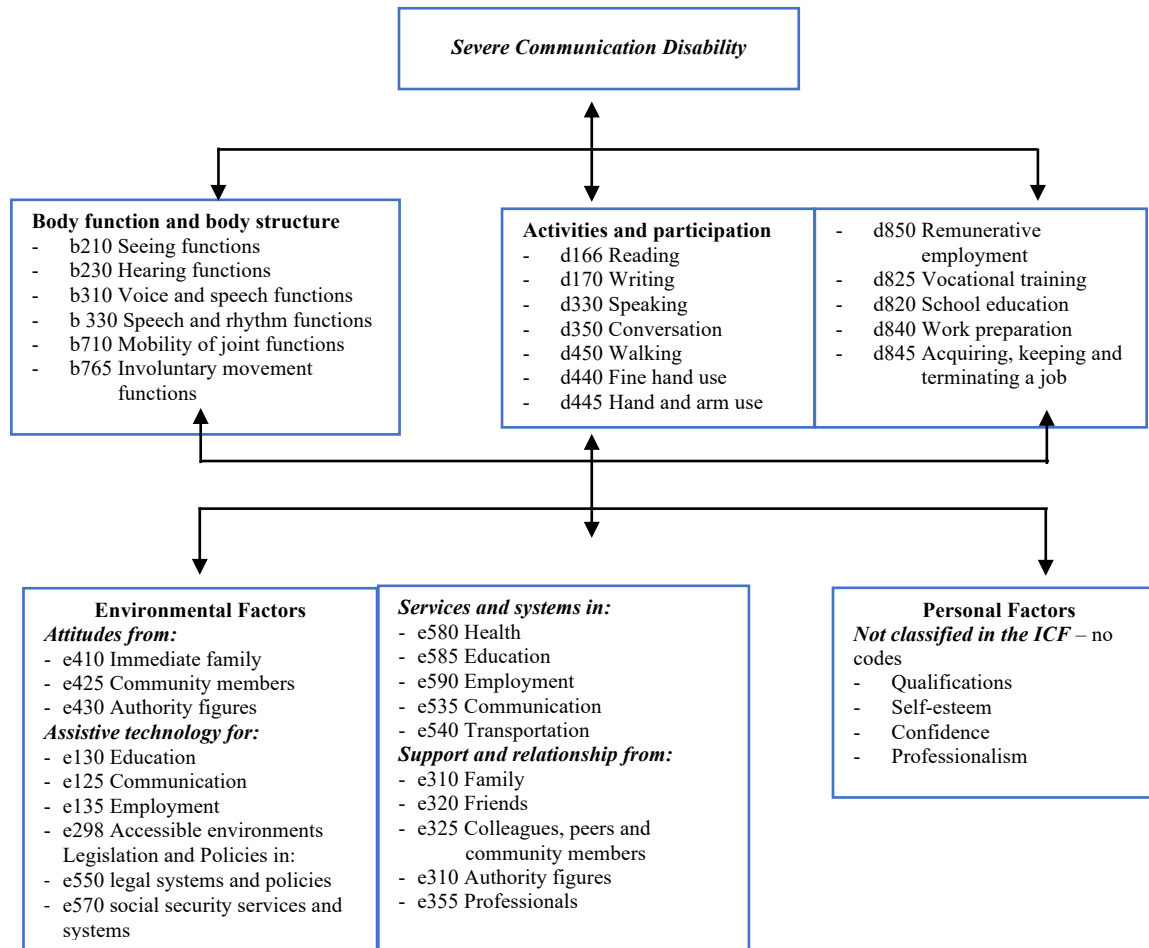
6.3. Phase 1 and 2a: Barriers to and Facilitators of Employment of Persons with Severe Communication Disabilities

This section discusses the collated findings obtained from Phases 1 and 2a. In Phase 1, participants with severe communication disabilities consisted of those employed and unemployed; a note must be made that the data was not presented according to their employment status, nor were there any comparisons made between those employed and their unemployed peers. This section discusses the commonality of the factors reported in the findings from Phase 1 and Phase 2a.

6.3.1. *Body Function and Body Structure*

Participants mainly reported severe impairment in speech and mobility functions as facilitating or hindering participation under the body function and body structure domain. Similar findings were observed by Yazıcı et al. (2011). When severe communication disability is viewed from a medical perspective by medical and rehabilitation professionals and teachers, the individuals are viewed as incapable of participating in educational and employment opportunities (Andrews, 2017). More so, this view is aggravated in SA by prevailing misconceptions regarding disability, and therefore, a moral/religious-based understanding of disability continues (Tigere & Makhubele, 2019). Due to stigma and discrimination being more associated with severe disability, persons with a severe communication disability are less likely to receive regular early intervention (Morwane et al., 2019; Van Niekerk et al., 2021; Saloojee et al., 2007) and education, and if they do, they are less likely to complete their education (Mitra et al., 2013).

Drawing from the characteristics of the participants in this study who presented with a severe communication disability, it was evident that this population continues to face marginalisation in accessing the open labour market. Observantly, the participants with severe communication disabilities who were in paid, full-time employment did not require personal assistants for activities of daily living, were ambulatory and had good use of the hands, to enable them to write or type independently, as well as take care of their daily needs (i.e., activities of daily living). However, participants who presented with severe restriction in motor function, that is, were not ambulatory and presented with poor hand use, could not access employment opportunities. In contrast, other participants who were considered as being employed according to the definition used in this study were appointed in volunteer or temporary positions, which paid meagre remuneration. These observations are in line with reports from the literature, which indicate that barriers to employment differ according to the type of disability, with persons with severe communication disabilities due to the presence of multiple disabilities (i.e., in communication, cognition, and mobility) being more disadvantaged (Lindsay, 2011).

The participants with severe communication disabilities shared that they were hesitant to apply for advertised employment opportunities out of fear that they would not be able to communicate comprehensively with potential employers and colleagues. This insight is not far

removed from reality, as effective communication is one of the so-called 'soft skills' greatly valued by employers (Bryen et al., 2007). Individuals who are able to communicate their needs are three to four times more likely to be employed (Carter et al., 2012). In this study, despite the employed participants with severe communication disabilities being competent communicators, that is, using AAC communication devices effectively, they were not employed in mid-level or senior level, permanent work positions. These reports are similar to those observed by Bryen et al. (2007), who observed that individuals with disabilities who were competent communicators still encountered challenges in accessing employment opportunities. The findings, therefore, indicate that the lack of verbal communication is not the sole barrier to accessing employment opportunities for this population. However, the inability to move independently and use one's hands, as is the case with most of the participants with severe communication disabilities in this study, plays a considerable role. This is in line with what is known in the literature, where persons with intellectual disabilities (including persons with severe communication disabilities) are more likely to be hired than those with physical disabilities (Maja et al., 2011; Ned & Lorenzo, 2016).

When the SRAs were asked which types of disabilities were challenging to place in employment, persons with severe communication disabilities were mentioned the least. From these findings, it can be assumed that individuals from this population are either easy to place or SRAs do not consider them as these individuals infrequently approach them. However, based on the reports by participants with severe communication disabilities, the latter seems to be the case. The reports also indicated that the employed participants relied on personal networks for information regarding available employment opportunities. They, therefore, rarely apply for advertised employment positions through the SRAs. Therefore, this could mean that the SRAs do not encounter a large caseload of persons with severe communication disabilities and, more specifically, that companies provide exact specifications of candidates they seek and are willing to accommodate – which often does not include persons presenting with severe communication disabilities multiple disabilities. Perhaps this explains to some extent the low representation of persons with severe communication disabilities in private companies and government departments.

6.3.2. Activity and Participation

Participation in major life areas such as education and employment depend on accessible education, availability of employment opportunities supports in the job-seeking process. Similar findings were observed in the literature (Morwane et al., 2021).

6.3.2.1.School Education. In this study, access to school education and vocational training appeared to have a consequential impact on the participant's ability to access employment opportunities. The participants with severe communication disabilities reported difficulties in accessing education, which resulted in several completing their school education only up to Grade 6 or Grade 9. As further reported in this study, the lack of access to education could be attributed to two main reasons. Firstly, a limited number of schools are able to accommodate the educational needs of learners with severe communication disabilities by offering an adapted curriculum and assistive technology. Secondly, the problematic qualifications framework followed by most schools for learners with disabilities in SA does not offer a Matric (Grade 12) level qualification. This means that many learners with severe disabilities exit the school system without qualifications that will allow them to advance to a higher level of education (Graham et al., 2013). The highest qualification offered by many of these schools is equivalent to Grade 9 (Department of Education, 2020).

A clear consequence of failure to access education and complete their school education is that most person with disabilities fail to develop literacy skills (Bualar, 2014). Individuals who are literate have the advantage of accessing a variety of employment opportunities that are also better paying and have more opportunities for vocational growth (Light et al., 1996). Therefore, being illiterate or semi-literate has an immense impact on the range and type of available job opportunities (McNaughton et al., 2002; McNaughton & Arnold, 2010). None of the participants with severe communication disabilities in this study were illiterate. However, based on their literacy skills, those who presented with a Grade 6 or lower educational qualification would find it difficult to effectively communicate using formal and comprehensive written language and following written communication in the workplace. For example, not all participants had the potential to cope in an administrative position, which involves the ability to receive messages, send

emails, and complete required documentation. This further disadvantage them in terms of the employment positions available to them.

An added challenge identified was the absence of vocational education in schools' curriculum for learners with disabilities. Many of the participants with severe communication disabilities would have preferred the lessons to include entrepreneurship training that would have equipped them to start their own business. Again, it was pointed out that they would have preferred an education that focuses on the development of business plans and skills to search for funding. Furthermore, participants posit that it is too late for schools to provide career guidance towards the end of their school year. Career guidance encourages individuals to start considering career paths they would like to follow and how they plan to get there (Lindsay et al., 2012). The SRAs also reported the lack of knowledge regarding career options available as candidates often have no awareness of career options available and, therefore, career tracks they would like to pursue.

The SRAs in this study expressed concern over the lack of critical components in vocational and work preparation training programmes in special schools and revealed that most of the goals set did not align with the skills demanded by employers. The SRAs, therefore, emphasised programmes to focus on skills required for them to succeed in the workplace and recommended that exposure to the world of work begin in the early phases of school education. Introducing the concept of work or career planning in the last year of school education is considered too late. Also, the vocational education programmes in most schools for children with disabilities do not sharpen the skills required for future employment (Soeker et al., 2018; Schneider, 2006). According to Hanif et al. (2017), effective vocational training programmes for youth with severe disabilities should consist of multiple strategies such as practical learning, peer mentorship, a collaboration between SRAs and teachers, rehabilitation professionals, and families as collaboration with potential employers. Some of the SRAs, have an established, collaborative relationship with schools for learners with disabilities in their proximity. They, therefore, collaborate with the rehabilitation professionals at the schools by guiding them on the skills to focus on as part of their work preparation programmes.

None of the participants with severe communication disabilities in the study reported attending a vocational training programme. This could be because of the lack of programmes

available that are able to accommodate individuals with severe communication disabilities (Tinta et al., 2020). Once again highlights the lack of vocational training programmes for individuals with severe disabilities in SA (Ebrahim et al., 2020; Soeker et al., 2018).

6.3.2.2. Employment Opportunities. Employment opportunities are generally limited, specifically for persons with severe communication disabilities (Khoo et al., 2013; Ta & Leng, 2013). This is evident in the limited number of participants with severe communication disabilities who are in formal and paid employment. The participants experience challenges in accessing employment opportunities that can accommodate their type and/or severity of disability, limited educational qualifications, and lack of vocational skills. Given the uncompromising attitude of some employers towards the appointment of candidates without required qualifications and work-related skills, many of these candidates are instantaneously excluded from accessing these employment opportunities.

The SA government introduced learnership programmes in private and public organisations with the intention of integrating persons with disabilities into the labour market (Ariefdien, 2015). However, since the minimum requirements for these learnership are typically a qualification at the Grade 12 level, most of the participants with severe communication disabilities in the study reported that they were excluded from the start due to a lack of necessary qualifications. Both participants with severe communication disabilities and SRAs indicated frustration over the lack of accommodations of low-level school education qualifications and the unsuitable positions advertised in these learnership programmes. There are advantages of these learnership programmes, such as the provision of work experience, exposure to the world of work, and in other instances, attainment of a skill or qualification. Be it so, the individuals with severe communication disabilities are typically not able to access and therefore benefit from these learnership programmes.

Once again, both participants with severe communication disabilities and SRAs, mentioned employers appointing persons with disabilities in learnership programmes, which do not amount to any formal appointment at the end of the programme, as a barrier. Subsidies allocated to these programmes by the government are provided on the premise that the candidates be appointed in a somewhat full-time position following the completion of the programme (Ariefdien, 2015).

However, the subsidy programme is increasingly being abused by some employers who reappoint candidates year after year without offering permanent employment. Thus, persons with disabilities continue in the learnership programme, remain on a low remuneration level, and receive no benefits such as a pension fund and medical aid cover. The SRAs in this study reported the lack of permanent employment positions that offer remuneration considered fair and satisfying for candidates. These findings highlight that many employers follow the economic model of disability when considering the participation of persons with severe communication disabilities in the open labour market. Their focus is on the (financial) bottom line, which is increasing productivity and, therefore, profits. Individuals with severe disabilities are not considered for employment positions but rather seen as being more suitable for the receipt of disability grants.

An additional advantage of the learnership programmes is the provision of a stipend. Due to these programmes not being designed to include persons with severe communication disabilities, most of these individuals have to settle for volunteer positions that, unfortunately, do not provide a stipend. As observed in this study, quite a significant number of the participants employed in volunteer positions received allowances towards their travelling and food costs. Volunteer positions are helpful in skill development for individuals with severe communication disabilities; however, most do not result in gaining full-time paid employment (Trembath, Balandin, Stancliffe, et al., 2010). Volunteering might not necessarily provide opportunities for full-time employment. In this study, individuals in volunteer positions had been in such programmes for more than a year and had not managed to gain full-time employment. Volunteering involves more than gaining skills required for future full-time, paid employment, but rather for reasons related to improving their quality of life (Trembath, Balandin, Stancliffe, et al., 2010). In this study, however, the participants with severe communication disabilities explicitly emphasised the desire to be employed in full-time, paid employment, despite the benefits of volunteering outlined.

6.3.2.3.Seeking Employment. Although employment opportunities are scarce, the available employment opportunities for persons with disabilities, in general, appear to be unexploited. Persons with severe communication disabilities rarely apply for employment positions (Lindsay et al., 2015; McNaughton & Bryen, 2002). SRAs in this study mentioned that

persons with disabilities seldom approach them to enquire about available opportunities. This report is further confirmed by the participants with severe communication disabilities, who, although mentioned SRAs as an essential network to utilise, seldom used these services. Most rely on personal networks for employment opportunities (Schneider & Nkoli, 2011). Those who attended various educational and professional activities such as workshops and conferences were able to network with rehabilitation professionals, disability advocacy groups, and SRAs who could potentially connect them to available employment opportunities (McNaughton et al., 2001; McNaughton & Bryen, 2007; Sefotho et al., 2019). Similarly, participants with severe communication disabilities had obtained information about volunteer positions or full-time paying positions through being part of disability programmes and formed part of their networks.

Studies that explored how individuals with severe communication disabilities use their networks to secure employment found that the participants attended various educational and professional activities such as workshops and conferences where they were able to network with SRAs who could potentially connect them to available employment opportunities (McNaughton et al., 2001; McNaughton & Bryen, 2007; Sefotho et al., 2019). The SRAs in this study reported that a large part of the services provided involves supporting the candidates with drafting CVs and informing them about available employment opportunities that may be suitable for them. Correspondingly, persons with severe communication disabilities mentioned that they require assistance with applying for employment opportunities and acquiring information regarding employment and skills training opportunities. Access to employment opportunities appears to depend on the availability of employment services and systems that cater to the needs of persons with severe disabilities.

6.3.3. *Environmental Factors as Part of Contextual Factors Domain*

Environmental factors influencing participation in the employment of persons with severe communication disabilities were reported to be the major barriers or facilitators. These included negative attitudes, limited services and systems in employment, restricted education, inaccessible and expensive transportation, and implementation challenges related to policies and legislation. Whether reported as a barrier or facilitator, the different environmental factors have an extensive impact on the participation of persons with severe communication disabilities in the labour market.

This corroborates with findings from Engelbrecht et al. (2019) and Ebuenyi et al. (2018), who also reported on barriers and facilitators mainly in the environment factor domain.

6.3.3.1. Attitudes. The presence of negative attitudes from employers was commonly reported by both participants with severe communication disabilities and SRAs. Participants with severe communication disabilities reported experiencing far more significant employment barriers than individuals with other types of disabilities. Stigma is associated with certain disabilities, and some experience more prejudice than others (Maja et al., 2011). The participants with severe communication disabilities reported they experienced discrimination in the job application process, where employers failed to respond to their job applications, and hence they seldom made it to the interview stage. Likewise, Amin and Abdullah (2017) also reported that persons with severe communication in their research were denied opportunities to participate in interviews.

The general lack of knowledge regarding the capability of persons with severe disabilities continues to pose a barrier to integrating persons with disabilities in the labour market (Ju et al., 2013). This highlights negative attitudes from employers and points out how societal beliefs regarding disability filter into places of employment. In the cases of colleagues, participants with severe communication disabilities experienced verbal and emotional abuse in the workplace. This was due to colleagues not understanding the reason for appointing a candidate with a disability as opposed to one without a disability. In one case, the situation was resolved by human resources; in another separate case, the participant had to search for alternative employment. The participant emphasised the importance of inclusive work environments that are willing to integrate severe communication persons with disabilities in their workforce to avoid similar situations.

In another instance, an employed participant with an acquired disability due to a medical condition mentioned that colleagues avoided any direct interactions and seemed uncomfortable around her. These colleagues mainly kept to themselves in the office as they were uncertain how to interact with a person who communicates using a "talking machine" (i.e., AAC communication device with voice output). In SA, speech generating AAC communication devices are not prevalent in society and relatively unknown (Dada et al., 2017). Seeing someone diagnosed with a degenerative disease and using an AAC communication device to communicate frightens

colleagues, as most do not know how to initiate a conversation, as noted in a US-based study where the use of AAC is more common than in the SA context (McNaughton et al., 2001).

SRAs mentioned how employers create exclusionary criteria for advertised posts to prevent requests for additional accommodations outside of what the company already has on offer. Employers have a misconception that integrating persons with disabilities in their company requires a substantial budget for accommodations (Abdullah & Mey, 2011; Gewurtz et al., 2016). However, evidence shows that costs associated with accommodating employees with disabilities are reasonable cost-wise and relatively easy to implement (Bengisu & Balta, 2011; Houtenville & Kalargyrou, 2012). SRAs also highlighted strategies employers could implement to improve the hiring of persons with severe communication disabilities. The majority mentioned that employers needed to first consider persons with disabilities as an asset to their companies. However, most employers fail to comprehend the capabilities of persons with severe disabilities and thus found it challenging to look beyond their disability (Wiggett-Barnard & Swartz, 2012). As mentioned by the SRAs, employers mistakenly assumed that persons with disabilities would not be able to cope with the demands of the job and that their productivity would therefore be poor. However, there are many benefits of hiring persons with disabilities cited in the literature, for instance, an increase in company profit margins, diverse and innovative models of service delivery, a more inclusive and supportive culture within the company, and improved knowledge regarding disability (Khayatzadeh-Mahani et al., 2019; Kocman et al., 2018; Nicholas et al., 2019).

To encourage employers to consider candidates with severe communication disabilities, SRAs reported in this study on the importance of marketing candidates' skills. Employers are more prone to employ persons with disabilities if they have been given an opportunity to interact with candidates (Dutta et al., 2008; Kulkarni & Scullion, 2015). An efficient strategy reported by SRAs to market candidates with a severe communication disability involves video recordings that illustrate to the potential employer the candidate's communication skills and their clear understanding of the type of position they are applying for. The video also indicates to employers how the candidate with a severe communication disability uses their AAC communication device and how they cope with accommodations, such as working alongside a personal assistant. Of course, the vastness of the work toward the eradication of lack of belief and trust by employers on

the capabilities of persons with severe communication disabilities lies in training designed towards creating understanding and awareness of disability and accommodations required in the workplace.

Families, that is, either parents, caregivers, or family members, often lack the knowledge and information on the possibilities that exist for their children (Naami et al., 2012). A participant who is a disability advocate and who supports caregivers of children with disabilities in the community mentioned that these beliefs are still prevalent and that caregivers hide their children from the community. Hiding children from the community and not exposing them to various available interventions results in delayed intervention. Therefore, it harms the future employment chances of the child. This is in line with the evidence in the literature, which reports that disability beliefs in LMICs are still based on the religious model of disability (Rohwerder, 2018; Sadiki et al., 2021).

Although SA can be viewed as progressive in terms of its way of life, misconceptions regarding disabilities are prevalent. Children with disabilities who do not receive the necessary intervention are observed in poor communities and middle-class families. Spiritual and religious beliefs often create confusion for families regarding the aetiology of the disability and, therefore, intervention (Tigere & Makhubele, 2019; Wegner & Rhoda, 2015). Perhaps this calls for intervention programmes to align with the cultural and traditional beliefs of the communities they serve. As recommended by Boston et al. (2015), rehabilitation professionals should take caution in making assumptions regarding beliefs held about disability. More so that cultures evolve over time and are different in various contexts. The authors therefore call for intervention to first determine what understanding regrading disability and align their intervention based on those perceptions (Boston et al., 2015).

6.3.3.2. Availability of Supports. There were various supports mentioned by both participants with severe communication disabilities and SRAs. These supports were related to accessible environments, the availability of assistive technology for work and communication, support from family and friends, employment services, and transportation. These findings align with what was reported in a peer-review of the literature by Padkapayeva et al. (2016) as the most identified reasonable accommodations for persons with disabilities.

The participants with a severe communication disability mentioned the importance of assistive technology as a facilitator to aid them to secure employment and stay employed. However, many of them did not have suitable AAC communication devices with the correct software, applications, or necessary adaptions to enable quick and efficient communication. For quick communication, the participants generally relied on gestures, vocalisations and pointing, which is unfortunately only understood by familiar communication partners. For completing the interview questions in this study, participants with severe communication disabilities relied primarily on typing on their cell phones, which have small keys and therefore are difficult to manipulate when one has limited fine motor skills. The participants could not afford to purchase their own suitable devices with the required adaptations. The cost of assistive technology in SA is high and cannot be afforded by most individuals in need or by their families, given the established reciprocal link between disability and poverty (Banks et al., 2017; Palmer, 2011). In cases where participants owned a reliable AAC communication device, the researcher observed that it had been donated to them by persons in their disability support network. Having an AAC communication device ensures participation in education, broadens skill sets that are beneficial in employment and opens up employment opportunities (McNaughton & Bryen, 2007; Richardson et al., 2019). The lack of AAC communication devices proved to negatively impact being gainfully employed, as it negatively affects the development of communication skills, which are, as previously mentioned, valued by employers (Bryen et al., 2007; Lindsay et al., 2014).

The support from family and friends was also an essential element of successful employment, as information regarding available employment opportunities was more likely to come from them (Marsay, 2014). In the current study, family and friends were instrumental in supporting the employment-seeking endeavours of the participants with severe communication disabilities. The involvement of key stakeholders such as family and friends in the placement process assists the SRAs in making a suitable job match. These stakeholders know the candidate better and are able to provide a holistic picture of the candidate. Additionally, they can offer necessary information related to their background, which could assist them to be matched to a suitable job position (Scott et al., 2018). Comparatively, for the participants with severe communication disabilities, key stakeholders' support ensures their engagement in education, training and employment opportunities (Morwane et al., 2021). None of the employed participants

mentioned going through the employment-seeking process independently without support, in most cases from friends, families, and rehabilitation professionals.

Transportation support offered by employers and rehabilitation professionals such as SLTs and OTs were also mentioned as facilitators to successful employment. Availability of transportation support and rehabilitation professionals is interwoven with the provision of services and systems.

6.3.3.3. Services and Systems. Both participants with severe communication disabilities and SRAs commonly reported services and systems were related to accessible rehabilitation, transportation, and employment services. This is consistent with findings from the literature where it is indicated that provision of vital services is notoriously poor, with persons with disabilities most affected in accessing these services (Eide et al., 2015; Vergunst et al., 2017).

AAC intervention by rehabilitation professionals ensures positive future outcomes for persons with severe communication disabilities (Light & McNaughton, 2011). However, most participants with a severe communication disability had not received formal training in the use of AAC and thus developed their own strategies of using the AAC communication devices to communicate. This, unfortunately, did not warrant them to be competent communicators with unfamiliar partners such as employers and colleagues. The lack of access to rehabilitation professionals in schools and remote areas means that these services are inaccessible to individuals with severe communication disabilities (Dada, Kathard, et al., 2017; Mophosho & Dada, 2015). Moreover, even in hospitals, the limited number of employed rehabilitation professionals makes it difficult for rehabilitation to be delivered regularly, consistently, resulting in improved functioning (Pillay et al., 2020). Furthermore, it should be noted that the majority of registered rehabilitation professionals lack knowledge of AAC and are thus not able to efficiently provide AAC assessments and intervention (Dada, Murphy, et al., 2017).

Furthermore, SRAs in this study recommended collaboration between themselves and rehabilitation professionals in both the medical and the school context. During such collaboration, individuals with severe communication disabilities could be exposed to the business world or world of work in the form of job visits, on-the-job experiences and opportunities to communicate

using their devices with the employer and potential employees in a formal setting. Not only would these experiences be beneficial to the candidates, but they would also help to sensitise the employer and employees to interact with individuals with disabilities, thereby eliminating the potential prejudices and misconceptions they previously held (Bryen et al., 2007; Carey et al., 2004). Furthermore, building relationships with specific employers who are trained in various disability aspects and have taken cognisance of the skills of individuals (in this instance, individuals with severe communication disabilities) increases the likelihood of the latter's successful placement in their organisations (Buys & Rennie, 2001; Dutta et al., 2008).

AAC intervention should not only focus on communication skills (more often only with familiar communication partners) but should include the development of literacy skills, interpersonal skills, social skills, problem-solving skills, and job-related skills (Isakson et al., 2006; McNaughton & Arnold, 2010; Trembath, Balandin, Stancliffe, et al., 2010). Again, these are crucial vocational skills that are facilitators to being employed (Morwane et al., 2021). The intervention approaches provided by rehabilitation professionals are, however, still based on the medical model of disability, where the focus is simply on improving functioning and not on providing skills that enhance participation, particularly in employment.

Accessible transportation is required for the participants with severe communication disabilities to commute between employment and home. However, transportation is inaccessible for persons with severe communication disabilities due to affordability, availability (i.e., in rural areas), and unaccommodating physical spaces. Individuals struggled to move around independently to work, and they often relied on expensive private transportation or pre-arranged lifts from friends and family (Cawood & Visagie, 2015; Maart et al., 2019). The participants who used a wheelchair for mobility indicated that, in addition to their wheelchair, they also had to carry equipment such as their AAC communication devices, laptops, and switches. In most cases, they also needed to travel with their personal assistants. The use of public transportation is stressful, and SA taxi drivers are not patient with loading individuals with wheelchairs in their vehicles. The only option to commute then becomes through private transportation, which is quite exuberant in terms of cost in SA. In this study, providing transportation to participants with severe communication disabilities enables them to stay employed. Travelling costs to and from work was

not sustainable given the stipend they received. The SRAs, also mentioned that transportation supports to and from work is often made available for candidates provided it comes at a reasonable cost to the employer.

      6.3.3.4. Legislation and Policies. The availability of policies and legislation to facilitate the employment of persons with disabilities was emphasised by SRAs in particular. They perceived the source of the problem to be emanating from the lack of law enforcement and poor monitoring of current policies that are in place in SA. They further emphasised the importance of stricter enforcement of laws governing the employment of persons with disabilities. It was recently reported that most companies and government departments fail to reach the employment quota of 2% of persons with disabilities, but the government imposed no further consequences (Department of Labour, 2018). The SRAs were of the opinion that the existing laws should be eradicated and new laws affected – more specifically, the B-BBEE policy, which does not pursue a comprehensive transformation agenda. They emphasised that the new laws should focus on increasing the numbers to reach equity targets and on mainstreaming disability. Most individuals with disabilities are employed at face value, yet, when one takes a closer look, the appointed individuals are simply kept in offices with no intention by employers to develop and integrate them into the workforce. Due to the observed lack of regulation and control of what occurs in these companies and government departments, the SRAs recommended that a monitoring task team be set up to ensure that quotas are attained and that integration of employees with disabilities indeed occurs.

      Inclusive company policies ensure the hiring, development and retainment of employees with disabilities (Potgieter et al., 2017). However, in this study, the SRAs reported that the manner in which company hiring policies are designed hinders the appointment of persons with disabilities. Firstly, they mentioned that when selecting candidates with disabilities for placement, the screening used by employers does not accommodate the cognition required to complete these assessments. Therefore, candidates often failed when tests were conducted using inflexible screening tools. Secondly, when candidates passed the screening test and were appointed, they were subjected to high-performance indicators that were not adapted according to their skills level and appointed post. However, some candidates with disabilities required job modifications (that

is, of assigned tasks) because when human resource managers reviewed their performance, many were scored as not competent and therefore not productive. Therefore, employers and human resource managers should reach a common understanding of goals set for candidates with disabilities (Kulkarni & Scullion, 2015). Additionally, company policies with a disability-focused agenda tend to have a higher representation of employees with disabilities (Wiggett-Barnard & Swartz, 2012). When SRAs in this study were asked what strategies facilitated the successful placement of persons with disabilities, they reported disability sensitisation training, disability awareness training, and the development of a disability recruitment strategy.

According to both participants with severe communication disabilities and SRAs, the support from the South African government is minimal in terms of funding of programmes and the introduction of initiatives aimed at facilitating the employment of persons with disabilities. This support is almost non-existent for individuals based in remote and rural areas. However, the government has an obligation to prioritise the development of persons with disabilities when it became a signatory to the CRPD (United Nations, 2006). It should have active programmes that focus on skills development of persons with severe disabilities (Lorenzo & Cramm, 2012; Ned & Lorenzo, 2016). Notable initiatives are the learnership programmes referred to earlier. However, as already discussed, these initiatives are still based on an economic model of disability and prioritise monetary profits over the social benefits of being employed, providing a sense of belonging and facilitating participation in the broader community). Where there are initiatives such as skills training programmes, they usually do not accommodate individuals with severe communication disabilities either (Schneider, 2006). Due to the presence of multiple disabilities that is typically associated with severe disabilities, these individuals require adaptations to learning material and accessible environments. The plight of individuals with severe communication disabilities in SA goes unheeded, and they continue to experience marginalisation in accessing education and employment activities.

Finally, SRAs also mentioned the importance of the government utilising their services in all its departments. The SRAs stated that most communications, especially from the government, were not easily understood by persons with disabilities. Thus, SRAs could assist them by providing information about available employment opportunities and government initiatives that are

underway for persons with disabilities (Schneider & Nkoli, 2011). In addition, participants with severe communication disabilities suggested that the services of SRAs should be extended to rural areas and townships where information on employment opportunities is not easily accessible.

6.3.4. *Personal Factors as part of Contextual Factors Domain*

Personal factors that were coded as personal traits in this study appear to influence whether one seeks employment or stays in employment. The participants seemed to focus on issues related to self-esteem and confidence. Perceiving oneself as incapable is a barrier to many, as they view themselves as able to be employed. Interestingly, an emphasis was placed on the impact of seeing oneself as worthy of the ability to speak up for yourself within the workplace and advocate for your rights as individuals with disabilities. This can be linked to a statement made by a participant with a severe communication disability who mentioned that she never considered herself as someone who could be employed and receive a salary until her SLT instilled that belief and confidence in her. Although the participants with a severe communication disability mentioned that the teachers and rehabilitation professionals were very encouraging in making the learners believe they were like everyone else, they did not encourage them to aspire beyond being individuals with disabilities. They thus did not empower them that they could be anything they wanted to be or guide them through the process of achieving their goals. Setting high expectations can lead to improved performance, as individuals typically live up to what is expected from them, known as the Pygmalion or Rosenthal effect (Rosenthal & Jacobson, 1968). Therefore, teachers setting low expectations results in the learners also having low expectations and low aspirations about their lives post-school (Isakson et al., 2006). This is hardly because teachers are ignorant and unsupportive but may be due to their awareness of the lack of opportunities for persons with severe communication disabilities. Often, teachers themselves do not have knowledge of successful examples of employed individuals with a disability.

Comparatively, the SRAs in the study also pointed out the lack of motivation and the presence of self-limiting beliefs among most of the candidates. The lack of self-confidence affects individuals with severe communication disabilities' ability to demonstrate to potential employers their capabilities and suitability for the interviewed position (Lindsay et al., 2014). However, candidates who believed that they could be successfully placed in an employment position often

succeeded in the job placement process with support. Self-limiting beliefs routinely result in underperformance of the individuals who do not believe in their capabilities (Lindsay, 2011). As further reiterated by the SRAs in this study, candidates placed in employment but who lacked self-confidence experienced difficulty developing problem-solving skills and completing tasks without assistance.

Most candidates with disabilities, therefore, require support in the development of their self-confidence skills. This is crucial as a key component of self-confidence involves the possession of self-advocacy skills that are essential when the individual needs to stand up for their rights in the workplace (Harmuth et al., 2018). Development of self-esteem and confidence should be included in all education and intervention programmes. When individuals with severe communication disabilities are not encouraged to develop these crucial skills, their ability to advocate for their rights is taken away (Lindsay et al., 2015).

Adherence to professional etiquette related to business dress code, professional communication skills when addressing the employer and colleagues, behaviour in the workplace were reported as being equally crucial than positive personality traits by SRAs. Due to a lack of work preparation training and exposure to the business world, persons with severe disabilities just like all youth transition from school to employment, also require support in developing work ethics and perseverance (Cohen et al., 2003). SRAs in this study referred to multiple instances where candidates discontinued learnership programmes without informing the employer or the SRA. The SRAs reported that employers expect candidates to show respect towards their work by being punctual, hardworking, reliable and dedicated. Similarly, employability skills valued by employers for all employees regardless of disability also include the demonstration of personal integrity/honesty in work, ability to follow, show respect for others, and be on time (Carter et al., 2012). For persons with severe communication disabilities, the development of professional etiquette must form part of the AAC intervention programme with the rehabilitation professionals (Trembath, Balandin, Stancliffe, et al., 2010).

6.4.   Phase 2b: Placement Process of Persons with Severe Communication Disabilities

The placement process followed by SRAs involved four stages: the pre-placement, job placement, post-employment, and training stages. In line with the ICF, which provides a systematic and unambiguous indication of where (and what) barriers and facilitators exist (Escorpizo, Finger, et al., 2011), the placement process is described according to the domains of the ICF.

6.4.1. Placement Process according to the Placement Stages

The pre-placement stage involves the sourcing or recruitment of candidates for potential job positions through various strategies such as advertising on social media and in newspapers. Steps in this process were linked to only two domains of the ICF, namely the body function and body structure and the personal factors in the contextual domain. Beyond the collection of the CVs and forwarding them to the employer, little is done to assist the candidates with the employment seeking process. For most SRAs, this process is a quick gathering of information and allocation to an open position. Little room is left for SRAs to request accommodations that may be required by a candidate with a severe communication disability, as employers tend only to accept candidates who match the specifications provided and thus do not require added accommodations. Therefore, the service provided in this stage is not beneficial for persons with severe communication disabilities, who in this study emphasise the importance of support in order to succeed in employment.

The job placement stage was purposefully created to demonstrate that some SRAs simply advertise a position and then collect applications that match the advertised job specifications. In the job placement stage, different from the placement stage, the SRAs provide employment seeking support (i.e., job selection and interview preparation) and further support in the form of career counselling and work readiness programmes. This is an advantage for persons with severe communication disabilities who are known to lack information about available career prospects (Isakson et al., 2006; McNaughton & Arnold, 2010).

In the post-employment stage, the candidates are supported to be integrated into the workplace. Subsequent to candidates being placed in a job position, support is extended to ensure

their retainment in employment by providing on-the-job training and ongoing support in the workplace. Persons with severe communications disabilities may well require support over an extended period before being able to work independently. The literature recommends support until candidates are able to manage on their own in the workplace (Jang et al., 2014; Kulkarni & Scullion, 2015). Unfortunately, the reality is that due to financial restrictions and lack of human resources, the SRAs in this study who offered support in the post-employment stage indicated that they usually withdrew support after three to four weeks. However, challenges may occur when they proceed to full-time employment, as SRA support is limited or completely withdrawn.

The training stage does not follow a linear pattern and may occur at any stage of the placement process. Training may follow the successful placement of a candidate with a disability or be requested by employers at any stage. Programmes may involve disability sensitisation training for employers on the implementation of reasonable accommodations or understanding the disability employment legal framework. These pieces of training are crucial as they ensure that the work environment accommodates employees with disabilities (Southwick & Grizzell, 2020).

Evidence shows that most successful employment placements are associated with support in the post-employment and training stage, rather than pre-placement and job-placement stages (Escorpizo, Finger, et al., 2011). Relatedly, the participants with severe communication disabilities who are employed are still in employment as a result of on-the-job support and training they received over extended periods of time. Important to note that depending on the size of the recruitment agency in terms of the number of available SRAs, the placement process may be limited to the pre-placement stage only and does not proceed to the placement stages.

6.4.2. *Placement Process According to The Domains of the ICF*

The ICF specifically places emphasis on functioning rather than on impairment. Factors linked to the body function and body structure domain are related to diagnostic information, which involves medical information and limitations in functioning. Research cautions that diagnostic information provides limited direction in terms of the candidates' strengths (Jang et al., 2014). In order to determine vocational competence, information gathered also includes information regarding the candidate's capabilities, for instance, information on literacy, communications skills,

and qualifications. This type of evaluation process is anticipated to result in the so-called "perfect job match" and, therefore, to ensure retainment in a job position (Escorpizo, Reneman, et al., 2011). Furthermore, the information is used to determine what accommodations and assistive technology are required (Homa, 2007).

Successful placements are observed when an assessment of vocational competence is based not only on limitations imposed by the disability but also on the holistic view of other aspects such as personal and environmental factors (Glässel et al., 2011). Similarly, SRAs in this study mentioned that they rarely receive a query from the employers when considerations are made during a placement in addition to the candidates' functional limitations. For persons with severe communication disabilities, severe impairment in mobility and communication on paper may not provide a realistic reflection of their capabilities. Therefore, the placement process for them would require more than an evaluation based on diagnostic and functional limitations. The determination of the need for accommodations and assistive technology is imperative.

Activities in the pre-placement, job placement and post-placement stages are linked to the activity and participation domain. These include employment seeking support. As already highlighted, the candidates with severe communication disabilities are less likely to possess completed CVs of an acceptable professional standard and are ready for submission to potential employers. Also, they are most likely unable to complete their CV independently. Other necessary forms of support that were mentioned include the provision of work readiness programmes and induction training. This allows a comparison of the difference between a candidate's performance and capacity, thereby increasing their chances of succeeding in their appointed position (Jang et al., 2014).

Important to note that assessment of capabilities in terms of job applications and tasks' completions should be considered in conjunction with environmental factors (Homa, 2007). Environmental factors, such as inaccessible buildings and negative attitudes from employers and colleagues, may hinder successful employment. For example, the candidate might be suitable for an appointed position and experience no environmental barriers and therefore be able to complete the job with no accommodations required. However, the candidate might not be able to cope in an environment that is discriminatory and unsupportive.

Personal factors are not coded in the ICF, yet they provide valuable information that impacts a candidate's successful placement (Leonardi et al., 2016; Morwane et al., 2021; Müller & Geyh, 2015). For instance, findings in this study indicate a lack of self-esteem and self-confidence as barriers to attaining employment. With regards to the candidate with a severe communication disability, knowledge of the level of confidence and motivation of the candidate instils trust in the SRA that the candidate will be able to cope in the work environment. A confident and motivated individual is more likely to be able to communicate to the employer situations that they experience as unfair or uncomfortable for them in the workplace. In addition, candidates who are informed about the different types of careers they are interested in are more likely to be placed in a suitable job position and to be happy in that position. This is in stark contrast to those who do not know what type of job they would prefer to be employed in. Again, the candidate's confidence, career interest and knowledge of their long-term goals facilitate a "perfect" job match and ultimately successful placement. The findings in this study show that persons with severe communication disabilities require support in setting realistic goals and formulating career aspirations. It is also important to note that many of the career planning issues discussed here are true not only for persons with disabilities but also for candidates across the board.

6.5.   Phase 2c: Roles of SRAs in the Successful Placement of Persons with Severe Communication Disabilities

The role of the SRAs identified in this study corresponds to some extent with those described in the literature (Dutta et al., 2008; Jang et al., 2014; Kulkarni & Kote, 2014; Kulkarni & Scullion, 2015). The discussion clarifies that the successful placement of individuals with severe communication disabilities requires the support outlined in all four SRA roles (i.e., consultation, placement, support, and training roles).

The consultation role may occur at any stage during the placement process, although ideally, it should occur prior to the placement of candidates with severe communication disabilities in an organisation. Employers consult with SRAs to assist them in complying with the stipulations of the EEA of 1998 regarding the employment of persons with disabilities. A series of services are provided, which include audits and support in the development and/or evaluation of a disability

recruitment strategy. Further support includes evaluating the company's disability employment equity plan to see whether it aligns with the stipulations of the EEA (1998) and assessing the company's skills development plan and its B-BBEE scorecard (transformation agenda). For instance, the SRAs can make recommendations on the removal of access barriers to enable the employment of candidates who use a wheelchair for mobility.

Furthermore, the development of a recruitment strategy ensures that companies have a plan of attracting talent that fits the organisation's culture and vision. The company's skills development plan should also include training for employers on disability sensitivity and prospective employees with disabilities on the specific skills required for the job. Added services provided by SRAs include supporting the employer in creating job positions that are accommodative of persons with severe communication disabilities. The SRAs' consultation role also appears to be linked to the economic model of disability. Although the services provided aim to facilitate the hiring and integration of persons with disabilities in the labour market, the focus is also on fulfilling the employer's business mandate. Individuals with severe communication disabilities are often disadvantaged in terms of their level of education, skills, and requirements for accommodations, and hence they are not prioritised for placement. The downside is that this approach often excludes persons with severe communication disabilities due to previously discussed factors.

In the placement role, services include those provided by SRAs in both the pre-placement and job placement stage. This service is limited when compared to the role of the facilitator, as described by Kulkarni and Kote (2014), where the facilitator also assists candidates to attain assistive technology from the hospital as part of primary health care. In this study, however, the SRAs mentioned that the size of their recruitment agency limits the services they offer. They also stated that small agencies do not always have adequate personnel to provide added services beyond what is paid for by the potential employer. Furthermore, as recruitment agencies are private companies, or non-government or non-profit organisations that not funded by the government, funds are limited, and neither candidates nor employers can be expected to pay SRAs for services other than the required consultation.

Also, as observed in the findings of this study and mentioned earlier, there is no established collaborative relationship between SRAs and rehabilitation professionals in the government sector (that is, tertiary hospitals). The SRAs' placement role rarely results in the successful placement of persons with severe disabilities, as added support (such as consultation services) to the employer is required in order to integrate the candidate (Wiggett-Barnard & Swartz, 2012). The placement role was assumed by the majority of the SRAs in SA. Seeing that potential candidates with severe communication disabilities may require assistance with the acquisition of assistive technology from tertiary hospitals as part of primary health care, the lack of support in this regard excludes them from participating in available employment opportunities. A seamless referral and collaborative system between SRAs and rehabilitation practitioners in schools and hospitals in SA can greatly facilitate the successful employment of individuals with severe communication disabilities.

In the support role, services are provided to both employers and candidates once the placement has been finalised. These services are provided in the post-placement stage. The exact period of support is dependent on the recruitment agency and may vary from a short to a long period of time. The reviewed literature recommends that support be provided for at least six months and be terminated only when the candidate is fully integrated or reports that he/she no longer needs support (Jang et al., 2014). On-the-job training reported in this study was offered only in learnership appointments and is a service offered by just a few SRAs. The support role is similar to that of the partner role described by Kulkarni and Kote (2014), where the SRA collaborates with the employer through joint certification programmes. However, in this study, SRAs reported the involvement of most employers as minimal and not as collaborative. One recruitment agency in the study indicated that companies hired it to facilitate their learnership programme specifically. Hence it is responsible for all activities, including services such as payroll and leaves applications. Upon completion of this learnership programme, joint certification by SRAs and employers is provided.

Persons with severe communications disabilities may well require support over an extended period before being able to work independently. The literature recommends support until candidates are able to manage independently on their own in the workplace (Jang et al., 2014;

Kulkarni & Scullion, 2015). Unfortunately, the reality is that due to financial restrictions and lack of workforce, the SRAs in this study who offered support in the post-employment stage indicated that they usually withdrew support after three to four weeks. The period of support by SRAs who co-ordinate learnership programmes is considerably longer and may last for 12 months to three years. Persons with severe communication disabilities in learnership positions could therefore fair quite well initially, as support is usually offered over an extended period of time. When they proceed to full-time employment, however, support is limited.

The training role involves providing training on disability-related issues offered to both employers and employees in the form of workshops and seminars. The training role is different from that described in the consultation role, where support is provided directly to the employer. Training workshops aim to provide a better understanding of employment legislation (e.g., the Technical Assistance Guidelines [2002] and Code of Good Conduct [2002]); to increase disability awareness by using practical examples (in the form of case studies); and to implement reasonable accommodations. The use of persons with severe disabilities as case studies in these training programmes serves as a strategy of SRAs to market the candidates to potential employers, thereby creating awareness of the capability of candidates with severe disabilities (Manaf et al., 2018). The training role complements the consultation role in that, following the provision of support in the development of a disability employment equity and recruitment strategy, active recruitment and placement of persons with disabilities is stimulated in companies. When comparing the roles described in Kulkarni and Kote (2014), this role is similar to two their roles, trainer and marketer.

6.6.   Phase 3: Proposed Guiding Placement Checklist for Persons with Severe Communication Disabilities

Facilitating factors reported in Phase 1 and 2 of the study were consolidated with the reported placement strategies in Phase 3. Thus, a proposed guiding placement checklist based on the ICF was created to support the successful placement of persons with severe communication disabilities. In the ICF, the interactions between all three domains are reciprocal, and therefore the SRAs are able to identify hindering or facilitating factors in the successful placement of an individual with severe communication disabilities (Jang et al., 2014). Most importantly, using an ICF-based guiding checklist ensures an evidence-based placement process (Southwick & Grizzell,

2020; Momsen et al., 2019; Finger et al., 2012). The checklist can be used with a heterogeneous group of individuals who present with a severe communication disability (e.g., with individuals with CP or ASD or intellectual disability).

As not all SRAs in SA have a rehabilitation background and, therefore, might not have extensive knowledge of the ICF, the checklist is created in a manner that information gathered by the SRAs is easily linked to the codes of the ICF. The checklist indicates facilitating strategies, that is, accommodations to be considered to facilitate a successful placement and therefore does not focus on individuals who are already in employment.

An indication of how the SRAs can use the proposed guiding placement checklist is provided. In the example, its use will be based on the candidate's profile in the hypothetical case study.

In the body function and body structure domain, for example, information gathered is linked to impairment in speech. Functioning is then rated according to severity (0 = no impairment; 1 = mild impairment; 2 = moderate impairment; 3 = severe impairment; and 4 = complete impairment) (McCormack & Worrall, 2008). For example, severe impairment in speech is indicated as b330.4 (indicating complete difficulty in speech). A facilitating strategy in this regard is ensuring the availability of assistive technology for communication and support from a rehabilitation professional with knowledge in AAC communication devices such as an SLT.

In the activity and participation domain, for example, information regarding the ability to perform tasks and activities (e.g., typing on a computer or writing) is gathered. The rating is based only on capacity (i.e., without support). The information is then rated according to difficulty (0 = no difficulty; 3=severe difficulty; and 4 =complete difficulty). For example, severe difficulty in hand function indicated d440.3 indicates a need for accommodations such as the use of adapted equipment (e.g., use of an enlarged keyboard to access the computer). However, in the case of the candidate in the hypothetical case study, she is able to use both hands functionally. Here rating in this regard will be indicated as d440.0 (no difficulty).

In the environmental factors that form part of the contextual domain, for example, information regarding the accessibility of the work environment is gathered. The identified barriers are rated to indicate accommodations required (a minus sign is used for barriers, i.e., -0 = no barrier to -4 = complete barrier, while a plus sign is used for facilitators, i.e., +0 = no facilitator to +4 = complete facilitator) (Howe, 2008). For example, the candidate is placed in a totally unsupportive work environment (completely unsupportive employer), (e430.-4) facilitating strategies could involve, for example, strategies such as the provision of disability sensitisation training, the training of candidates on how to handle difficult situations, and on-the-job support for the candidate as well as ongoing support.

The second type of factors that form part of the contextual domain, namely personal factors, although not classified in the ICF, are added to supplement information provided in the three domains (Müller et al., 2015). Therefore, in the proposed guiding placement checklist, a candidate with low confidence would be provided with the necessary counselling and considered for placement in a more supportive work environment.

Table 6.1 provides an outline of the proposed guiding placement checklist.

Table 6.1

Proposed Guiding Checklist on the Strategies that Ensure Successful Placement of Persons with a Severe Communication Disability

Name:	Diagnosis as outlined in Medical Report:							Date:	
Domain	**Information gathered**	**ICF Category**	**Rating scale**					**Facilitating Strategy**	**Comment**
Body function and body structure domain			Severity						
			0	1	2	3	4		
	Sensory function	b210 Seeing function						Assistive technology (e.g., braille machine, adapted computer software and keyboards)	
		b230 Hearing functions							
	Impairment in speech	b310 Voice and speech functions						Assistive technology for communication (e.g., AAC communication devices)	
		b 330 Speech and rhythm functions							
	Impairment in Mobility	b710 Mobility of joint functions							
		b765 Involuntary movement functions						Assistive technology for mobility (e.g., wheelchairs, walking frames, and etc.)	
								Adapted equipment (e.g., use of switches to access work computer or equipment) Accessible work environments	
	Health condition	No classification						Recommend a medical assessment (e.g., Referral to the clinic or hospital for assessment by medical personnel) Determine medication taken condition. Provision of mental health services Provision of extended healthcare Referral to a medical professional when a candidate is not in good health Seek advice from rehabilitation practitioners	

Domain	Information gathered	ICF Category	Rating scale					Facilitating Strategy	Comment
Activity and participation domain			Difficulty						
			0	1	2	3	4		
	Job seeking support	d845 Acquiring. keeping and terminating a job						Support in the job application process - Drafting and completion of CV - Interview preparation/mock interview - Job selection	
	Hand function	d440 Fine hand use						Assistive technology for work (e.g., adapted keyboards, mouses, and use of adaptive switches)	
		d445 Hand and arm use							
	Mobility	d450 Walking						Assistive technology for Mobility (e.g., walking frame and wheelchair)	
		d455 Moving around							
	Literacy skills	d166 Reading						Job match considerations Augmentative and alternative means of communication	
		d170 Writing							
	Communication skills	d310 Understanding spoken messages						Job match considerations Augmentative and alternative means of communication	
		d315 Understanding non-verbal messages							
	Problem-solving skills	d175 Solving problems						Work preparation support - Induction training - On-the-job support - On-the-job training - Ongoing job support Organise social activities in the workplace.	
		d240 Handling stress and other psychological demands							
	Social skills	d350 Conversation							
		d710 Basic interpersonal interactions							
Environmental factors domain	Accessibility of work environment		Barrier -		Facilitator +				
			0	1	2	3	4		

Domain	Information gathered	ICF Category	Rating scale						Facilitating Strategy	Comment
	Physical	e155 Accessible buildings							Conduct accessibility audits	
		e240 Light							Consideration of non-over stimulation environment (provision of a sensory room)	
		e250 Sound								
	Assistive technology required	e125 Technology for communication							Provision of necessary assistive technology	
		e130 Technology for education								
		e135 Technology for employment								
	Attitudes	e430 Attitudes of people in positions of authority							Provision of disability awareness training to employers and employees	
		E425 Attitudes of colleagues							Provision of disability sensitisation training	
									Work preparation support - Induction training - On-the-job support - On-the-job training - Ongoing job support	
	Support system	e310 Immediate family							Support network - Connecting with family member or friend - Selecting a supportive work environment - Collaborating with teachers where applicable	
		e320 Friends								
		e325 Acquaintances, peers, colleagues, and community members								
		e330 People in positions of authority							Collaborating with rehabilitation therapists where applicable	
		e340 Personal care providers and personal assistants							Support from employer	
		e355 Health professionals								
		e360 Other professionals								
	Services	e540 Transportation services							Transportation to work - Organising shuttle/transport to/from work	

224

Domain	Information gathered	ICF Category	Rating scale					Facilitating Strategy	Comment
								- Inform about transportation available to work	
		e570 Social security services						Refer to social development for social benefit queries	
Personal factors domain	Personal traits	Motivation						Provision of career counselling Induction training Work preparation support	
		Confidence						- Induction training - On-the-job support	
		Knowledge about a career path						- On-the-job training - Ongoing job support Provision of skills training opportunities	

6.7. Summary

Chapter 6 presented a discussion of barriers to and facilitators of the employment of persons with severe communication disabilities based on the information provided by the participants in this study – that is, persons with severe communication disabilities themselves and SRAs. The discussion detailed the role of the SRAs and their impact on facilitating the successful employment of persons with severe communication disabilities. Finally, in consideration of the synthesised findings of the barriers and facilitators and the placement process suggested for individuals with severe communication disabilities, a proposed guiding placement checklist based on the ICF was presented. The checklist may be used by SRAs to during a placement of a candidate with a severe communication disability.

CHAPTER 7

CONCLUSIONS

7.1.   Introduction

This final chapter of the thesis summarises the findings, conclusions reached and clinical implications of the finds of the study. The chapter further provides a critical evaluation of the current study by delineating the strengths and limitations. In conclusion, the chapter provides recommendations for future research.

7.2.   Summary of Findings

By employing a qualitative case study research design, this study aimed to determine barriers to and facilitators of employment of persons with severe communication disabilities by exploring perspectives from multiple data sources, namely, persons with severe communication disabilities themselves and SRAs. Furthermore, it explored the services and roles of the SRAs in the placement of persons with severe communication disabilities throughout the four stages of employment. In addition, it explored the placement process of persons with severe communication disabilities. Throughout, the ICF was used as a conceptual framework to embody the research process.

In Phase 1 and 2a, barriers to and facilitators of employment of persons with severe communication disabilities were identified by interviewing persons with severe communication disabilities themselves and SRAs. Factors that were reported as either barriers or facilitators were identified across all three domains of the ICF, namely, body function and body structure, activity and participation, and contextual factors (i.e., environmental and personal factors). These factors were primarily reported in the conceptual factor's domain – specifically as related to environmental factors. Each of the five chapters of the ICF environmental factors influenced the participation of persons with severe communication disabilities to a lesser or greater degree, with negative attitudes and the services, systems, and policies mentioned most frequently.

In Phase 2b, through interviews with SRAs, the placement process highlighted four distinct placement stages, namely, the pre-placement, job-placement, post-placement, and training stage. Each placement stage specifically outlined the activities of SRAs in the placement process. It also highlighted the facilitating strategies employed to ensure a successful placement of candidates with severe communication disabilities. The most notable facilitating strategies were the provision of support in the job seeking and selection process, provision of accommodations such as assistive technology required for employment, and employers' training regarding disability.

In Phase 2c, four roles assumed by SRAs were identified through content analysis. The roles consisted of a consultation role (e.g., guiding employers on matters related to employment equity compliance), a placement role (e.g., sourcing and placement of candidates), a support role (e.g., providing on-the-job or ongoing support), and a trainer role (e.g., providing disability sensitisation training). These roles were derived from the services provided by SRAs during the placement of persons with a severe communication disability.

In Phase 3, the findings from Phases 1 and 2 were synthesised using a data collation strategy to emphasise factors that may facilitate the successful placement of persons with severe communication disabilities in employment. These key findings were organised to highlight hindering and facilitating factors aligned with the placement stages and accommodations. The collated findings were organised according to the three domains of the ICF. In the end, the collated findings were used to develop a proposed guiding placement checklist based on the ICF.

The study findings highlight the ongoing challenges persons with severe communication disabilities face to participate in the labour market. On an individual level, persons with severe communication disabilities included in this study experienced exclusion from participating in employment due to the severity of their disability. They often presented with co-morbid disabilities (such as physical, intellectual and medical disabilities) and lacked adequate education. Undoubtedly, these barriers experienced on an individual level are interconnected to the barriers within society, such as negative attitudes from society in general, the lack of health services (i.e., medical and rehabilitative services), and the limited inclusive education schools. Misconceptions regarding disability are still prevalent in SA. This influences family beliefs on the future outcomes of their children with a disability and hinders families from seeing employment as an attainable outcome for their children. Furthermore, as mentioned by

SRAs, persons with severe communication disabilities may be viewed as only suitable to be placed on the government disability social grant system rather than in employment.

In countries with high unemployment rates like SA, the unemployment of persons with disabilities is even higher than the general population (more so when they have severe disabilities) (Palaganas et al., 2017). The findings from this study indicate the poor representation of persons with severe communication disabilities in the South African labour market. Perhaps, in a stronger and stable economy, persons with a severe communication disability have a better chance of attaining employment. However, as mentioned by SRAs, employers do not even hire those candidates with disabilities that are less severe in nature and who have the necessary qualifications. It is important to consider that a barrier-free society for persons with disabilities is dependent on a well-functioning government that supports the participation of persons with disabilities. Such a government must provide sustainable education, health services and systems, enforce anti-discriminatory disability laws and policies, and launch initiatives to support persons with disabilities. SA has world class-disability employment legislation, yet its implementation is poor. There is a desperate call by SRAs for the government to play an active role in enforcing employment quotas and follow up on the long-term employment of persons with disabilities by subsidised companies. However, the South African government has no jurisdiction over private companies whose stringent policies are based on an economic model of disability, consequently excluding persons with severe disabilities.

The findings further revealed that SRAs have a critical role in facilitating and securing employment for persons with severe communication disabilities and eradicating misconceptions regarding disabilities through disability awareness campaigns.

In conclusion, the study findings have indicated a willingness and desire by persons with severe communication disabilities to participate in the labour market. This sentiment is supported by the SRAs, who also stressed that persons with severe communication disabilities could be employed if employers provide the necessary support for them and improve their hiring practices. Equally, the government has a key role in ensuring the successful integration of persons with severe communication disabilities into the labour market. This can be ensured by monitoring and enforcing employment equity policies, the availability of vital services, and establishing a collaborative relationship with private companies. Ultimately, the future successful employment of persons with severe communication disabilities relies largely on

rehabilitation professionals' comprehensive AAC intervention programme early on in their school education. Such a programme should incorporate interventions to improve language and communication skills, develop job-related and socialisation skills, and build the confidence of persons with severe communication disabilities.

7.3.   Clinical Implications

In SA, the role of the SLT involves the diagnosis, assessment, and treatment of swallowing and communication disorders. They service clients across the lifespan in diverse settings, which include schools, clinics, and hospitals. The SLTs, although listed as part of the vocational rehabilitation team, which play an important role in securing, retaining and advancing persons with disabilities in employment, most often do not provide job training, job counselling and job placement services. Should intervention focus on employment, it is often for the return to work cases and not for the individuals with a developmental disability. For persons with severe communication disabilities, the SLTs play an integral role in enhancing skills essential in employment (Lindsay et al., 2014; McNaughton & Arnold, 2010). Their role may be expanded to assist with AAC implementation in the workplace and training communication partners (i.e., employers and colleagues) in the workplace.

A collaborative team approach from the rehabilitation professionals (SLTs, OTs and physiotherapists) is crucial for persons with severe communication disabilities. For the cohort with severe physical disabilities, for instance, the OTs and physiotherapists play a role in improving motor functioning and support the competent use of assistive technology such as AAC communication devices and wheelchairs. Such skills are needed for the completion of tasks in the workplace.

Although some of the participants in this study received SLT intervention at school, this intervention did not focus on AAC, much to their detriment. For the successful employment of persons with severe communication disabilities, research-based on EBP principles highlights that AAC intervention (in early intervention and school) at school should be expanded to not only focus on communication skills (more often with only familiar communication partners) but also to include the development of literacy skills, interpersonal skills, social skills, problem-solving skills, and job-related skills (Isakson et al., 2006; McNaughton et al., 2002). These skills have been shown to increase the employability of

persons with severe communication disabilities (Lindsay et al., 2014; McNaughton & Bryen, 2007).

Vocational rehabilitation, which rehabilitation professionals collaboratively administer, should include career planning (discussion on life after school), exposure to the world of work, creation of volunteer activities, and development of mentorship programs. Furthermore, the programmes should focus on developing skills related to applying for jobs, developing a curriculum vitae, and preparing for interviews (through mock interviews) (Lindsay et al., 2015; McNaughton et al., 2002). Other programmes which can be beneficial to persons with severe communication disabilities are mentorship programmes supported by SLTs. These programmes should aim to target the enhancement of self-esteem and confidence to facilitate independence ultimately. A participant with a severe communication disability in the study reported how their SLT assisted them to overcome the fear of being in public spaces and communicating with unfamiliar partners. Strategies used by the SLT included letting the participants speak in front of the class and delivering messages to teachers in other school sections. Important to note that these programmes are not explicitly facilitated by the SLTs, but require a multi-disciplinary approach (i.e., rehabilitation professionals, teachers, and caregivers).

A collaboration between different team members who represent different sectors (e.g., SRAs, rehabilitation professionals, teachers, and employers) can create synergy between these different sectors and enhance employment opportunities for individuals with severe disabilities. This type of collaboration will have multiple benefits. Firstly, employers will communicate what skills they value in a candidate and have access to potential employees. The SRAs, on the other hand, have access to potential candidates for employers and will be able to support both the professionals and employers in work preparation programmes. Likewise, the rehabilitation professionals and teachers will be kept up to date on what skills are relevant in the industry and will increase the chances of individuals with a severe communication disability attaining employment.

The proposed guiding placement checklist provides information on areas that may hinder or facilitate a successful placement. As the outlined factors are linked to the ICF, accommodations are easily identified and therefore guides the SRAs on how best to intervene to enable a successful placement (Homa, 2007; Southwick & Grizzell, 2020). Areas of intervention may therefore be specific to the individual (i.e., requirements for personal

assistants or supervision) or at the environmental level (i.e., remove barriers in the workplace such as inaccessible spaces) (Finger et al., 2012; Momsen et al., 2019). The checklist may help guide SRAs in the placement of candidates with severe communication disabilities who require support in the job-seeking process.

7.4.   Evaluation

In this section, the study is evaluated in terms of its strengths and limitations.

7.4.1. Strengths of the Study

Multiple strengths of the study were observed. These will be described according to the various components of the thesis.

7.4.1.1.Strengths in the use of a Conceptual Framework. The ICF as a conceptual framework provided a comprehensive structure for identifying and classifying barriers to and facilitators of employment persons with severe communication disabilities. Furthermore, it provided a framework in which facilitating strategies and roles of SRAs are crucial in the successful placement of a candidate with a severe communication disability. Factors facilitating or hindering employment were identified in the contextual factors' domain, that is, they were related to the environmental and personal factors. This information is valuable for SRAs when placing a candidate with a severe communication disability. Therefore, the framework provided a map of where support is required, and the type of support SRAs can provide to candidates to ensure a successful placement.

The ICF ensures the use of universal language understood by rehabilitation professionals across disciplines, by SRAs and by policymakers across different work contexts and disciplines. Notably, the use of the ICF provides a detailed understanding of the interconnectedness of the different factors that impact an individual's functioning. This enables the SRAs to identify factors to consider during the placement of persons with severe communication disabilities (Homa, 2007; Jang et al., 2014; Southwick & Grizzell, 2020). The ICF as a framework was beneficial in this study as it not only pointed out societal barriers and the prevailing medical model approach to rehabilitation for persons with severe communication disabilities. It also highlighted how the lack of participation in major life areas such as employment and education violate human rights, one which must be rectified. In addition, the

framework guided the data analysis of the study as deductive analysis was based on priori codes linked to/related to the ICF.

An in-depth consultation of the literature was conducted through a scoping review of the available literature on the barriers to and facilitators of the employment of persons with disabilities in LMICs. This scoping review also employed the ICF as a conceptual framework to identify the factors that hinder or hinder the employment of persons with disabilities. The findings from this scoping review guided the research methodology used in the study.

7.4.1.2. Strengths in the Design. A qualitative case study design was followed in this study that provided an opportunity to explore and describe the lived experiences of persons with severe communication disabilities themselves and the first-hand knowledge of SRAs. Therefore, the approach aligned with the researcher's epistemological standpoint, which is an interpretive approach (Creswell, 2017). Notably, the use of different perspectives to inform the case study ensured the perception of persons with severe communication disabilities themselves and SRAs who are in contact with both the employers and potential candidates, is captured. Therefore, the findings from Phase 1 and 2a of the study contributed to understanding factors understood in terms of impact on the economic participation of persons with severe communication disabilities from various perspectives of both persons with disabilities and SRAs.

Also, the necessary steps to eliminate bias and errors during the research process included the implementation of ethical considerations (that is, ensuring confidentiality and attending necessary training to assist with data handling and analysis of the selected research design). Multiple strategies were used to enhance the trustworthiness of the data. Some of these strategies included obtaining multiple perspectives on the case study at hand, i.e., employment of persons with severe communication disabilities, using a robust sampling technique with a clearly described population, describing the data collection and analysis procedures in detail, employing member checking, and using inter-rater coding to increase trustworthiness.

7.4.1.3. Strengths in Methods. The study employed semi-structured interviews as a data collection method. This allowed for participants to provide knowledge that a structured interview would not have otherwise captured. As research in this area of study is limited, the added information provided by the participants further enriched the study's findings.

Data collection tools used in the study included the use of telephonic interviews and interviews on WhatsApp™. This enabled access to participants in various areas in SA, and therefore provided the study with diverse voices and experiences. Likewise, collecting data using these tools was even more beneficial and relevant in the context of the national lockdown implemented in SA (as in other countries) in response to the COVID-19 global pandemic, where traditional face-to-face interviews were impossible. More specifically, the use of WhatsApp™ to conduct interviews enabled the inclusion of persons with severe communication disabilities in this study as telephonic interviews would not have sufficed with this population. This further demonstrated that qualitative data could be collected effectively using a social media platform.

7.4.1.4. Strength in the Study Sample. An added strength of the study concerned the nature of the sample used in the study. Firstly, the sample size, which consisted of 24 persons with severe communication disabilities and 25 SRAs, represented diverse individuals from various geographical locations. Secondly, the participants with severe communication disabilities consisted of 96% black and 4% coloured individuals. The participants thus represented the country's population composition, where Black people constitute the largest population group in SA and present with the highest prevalence rate of disability (Statistics SA, 2014). The SRAs, consisted of individuals from private organisations, non-profit, and non-government organisations such as disability advocacy groups. This ensured that SRAs who had knowledge of challenges experienced by the most marginalised (i.e., those based in rural and poor communities) contributed their perspectives to the unemployment of persons with severe communication disabilities.

7.4.1.5. Strengths in Findings. This study focused on an area of research that is under-represented in the literature in both HICs and LMICs, namely the employment of persons with severe communication disabilities. The study, therefore, contributes valuable data on what hinders and facilitates the employment of this population of persons with severe disabilities, more specifically in LMICs. In addition, this study included the voices of persons with severe communication disabilities from LMICs. It can be concluded that the findings shed some light on the challenges experienced by this population in trying to participate in the labour market. There is currently also a paucity of data regarding the practices and roles of SRAs in the South African context. Findings from this study provide valuable information on the roles that SRAs play in facilitating the successful placement of persons with severe communication disabilities.

In terms of scholarly contribution, this study makes notable contributions to different fields, such as disability studies (including employment equality), education, and rehabilitation, as it focuses on the nexus between these disciplines. By seeking to understand the barriers to and facilitators of the employment of persons with severe communication disabilities from their own perspective and from that of the SRAs, the findings in this study constitute a crucial step towards to understanding the factors that impact the employment of persons with severe communication disabilities and offers initial clinical implications. This is a significant extension of the past research on severe disability and employment in LMICs (Morwane et al., 2021), as the findings of this study extend the knowledge base in the mentioned fields of research.

7.4.2. *Limitations of the Study*

Although the study contributes much-needed knowledge to the body of literature, it is important to note that certain limitations exist.

Firstly, the study focused on persons with severe communication disabilities that were congenital in nature. The research, therefore, did not include a focus on the return-to-work aspect that would be relevant if persons with acquired disabilities had also been included. The researcher is aware that the related to return to work aspects are notably different from those experienced by persons with congenital disabilities (Bonner et al., 2016; Mohammad Shaheed Soeker et al., 2012).

A second limitation of the study was that the participants with severe communication disabilities who participated in the study were required to be literate in order to provide responses using the WhatsApp™ platform. Given the number of persons with severe communication disabilities who have never been to school, this criterion may have excluded a large cohort of individuals with severe communication disabilities. Other groups of participants with disabilities who might have been excluded were those who did not have smart devices to use to respond to the research questions. Although these factors were not included as exclusion criteria, the recruitment procedure may unintentionally have excluded this population. The fact that participants were recruited from disability advocacy groups on social media platforms also contributed to targeting only literate individuals. Also, the participants were homogenous in terms of the type of disability they presented with, namely cerebral palsy (CP). This is, however, reflective of the situation in LMICS in terms of the high prevalence of CP (Abdel

Malek et al., 2020). Be it so, this nevertheless implies that the perspectives of persons with different diagnoses such as ASD were not obtained.

Another limitation was the quantity of the responses from the participants with disabilities. Some of the participants with a severe communication disability in the study presented with limited hand function and therefore had restrictions in accessing their AAC communication devices. These individuals, therefore, used body parts other than their fingers to type messages, such as their toes, chin, or thumbs. This means added effort was required to type longer messages, which may have resulted in short and specific responses.

Lastly, the definition of employment used in the study might also have served as a limitation. In this study, employment included paid formal work (full-time employment with remuneration) and unpaid informal work (such as volunteer positions with no remuneration). Only four participants were employed on a full-time basis, albeit in a low-paying position with no additional benefits (in other words, no pension fund contribution, no salary bonuses, no medical aid and no housing allowance). The remaining participants were hired by disability organisations in their communities as mentors and disability advocates on a part-time basis, where they earned a low wage. Therefore, the participants could not provide experiences as full-time employees who interacted with employers and colleagues on a daily basis.

7.5. Recommendations for Future Research

The following recommendations are made for future research projects.

The participants in this study were relatively homogenous, with most being black persons diagnosed with congenital cerebral palsy. Future studies should consider the inclusion of a diverse population with severe communication disabilities in terms of the type of diagnosis (e.g., Down syndrome and ASD), race and those with an acquired disability. As research indicates that persons with acquired disabilities present with different challenges compared to individuals with congenital disabilities, it is assumed that the findings in this study could not be presentative of the challenges faced by those with an acquired disability. Furthermore, based on the social model of disability principles, individuals experience unique and specific challenges to their context and environment.

While a qualitative research design in this study provided an opportunity to explore and describe the lived experiences of persons with severe communication disabilities and the first-

hand knowledge of SRAs, future studies may consider the use of a quantitative design which allows for the use of questionnaires and surveys. Questions that may be added to the questionnaires may verify the findings of this study. These measures allow for data from large sample size to be collected. The data is, therefore, more likely to apply to the general population.

It is further recommended that future studies that focus on persons with severe communication disabilities employ a participatory research approach, thereby making the participants the drivers of the research and allowing them to find solutions to their own challenges. This would be particularly important since some of the participants were disability advocates who had extensive knowledge about challenges experienced by youths with disabilities in their communities. Also, a participatory action research approach gives a voice to marginalised populations such as persons with severe communication disabilities, whose views are often ignored or censored by government, institutions, and society. Therefore, research that amplifies their voices is crucial – even more so in the South African context.

The study focused on interviewing persons with disabilities and SRAs and therefore did not include the perspectives of caregivers, teachers or rehabilitation professionals. These individuals would be a valuable source of support in understanding the barriers and facilitators to successful employment. Future research should explore what they perceive as barriers to and facilitators of successful employment of persons with severe communication disabilities. Similarly, in the workplace context, the perceptions of job coaches and human resource managers should be explored, as they could enhance our understanding of what ensures employment retainment of persons with severe communication disabilities. Another group that could provide valuable data could be co-workers, as they have a closer working relationship with their colleagues with a disability than that experienced by persons with disabilities. They could also provide strategies on how to socially integrate persons with disabilities in the workplace and provide input in policies developed by government departments and private companies.

It was beyond the scope of this study to explore vocational training programmes in the South African context, or the employment services provided by the government to persons with disabilities. Further studies should therefore explore what models of vocational training programmes are currently available in SA and their effectiveness for persons with severe communication disabilities. Also, the type of skills training programmes offered and the

support in the transition to formal employment in these vocational training programmes should be explored.

In addition, future studies should focus on exploring the relationship between SRAs and employers. More information is needed on successful placement as a result of the collaborative relationship between these two parties. Indeed previous studies highlight that employers who collaboratively interact with SRAs are able to attract and retain candidates with disabilities (Wiggett-Barnard & Swartz, 2012). Again, the training provided by SRAs, such as disability awareness programmes, should be analysed to determine their efficacy in eliminating stigma and facilitating the inclusion of persons with disabilities within places of employment. Such analysis could be conducted based on a survey that explores the views of employed persons with disabilities, employees, and employers.

This study proposed a guiding placement checklist to be used by SRAs with candidates with a severe communication disability. This checklist was not validated by SRAs nor trialled with candidates with severe communication disabilities seeking employment. Therefore, it is recommended that future studies determine the feasibility of the proposed guiding checklist and the practicality of use with candidates with severe communication disabilities. Following this process, the views of rehabilitation professionals and teachers may also be explored regarding the use of the proposed guiding placement checklist.

7.6. Summary

This chapter discussed the findings of the study. Furthermore, it presented the clinical implications, strengths, and limitations of the study. Also, the recommendation for future studies was provided.

REFERENCES

Abdel Malek, S., Rosenbaum, P., & Gorter, J. W. (2020). Perspectives on cerebral palsy in Africa: Exploring the literature through the lens of the International Classification of Functioning, Disability and Health. *Child: Care, Health and Development*, *46*(2), 175–186. https://doi.org/10.1111/cch.12733

Abdullah, M., & Mey, S. C. (2011). Employment of people with disabilities in Malaysia: Drivers and inhibitors. *International Journal of Special Education*, *26*(1), 112–124.

Acemoglu, D., & Angrist, J. D. (2001). Consequences of employment protection? The case of the Americans with Disabilities Act. *Journal of Political Economy*, *109*(5), 915–957. https://doi.org/10.1086/322836

Adler, R. H. (2009). Engel's biopsychosocial model is still relevant today. *Journal of Psychosomatic Research*, *67*(6), 607–611. https://doi.org/10.1016/j.jpsychores.2009.08.008

African Union (2010). *Continental plan of action for the african decade of persons with disabilities 2000-2009.* Retrieved from https://www.un.org/esa/socdev/enable/disafricadecade.htm

African Union (2012). *Continental plan of action for the african decade of persons with disabilities 2010-2019*. Retrieved from https://au.int/sites/default/files/pages/32900-file-cpoa_handbook._audp.english_-_copy.pdf

Africa's developmental report (2015). *Africa's youth in the labour market.* Chapter 5. Retrieved from https://www.afdb.org/en/documents/document/african-development-report-2015-chapter-5-africas-youth-in-the-labour-market-89692

Agustina, A., Dalimunthe, R. F., & Sinulingga, S. (2019). The effect of recruitment, training and placement on the performance of employees. *European Journal of Human Resource Management Studies*, *3*(1), 4-14.

Agyei-Okyere, E., Nketsia, W., Opoku, M. P., Torgbenu, E. L., Alupo, B. A., & Odame, L. (2019). Sustainable employment opportunities for persons with disabilities in Ghana: Exploring perceptions and participation in agriculture. *Business strategy & development*, *2*(2), 68–76. https://doi.org/10.1002/bsd2.43

Alwell, M., & Cobb, B. (2009). Functional life skills curricular interventions for youth with disabilities : A systematic review functional life skills curricular interventions for youth with disabilities. *Career Development for Exceptional Individuals*, *32*(2), 82–93. https://doi.org/10.1177/0885728809336656

Amado, A. N., Stancliffe, R. J., McCarron, M., & McCallion, P. (2013). Social inclusion and community participation of individuals with intellectual/developmental disabilities. *Intellectual and Developmental Disabilities*, *51*(5), 360–375. https://doi.org/10.1352/1934-9556-51.5.360

Amankwaa, L. (2016). Creating protocols for trustworthiness in qualitative research. *Journal of Cultural Diversity*, *23*(3), 121–127.

Ameri, M., Schur, L., Adya, M., Bentley, F. S., McKay, P., & Kruse, D. (2018). The disability employment puzzle: A field experiment on employer hiring behavior. *ILR Review*, *71*(2), 329–364. https://doi.org/10.1177/0019793917717474

American Speech-Language-Hearing Association (ASHA) (2020), *Augmentative and alternative communication (AAC)*. Retrieved from at http://www.asha.org/public/speech/disorders/AAC/#what_is

American Speech-Language-Hearing Association. (2021). Augmentative and alternative communication. Retrieved from https://www.asha.org/PRPSpecificTopic.aspx?folderid=8589942773&section=Overview

Americans with Disabilities Act of 1990 (ADA). (1990). ADA Statute. Retrieved from at :https://www.ada.gov/pubs/adastatute08.pdf

American Association of Persons with Disabilities (2005). *Research with persons with disabilities*. Retrieved from https://www.ahead.ie/disabilityact

Americans with Disabilities Act Amendments Act of 2008 (ADAAA). Retrieved from at : https://www.eeoc.gov/statutes/americans-disabilities-act-amendments-act-2008

Amin, A. S., & Abdullah, S. H. (2017). Malaysian disabled women experiences in employment. *International Journal for Studies on Children, Women, Elderly And Disabled*, *11*(4), 259–271. https://doi.org/10.1111/j.1471-3802.2011.01216.x

Anastasiou, D., & Kauffman, J. M. (2013, August). The social model of disability: Dichotomy between impairment and disability. *The Journal of Medicine and Philosophy: A forum for bioethics and philosophy of medicine, 38*(4), 441-459.

Andrews, E. (2017). Disability models. In *Practical Psychology in Medical Rehabilitation* (pp. 77–83). Springer International Publishing. https://doi.org/10.1007/978-3-319-34034-0_9

Ang, M. C. H. (2014). Do Persons with Disabilities Act (2008) and organizational culture influence managerial intention to hire persons with disabilities?: The Malaysian perspective. *Jurnal Pengurusan*, *41*, 81–89.

Ariefdien, R. (2016). Learnerships: Enabling inclusion for persons with disabilities into employment. In T. Lorenzo & V. Van Rensburg (Eds), Monitoring disability inclusion and social change. Disability Catalyst Africa Series (pp. 65-70).

Armstrong, D., Armstrong, A. C., & Spandagou, I. (2011). Inclusion: by choice or by chance? *International Journal of Inclusive Education*, *15*(1), 29–39. https://doi.org/10.1080/13603116.2010.496192

Arvidsson, P., Granlund, M., Thyberg, I., & Thyberg, M. (2014). Important aspects of participation and participation restrictions in people with a mild intellectual disability. *Disability and Rehabilitation*, *36*(15), 1264–1272. https://doi.org/10.3109/09638288.2013.845252

Azungah, T. (2018). Qualitative research: deductive and inductive approaches to data analysis. *Qualitative Research Journal*, *18*(4), 383–400. https://doi.org/10.1108/QRJ-D-18-00035

Babineau, J. (2014). Product review: Covidence (systematic review software). *Journal of the Canadian Health Libraries Association*, *71*(2), 68–71. https://doi.org/10.5596/c14-016

Banks, L. M., Kuper, H., & Polack, S. (2017). Poverty and disability in low- and middle-income countries: A systematic review. *PLOS ONE*, *12*(12), e0189996. https://doi.org/10.1371/journal.pone.0189996

Barbour, R. S. (2018). Quality of data collection. *The SAGE handbook of qualitative data collection*, 217-230. SAGE.

Barnes, C. (2003). "Work" is a four letter word? Disability, Work and welfare. In *Working Futures: Policy, Practice and Disabled People's Employment* (Issue December). http://www.leeds.ac.uk/disability-studies/archiveuk/Barnes/work 2.pdf

Barnes, C. (2012). Disability, work and welfare. *Sociology Compass*, *6*(6), 472–484.

Barnes, C., & Roulstone, A. (2005). 'Work' is a four letter word: disability, work and welfare. In A. Roulstone & C. Barnes, C. (eds), *Working Futures? Disabled People, Policy and Social Inclusion*. Bristol: The Polity Press, pp. 315–328.

Barnes, C., Mercer, G. & Shakespeare. (2010). The social model of disability. In A. Giddens & P. W. Sutton (Eds.), *Sociology: Introductory readings* (pp. 161-167). Cambridge: Polity Press.

Batra, B. (2016). News communication through WhatsApp. *Jounalism & Mass Communication*, *3*(10), 3725–3733.

Beaudry, J. S. (2016). Beyond (models of) disability? *Journal of Medicine and Philosophy*, *41*(2), 210–228. https://doi.org/10.1093/jmp/jhv063

Belmont Report (1978): Ethical principles and guidelines for the protection of human subjects of research Retrieved from http://ohsr.od.nih.gov/mpa/belmont.php3

Bengisu, M., & Balta, S. (2011). Employment of the workforce with disabilities in the hospitality industry. *Journal of Sustainable Tourism*, *19*(1), 35–57. https://doi.org/10.1080/09669582.2010.499172

Bengisu, M., Izbırak, G., & Mackieh, A. (2008). Work-related challenges for individuals who are visually impaired in Turkey. *Journal of Visual Impairment & Blindness*, *102*(5), 284–294. https://doi.org/10.1177/0145482X0810200504

Bennett, J. M., & Volpe, M. A. (2018). Models of disability from religious tradition: Introductory Editorial. *Journal of Disability and Religion*, *22*(2), 121–129. https://doi.org/10.1080/23312521.2018.1482134

Beukelman, D., & Light, J. (2020). Augmentative and alternative communication: Supporting children and adults with complex communication needs (5th ed.). Baltimore, MD: Paul H.

Brookes Publishing Company.

Bhanushali, K. (2016). Issues and challenges to self employment among persons with disabilities: micro level study of ahmedabad. *The Journal of Management Awareness*, *19*(1), 51–59.

Bhavnani, K. K., Chua, P., & Collins, D. (2014). Critical approaches to qualitative. *The Oxford handbook of qualitative research*, 165. Oxford University Press.

Bhorat, H., & Van Der Westhuizen, C. (2012). *Poverty Inequality and the Nature of Economic Growth in South Africa*. Development Policy Research Unit, University of Cape Town (DPRU Working Paper Series No. WP 12/151) Retrieved from http://www.dpru.uct.ac.za/wp-12151-poverty-inequality-and-nature-economic-growth-south-africa

Bianquin, N., Sacchi, F., & Besio, S. (2018). Enhancing communication and participation using AAC technologies for children with motor impairments: a systematic review. *Education Sciences and Society*, *1*, 49–72. https://doi.org/10.3280/ess1-2018oa6012

Bickenbach, J. (2012). Ethics, Disability and the International Classification of Functioning, Disability and Health. *American Journal of Physical Medicine & Rehabilitation*, *91*, 163–167. https://doi.org/10.1097/PHM.0b013e31823d5487

Blue, E. P. (2012). Arguing disability under the ADA Amendments Act: Where do we stand?. *Fed. Law*, 38-39.

Blustein, D. L. (2008). The role of work in psychological health and well-being: A conceptual, historical, and public policy perspective. *American Psychologist*, *63*(4), 228–240. https://doi.org/10.1037/0003-066X.63.4.228

Bonner, B., Pillai, R., Sarma, P. S., Lipska, K. J., Pandian, J., & Sylaja, P. N. (2016). Factors predictive of return to work after stroke in patients with mild-moderate disability in India. *European Journal of Neurology*, *23*(3), 548–553. https://doi.org/10.1111/ene.12887

Bornman, J. (2004). The World Health Organisation's terminology and classification : application to severe disability. *Disability and Rehabilitation*, *26*(3), 182–188. https://doi.org/10.1080/09638280410001665218

Bornman, J. (2017). Developing inclusive literacy practices in South African schools. In M. Milton (Ed.), *Inclusive Principles and Practices in Literacy Education*. Emerald Publishing Linited.

Bornman, J., Bryen, D. N., Moolman, E., & Morris, J. (2016). Use of consumer wireless devices by South Africans with severe communication disability. *African Journal of Disability*, *5*(1), 1–9. https://doi.org/http://dx.doi.org/10.4102/

Bornman, J., & Tönsing, K. (2019). Augmentative and alternative communication. In E. Landsberg, D. Kruger, & E. Swart (Eds.), *Addressing barriers to learning: A South African perspective* (4th Ed, pp. 216–240). Van Schaik Publishers.

Bosch, A., & Koch, S. F. (2020). The South African financial cycle and its relation to household deleveraging. *South African Journal of Economics*, *88*(2), 145-173.

Boston, Q., Dunlap, P. N., Ethridge, G., Barnes, E., Dowden, A. R., & Euring, M. J. (2015). Cultural beliefs and disability: Implications for rehabilitation counsellors. *International Journal for the Advancement of Counselling*, *37*(4), 367-374.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, *3*(2), 77-101.

Bright, T., Wallace, S., & Kuper, H. (2018). A systematic review of access to rehabilitation for people with disabilities in low- and middle-income countries. *International Journal of Environmental Research and Public Health*, *15*(10), 2165. https://doi.org/10.3390/ijerph15102165

Bruyère, S. M., Van Looy, S. A., & Peterson, D. B. (2005). The International Classification of Functioning, Disability and Health (ICF): Contemporary literature overview. *Rehabilitation Psychology*, *50*(2), 1–21. https://academic.oup.com/tropej/article-lookup/doi/10.1093/tropej/fmn047

Bryan, W. V., & Henderson, G. (2011). *Psychosocial aspects of disability.* Springfield: Charles C.

Bryen, D. N., Potts, B. B., & Carey, A. C. (2007). So you want to work? What employers say about job skills, recruitment and hiring employees who rely on AAC. *Augmentative and Alternative Communication (Baltimore, Md. : 1985)*, *23*(2), 126–139. https://doi.org/10.1080/07434610600991175

Bryman, A. (2012). Sampling in qualitative research. *Social research methods*, *4*, 415-429.

Bryman, A. (2016). *Social research methods*. Oxford university press.

Bryman, A. (2017). Quantitative and qualitative research: further reflections on their integration. In *Mixing methods: Qualitative and quantitative research* (pp. 57-78). Routledge

Bualar, T. (2014). Barriers to employment: Voices of physically disabled rural women in Thailand. *Community, Work and Family*, *17*(2), 181–199. https://doi.org/10.1080/13668803.2013.806125

Budree, A., & Kathard, H. (2020). Design thinking for technology supporting individuals with neurodevelopmental disorders in developing countries: Participatory design for inclusivity. In T. Wadhera & B. R. Ambedkar. *Interdisciplinary Approaches to Altering Neurodevelopmental Disorders* (pp. 186-199). GI Global.

Buys, N. J., & Rennie, J. (2001). Developing relationships between vocational rehabilitation agencies and employers. *Rehabilitation Counseling Bulletin*, *44*(2), 95–103. https://doi.org/10.1177/003435520104400206

Carey, A. C., Potts, B. B., Bryen, D. N., & Shankar, J. (2004). Networking towards employment: Experiences of people who use augmentative and alternative communication. *Research & Practice for Persons with Severe Disabilities, 29*(1).

Carter, E. W., Austin, D., & Trainor, A. A. (2011). Factors associated with the early work experiences of adolescents with severe disabilities. *Intellectual and Developmental Disabilities*, *49*(4), 233–247. https://doi.org/10.1352/1934-9556-49.4.233

Carter, E. W., Austin, D., & Trainor, A. A. (2012). Predictors of postschool employment outcomes for young adults with severe disabilities. *Journal of disability policy studies, 23(1)*, 50-63.

Cawood, J., & Visagie, S. (2015). Environmental factors influencing participation of stroke survivors in a Western Cape setting. *African Journal of Disability*, *4*(1), 1–9. https://doi.org/10.4102/ajod.v4i1.198

Cerniauskaite, M., Quintas, R., Boldt, C., Raggi, A., Cieza, A., Bickenbach, J. E., & Leonardi, M. (2011). Systematic literature review on ICF from 2001 to 2009: Its use, implementation and operationalisation. *Disability and Rehabilitation*, *33*(4), 281–309. https://doi.org/10.3109/09638288.2010.529235

Chan, F., Gelman, J. S., Ditchman, N., Kim, J. H., & Chiu, C. Y. (2009).The World Health Organization ICF model as a conceptual framework for disability. In F. Chan, E. Cardoso & J.A. Chronister (Eds.). Understand ing Psychosocial Adjustment to Chronic Illness and Disability: A Handbook for Evidenced-Based Prac titioners in Rehabilitation (pp. 23-50). New York: Springer.

Chan, F., Tarvydas, V., Blalock, K., Strauser, D., & Atkins, B. J. (2009). Unifying and elevating rehabilitation counseling through model-driven, diversity-sensitive evidence-based practice. *Rehabilitation Counseling Bulletin*, *52*(2), 114-119.

Charlton, J. I. (2000). Nothing about us without us: Disability empowerment and oppression. *University of California Press, Oakland, CA*, *19*, 1075-1080. https://doi.org/10.1080/1034912X.2020.1722073

Chirwa, D. M. (2018). The Universal Declaration of Human Rights, economic, social and cultural rights and human rights discourse. In C. Ferstman, A. Goldberg, T. Gray, L. Ison, R. Nathan, & M. Newman (Eds.), *Contemporary Human Rights Challenges* (p. 11). Routledge. https://doi.org/10.4324/9781351107136

Christianson, M. (2012). People with disabilities inside [and outside] the South African workplace: the current status of the constitutional and statutory promises. *Acta Juridica*, *1*, 86–305.

Cieza, A., Causey, K., Kamenov, K., Hanson, S. W., Chatterji, S., & Vos, T. (2020). Global estimates of the need for rehabilitation based on the Global Burden of Disease study 2019: a systematic analysis for the Global Burden of Disease Study 2019. *The Lancet*, *396*(10267), 2006-2017.

Cieza, A., Fayed, N., Bickenbach, J., & Prodinger, B. (2019). Refinements of the ICF linking rules to strengthen their potential for establishing comparability of health information. *Disability and Rehabilitation*, *41*(5), 574–583. https://doi.org/10.3109/09638288.2016.1145258

Cobb, R. B., & Alwell, M. (2009). Transition planning/coordinating interventions for youth with disabilities: A systematic review. *Career Development for Exceptional Individuals*, *32*(2), 70–81. https://doi.org/10.1177/0885728809336655

Coelho, C. M., Sampaio, R. F., Luz, M. T., & Mancini, M. C. (2013). Work reality perceived by individuals with impairments: A biopsychosocial experience. *Work*, *45*(4), 537–551. https://doi.org/10.3233/WOR-131640

Cohen, K. J., Bryen, D. N., & Carey, A. C. (2003). Augmentative communication employment training and supports (ACETS). *AAC: Augmentative and Alternative Communication*, *19*(3), 199–206. https://doi.org/10.1080/07434610310001595678

Collins, D. (2003). Pretesting survey instruments: an overview of cognitive methods. *Quality of life research, 12*(3), 229-238.

Commission of Employment Equity (CEE). (2019-2020). Annual Report. Department of Labour. Pretoria. Government Printer. Retrieved from http://www.labour.gov.za.

Compagnone, E., Maniglio, J., Camposeo, S., Vespino, T., Losito, L., De Rinaldis, M., Gennaro, L., & Trabacca, A. (2014). Functional classifications for cerebral palsy: Correlations between the gross motor function classification system (GMFCS), the manual ability classification system (MACS) and the communication function classification system (CFCS). *Research in Developmental Disabilities*, *35*(11), 2651–2657. https://doi.org/10.1016/j.ridd.2014.07.005

Connelly, L. M. (2016). Trustworthiness in qualitative research. *MEDSURG Nursing*, *25*(6), 435–436.

Coutinho, M. T., Dam, U. C., & Blustein, D. L. (2008). The psychology of working and globalisation: A new perspective for a new era. *International Journal for Educational and Vocational Guidance*, *8*(1), 5–18. https://doi.org/10.1007/s10775-007-9132-6

Cramm, J. M., Nieboer, A. P., Finkenflügel, H., & Lorenzo, T. (2013). Comparison of barriers to employment among youth with and without disabilities in South Africa. *Work*, *46*(1), 19–24. https://doi.org/10.3233/WOR-121521

Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. SAGE.

Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. SAGE.

Dada, S., Kathard, H., Tönsing, K., & Harty, M. (2017). Severe communication disabilities in south africa: Challenges and enablers. In *Inclusion, Disability and Culture* (pp. 169–193). Springer International Publishing. https://doi.org/10.1007/978-3-319-55224-8_12

Dada, S., Murphy, Y., & Tönsing, K. (2017). Augmentative and alternative communication practices: A descriptive study of the perceptions of South African speech-language therapists. *Augmentative and Alternative Communication*, *33*(4), 189–200. https://doi.org/10.1080/07434618.2017.1375979

Daley, T. C., Singhal, N., & Krishnamurthy, V. (2013). Ethical considerations in conducting research on autism spectrum disorders in low and middle income countries. *Journal of Autism and Developmental Disorders*, *43*(9), 2002–2014.

Daniel, A., Abba Sanda, A., & Salau Midala, A. (2014). Recruitment, selection and placement of human resource in adult education organisation: Implications for the management of adult education in Borno state Nigeria. *Journal of Education and Practice*, *5*(31), 64–69.

Darcy, S., Taylor, T., & Green, J. (2016). 'But I can do the job': examining disability employment practice through human rights complaint cases. *Disability & Society*, *31*(9), 1242–1274. https://doi.org/10.1080/09687599.2016.1256807

De Schutter, O. (2019). *International human rights law*. Cambridge University Press.

Dee-Price, B. J. M., Hallahan, L., Nelson Bryen, D., & Watson, J. M. (2020). Every voice counts: exploring communication accessible research methods. *Disability and Society*, *0*(0), 1–25. Https://doi.org/10.1080/09687599.2020.1715924

Degener, T. (2016). Disability in a human rights context. *Laws*, *5*(3), 35. https://doi.org/10.3390/laws5030035

Degener, T. (2017). A new human rights model of disability. In V. Della Fina, R. Cera, & G. Palmisano (Eds.), *The United Nations Convention on the Rights of Persons with Disabilities* (pp. 41–59). Springer International Publishing. https://doi.org/10.1007/978-3-319-43790-3_2

Denzin, N. K., & Lincoln, Y. S. (2011). The SAGE handbook of qualitative research (4th ed.). SAGE.

Department of Education. (2001). Education White Paper 6: Special Needs Education: Building an Inclusive Educationand Training System. Pretoria

Department of Health. (2017). Framework and strategy for disability and rehabilitation services in South Africa 2015 - 2020. Retrieved from

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKE

Department of Higher Education and Training. (2015). Annual Report 2014/2015. Pretoria: Government Printer.

Department of Higher Education and Training. (2015). Skills Development Amendment Act [No. 31 of 2003]. Retrieved from at:https://www.dhet.gov.za/Part%20A%20%20Legislation%20Acts/SKILLS%20DEVELOPMENT%20SECTOR/4.2.%20Skills%20Development%20Amendment%20Act%2031%20of%202003.pdf

Department of Justice. (2000). Promotion of Equality and Prevention of Unfair Discrimination Act 4 of 2000. Retrieved from https://www.justice.gov.za/legislation/acts/2000-004.pdf

Department of Labour (2020). Commission on Employment Equity (2018-2019). Retrieved from at: http://www.labour.gov.za/DOL/downloads/documents/annual-reports/employment-equity/2014-2015/15thceeannualreport2015_part1.pdf

Department of Labour. (2002). Code of Good Practise on the Employment of People with Disabilities. www.labour.gov.za

Department of Labour. (2001). The National Skills Development Strategies (NSDS) (2001). Pretoria. www.labour.gov.za

Department of Labour. (1997). National skill developmental strategy, implementation report. Pretoria. www.labour.gov.za

Department of Labour. (1998). The Employment Equity Act no 55 of 1998. Pretoria. Department of labour. Retrieved from :www.labour.gov.za

Department of labour. (1998). The Skills Development Act, no 97 of 1998. Pretoria: Government Printers.

Department of Labour. (2001). The National Skills Development Strategies (NSDS) (2001). Pretoria. Department of Labour. www.labour.gov.za

Department of Labour. (2002). Technical Assistance Guidelines on the Employment of People with Disabilities (TAG). Pretoria: Department of Labour, Chief Directorate of Communication/Labour Relations.

Department of Labour. (2004). The Code of good practice (The Code). Pretoria: Department of Labour, Chief Directorate of Communication/Labour Relations.

Department of Labour. (2005). The National Skills Development Strategies (NSDS).

Department of Labour. (2011). The National Skills Development Strategies (NSDS).

Department of Public Service and Administration (2012). Public Service recruitment & mainstreaming of disabled persons: Ministerial & Departmental briefings, Disabled People SA comment. Public Service and Administration, Performance Monitoring and Evaluation.https://pmg.org.za/committee-meeting/14039/

Department of Social Development. (2012). *Children with disabilities in South Africa: A situation Analysis: 2001-2011* (Executive summary). Pretoria, South Africa: Department of Social Development/Department of Women, Children and People with Disabilities/UNICEF. https://www.unicef.org/southafrica/SAF_resources_sitandisabilityes.pdf

Department of Social Development. (2015). *White paper on the rights of persons with disabilities.* Retrieved from http//www.dsd.gov.za/wprpd/ finaldraft/2015/pdf

Department of Social Development. (2020). *Basic conditions of employment.* Retrieved from: http//www.dsd.gov.za/wprpd/ finaldraft/2015/pdf

Department of Women, Children and People with Disabilities. (2013). *Baseline Country Report to the United Nations on the Implementation of the Convention on the Rights of Persons with Disabilities in South Africa.* Retrieved from

DeVellis, R. F. (2016). *Scale development: Theory and applications* (Vol. 26). SAGE.

Dlamini, B. (2014). The 2014 state of the world youth population report. Retrieved from http://www.dsd.gov.za/index.php?Option=com_content&task=view&id=651&Item id=106.

Dillman, D. A., Phelps, G., Tortora, R., Swift, K., Kohrell, J., Berck, J., & Messer, B. L. (2009). Response rate and measurement differences in mixed-mode surveys using mail, telephone, interactive voice response (IVR) and the Internet. *Social Science Research*, *38*(1), 1-18.

Dirth, T. P., & Branscombe, N. R. (2017). Disability models affect disability policy support through awareness of structural discrimination. *Journal of Social Issues, 73*(2), 413-442.

Donald, K. A., Samia, P., Kakooza-Mwesige, A., & Bearden, D. (2014). Pediatric cerebral palsy in Africa: A systematic review. *Seminars in Pediatric Neurology*, *21*(1), 30–35. https://doi.org/10.1016/j.spen.2014.01.001

Donkervoort, M., Roebroeck, M., Wiegerink, D., van der Heijden-Maessen, H., & Stam, H. (2007). Determinants of functioning of adolescents and young adults with cerebral palsy. *Disability and Rehabilitation*, *29*(6), 453–463. https://doi.org/10.1080/09638280600836018

Donohue, A. (2020). Uses of Telephones in Business. Retrieved from https://bizfluent.com/about-5418884-uses-telephones-business.html

Donohue, D., & Bornman, J. (2014). The challenges of realising inclusive education in South Africa. *South African Journal of Education*, *34*(2), 1–14.

dos Santos Rodrigues, P., Luecking, R. G., Glat, R., & Daquer, A. F. C. (2013). Improving workforce outcomes among persons with disabilities in Brazil through youth apprenticeships and customized employment. *Journal of Vocational Rehabilitation*, *38*(3), 185–194. https://doi.org/10.3233/JVR-130633

Dreaver, J., Thompson, C., Girdler, S., Adolfsson, M., Black, M. H., & Falkmer, M. (2020). Success factors enabling employment for adults on the autism spectrum from employers' perspective. *Journal of Autism and Developmental Disorders*, *50*(5), 1657–1667. https://doi.org/10.1007/s10803-019-03923-3

Du Plessis, M. C. (2017). *Access to work for disabled persons in South Africa: A rights critique.* PULP.

Duffy, R. D., Blustein, D. L., Diemer, M. A., & Autin, K. L. (2016). The psychology of working theory. *Journal of Counseling Psychology*, *63*(2), 127–148. https://doi.org/10.1037/cou0000140

Dutta, A., Gervey, R., Chan, F., Chou, C.-C., & Ditchman, N. (2008). Vocational rehabilitation services and employment outcomes for people with disabilities: A United States Study. *Journal of Occupational Rehabilitation*, *18*(4), 326–334. https://doi.org/10.1007/s10926-008-9154-z

Dutta, A., Chan, F., Kundu, M. M., Kaya, C., Brooks, J., Sánchez, J., & Tansey, T. N. (2017). Assessing vocational rehabilitation engagement of people with disabilities. *Rehabilitation Counseling Bulletin*, *60*(3), 145–154. https://doi.org/10.1177/0034355215626698

Eagan, B., Brohinsky, J., Wang, J., & Shaffer, D. W. (2020). Testing the reliability of inter-rater reliability. *ACM International Conference Proceeding Series*, 454–461. https://doi.org/10.1145/3375462.3375508

Ebneyamini, S., & Sadeghi Moghadam, M. R. (2018). Toward developing a framework for conducting case study research. *International Journal of Qualitative Methods*, *17*(1). https://doi.org/10.1177/1609406918817954

Ebrahim, A., Botha, M., Brand, D., & Mogensen, K. F. (2020). Reimagining rehabilitation outcomes in South Africa. *South African Health Review*, 164.

Ebuenyi, I. D., Syurina, E. V., Bunders, J. F. G., & Regeer, B. J. (2018). Barriers to and facilitators of employment for people with psychiatric disabilities in Africa: A scoping review. *Global Health Action*, *11*(1), 1463658. https://doi.org/10.1080/16549716.2018.1463658

Eide, A. H., Jelsma, J., Loeb, M., Maart, S., & Toni, M. K. (2008). Exploring ICF components in a survey among Xhosa speakers in Eastern & Western Cape, South Africa. *Disability and Rehabilitation*, *30*(11), 819–829. https://doi.org/10.1080/09638280701390998

Eide, A. H., Mannan, H., Khogali, M., van Rooy, G., Swartz, L., Munthali, A., Hem, K.-G., MacLachlan, M., & Dyrstad, K. (2015). Perceived barriers for accessing health services among individuals with disability in four African countries. *PLOS ONE*, *10*(5), e0125915. https://doi.org/10.1371/journal.pone.0125915

Eliasson, A. C., Krumlinde-Sundholm, L., Rösblad, B., Beckung, E., Arner, M., Öhrvall, A. M., & Rosenbaum, P. (2006). The Manual Ability Classification System (MACS) for children with cerebral palsy: scale development and evidence of validity and reliability. *Developmental medicine and child neurology*, *48*(7), 549-554.

Elo, S., Kääriäinen, M., Kanste, O., Pölkki, T., Utriainen, K., & Kyngäs, H. (2014). Qualitative Content Analysis. *SAGE Open*, *4*(1), 215824401452263. https://doi.org/10.1177/2158244014522633

Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, *62*(1), 107–115. https://doi.org/10.1111/j.1365-2648.2007.04569.x

Elsahar, Y., Hu, S., Bouazza-Marouf, K., Kerr, D., & Mansor, A. (2019). Augmentative and alternative communication (AAC) advances: A review of configurations for individuals with a speech disability. *Sensors*, *19*(8), 1911. Https://doi.org/10.3390/s19081911

Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine. *Science,* 196(4286), 129-136.

Engel, G. L. (1981). The clinical application of the biopsychosocial model. *American Journal of Psychiatry,* 137, 535–44.

Engelbrecht, M., Shaw, L., & Van Niekerk, L. (2017). A literature review on work transitioning of youth with disabilities into competitive employment. *African Journal of Disability*, *6*(6), 1–7. https://doi.org/10.4102/ajod.v6i0.298

Epstein, R. M., & Borrell-Carrio, F. (2005). The biopsychosocial model: Exploring six impossible things. *Families, Systems and Health*, *23*(4), 426–431. https://doi.org/10.1037/1091-7527.23.4.426

Erickson, W. A., von Schrader, S., Bruyère, S. M., & VanLooy, S. A. (2014). The employment environment: Employer perspectives, policies, and practices regarding the employment of persons with disabilities. *Rehabilitation Counseling Bulletin*, *57*(4), 195–208. https://doi.org/10.1177/0034355213509841

Escorpizo, R., Finger, M. E., Glässel, A., Gradinger, F., Lückenkemper, M., & Cieza, A. (2011). A systematic review of functioning in vocational rehabilitation using the International Classification of Functioning, Disability and Health. *Journal of Occupational Rehabilitation*, *21*(2), 134–146. https://doi.org/10.1007/s10926-011-9290-8

Escorpizo, R., Reneman, M. F., Ekholm, J., Fritz, J., Krupa, T., Marnetoft, S.-U., Maroun, C. E., Guzman, J. R., Suzuki, Y., Stucki, G., & Chan, C. C. H. (2011). A conceptual definition of vocational rehabilitation based on the ICF: Building a shared global model. *Journal of Occupational Rehabilitation*, *21*(2), 126–133. https://doi.org/10.1007/s10926-011-9292-6

Farooq, M. B., & de Villiers, C. (2017). Telephonic qualitative research interviews: when to consider them and how to do them. *Meditari Accountancy Research*, *25*(2), 291–316. https://doi.org/10.1108/MEDAR-10-2016-0083

Fernandez, E. L. A., Rutka, L. J., & Aldersey, H. M. (2017). Exploring disability policy in Africa: An online search for national disability policies and UNCRPD ratification. *Review of Disability Studies: An International Journal*, *13*(1).

Finger, M. E., Escorpizo, R., Glässel, A., Gmünder, H. P., Lückenkemper, M., Chan, C., Fritz, J., Studer, U., Ekholm, J., Kostanjsek, N., Stucki, G., & Cieza, A. (2012). ICF core set for vocational rehabilitation: Results of an international consensus conference. *Disability and Rehabilitation*, *34*(5), 429–438. https://doi.org/10.3109/09638288.2011.608145

Fitzgerald, J., & Clapton, J. (1997). The History of Disability : A history of the religious model of disability the medical model of disability. *New Renaissance Magazine*, *7*(1), 1–3.

Flick, U. (2014). The qualitative data analysis. *The SAGE handbook of qualitative data collection*. SAGE.

Flick, U. (2018). Triangulation in data collection. *The SAGE handbook of qualitative data collection*, 527-544. SAGE.

Flynn, C. C., & Clark, M. C. (1995). Rehabilitation Technology assessment practices in vocational rehabilitation agencies. *Assistive Technology*, *7*(2), 111–118. Https://doi.org/10.1080/10400435.1995.10132259

Forrester, B., & Davis, D. (2011). An Economic Model of Disability. *Occasional Paper*, *4*.

Frazier, L. D. (2020). The past, present, and future of the biopsychosocial model: A review of the biopsychosocial model of health and disease: New philosophical and scientific developments by Derek Bolton and Grant Gillett. *New Ideas in Psychology*, *57*, 100755. https://doi.org/10.1016/j.newideapsych.2019.100755

Friedman, C. (2020). The relationship between disability prejudice and disability employment rates. *Work*, *65*(3), 591–598. https://doi.org/10.3233/WOR-203113

Friese, S., Soratto, J., & Pires., D. (2018). Carrying out a computer-aided thematic content analysis with ATLAS.ti *MG Working Paper*, *18*(02). https://www.mmg.mpg.de/62130/wp-18-02

Gale, N. K., Heath, G., Cameron, E., Rashid, S., & Redwood, S. (2013). Using the framework method

for the analysis of qualitative data in multi-disciplinary health research. *BMC Medical Research Methodology*, *13*(1), 117. https://doi.org/10.1186/1471-2288-13-117

Gathiram, N. (2008). A critical review of the developmental approach to disability in South Africa. *International Journal of Social Welfare*, *17*(2), 146-155.

Gaus, N. (2017). Selecting research approaches and research designs: a reflective essay. *Qualitative Research Journal*, *17*(2), 99–112. https://doi.org/10.1108/QRJ-07-2016-0041

Grandy, G., Mills, A. J., Durepos, G., & Wiebe, E. (2010). *Encyclopedia of case study research*: *Multiple-case designs.* SAGE.

Grant, M. J., & Booth, A. (2009). A typology of reviews: an analysis of 14 review types and associated methodologies. *Health information & libraries journal*, *26*(2), 91-108.

Gewurtz, R. E., Langan, S., & Shand, D. (2016). Hiring people with disabilities: A scoping review. *Work*, *54*(1), 135–148. https://doi.org/10.3233/WOR-162265

Geyh, S., Cieza, A., Schouten, J., Dickson, H., Frommelt, P., Omar, Z., Kostanjsek, N., Ring, H., & Stucki, G. (2004). ICF core sets for stroke. *Journal of Rehabilitation Medicine*, *36*(SUPPL. 44), 135–141. https://doi.org/10.1080/16501960410016776

Ghaemi, S. N. (2009). The rise and fall of the biopsychosocial model. *British Journal of Psychiatry*, *195*(1), 3–4. https://doi.org/10.1192/bjp.bp.109.063859

Gibberd, J. (2007). *South Africa's school infrastructure performance indicator system, PEB exchange, programme on educational building, 2007/06*. South Africa: OECD

Glässel, A., Finger, M. E., Cieza, A., Treitler, C., Coenen, M., & Escorpizo, R. (2011). Vocational rehabilitation from the client's perspective using the International Classification Of Functioning, Disability and Health (ICF) as a reference. *Journal of Occupational Rehabilitation*, *21*(2), 167–178. https://doi.org/10.1007/s10926-010-9277-x

Graham, C. W., Inge, K. J., Wehman, P., Seward, H. E., & Bogenschutz, M. D. (2018). Barriers and facilitators to employment as reported by people with physical disabilities: An across disability type analysis. *Journal of Vocational Rehabilitation*, *48*(2), 207–218. https://doi.org/10.3233/JVR-180929

Graham, L. (2020). Differences in employment and income poverty between people with and without disabilities in South Africa. *Alter*, *14*(4), 299–317. https://doi.org/10.1016/j.alter.2020.06.011

Gray, D. B., & Hendershot, G. E. (2000). The ICIDH-2: Developments for a new era of outcomes research. *Archives of Physical Medicine and Rehabilitation*, *81*, S10–S14. https://doi.org/10.1053/apmr.2000.20616

Grigal, M., Hart, D., & Migliore, A. (2011). Comparing the transition planning, postsecondary education, and employment outcomes of students with intellectual and other disabilities. *Career Development and Transition for Exceptional Individuals*, *34*(1), 4–17. https://doi.org/10.1177/0885728811399091

Groce, N., Kembhavi, G., Wirz, S., Lang, R., Trani, J.-F., & Kett, M. (2011). *Poverty and Disability A critical review of the literature in low and middle-income countries*. 31.www.ucl.ac.uk/lc-ccr/.../WP16_Poverty_and_Disability_review.pdf

Gudlavalleti, M. V. S., John, N., Allagh, K., Sagar, J., Kamalakannan, S., & Ramachandra, S. S. (2014). Access to health care and employment status of people with disabilities in South India, the SIDE (South India Disability Evidence) study. *BMC Public Health*, *14*(1), 1125. https://doi.org/10.1186/1471-2458-14-1125

Haegele, J. A., & Hodge, S. (2016). Disability discourse: Overview and critiques of the medical and social models. *Quest*, *68*(2), 193–206. https://doi.org/10.1080/00336297.2016.1143849

Haines, D. (2017). Ethical considerations in qualitative case study research recruiting participants with profound intellectual disabilities. *Research Ethics*, *13*(3–4), 219–232. https://doi.org/10.1177/1747016117711971

Hammel, J., Magasi, S., Heinemann, A., Gray, D. B., Stark, S., Kisala, P., Carlozzi, N. E., Tulsky, D., Garcia, S. F., & Hahn, E. A. (2015). Environmental barriers and supports to everyday participation: A qualitative insider perspective from people with disabilities. *Archives of Physical Medicine and Rehabilitation*, *96*(4), 578–588. https://doi.org/10.1016/j.apmr.2014.12.008

Hammersley, M. (2015). On ethical principles for social research. *International Journal of Social Research Methodology*, *18*(4), 433–449. https://doi.org/10.1080/13645579.2014.924169

Hanass-Hancock, J., Nene, S., Deghaye, N., & Pillay, S. (2017). 'These are not luxuries, it is essential for access to life': Disability related out-of-pocket costs as a driver of economic vulnerability in South Africa. *African Journal of Disability*, *6*, 1–10. https://doi.org/10.4102/ajod.v6i0.280

Hanif, S., Peters, H., McDougall, C., & Lindsay, S. (2017). A systematic review of vocational interventions for youth with physical disabilities. In *Factors in Studying Employment for Persons with Disability, 10,*181–202. https://doi.org/10.1108/S1479-354720170000010008

Harmuth, E., Silletta, E., Bailey, A., Adams, T., Beck, C., & Barbic, S. P. (2018). Barriers and facilitators to employment for adults with Autism: A Scoping review. *Annals of International Occupational Therapy*, *1*(1), 31–40. https://doi.org/10.3928/24761222-20180212-01

Harpur, P. (2012). Embracing the new disability rights paradigm: The importance of the Convention on the Rights of Persons with Disabilities. *Disability and Society*, *27*(1), 1–14. https://doi.org/10.1080/09687599.2012.631794

Harpur, P. (2017). *Nothing About Us Without Us: The UN Convention on The Rights of Persons with Disabilities1*. Oxford University Press. https://doi.org/10.1093/acrefore/9780190228637.013.245

Harun, D., Din, N. C., Rasdi, H. F. M., & Shamsuddin, K. (2020). Employment experiences among young Malaysian adults with learning disabilities. *International Journal of Environmental Research and Public Health*, *17*(1). https://doi.org/10.3390/ijerph17010115

Hästbacka, E., Nygård, M., & Nyqvist, F. (2016). Barriers and facilitators to societal participation of people with disabilities: A scoping review of studies concerning European countries. *Alter*, *10*(3), 201–220. https://doi.org/10.1016/j.alter.2016.02.002

Hayes, A. (2020). Labour market. *Investopedia.* https://www.investopedia.com/terms/l/labor-market.asp

Hedley, D., Uljarević, M., Cameron, L., Halder, S., Richdale, A., & Dissanayake, C. (2017). Employment programmes and interventions targeting adults with autism spectrum disorder: A systematic review of the literature. *Autism*, *21*(8), 929–941. https://doi.org/10.1177/1362361316661855

Heerkens, Y., Engels, J., Kuiper, C., Van Der Gulden, J., & Oostendorp, R. (2004). The use of the ICF to describe work related factors influencing the health of employees. *Disability and Rehabilitation*, *26*(17), 1060–1066. https://doi.org/10.1080/09638280410001703530

Heinemann, A. W., Lai, J. S., Wong, A., Dashner, J., Magasi, S., Hahn, E. A., Carlozzi, N. E., Tulsky, D. S., Jerousek, S., Semik, P., Miskovic, A., & Gray, D. B. (2016). Using the ICF's environmental factors framework to develop an item bank measuring built and natural environmental features affecting persons with disabilities. *Quality of Life Research*, *25*(11), 2775–2786. https://doi.org/10.1007/s11136-016-1314-6

Heintz, J., & Posel, D. (2008). Revisiting informal employment and segmentation in the South African labor market. *The South African Journal of Economics*, *76*(1), 26–44. https://doi.org/10.1111/j.1813-6982.2008.00153.x

Hendricks, A. (2007). Selected legislation and jurisprudence: UN convention on the Rights of Persons With Disabilities. *European Journal of Health Law*, *14*, 273–298. https://doi.org/10.1525/sp.2007.54.1.23.

Hernandez, B., Chen, B., Araten-Bergman, T., Levy, J., Kramer, M., & Rimmerman, A. (2012). Workers with Disabilities: Exploring the hiring intentions of nonprofit and for-profit employers. *Employee Responsibilities and Rights Journal*, *24*(4), 237–249. https://doi.org/10.1007/s10672-011-9187-x

Hidecker, M. J. C., Ho, N. T., Dodge, N., Hurvitz, E. A., Slaughter, J., Workinger, M. S., Kent, R. D., Rosenbaum, P., Lenski, M., Messaros, B. M., Vanderbeek, S. B., Deroos, S., & Paneth, N. (2012). Inter-relationships of functional status in cerebral palsy: Analyzing gross motor function, manual ability, and communication function classification systems in children. *Developmental Medicine and Child Neurology*, *54*(8), 737–742. https://doi.org/10.1111/j.1469-8749.2012.04312.x

Higashida, M. (2017). The relationship between the community participation of disabled youth and socioeconomic factors: mixed-methods approach in rural Sri-Lanka. *Disability and Society*, *32*(8), 1239–1262. https://doi.org/10.1080/09687599.2017.1351921

Hollweck, T. (2015). Robert K. Yin.(2014). Case Study research design and methods. SAGE.

Homa, D. B. (2007). Using the International Classification of Functioning, Disability and Health (ICF) in job placement. *Work*, *29*(4), 277–286.

Houghton, C., Casey, D., Shaw, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse Researcher*, *20*(4), 12–17. https://doi.org/10.7748/nr2013.03.20.4.12.e326

Houtenville, A., & Kalargyrou, V. (2012). People with disabilities: Employers' perspectives on recruitment practices, strategies, and challenges in leisure and hospitality. *Cornell Hospitality Quarterly*, *53*(1), 40–52. https://doi.org/10.1177/1938965511424151

Howe, T. J. (2008). The ICF contextual factors related to speech-language pathology. *International Journal of Speech-Language Pathology*, *10*(1–2), 27–37. https://doi.org/10.1080/14417040701774824

Hsieh, H.-F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288. https://doi.org/10.1177/1049732305276687

Hubbard, E. (2004). *The manager's pocket guide to diversity management*. Human Resource Development.

Humpage, L. (2007). Models of disability, work and welfare in australia. *Social Policy & Administration*, *41*(3), 215–231. https://doi.org/10.1111/j.1467-9515.2007.00549.x

Huus, K., Granlund, M., Bornman, J., & Lygnegård, F. (2015). Human rights of children with intellectual disabilities: Comparing self-ratings and proxy ratings. *Child: Care, Health and Development*, *41*(6), 1010–1017. https://doi.org/10.1111/cch.12244

Huus, K, Morwane, R.E., Ramaahlo, M., Balton, S., Pettersson, E., Gimbler Berglund, I., & Dada, S. (2021). Voices of children with intellectual disabilities on participation in daily activities. *African Journal of Disability*, *10*(2012), 1–9. https://doi.org/10.4102/ajod.v10i0.792

Iemmi, V., Gibson, L., Blanchet, K., Kumar, K. S., Rath, S., Hartley, S., Murthy, G. V., Patel, V., Weber, J., & Kuper, H. (2015). Community-based rehabilitation for people with disabilities in low- and middle-income countries: A systematic review. *Campbell Systematic Reviews*, *11*(1), 1–177. https://doi.org/10.4073/csr.2015.15

Igei, K. (2018). Were the adverse effects of disability on employment mitigated during 2002-2015 in South Africa?: A Pseudo- Panel Approach. pp. 1–55. Tokyo: JICA Research Institute (Working Paper No. 168). Retrieved from https://jicari.repo. nii.ac.jp/index.php?active action=repository view main item detail&page id=13&block id=21&item id=891&item no=1

Imms, C., Adair, B., Keen, D., Ullenhag, A., Rosenbaum, P., & Granlund, M. (2016). "Participation": A systematic review of language, definitions, and constructs used in intervention research with children with disabilities. *Developmental Medicine and Child Neurology*, *58*(1), 29–38. https://doi.org/10.1111/dmcn.12932

International Labour Organization (ILO). (2013). *Inclusion of people with disabilities in vocational training: a practical guide* / International Labour Office, Gender, Equality and Diversity – Geneva: ILO, 2013

International Labour Organization (ILO). (2020). *General survey on promoting employment and decent work in a changing landscape*. Geneva: ILO.

Isakson, C., Burghstahler, S., & Arnold, A. (2006). AAC, employment, and independent living: a success story. *Assistive Technology Outcomes and Benefits*, *3*(1), 67–79.

Jacobs, B., Drew, R., Ogletree, B., & Pierce, K. (2004). Augmentative and Alternative Communication (AAC) for adults with severe aphasia: where we stand and how we can go further. *Disability and Rehabilitation*, *26*(21–22), 1231–1240. https://doi.org/10.1080/09638280412331280244

Jahan, A., & Ellibidy, A. (2017). A review of conceptual models for rehabilitation research and practice. *Journal of Rehabilitation Sciences*, *2*(2), 46–53. https://doi.org/10.11648/j.rs.20170202.14

Jahn, W. T. (2011). The 4 basic ethical principles that apply to forensic activities are respect for autonomy, beneficence, nonmaleficence, and justice. *Journal of Chiropractic Medicine*, *10*(3), 225–226. https://doi.org/10.1016/j.jcm.2011.08.004

Jang, Y., Wang, Y. T., & Lin, M. H. (2014). Factors affecting employment outcomes for people with disabilities who received disability employment services in Taiwan. *Journal of Occupational Rehabilitation*, *24*(1), 11–21. https://doi.org/10.1007/s10926-013-9433-1

Jelsma, J., Maart, S., Eide, A., Toni, M., & Loeb, M. (2008). Who gets the disability grant in South

Africa? An analysis of the characteristics of recipients in urban and rural areas. *Disability and Rehabilitation*, *30*(15), 1139–1145. https://doi.org/10.1080/17483100701475962

Jongbloed, L. (2003). Disability policy in Canada: An overview. *Journal of Disability Policy Studies*, *13*(4), 203-209.

Ju, S., Zhang, D., & Pacha, J. (2012). Employability skills valued by employers as important for entry-level employees with and without disabilities. *Career Development and Transition for Exceptional Individuals*, *1*(35), 28–38.

Ju, Song, Roberts, E., & Zhang, D. (2013). Employer attitudes toward workers with disabilities: A review of research in the past decade. *Journal of Vocational Rehabilitation*, *38*(2), 113–123. https://doi.org/10.3233/JVR-130625

Kamal, S. S. L. B. (2019). Research paradigm and the philosophical foundations of a qualitative study. *International Journal of Social Sciences, 4*(3), 1386–1394. https://doi.org/10.20319/pijss.2019.43.13861394

Kaufmann, K., & Peil, C. (2020). The mobile instant messaging interview (MIMI): Using WhatsApp to enhance self-reporting and explore media usage in situ. *Mobile Media and Communication*, *8*(2), 229–246. https://doi.org/10.1177/2050157919852392

Khan, F., & Pallant, J. F. (2007). Use of the International Classification of Functioning, Disability and Health (ICF) to identify preliminary comprehensive and brief core sets for multiple sclerosis. *Disability and Rehabilitation*, *29*(3), 205–213. https://doi.org/10.1080/09638280600756141

Khayatzadeh-Mahani, A., Wittevrongel, K., Nicholas, D. B., & Zwicker, J. D. (2019). Prioritizing barriers and solutions to improve employment for persons with developmental disabilities. *Disability and Rehabilitation*, 1–11. https://doi.org/10.1080/09638288.2019.1570356

Khoo, S. L., Tiun, L. T., & Lee, L. W. (2013). Unseen challenges, unheard voices, unspoken desires: Experiences of employment by Malaysians with physical disabilities. *Kajian Malaysia*, *31*(1), 37–55.

Khothari, C. R. (2004). Research methodology: Methods and techniques. *New Age International, New Delhi*.

Kidd, S., Wapling, L., Bailey-Athias, D., & Tran, A. (2018). Social protection and disability in South Africa. *Development Pathways Working Paper.* Retrieved from https://www.developmentpathways.co.uk/wp-content/uploads/2018/07/Social-protection-and-disability-in-South-Africa-July-2018.pdf

Kivunja, C., & Kuyini, A. B. (2017). Understanding and Applying Research Paradigms in Educational Contexts. *International Journal of Higher Education, 6*(5), 26. https://doi.org/10.5430/ijhe.v6n5p26

Kocman, A., Fischer, L., & Weber, G. (2018). The employers' perspective on barriers and facilitators to employment of people with intellectual disability: A differential mixed-method approach. *Journal of Applied Research in Intellectual Disabilities*, *31*(1), 120–131. https://doi.org/10.1111/jar.12375

Kostanjsek, N. (2011). Use of The International Classification of Functioning, Disability and Health (ICF) as a conceptual framework and common language for disability statistics and health information systems. *BMC Public Health*, *11*(4). https://doi.org/10.1186/1471-2458-11-S4-S3

Kruse, D., & Schur, L. (2003). Employment of people with disabilities following the ADA. *Industrial Relations*, *42*(1), 31–64. https://doi.org/10.1111/1468-232X.00275

Kulkarni, M. (2016). Organizational career development initiatives for employees with a disability. *International Journal of Human Resource Management*, *27*(14), 1662–1679. https://doi.org/10.1080/09585192.2015.1137611

Kulkarni, M., & Gopakumar, K. V. (2014). Career management strategies of people with disabilities. *human resource management*, *53*(3), 445–466. http://10.0.3.234/hrm.21570

Kulkarni, M., & Kote, J. (2014). Increasing employment of people with disabilities: the role and views of disability training and placement agencies. *Employee Responsibilities and Rights Journal*, *26*(3), 177–193. https://doi.org/10.1007/s10672-013-9216-z

Kulkarni, M., & Lengnick-Hall, M. L. (2014). Obstacles to success in the workplace for people with disabilities: A review and research agenda. *Human Resource Development Review*, *13*(2), 158–180. https://doi.org/10.1177/1534484313485229

Kulkarni, M., & Scullion, H. (2015). Talent management activities of disability training and

placement agencies in India. *The International Journal of Human Resource Management*, *26*(9), 1169–1181. https://doi.org/10.1080/09585192.2014.934896

Kyngäs, H., Kääriäinen, M., & Elo, S. (2020). The trustworthiness of content analysis. In *The Application of Content Analysis in Nursing Science Research*. https://doi.org/10.1007/978-3-030-30199-6_5

Lamichhane, K. (2012). Employment situation and life changes for people with disabilities: evidence from Nepal. *Disability & Society*, *27*(4), 471–485. https://doi.org/10.1080/09687599.2012.659462

Lawson, A., & Beckett, A. E. (2021). The social and human rights models of disability: towards a complementarity thesis. *The International Journal of Human Rights*, *25*(2), 348–379. https://doi.org/10.1080/13642987.2020.1783533

Lee, M. N., Abdullah, Y., & Mey, S. C. (2011). Employment of people with disabilities in Malaysia: Drivers and inhibitors. *International Journal of Special Education*, *26*(1), 112-124

Leibbrandt, M., Woolard, I., McEwen, H., & Koep, C. (2010). Employment and inequality outcomes in South Africa. *University of Cape Town: Southern Africa Labour and Development Research Unit*.

Leonardi, M., Sykes, C. R., Madden, R. C., Ten Napel, H., Hollenweger, J., Snyman, S., Madden, R. H., Kraus De Camargo, O., Raggi, A., Van Gool, C. H., & Martinuzzi, A. (2016). Do we really need to open a classification box on personal factors in ICF? *Disability and Rehabilitation*, *38*(13), 1327–1328. https://doi.org/10.3109/09638288.2015.1089604

Light, J., & McNaughton, D.. (2015). Designing AAC research and intervention to improve outcomes for individuals with complex communication needs. *Augmentative and Alternative Communication*, *31*(2), 85–96. https://doi.org/10.3109/07434618.2015.1036458

Light, J., & McNaughton, D. (2011). Supporting the communication, language, and literacy development of children with complex communication needs: state of the science and future research priorities. *Assistive Technology : The Official Journal of RESNA*, *24*(1), 34–44. https://doi.org/10.1080/10400435.2011.648717

Light, J., Stoltz, B., & McNaughton, D. (1996). Community-based employment: Experiences of adults who use AAC. *AAC: Augmentative and Alternative Communication*, *12*(4), 215–229. https://doi.org/10.1080/07434619612331277688

Liisberg, M. V. (2017). Article 27 [Work and employment]. In *The United Nations Convention on the Rights of Persons with Disabilities* (pp. 497-508). Springer, Cham.

Lincoln, Y.S. & Guba, E.G. (1985). *Naturalistic inquiry.* SAGE.

Lindsay, S. (2011). Discrimination and other barriers to employment for teens and young adults with disabilities. *Disability and Rehabilitation*, *33*(15–16), 1340–1350. https://doi.org/10.3109/09638288.2010.531372

Lindsay, S., Cagliostro, E., Albarico, M., Mortaji, N., & Karon, L. (2018). A systematic review of the benefits of hiring people with disabilities. *Journal of Occupational Rehabilitation*, *28*(4), 634–655. Https://doi.org/10.1007/s10926-018-9756-z

Lindsay, S., Hartman, L. R., & Fellin, M. (2016). A systematic review of mentorship programs to facilitate transition to post-secondary education and employment for youth and young adults with disabilities. *Disability and Rehabilitation*, *38*(14), 1329–1349. Https://doi.org/10.3109/09638288.2015.1092174

Lindsay, S., Adams, T., McDougall, C., & Sanford, R. (2012). Skill development in an employment-training program for adolescents with disabilities. *Disability and Rehabilitation*, *34*(3), 228–237. https://doi.org/10.3109/09638288.2011.603015

Lindsay, S., Adams, T., Sanford, R., McDougall, C., Kingsnorth, S., & Menna-Dack, D. (2014). Employers' and employment counselors' perceptions of desirable skills for entry-level positions for adolescents: how does it differ for youth with disabilities? *Disability and Society*, *29*(6), 953–967. https://doi.org/10.1080/09687599.2013.874330

Lindsay, S., McDougall, C., Menna-Dack, D., Sanford, R., & Adams, T. (2015). An ecological approach to understanding barriers to employment for youth with disabilities compared to their typically developing peers: views of youth, employers, and job counselors. *Disability and Rehabilitation*, *37*(8), 701–711. https://doi.org/10.3109/09638288.2014.939775

Lindsay, S., McDougall, C., & Sanford, R. (2013). Disclosure, accommodations and self-care at work

among adolescents with disabilities. *Disability and Rehabilitation*, *35*(26), 2227–2236. https://doi.org/10.3109/09638288.2013.775356

Lindsay, S., McDougall, C., Sanford, R., Menna-Dack, D., Kingsnorth, S., & Adams, T. (2015). Exploring employment readiness through mock job interview and workplace role-play exercises: Comparing youth with physical disabilities to their typically developing peers. *Disability and Rehabilitation*, *37*(18), 1651–1663. https://doi.org/10.3109/09638288.2014.973968

Llewellyn, A., & Hogan, K. (2000). The use and abuse of models of disability. *Disability and Society*, *15*(1), 157–165. https://doi.org/10.1080/09687590025829

Loeb, M., Eide, A. H., Jelsma, J., Toni, M. K., & Maart, S. (2008). Poverty and disability in Eastern and Western Cape Provinces, South Africa. *Disability and Society*, *23*(4), 311–321. https://doi.org/10.1080/09687590802038803

Lorenzo, T, van Niekerk, L., & Mdlokolo, P. (2007). Economic empowerment and black disabled entrepreneurs: negotiating partnerships in Cape Town, South Africa. *Disability and Rehabilitation*, *29*(5), 429–436.

Lorenzo, Theresa, & Cramm, J. M. (2012). Access to livelihood assets among youth with and without disabilities in South Africa: Implications for health professional education. *South African Medical Journal*, *102*(6), 578–581.

Lygnegård, F., Donohue, D., Bornman, J., Granlund, M., & Huus, K. (2013). A systematic review of generic and special needs of children with disabilities living in poverty settings in low- and middle-income countries. *Journal of Policy Practice*, *12*(4), 296–315. https://doi.org/10.1080/15588742.2013.827141

Mackenzie, N., & Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, *16*(2).

Mactaggart, I., Banks, L. M., Kuper, H., Murthy, G. V. S., Sagar, J., Oye, J., & Polack, S. (2018). Livelihood opportunities amongst adults with and without disabilities in Cameroon and India: A case control study. *PloS one*, *13*(4). https://doi.org/10.1371/journal.pone.0194105

Maart, S., Amosun, S., & Jelsma, J. (2019). Disability prevalence-context matters: A descriptive community-based survey. *African Journal of Disability*, *8*, 1–8. https://doi.org/10.4102/ajod.v8i0.512

Maart, S., Eide, A. H., Jelsma, J., Loeb, M. E., & Ka Toni, M. (2007). Environmental barriers experienced by urban and rural disabled people in South Africa. *Disability and Society*, *22*(4), 357–369. https://doi.org/10.1080/09687590701337678

Madden, R. H., & Bundy, A. (2019). The ICF has made a difference to functioning and disability measurement and statistics. *Disability and Rehabilitation*, *41*(12), 1450–1462. https://doi.org/10.1080/09638288.2018.1431812

Maja, P. A., Mann, W. M., Sing, D., Steyn, A. J., & Naidoo, P. (2011). Employing people with disabilities in South Africa. *South African Journal of Occupational Therapy*, *41*(1), 24-32 9p.

Malle, A. Y., Pirttimaa, R., & Saloviita, T. (2015). Inclusion of students with disabilities in formal vocational education programs in Ethiopia. *International Journal of Special Education*, *30*, 57–67.

Manaf, A. R. A., Othman, S. Z., Saad, Z. M., Jamaluddin, Z., & Noor, A. A. M. (2018). employability of persons with disabilities: Job coaches' perspectives. *International Journal of Academic Research in Business and Social Sciences*, *8*(6), 254–269. https://doi.org/10.6007/ijarbss/v8-i6/4202

Marks, D. (1997). Models of disability. *Disability and Rehabilitation*, *19*(3), 85–91. https://doi.org/10.3109/09638289709166831

Marsay, G. (2014). Success in the workplace: From the voice of (dis)abled to the voice of enabled. *African Journal of Disability*, *3*(1), 1–10. https://doi.org/10.4102/ajod.v3i1.99

Marumoagae, M. (2012). Disability discrimination and the right of disabled persons to access the labour market. *Potchefstroom Electronic Law Journal/Potchefstroomse Elektroniese Regsblad*, *15*(1), 345–365. https://doi.org/10.4314/pelj.v15i1.10

Mason, M. (2010, August). Sample size and saturation in PhD studies using qualitative interviews. In *Forum: qualitative social research 11*, 3.

McAlister, A. M., Lee, D. M., Ehlert, K. M., Kajfez, R. L., Faber, C. J., & Kennedy, M. S. (2017). Qualitative coding: An approach to assess inter-rater reliability. *ASEE Annual Conference and*

Exposition, Conference Proceedings, 2017-June. https://doi.org/10.18260/1-2--28777

McCormack, J., & Worrall, L. E. (2008). The ICF body functions and structures related to speech-language pathology. *International Journal of Speech-Language Pathology*, *10*(1–2), 9–17. https://doi.org/10.1080/14417040701759742

McNaughton, D, Light, J., & Arnold, K. B. (2002). "Getting your wheel in the door": Successful full-time employment experiences of individuals with cerebral palsy who use augmentative and alternative communication. *Augmentative and Alternative Communication*, *18*(June), 59–76. https://doi.org/10.1080/07434610212331281171

McNaughton, D., & Arnold, A. (2010). Supporting positive employment outcomes for individuals who use AAC. *Perspectives on Augmentative and Alternative Communication*, *22*(3), 164–172. https://doi.org/10.1044/aac22.3.164

McNaughton, D., & Bryen, D. N. (2002). Enhancing participation in employment through AAC technologies. *Assistive Technology*, *14*(1), 58–70. https://doi.org/10.1080/10400435.2002.10132055

McNaughton, D., & Bryen, D. N. (2007). AAC technologies to enhance participation and access to meaningful societal roles for adolescents and adults with developmental disabilities who require AAC. *AAC: Augmentative and Alternative Communication*, *23*(3), 217–229. https://doi.org/10.1080/07434610701573856

McNaughton, D., Light, J., & Arnold, K. B. (2002). "Getting your wheel in the door": Successful full-time employment experiences of individuals with cerebral palsy who use augmentative and alternative communication. *AAC: Augmentative and Alternative Communication*, *18*(2), 59–76. https://doi.org/10.1080/07434610212331281171

McNaughton, D., Light, J., & Groszyk, L. (2001). "Don't give up": Employment experiences of individuals with amyotrophic lateral sclerosis who use augmentative and alternative communication. *AAC: Augmentative and Alternative Communication*, *17*(3), 179–195. https://doi.org/10.1080/aac.17.3.179.195

Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation (3rd ed)*. San Francisco, CA: Jossey-Bass.

Mertens, D.M. (2014*). Research and Evaluation in Education and Psychology*: Integrating diversity with quantitative, qualitative, and mixed methods. 4th Edition. SAGE.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. SAGE.

Mitra, S. (2008). The recent decline in the employment of persons with disabilities in South Africa, 1998-2006. *South African Journal of Economics, 76*(3), 480-492.

Mitra, S. (2010). Disability cash transfers in the context of poverty and unemployment: the case of South Africa. *World Development*, *38*(12), 1692–1709. https://doi.org/10.1016/j.worlddev.2010.06.014

Mitra, S. (2018). D*isability, health and human development*. New York: Palgrave.

Mitra, S., Palmer, M., Kim, H., Mont, D., & Groce, N. (2017). Extra costs of living with a disability: A review and agenda for research. *Disability and Health Journal*, *10*(4), 475-484.

Mitra, S., Posarac, A., & Vick, B. (2013). Disability and poverty in developing countries: A multidimensional study. *World Development*, *41*(1), 1–18. https://doi.org/10.1016/j.worlddev.2012.05.024

Mitra, S., & Sambamoorthi, U. (2014). Disability prevalence among adults: estimates for 54 countries and progress toward a global estimate. *Disability and Rehabilitation*, *36*(11), 940–947. https://doi.org/10.3109/09638288.2013.825333

Mizunoya, S., Yamasaki, I., & Mitra, S. (2016). The disability gap in employment rates in a developing country context: New evidence from Vietnam. *Economics Bulletin*, *36*(2), 771–777.

Mizunoya, S, & Mitra, S. (2013). Is there a disability gap in employment rates in developing countries? *World Development*, *42*(1), 28–43. https://doi.org/10.1016/j.worlddev.2012.05.037

Mizunoya, Suguru, Mitra, S., & Yamasaki, I. (2018). Disability and school attendance in 15 low- and middle-income countries. *World Development*, *104*, 388–403. https://doi.org/10.1016/j.worlddev.2017.12.001

Momsen, A. H., Stapelfeldt, C. M., Rosbjerg, R., Escorpizo, R., Labriola, M., & Bjerrum, M. (2019). International Classification of Functioning, Disability and Health in vocational rehabilitation: A

scoping review of the state of the field. In *Journal of Occupational Rehabilitation*, 29(2). https://doi.org/10.1007/s10926-018-9788-4

Moodley, J. (2017). Education on an equal basis: A comparison of persons with and without disabilities in South Africa. *International Journal of Disability, Development and Education*, *64*(3), 283–293. https://doi.org/10.1080/1034912X.2016.1202404

Mophosho, M., & Dada, S. (2015). Role of Speech- language pathologists in implementing AAC in schools. In S. Moonsamy & H. Kathard (Eds.), *Speech-Language Therapy in a School Context: Its Principles and Practices* (First Ed, pp. 197–214). Van Schaik Publishers.

Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counseling psychology. *Journal of Counseling Psychology*, *52*(2), 250–260. https://doi.org/10.1037/0022-0167.52.2.250

Morwane, R.E., Dada, S., & Bornman, J. (2019). Shared storybook reading interactions between children with complex communication needs and their caregivers. *South African Journal of Education*, *39*(2), 1–12. https://doi.org/10.15700/saje.v39n2a1695

Morwane, R.E., Dada, S., & Bornman, J. (2021). Barriers to and facilitators of employment of persons with disabilities in low- and middle-income countries: A scoping review. *African Journal of Disability*, *10*. https://doi.org/10.4102/ajod.v10i0.833

Müller, R., & Geyh, S. (2015). Lessons learned from different approaches towards classifying personal factors. *Disability and Rehabilitation*, *37*(5), 430–438. https://doi.org/10.3109/09638288.2014.923527

Munn, Z., Peters, M. D. J., Stern, C., Tufanaru, C., McArthur, A., & Aromataris, E. (2018). Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach. *BMC Medical Research Methodology*, *18*(1), 143. https://doi.org/10.1186/s12874-018-0611-x

Naami, A., Hayashi, R., & Liese, H. (2012). The unemployment of women with physical disabilities in Ghana: issues and recommendations. *Disability and Society*, *27*(2), 191–204. https://doi.org/10.1080/09687599.2011.644930

National Council of and for Persons with Disabilities. (2016). *Looking for a job.* Retrieved from http://disabilityinfosa.co.za/mobility-impairments/looking-for-a-job/

National Council on Disability. (2017). *National Disability Policy: A Progress Report.* Washington, DC: NCD. Retrieved from https://ncd.gov/progressreport/2017/national-disability-policy-progress-report-october-2017

Ned, L., & Lorenzo, T. (2016). Enhancing public sectors' capacity for inclusive economic participation of disabled youth in rural communities. *African Journal of Disability*, *5*(1), 1–9. https://doi.org/10.4102/ajod.v5i1.189

Newcomer, K. E., Hatry, H. P., & Wholey, J. S. (2015). Conducting semi-structured interviews. Handbook of practical program evaluation, 4, 493.

Ngwena, C. (2007). Deconstructing the definition of ' disability ' under the Employment Equity Act : Legal Deconstruction. *South African Journal of Human Rights*, *23*(October), 116–156.

Nicholas, D. B., Attridge, M., Zwaigenbaum, L., & Clarke, M. (2015). Vocational support approaches in autism spectrum disorder: A synthesis review of the literature. *Autism*, *19*(2), 235–245. https://doi.org/10.1177/1362361313516548

Nicholas, D., Mitchell, W., Zulla, R., & Dudley, C. (2019). Perspectives of employers about hiring individuals with autism spectrum disorder: Evaluating a cohort of employers engaged in a job-readiness initiative. *Journal of Vocational Rehabilitation*, *50*(3), 353–364. https://doi.org/10.3233/JVR-191018

Nordenfelt, L. (2003). Action theory, disability and ICF. *Disability and Rehabilitation*, *25*(18), 1075–1079. https://doi.org/10.1080/0963828031000137748

Novick, G. (2008). Is there a bias against telephone interviews in qualitative research? *Research in Nursing & Health*, *31*(4), 391–398. https://doi.org/10.1002/nur.20259

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis : Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods, 16*, 1–13. https://doi.org/10.1177/1609406917733847

Nützi, M., Trezzini, B., Medici, L., & Schwegler, U. (2017). Job matching: An interdisciplinary scoping study with implications for vocational rehabilitation counseling. *Rehabilitation Psychology*, *62*(1), 45–68. https://doi.org/10.1037/rep0000119

O'Brien, D. E., Revell, G., & West, M. (2003). The impact of the current employment policy environment on the self-determination of individuals with disabilities. *Journal of Vocational Rehabilitation*, *19*(2), 105–118.

O'Halloran, R., Hickson, L., & Worrall, L. (2008). Environmental factors that influence communication between people with communication disability and their healthcare providers in hospital: A review of the literature within the International Classification of Functioning, Disability and Health (ICF) framework. *International Journal of Language & Communication Disorders*, *43*(6), 601–632. https://doi.org/10.1080/13682820701861832

Oberlo (2020). *Most popular social media platforms in 2020.* Retrieved from https://www.oberlo.com/statistics/most-popular-social-media-platforms

Ocampo, M. l. (2004). A brief history of educational inequality from apartheid to the present. Retrieved from http://web.stanford.edu/~jbaugh/saw/lizet_Education_Inequity.html

Oliver, M. (1990). The individual and social models of disability: People with established locomotor disabilities in hospitals. In *Joint Workshop of the Living Options Group and the Royal College of Physicians*, *23*(7), 1990.

Oliver, M. (2013). The social model of disability: Thirty years on. Di*sability and society, 28*(7), 1024-1026.

Opoku, M. P., Mprah, W. K., Mckenzie, J., Sakah, B. N., & Badu, E. (2017). Lives of persons with disabilities in Cameroon after CRPD: voices of persons with disabilities in the Buea Municipality in Cameroon. *International Journal on Disability and Human Development*, *16*(1), 67–75. https://doi.org/10.1515/ijdhd-2016-0009

Opoku, M. P., Mprah, W. kwado, Dogbe, J. A., Moitui, J. N., & Badu, E. (2017). Access to employment in Kenya: the voices of persons with disabilities. *International Journal on Disability and Human Development*, *16*(1), 77–87. https://doi.org/10.1515/ijdhd-2015-0029

Ouimet, J. A., Bunnage, J. C., Carini, R. M., Kuh, G. D., & Kennedy, J. (2004). Using focus groups, expert advice, and cognitive interviews to establish the validity of a college student survey. *Research in Higher Education*, *45*(3), 233–250. https://doi.org/10.1023/B:RIHE.0000019588.05470.78

Owens, J. (2015). Exploring the critiques of the social model of disability: The transformative possibility of Arendt's notion of power. *Sociology of Health and Illness*, *37*(3), 385–403. https://doi.org/10.1111/1467-9566.12199

Padkapayeva, K., Posen, A., Yazdani, A., Buettgen, A., Mahood, Q., & Tompa, E. (2016). Workplace accommodations for persons with physical disabilities: evidence synthesis of the peer-reviewed literature. *Disability and Rehabilitation*, *8288*(September), 1–17. https://doi.org/10.1080/09638288.2016.1224276

Palaganas, E. C., Sanchez, M. C., Molintas, M. V. P., & Caricativo, R. D. (2017). Reflexivity in qualitative research: A journey of learning. *Qualitative Report*, *22*(2), 426–438.

Palisano, R. J., Copeland, W. P., & Galuppi, B. E. (2007). Performance of physical activities by adolescents with cerebral palsy. *Physical Therapy*, *87*(1), 77-87.

Palisano, R. J., Rosenbaum, P., Bartlett, D., & Livingston, M. H. (2008). Content validity of the expanded and revised Gross Motor Function Classification System. *Developmental Medicine and Child Neurology*, *50*(10), 744-750.

Palisano, R., Rosenbaum, P., Walter, S., Russell, D., Wood, E., & Galuppi, B. (1997). Development and reliability of a system to classify gross motor function in children with cerebral palsy. *Developmental Medicine & Child Neurology*, *39*(4), 214-223.

Palmer, M. (2011). Disability and poverty: A Conceptual review. *Journal of Disability Policy Studies*, *21*(4), 210–218. https://doi.org/10.1177/1044207310389333

Palmer, M., Williams, J., & McPake, B. (2019). Standard of living and disability in Cambodia. *The Journal of Development Studies*, *55*(11), 2382–2402. https://doi.org/10.1080/00220388.2018.1528349

Parnes, P., Cameron, D., Christie, N., Cockburn, L., Hashemi, G., & Yoshida, K. (2009). Disability in low-income countries: issues and implications. *Disability and Rehabilitation*, *31*(14), 1170–1180.

Paulus, T. M., Jackson, K., & Davidson, J. (2017). Digital tools for qualitative research: Disruptions and entanglements. *Qualitative Inquiry*, *23*(10), 751–756.

https://doi.org/10.1177/1077800417731080

Paulus, T. M., & Lester, J. N. (2016). ATLAS.ti for conversation and discourse analysis studies. *International Journal of Social Research Methodology*, *19*(4), 405–428. https://doi.org/10.1080/13645579.2015.1021949

Perenboom, R. J. M., & Chorus, A. M. J. (2003). Measuring participation according to the International Classification of Functioning, Disability and Health (ICF). *Disability and Rehabilitation*, *25*(11–12), 577–587. https://doi.org/10.1080/0963828031000137081

Perućica, R., Sladoje Bošnjak, B., & Zecevic, I. (2018). Employment of people with disabilities in private and public sectors. *Sociology and Anthropology*, *6*(5), 459–464. https://doi.org/10.13189/sa.2018.060502

Peterson, C. H., Peterson, N. A., & Powell, K. G. (2017). Cognitive interviewing for item development: Validity evidence based on content and response processes. *Measurement and Evaluation in Counseling and Development*, *50*(4), 217–223. https://doi.org/10.1080/07481756.2002.12069057

Philpott, S., & McLaren, P. (2011). Hearing the voices of children and caregivers: Children with disabilities in South Africa; A situation analysis, 2001-2011. *Pretoria: Department of Social Development, Republic of South Africa/UNICEF*.

Pilgrim, D. (2002). The biopsychosocial model in Anglo-American psychiatry: Past, present and future?. *Journal of Mental Health*, *11*(6), 585-594.

Pillay, M., Tiwari, R., Kathard, H., & Chikte, U. (2020). Sustainable workforce: South African audiologists and speech therapists. *Human Resources for Health*, *18*(1), 47. https://doi.org/10.1186/s12960-020-00488-6

Pindayi, B. (2017). Social media uses and effects: The case of Whatsapp in Africa. In *Impacts of the media on African socio-economic development* (pp. 34-51). IGI Global.

Piscitelli, D., Vercelli, S., Meroni, R., Zagnoni, G., & Pellicciari, L. (2019). Reliability of the gross motor function classification system and the manual ability classification system in children with cerebral palsy in Tanzania. *Developmental Neurorehabilitation*, *22*(2), 80–86. https://doi.org/10.1080/17518423.2017.1342710

Potgieter, I. L., Coetzee, M., & Ximba, T. (2017). Exploring career advancement challenges people with disabilities are facing in the South African work context. *SA Journal of Human Resource Management*, *15*, 1–11. https://doi.org/10.4102/sajhrm.v15i0.815

Prosek, E. A., & Gibson, D. M. (2021). Promoting rigorous research by examining lived experiences: A review of four qualitative traditions. *Journal of Counseling and Development*, *99*(2), 167–177. https://doi.org/10.1002/jcad.12364

Prusaczyk, B., Cherney, S. M., Carpenter, C. R., & DuBois, J. M. (2017). Informed consent to research with cognitively impaired adults: Transdisciplinary challenges and opportunities. *Clinical Gerontologist*, *40*(1), 63–73. https://doi.org/10.1080/07317115.2016.1201714

Ramaahlo, M., Tönsing, K. M., & Bornman, J. (2018). Inclusive education policy provision in South African research universities. *Disability and Society*, *33*(3), 349–373. https://doi.org/10.1080/09687599.2018.1423954

Rashid, M., Thompson-Hodgetts, S., & Nicholas, D. (2020). Tensions experienced by employment support professionals when seeking meaningful employment for persons with developmental disabilities. *Research in Developmental Disabilities*, *99*(January), 103603. https://doi.org/10.1016/j.ridd.2020.103603

Republic of South Africa. (1997). *Integrated national disability strategy white paper*. Pretoria: Author.

Republic of South Africa. (2020). *The Constitution of the Republic of South Africa. Retrieved from* https://www.gov.za/documents/constitution/constitution-republic-south-africa-1996-1

Retief, M., & Letšosa, R. (2018). Models of disability: A brief overview. *HTS Teologiese Studies / Theological Studies*, *74*(1), 1–8. https://doi.org/10.4102/hts.v74i1.4738

Richardson, L., McCoy, A., & McNaughton, D. (2019). "He's worth the extra work": The employment experiences of adults with ASD who use augmentative and alternative communication (AAC) as reported by adults with ASD, family members, and employers. *Work*, *62*(2), 205–219. https://doi.org/10.3233/WOR-192856

Roggero, P., Tarricone, R., Nicoli, M., & Mangiaterra, V. (2006). What do people think about

disabled youth and employment in developed and developing countries? Results from an e-discussion hosted by the World Bank. *Disability & Society*, *21*(6), 645–650. https://doi.org/10.1080/09687590600918370

Rosenbaum, P., Paneth, N., Leviton, A., Goldstein, M., Bax, M., Damiano, D., Dan, B., & Jacobsson, B. (2007). A report: the definition and classification of cerebral palsy April 2006. *Developmental Medicine and Child Neurology*, *49*(April 2006), 8–14. https://doi.org/10.1111/j.1469-8749.2007.tb12610.x

Rosenthal, R., & Jacobson, L. (1968). Pygmalion in the classroom. New York: Holt, Rinehart & Winston

Rohwerder, B. (2018). Disability stigma in developing countries. Academic Press.

Rudwick, S. (2008). Linguistic Culture and Essentialism in South Africa. *Macrolinguistics*, *2*(2), 149–163. https://doi.org/10.26478/ja2008.2.2.9

Rule, P., & Modipa, T. R. (2013). "We must believe in ourselves": Attitudes and experiences of adult learners with disabilities in Kwazulu-Natal, South Africa. In *Learning with Adults* (pp. 55-76). Brill Sense.

Sadiki, M. C., Watermeyer, B., & Abrahams, N. T. (2021). Transitioning to a life with disability in rural South Africa: A qualitative study. *African Journal of Disability*, *10*. https://doi.org/10.4102/ajod.v10i0.697

Saigal, N., & Narayan, R. (2014). Structural barriers at the workplace for employees with vision and locomotor disabilities in New Delhi, India. *Work*, *48*(3), 329–337. https://doi.org/10.3233/WOR-141910

Saldaña, J., (2013). *The coding manual for qualitative researchers.* SAGE.

Saloojee, G., Phohole, M., Saloojee, H., & Ijsselmuiden, C. (2007). Unmet health, welfare and educational needs of disabled children in an impoverished South African peri-urban township. *Child: Care, Health and Development*, *33*(3), 230–235. https://doi.org/10.1111/j.1365-2214.2006.00645.x

Schneider, M., & Nkoli, M. I. 'Papi.' (2011). Affirmative action and disability in South Africa. *Transformation: Critical Perspectives on Southern Africa*, *77*(1), 90–106. https://doi.org/10.1353/trn.2011.0041

Schneidert, M., Hurst, R., Miller, J., & Üstün, B. (2003). The role of environment in the International Classification of Functioning, Disability and Health (ICF). *Disability and rehabilitation*, *25*(11-12), 588-595. https://doi.org/10.1080/0963828031000137090

Scott, M., Milbourn, B., Falkmer, M., Black, M., Bölte, S., Halladay, A., Lerner, M., Taylor, J. L., & Girdler, S. (2018). Factors impacting employment for people with autism spectrum disorder: A scoping review. *Autism*. https://doi.org/10.1177/1362361318787789

Sefotho, M. (2015). A Researcher's Dilemma: Philosophy in Crafting Dissertations and Theses Maximus. *Journal of Social Sciences, 1*(2), 23–36. https://doi.org/10.1155/2017/2410408

Sefotho, M., Morwane, R. E., & Bornman, J. (2019). Inclusive Employment Plight of Youth with Complex Communication Needs. In S. Halder & V. Argyropoulos (Eds.), *Inclusion, Equity and Access for Individuals with Disabilities* (pp. 281–296). Palgrave Macmillan.

Seufert, M., Hoβfeld, T., Schwind, A., Burger, V., & Tran-Gia, P. (2016). Group-based communication in WhatsApp. *2016 IFIP Networking Conference (IFIP Networking) and Workshops, IFIP Networking 2016*, 536–541. https://doi.org/10.1109/IFIPNetworking.2016.7497256

Shakespeare, T. (2006). The social model of disability. In L. J. Davis (Ed.), The disability studies reader (2nd ed., pp. 197–204). Routledge.

Shakespeare, T., Bright, T., & Kuper, H. (2018). Access to health for persons with disabilities. *Geneva: United Nations High Commissioner for Human Rights*.

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects.: University of Liverpool Library. *Education for Information*, *22*, 63–75. https://eds-b-ebscohost-

Shier, M., Graham, J. R., & Jones, M. E. (2009). Barriers to employment as experienced by disabled people: a qualitative analysis in Calgary and Regina, Canada. *Disability and Society*, *24*(1), 63–75. https://doi.org/10.1080/09687590802535485

Shyman, E. (2016). The reinforcement of ableism: Normality, the medical model of disability, and humanism in applied behavior analysis and ASD. *Intellectual and Developmental Disabilities*,

54(5), 366–376. https://doi.org/10.1352/1934-9556-54.5.366

Sime, T. (2019). The importance of telephone communication in business. Retrieved from https://www.agcc.co.uk/blog-article/the-importance-of-telephone-communication-in-business

Simeonsson, R. J., Lollar, D., Björck-Åkesson, E., Granlund, M., Brown, S. C., Zhuoying, Q., Gray, D., & Pan, Y. (2014). ICF and ICF-CY lessons learned: Pandora's box of personal factors. *Disability and Rehabilitation*, *36*(25), 2187–2194. https://doi.org/10.3109/09638288.2014.892638

Simeonsson, R., Lollar, D., Hollowell, J., & Adams, M. (2000). Revision of the International Classification of Impairments, Disabilities, and Handicaps Developmental issues. *Journal of Clinical Epidemiology*, *53*(2), 113–124. https://doi.org/10.1016/S0895-4356(99)00133-X

Simkins, C. (2013). Performance in the South African educational system: What do we know. *Johannesburg: Center for Development & Enterprise*, *27*(October), 1 to 36. http://www.acceleratecapetown.co.za/wp-content/uploads/2014/05/Centre-for-Dev-Enterprise-Analysis-of-Educational-System-2013.pdf

Sing, D. (2012). Promoting the employability and employment of people with disabilities in the south african public service. *Public Personnel Management*, *41*(1), 161–171. https://doi.org/10.1177/009102601204100109

Smart, J. F. (2009). The power of Models of disability. *Journal of Rehabilitation*, *75*(2), 3–11.

Soeker, Mogammad Shaheed, Van Rensburg, V., & Travill, A. (2012). Individuals with traumatic brain injuries perceptions and experiences of returning to work in South Africa. *Work*, *42*(4), 589–600.

Soeker, Mohammed Shaheed, De Jongh, J. C., Diedericks, A., Matthys, K., Swart, N., & Van Der Pol, P. (2018). The experiences and perceptions of persons with disabilities regarding work skills development in sheltered and protective workshops. *Work*, *59*(2), 303–314. https://doi.org/10.3233/WOR-172674

South African Qualifications Authority [SAQA] (2019). National Qualifications Framework Amendment Act 12 of 2019. Retrieved from https://www.saqa.org.za/documents/research-papers/lessons-south-african-national-qualifications-framework

Southwick, J. D., & Grizzell, S. T. (2020). Utilizing the ICF to enable evidence-based practice among vocational rehabilitation counselors. *Rehabilitation Counseling Bulletin*, *64*(1), 17–30. https://doi.org/10.1177/0034355220910782

Statistics South Africa (2014), *Census 2011. Profile of persons with disability in South Africa. Report no. 03-01-59 (2014)*. Http://www.statssa.gov.za/ publications/Report-03-01-59/Report-03-01-592011.pdf

Statista. (2020). *South Africa: Unemployment rate from 1999 to 2020.* Retrieved from https://www.statista.com/statistics/370516/unemployment-rate-in-south-africa/

Statistics South Africa. (2017a). General Household Survey. Pretoria: Statistics South Africa.

Statistics South Africa. (2017b). Poverty Trends in South Africa: An examination of absolute poverty between 2006 and 2015. Pretoria: Statistics South Africa (Statistical report No. 03-10-06). Retrieved from https://www.statssa.gov.za/publications/ Report-03-10-06/Report-03-10-062015.pdf

Statistics South Africa (2020). *Mid-year population estimates 2020*. Statistical release P0302. Pretoria: Statistics South Africa.

Stein, M. A. (2017). Disability human rights. *Nussbaum and law*, 3-49. In R. West (Ed.), *Nussbaum and Law*. Routledge. Https://doi.org/10.4324/9781315090412

Stucki, G, Cieza, A., Ewert, T., Kostanjsek, N., Chatterji, S., & Üstün, T. B. (2002). Application of the International Classification of Functioning, Disability and Health (ICF) in clinical practice. *Disability and Rehabilitation*, *24*(5), 281–282. https://doi.org/10.1080 10.1080 09638280110105222

Stucki, G, Pollock, A., Engkasan, J. P., & Selb, M. (2019). How to use the International Classification of Functioning, Disability and Health as a reference system for comparative evaluation and standardized reporting of rehabilitation interventions. *European Journal of Physical and Rehabilitation Medicine*, *55*(3). https://doi.org/10.23736/S1973-9087.19.05808-8

Sturges, J. E., & Hanrahan, K. J. (2004). Comparing telephone and face-to-face qualitative interviewing: A research note. *Qualitative Research*, *4*(1), 107–118.

https://doi.org/10.1177/1468794104041110

Swart, E., Engelbrecht, P., Eloff, I., & Pettipher, R. (2002). Implementing inclusive education in South Africa: teachers' attitudes and experiences. *Acta Academica*, *34*(1), 175–189.

Ta, T. L., & Leng, K. S. (2013). Challenges faced by Malaysians with disabilities in the world of employment. *Disability, CBR & Inclusive Development*, *24*(1), 6–21. https://doi.org/10.5463/dcid.v24i1.142

Ta, T. L., Wah, L. L., & Leng, K. S. (2011). Employability of people with disabilities in the Northern States of Peninsular Malaysia: Employers' perspective. *Disability, CBR and Inclusive Development*, *22*(2), 79–94. https://doi.org/10.5463/dcid.v22i2.28

Tarisayi, K. S., & Manhibi, R. (2017). Social media tools in education: A case of WhatsApp use by heritage studies teachers in Zimbabwe. *Greener Journal of Social Sciences*, *7*(4), 34-40.

Threats, T. (2006). Towards an international framework for communication disorders: Use of the ICF. *Journal of Communication Disorders*, *39*(4), 251–265. https://doi.org/10.1016/j.jcomdis.2006.02.002

Threats, T., & Worrall, L. (2004). Classifying communication disability using the ICF. *Advances in Speech Language Pathology*, *6*(1), 53–62. https://doi.org/10.1080/14417040410001669426

Tigere, B., & Makhubele, J. C. (2019). The experiences of parents of children living with disabilities at Lehlaba Protective Workshop in Sekhukhune district of Limpopo province. *African Journal of Disability*, *8*, 1–9. https://doi.org/10.4102/ajod.v8i0.528

Tinta, N., Steyn, H., & Vermaas, J. (2020). Barriers experienced by people with disabilities participating in income-generating activities. A case of a sheltered workshop in Bloemfontein, South Africa. *African Journal of Disability*, *9*, 1–9. https://doi.org/10.4102/ajod.v9i0.662

Toldrá, R. C., & Santos, M. C. (2013). People with disabilities in the labor market: Facilitators and barriers. *Work*, *45*(4), 553–563. https://doi.org/10.3233/WOR-131641

Tregaskis, C. (2002). Social Model Theory: The story so far. *Disability & Society*, *17*(4), 457–470. https://doi.org/10.1080/09687590220140377

Trembath, D., Balandin, S., Stancliffe, R. J., & Togher, L. (2010). Volunteering and paid work for adults who use AAC. *Journal of Developmental and Physical Disabilities*, *22*(3), 201–218. https://doi.org/10.1007/s10882-009-9170-8

Trembath, D., Balandin, S., Togher, L., & Stancliffe, R. J. (2010). The experiences of adults with complex communication needs who volunteer. *Disability and Rehabilitation*, *32*(11), 885–898. https://doi.org/10.3109/09638280903349537

Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., Peters, M. D. J., Horsley, T., Weeks, L., Hempel, S., Akl, E. A., Chang, C., McGowan, J., Stewart, L., Hartling, L., Aldcroft, A., Wilson, M. G., Garritty, C., … Straus, S. E. (2018). PRISMA extension for Scoping Reviews (PRISMA-ScR): Checklist and Explanation. *Annals of Internal Medicine*, *169*(7), 467. https://doi.org/10.7326/M18-0850

Trier-Bieniek, A. (2012). Framing the telephone interview as a participant-centred tool for qualitative research: A methodological discussion. *Qualitative Research*, *12*(6), 630–644. https://doi.org/10.1177/1468794112439005

Tripney, J., Hogrebe, N., Schmidt, E., Vigurs, C., & Stewart, R. (2019). Employment supports for adults with disabilities in low- and middle-income countries: A campbell systematic review. *Research on Social Work Practice*, *29*(3), 243–255. https://doi.org/10.1177/1049731517715316

United Nations (2006). Convention on the Rights of Persons with Disabilities and Optional Protocol2006; 2016. Retrieved from http://www.un.org/disabilities//convention/convoptprot-e.pdf

United Nations. (2008). *Disability and employment*. Retrieved from http://www.un.org/disabilities

United Nations. (2015). millennium development goals (mdgs). Retrieved from https://www.undp.org/publications/millennium-development-goals-report-2015

United Nations (2016). disability in the sdgs indicators. Retrieved from http://www.un.org/disabilities/documents/2016/SDG-disability-indicators- march-2016.pdf

United Nations. (2016). *Sustainable development goals: 17 Goals to Transform our World*. Retrieved August 14, 2018, from https://www.un.org/sustainabledevelopment/sustainable-development-goals/

United Nations. (2018).*The UN Flagship Report on Disability and Development 2018.*

Https://www.un.org/development/desa/disabilities/wp-content/uploads/sites/15/2019/10/UN-flagship-report-on-disability-and-development.pdf

Üstün, T. B., Chatterji, S., Bickenbach, J., Kostanjsek, N., & Schneider, M. (2003). The International Classification of Functioning, Disability and Health: A new tool for understanding disability and health. *Disability and Rehabilitation*, *25*(11–12), 565–571. https://doi.org/10.1080/0963828031000137063

Vaismoradi, M., Turunen, H., & Bondas, T. (2013). Content analysis and thematic analysis: Implications for conducting a qualitative descriptive study. *Nursing and Health Sciences*, *15*(3), 398–405. Https://doi.org/10.1111/nhs.12048

Van Brakel, W. H., & Officer, A. (2008). Approaches and tools for measuring disability in low and middle-income countries. *Leprosy Review*, *79*(1), 50–64.

van Niekerk, K., Dada, S., & Tönsing, K. (2019). Influences on selection of assistive technology for young children in South Africa: perspectives from rehabilitation professionals. *Disability and Rehabilitation*, *41*(8), 912–925. https://doi.org/10.1080/09638288.2017.1416500

van Niekerk, K., Dada, S., & Tönsing, K. (2021). Perspectives of rehabilitation professionals on assistive technology provision to young children in South Africa: a national survey. *Disability and Rehabilitation: Assistive Technology*, 1-8.

Van Reenen, T. P., & Combrinck, H. (2011). The UN Convention of the Rights of Persons with Disabilities in Africa: Progress after 5 years. *SUR- International Journal on Human Rights*, *8*(14), 133–165.

Van Rooy, G., Amadhila, E. M., Mufune, P., Swartz, L., Mannan, H., & MacLachlan, M. (2012). Perceived barriers to accessing health services among people with disabilities in rural northern Namibia. *Disability and Society*, *27*(6), 761–775. https://doi.org/10.1080/09687599.2012.686877

Vanclay, F., Baines, J. T., & Taylor, C. N. (2013). Principles for ethical research involving humans: Ethical professional practice in impact assessment Part I. In *Impact Assessment and Project Appraisal* ,*31*(4), 243-253. Taylor & Francis. https://doi.org/10.1080/14615517.2013.850307

Varkey, B. (2020). Principles of clinical ethics and their application to practice. *Medical Principles and Practice*, *30*(1), 17–28. https://doi.org/10.1159/000509119

Vasileiou, K., Barnett, J., Thorpe, S., & Young, T. (2018). Characterising and justifying sample size sufficiency in interview-based studies: systematic analysis of qualitative health research over a 15-year period. BMC Med Res Methodol 18, 148. https://doi.org/10.1186/s12874-018-0594-7

Vergunst, R., Swartz, L., Hem, K.-G., Eide, A. H., Mannan, H., MacLachlan, M., Mji, G., Braathen, S. H., & Schneider, M. (2017). Access to health care for persons with disabilities in rural South Africa. *BMC Health Services Research*, *17*(1), 741. https://doi.org/10.1186/s12913-017-2674-5

Victor, C. M., Thacker, L. R., Gary, K. W., Pawluk, D. T., & Copolillo, A. (2017). Workplace discrimination and visual impairment: A comparison of equal employment opportunity commission charges and resolutions under the Americans with Disabilities Act and Americans with Disabilities Amendments Act. *Journal of Visual Impairment & Blindness*, *111*(5), 475-482

Visagie, S., Eide, A. H., Dyrstad, K., Mannan, H., Swartz, L., Schneider, M., Mji, G., Munthali, A., Khogali, M., Rooy, G. van, Hem, K. G., & MacLachlan, M. (2017). Factors related to environmental barriers experienced by persons with and without disabilities in diverse African settings. *PLoS ONE*, *12*(10), 1–14. https://doi.org/10.1371/journal.pone.0186342

Vogl, S. (2013). Telephone versus face-to-face interviews. *Sociological Methodology*, *43*(1), 133–177. https://doi.org/10.1177/0081175012465967

Vornholt, K., Villotti, P., Muschalla, B., Bauer, J., Colella, A., Zijlstra, F., Van Ruitenbeek, G., Uitdewilligen, S., & Corbière, M. (2018). Disability and employment–overview and highlights. *European Journal of Work and Organizational Psychology*, *27*(1), 40–55. https://doi.org/10.1080/1359432X.2017.1387536

Walby, K. (2015). Marshall, Catherine, and Gretchen B. Rossman, Designing Qualitative Research. *Canadian Journal of Sociology*, *40*(3), 399-402.

Walsham, M., Kuper, H., Banks, L. M., & Blanchet, K. (2019). Social protection for people with disabilities in Africa and Asia: a review of programmes for low- and middle-income countries. *Oxford Development Studies*, *47*(1), 97–112. https://doi.org/10.1080/13600818.2018.1515903

Wang, Y. T., & Lin, Y. J. (2013). Employment outcome predictors for people with disabilities in

Taiwan -A preliminary study using ICF conceptual frameworks. *Journal of Rehabilitation*, *79*(2), 3–14.

Wegner, L., & Rhoda, A. (2015). The influence of cultural beliefs on the utilisation of rehabilitation services in a rural South African context: Therapists' perspective. *African Journal of Disability*, *4*(1), 1–8. https://doi.org/10.4102/ajod.v4i1.128

West, R. (2017). Nussbaum and Law. In R. West (Ed.), *Nussbaum and Law*. Routledge. https://doi.org/10.4324/9781315090412

Whatsapp[tm] User Manual (2020). *Whatsapp Security*. Retrieved from https://www.whatsapp.com/security/

Wiggett-Barnard, C., & Swartz, L. (2012). What facilitates the entry of persons with disabilities into South African companies? *Disability and Rehabilitation*, *34*(12), 1016–1023. https://doi.org/10.3109/09638288.2011.631679

Winkler, I.T., & Williams C. (2017). The Sustainable Development Goals and human rights: a critical early review. *International Journal of Human Rights, 21*(8), 1023–1028.

Wolffe, K., Ajuwon, P., & Kelly, S. (2013a). A quantitative analysis of the work experiences of adults with visual impairments in Nigeria. *Journal of Visual Impairment & Blindness*, *December*, 411–425.

Wolffe, K., Ajuwon, P., & Kelly, S. (2013b). Working with visual impairment in Nigeria: A qualitative look at employment status. *Journal of Visual Impairment & Blindness*, *107*(6), 425–436.

World Bank (2020). *World Bank country classifications by income level: 2021-2022.* Retrieved from https://blogs.worldbank.org/opendata/new-world-bank-country-classifications-income-level-2021-2022

World Health Organisation. (1980). *International classification of impairments, disabilities, and handicaps (ICIDH).* Geneva: WHO.

World Health Organisation. (1981). *Disability prevention and rehabilitation: report of the WHO expert committee on disability prevention and rehabilitation.* Geneva, World Health Organization, 1981 (Technical Report Series 668). Retrieved from http://whqlibdoc.who.int/trs/WHO_TRS_668. pdf

World Health Organisation. (2001). *International classification of functioning, disability and health (ICF)*. Geneva, Switzerland: World Health Organisation.

World Health Organisation. (2002). *International classification of functioning, disability and health*. Geneva, Switzerland: World Health Organisation.

World Health Organisation & World Bank (2011). *World report on disability.* Retrieved from http:// whqlibdoc.who.int/publications/2011/9789240685215_eng

Yazıcı, B., Şişman, Y., & Kocabaş, F. (2011). Determining the problems of disabled employees: a survey study conducted in Eskişehir, Turkey. *Disability & Society*, *26*(3), 285–292. https://doi.org/10.1080/09687599.2011.560373

Yin, R. K. (2009). *Case Study research design and methods (4th ed)*. SAGE.

Yin, R. K. (2013). Validity and generalization in future case study evaluations. *Evaluation*, *19*(3), 321-332

Yin, R. K. (2014). *Case Study research design and methods* (5th ed.). SAGE.

Yusof, A. M., Ali, M. M., & Salleh, A. M. (2014). Employability of vocational school leavers with disabilities. *Procedia - Social and Behavioral Sciences*, *112*, 1064–1069. Https://doi.org/10.1016/j.sbspro.2014.01.1270

Yusof, A. M., Ali, M. M., & Salleh, A. M. (2015). Youth workers with disabilities: The views of employers in Malaysia. *Procedia-social and Behavioral Sciences*, *204*, 105-113.

Zajadacz, A. (2015). Evolution of models of disability as a basis for further policy changes in accessible tourism. *Journal of Tourism Futures, 1*(3), 189–202. https://doi.org/10.1108/JTF-04-2015-0015

Zolna, J. S., Sanford, J., Sabata, D., & Goldthwaite, J. (2008). Review of accommodation strategies in the workplace for persons with mobility and dexterity impairments: Application to criteria for universal design. *Technology and Disability*, *19*(4), 189–198. https://doi.org/10.3233/TAD-2007-19404

APPENDIX A

Manuscript (Barriers to And Facilitators of Employment of Persons with Disabilities: A Scoping Review)

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

AOSIS

Barriers to and facilitators of employment of persons with disabilities in low- and middle-income countries: A scoping review

CrossMark
click for updates

Authors:
Refilwe E. Morwane[1]
Shakila Dada[1]
Juan Bornman[1]

Affiliations:
[1]Centre for Augmentative and Alternative Communication, Faculty of Humanities, University of Pretoria, Pretoria, South Africa

Corresponding author:
Refilwe Morwane,
refilwe.morwane@up.ac.za

Background: Unemployment rates for persons with disabilities in low- and middle-income countries (LMICs) are high. This is despite the call to action by the United Nations Convention on the Rights of Persons with Disabilities and Sustainable Development Goals aimed at improving the economic well-being of the marginalised. To improve the employment outcomes of persons with disabilities in these countries, factors that facilitate and hinder employment should be explored.

Objectives: This study explored barriers to and facilitators of employment for persons with disabilities in LMICs through a scoping review.

Methods: A search strategy included a systematic search of nine databases using specific keywords. The International Classification of Functioning, Disability and Health (ICF) framework was used as a conceptual framework and barriers and facilitators were reported according to the domains of the ICF. Articles published between 2008 and 2020 were reviewed using a predefined criteria.

Results: Thirty-two studies were identified in the review. Factors were identified in all domains of the ICF: (1) body function and body structure (12; 39%); (2) activities and participation (13; 42%); (3) personal factors (23; 74%); (4) environmental factors (27; 84%).

Conclusion: Factors that hinder and facilitate the participation of persons with disabilities in LMICs were mainly found in the environment, with personal factors also influencing participation. The presence of negative attitudes and lack of services mainly in health and transport were major factors within the environment whilst personals factors included the lack of educational qualifications and skills. These results indicate the importance of consideration of contextual factors when developing intervention strategies aimed at facilitating the employment of persons with disabilities in LMICs.

Keywords: barriers; disability; employment; facilitators; International Classification of Functioning Disability and Health (ICF) framework; low- and middle-income countries (LMICs); societal participation.

Introduction

People with disabilities constitute approximately 15% of the world's population, a rising figure compared to the 10% prevalence rate estimated in the 1970s (WHO [World Health Organization] and World Bank 2011). A significant proportion of these individuals live in low- and middle-income countries (LMICs) where unemployment rates for persons with disabilities can be as high as 60% – 90% (United Nations Flagship Report 2018). Indeed, both the prevalence and unemployment rate of persons with disabilities vary amongst countries and are significantly influenced by the political, social and economic status of that country (Jenkins et al. 2011).

The World Report on Disability (WHO and World Bank 2011) describes barriers faced by persons with disabilities which result in exclusion and restrictions for participation in various live activities, such as the presence of negative attitudes, lack of delivery and provision of services, lack of accessibility, inadequate funding and lack of consultation of persons with disabilities themselves. Mitra, Posarac and Vick (2013) gave a snapshot of the economic well-being of persons with disabilities in 15 LMICs. The results of the study indicated that persons with disabilities presented with low education, low participation in the workforce and lived in abject poverty. These results are similar to previous studies that have reported a link between disability and poverty (Banks, Kuper & Polack 2017). In most instances, the source of income emanates from

social security benefits or grants. It is therefore not surprising that persons with disabilities are the most economically disadvantaged group in society, particularly those in LMICs (Mitra et al. 2013). Employment is considered a mode of societal participation and therefore extends far beyond economic sustainability as it facilitates inclusion and participation in everyday life activities (Hästbacka, Nygård & Nyqvist 2016). Given the consequences of non-participation in the economic environment, unemployment of persons with disabilities then becomes a violation of human rights.

With the world report on disability (WHO and World Bank 2011) recommending practical solutions to the current barriers faced by persons with disabilities, some governments in LMICs heeded the call to action and responded with the drafting of policies and programmes that promote the participation of persons with disabilities, particularly in areas related to education, health and employment (Cobley 2013). Despite these initiatives, persons with disabilities continue to be side-lined and face barriers in accessing health services, education and employment opportunities (Mitra & Sambamoorthi 2014).

In order to propose strategies that promote and improve the employment outcomes of persons with disabilities in LMICs, an understanding of factors that hinder and facilitate their employment is required. Currently, evidence regarding this is based on literature from high-income countries (HICs) (Harmuth et al. 2018; Khayatzadeh-Mahani et al. 2019; Vornholt et al. 2018). According to the social model of disability, disability is a result of barriers that exist in the social, economic and attitudinal environment and not because of the impairment in health conditions (Oliver 1990). Therefore, an individual is disabled because of barriers that exist in that specific environment which is context-bound.

Comparatively, barriers identified in LMICs may differ from HICs mainly because of the availability of resources and sustainable services (WHO and World Bank 2011). In most LMICs, the lack of availability of quality prevalence data because of inconsistent use of the definition of disability, amongst others, results in data that are incomparable internationally (Schneider & Nkoli 2011). Therefore, data cannot be easily transferred from one context to the other. There are limited studies that have systematically reported on what hinders and facilitates the employment of persons with disabilities in LMICs (Ebuenyi et al. 2018; Mizunoya & Mitra 2013; Tripney et al. 2019; Visagie et al. 2017).

Recently, a scoping review by Ebuenyi et al. (2018) reported on barriers to and facilitators of employment of persons with psychiatric disabilities specifically in the African context. Poor health, social stigma, discrimination, negative attitudes from employers and lack of social support from the government were identified as the main barriers for this population in accessing employment. Conversely, facilitators included personal factors such as positive self-esteem, other forms of employment such as supported and competitive employment and reasonable accommodation in

the workplace. Results further highlighted existing challenges in the development of legislation and the implementation of policies and guidelines that support the participation of persons with disabilities in the labour market in Africa. Only eight studies were included in the review (1990–2018) highlighting the paucity of research in the field of disability and employment in LMICs. In the review by Tripney et al. (2019) on the effectiveness of various intervention programs in facilitating participation in the labour market of adults with intellectual and physical disabilities from LMICs, participants reported ill-health and poor well-being, attitudinal barriers, inaccessible working environments and the lack of education and job-related skills as employment barriers post-intervention.

Although the two reviews provide some understanding of the barriers to and facilitators of employment, Ebuenyi et al. (2018) focused on psychiatric disabilities whilst Tripney et al. (2019) reported on outcomes of employment intervention programmes. The aim of this review is, therefore, to explore the complexity of participation of persons with various disabilities in LMICs by using a framework that understands the complexity of factors that hinder the employment of persons with disabilities. Studies in LMICs suggest that environmental factors are important considerations in understanding barriers or facilitators to employment for persons with disabilities (Mizunoya, Yamasaki & Mitra 2016).

The International Classification of Functioning, Disability and Health (ICF) framework (WHO 2001) describes disability as occurring at three levels of functioning, that is, body function and structure (condition or disorder), activity limitations, participation and contextual factors (environmental and personal factors). Disability is therefore viewed as a complex interplay between these three levels of functioning. In the ICF (WHO 2001) disability is therefore defined as an:

> [U]mbrella term for impairments, activity limitations and participation restrictions that denotes the negative aspects of the interaction between a person's health condition and their contextual factors i.e., environmental and personal factors. (p. 213)

In other words, the ICF does not attribute disability as a result of the impairment an individual presents with, but as an experience with the environment they function in. The ICF interrelates with the ecological-system approach which is used within vocational rehabilitation to specifically identify factors that hinder or facilitate the participation of persons with disabilities in employment (Erickson et al. 2014; Lindsay et al. 2015).

The ICF's definition of disability has been highly praised, however, its relevance to LMICs critiqued, mainly because of the model's view of the environment as disabling and not necessarily as a cause of disability (Visagie et al. 2017). In LMICs, there is a strong association between poverty, health and disability (Banks et al. 2017; Groce et al. 2011). For instance, the development of certain diseases can be because of lack of access or availability of health services (e.g. lack of access to medication, rehabilitation and assistive devices)

and poor living conditions (e.g. malnutrition and poor water and sanitation) (Mitra et al. 2013). Therefore, diseases are a result of poverty caused by the environment. Nonetheless, the ICF is currently the most widely used comprehensive model of disability which is also adopted by the World Report on Disability (WHO & World Bank 2011). This study follows the definition of disability as used in the ICF. It should be noted that inconsistent definitions of disability were used in the studies included in the review.

The paucity of research on disability and employment in LMICs necessitated a scoping review. This allowed for the collation of existing literature to highlight existing gaps in research.

Methods

The review followed the methodology for scoping reviews as outlined by Tricco et al. (2018). It aimed to specifically determine existing barriers and facilitators to the employment of persons with disabilities in LMICs. The review was guided by the following research question, 'what are the barriers to and facilitators of the employment of persons with disabilities in LMICs?'.

Search strategy

A multi-faceted search strategy was utilised including a systematic search of multiple electronic databases spanning the interval from 2008 to April 2020, which included Africa Wide Information, CINAHL, EconLit, Education Resources Information Center (ERIC), Medical Literature Analysis and Retrieval System Online (MEDLINE) business source complete and PsychInfo to avoid database bias (Munn et al. 2018). Search-terms were determined according to the suitability of each electronic database. Furthermore, publications from the WHO, the World Bank, the United Nations, the International Labour Organisation and other organisations such as professional and organisational associations were explored. Also, a search on Google Scholar, and a broad search on a web search engine, Google™ were conducted.

The search strategy included a combination of key PCC concepts including *disability* (population), *employment (concept)* and *LMICs* (context) as indicated by the World Bank

country income classification system (2019–2020). Appendix Table 1-A1 provides information on the search strategy used in this study. Following the completion of the search strategy in April of 2020, relevant studies related to the employment of persons with disabilities in LMICs were included using the exclusion and inclusion criteria outlined in Table 1.

Data analysis

A data extraction tool was developed to extract information on the scope of the article. The tool included population, type of disability, aims of the study, design, context and the outcomes of the studies. An example of how data were extracted using the tool is depicted in Table 2. The data extraction was conducted by REM and SD. To determine factors that were reported as barriers and facilitators, identified studies were transferred to a computer-aided qualitative data analysis program, Atlas-ti™ software, where the findings of the included studies were thematically analysed and coded. The identified codes were organised according to the second-level category classification of the ICF using refined linking rules as outlined by Cieza et al. (2019). The findings were therefore presented under the domains of the ICF, that is, body function and structure, activity and participation, environmental and personal domain (Table 3). To ensure accurate analysis of data, 20% of the total coded data were randomly selected and analysed by the second author, SD. Disagreements in coding were resolved by the first and second authors re-coding the data together.

Ethical considerations

This article followed all ethical standards for research without direct contact with human or animal subjects.

Results

An initial search was conducted in June 2019 which included studies between the years 1997 and 2019. This electronic search of the literature yielded a total of 1490 potentially relevant, peer-reviewed studies. When updating the review search strategy in April 2020, the authors made a decision to include studies dated between 2008 and 2020; this was done with the intention to only identify studies published after the ratification of the CRPD (United Nations 2006) by most

TABLE 1: Inclusion and exclusion criteria.

Category	Inclusion criteria	Exclusion criteria
Targeted population	Persons with disabilities with childhood and acquired disabilities. Female and male participants who are economically active, that is, individuals who were considered economically active and were therefore 15 years and older.	Individuals with a disability because of ageing, chronic medical conditions such as HIV/AIDS, stroke and dementia as well as psychiatric disabilities were excluded. Children with disabilities and people older than 60 years.
Study period	Published peer-reviewed research studies dated from 2008 to April 2020.	Non-peer-reviewed articles were excluded as well as peer-reviewed articles published before the year 2008.
Study design	Studies following quantitative, qualitative and mixed-method designs were included.	Policy reports, analysis, dissertations and book chapters, editorials, opinion pieces, scoping and systematic reviews were not considered.
Language	Only articles published in English were included.	Articles published in languages other than English were excluded.
Study outcome	Studies reporting on employment including recruitment, hiring and vocational training of persons with disabilities, customised employment and self-employment were included.	Studies reporting on psychiatric/mental and medical disabilities, as well as studies reporting on transitioning from school to work and return to work, were excluded.
Context	Studies conducted in LMICs as listed in the World Bank (2019–2020) income classification were included. Studies that compared data between HICs and LMICs were also considered, provided the data could be segregated.	Studies conducted in HICs.

LMIC, low- and middle-income countries; HIV/AIDS, human immunodeficiency virus/acquired immunodeficiency syndrome; HICs, high-income countries.

LMICs. The final search strategy yielded a total of 1337 studies. The identified studies were then exported to Covidence™, a web-based software platform that organises reviews such as systematic reviews (Babineau 2014). Following the exclusion of duplicates, a total of 1151 studies were independently screened by R.E.M. and S.D. at a title level. Finally, following the screening at an abstract level, 64 studies were assessed for eligibility, 24 of which met the inclusion criteria. Eight studies identified through hand searches and a search on Google™ were added to the 24 studies which totalled to 32 included studies. Where there were conflicts, the authors reviewed the articles together and came to a consensus. Preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews (PRISMA-ScR) (Tricco et al. 2018) were used to report on the scoping review process. Further information regarding the review process is charted in Figure 1.

Thirty-two studies were included in the final analysis as shown in Table 2. Geographical distribution of the countries represented in the review as classified by the World Bank classification (2019–2020) included two studies from low-income countries (6.3%), nine from lower-middle-income countries (28%) and 21 from upper-middle-income countries (66%). Countries represented in the review included Malaysia ($n = 8$), South Africa ($n = 6$), India ($n = 3$), Brazil ($n = 3$), Turkey ($n = 3$), Nigeria ($n = 2$), Ghana ($n = 2$), whilst the rest of the studies were from Cameroon, Ethiopia, Kenya, Nepal and Thailand. Sixteen qualitative (50%), 13 quantitative (41%) and three mixed-method (9%) original studies were included.

The included studies mainly focused on exploring the experiences of persons with disabilities and views of employers

Source: Tricco, A.C., Lillie, E., Zarin, W., O'Brien, K.K., Colquhoun, H., Levac, D. et al., 2018, 'PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation', *Annals of Internal Medicine* 169(7), 467. https://doi.org/10.7326/M18-0850

FIGURE 1: Preferred reporting items for systematic reviews and meta-analyses extension for scoping reviews.

with regard to economic participation (31; 97%), whilst two specifically focused on vocational training (Malle, Pirttimaa & Saloviita 2015; Yusof, Ali & Salleh 2014) and one on integrative employment (Santos Rodrigues et al. 2013). Although the included studies covered various types of disabilities such as sensory, intellectual, physical, learning, communication and multiple disabilities (Table 2), there was a vast representation of sensory disabilities, particularly visual disabilities (8; 24%).

The participants in the studies varied, 24 studies explored the experiences of persons with disabilities themselves (27; 75%), whilst seven studies explored the views of employers (22%), and three studies explored the perspectives of family members, recruitment agencies and other stakeholders (researchers and educators). Although studies included both male and female participants, three studies focused specifically on women with disabilities (Amin & Abdullah 2017; Bualar 2014; Naami, Hayashi & Liese 2012). Table 1 provides a list of studies reporting on barriers and facilitators of the employment of persons with disabilities in LMICs.

Barriers and facilitators identified within the International Classification of Functioning, Disability and Health framework domains

Table 3 provides a summary of factors reported to either hinder or facilitate the employment of persons with disabilities as described in the studies included in the review.

The study used the ICF as a guiding framework; therefore, the identified barriers and facilitators are reported according to its domains, that is, body function and body structure, activity and participation, environment and personal domain. The vast majority of studies (32; 97%) were reported on barriers to employment, whilst only nine studies (27%) were reported on facilitators of employment. With regard to the ICF, included studies reported on factors related to multiple domains of the ICF (Table 1), with only four studies (12%) reporting on factors within one domain. An example would be a study by Saigal and Narayan (2014) that reported on inaccessible environments as a barrier to employment, which solely lies within the environment domain.

Barriers are reported in the study as a 'lack of' and facilitators as 'availability of'. It should be noted, however, that a lack of a barrier is not automatically seen as a facilitator, although the absence or lack of a facilitating factor can be a barrier. Identified factors that are barriers and facilitators are, therefore, reported together.

Thirteen studies (39%) reported on factors within the body function and body structure domain which included the type and severity of disability (8; 62%), and health condition (5; 38%). Fifteen studies (47%) were reported on factors within the activity and participation domain, including admission to schooling (8; 53%) and work and employment (7; 47%). Twenty-two (69%) studies were reported on personal factors,

TABLE 2: Studies reporting on barriers and facilitators of employment of persons with disabilities in low- and middle-income countries.

Authors and year of publication	Aim of the study	Study design/methods	Participants	Low- and middle-income country
Agyei-Okyere et al. (2019)	To document the perceptions and experiences of persons with disabilities concerning farming activities.	Qualitative: Individual interviews and focus group discussions	Nineteen persons with disabilities	Ghana
Amin and Abdullah (2017)	To explore the employment experience of Malaysian women with physical impairment.	Qualitative: Individual interviews	Thirty three Malaysian women with physical disabilities	Malaysia
Bhanushali (2016)	To explore the socio-economic conditions of persons with disabilities who are self-employed.	Quantitative: Survey	Two hundred persons with hearing, speech and physical disabilities	India
Bengisu and Balta (2011)	To determine a collective expert view on key issues regarding the employment of the workforce with disabilities in the hospitality industry.	Delphi survey	Forty three participants in three groups 1. Researchers and disability experts 2. Career experts 3. Managers	Turkey
Bengisu, Izbirak and Mackieh (2008)	To determine the physical, attitudinal and organisational barriers faced by persons who are visually impaired.	Quantitative: Survey	One hundred and forty four employed and 54 unemployed persons with visual disabilities	Turkey
Bualar (2014)	To investigate the barriers affecting the employment opportunities of rural women with physical disabilities.	Qualitative: Semi-structured interviews	Ten women with physical disabilities	Thailand
Coelho et al. (2013)	To explore the factors that restrictions in the workplace are experienced by persons with disabilities.	Qualitative: Semi-structured interviews and observations	Thirty employed persons with disabilities	Brazil
Harun et al. (2020)	To describe the employment experiences of persons with learning disabilities.	Quantitative: Survey	Ninety, young persons with learning disabilities	Malaysia
Cramm et al. (2013)	To compare barriers to employment amongst disabled and non-disabled youth.	Quantitative: Survey	Four hundred and sixty six youth with a disability and 523 youth without a disability	South Africa
Santos Rodrigues et al. (2013)	To explore the use of youth apprenticeships and customised employment to improve workforce outcomes amongst persons with disabilities.	Qualitative: Case study	Two persons with disabilities	Brazil
Gudlavalleti et al. (2014)	To explore the health needs and barriers to accessing health services by persons with disabilities.	Quantitative: Survey	Eight hundred and thirty nine persons with disabilities (physical, visual, hearing and intellectual disabilities) matched to 1153 persons without disabilities	India
Khoo, Tiun and Lee (2013)	To explore the experiences regarding employment from persons with physical disabilities.	Mixed method: Semi-structured interviews and surveys	Two hundred and eighty seven persons with physical disabilities	Malaysia
Maja et al. (2011)	To identify the knowledge, attitudes and experiences of employers when hiring persons with disabilities.	Qualitative: Individual interviews	Three managers and two companies	South Africa
Malle et al. (2015)	To investigate prevailing challenges and opportunities for the participation of students with disabilities in vocational education programs.	Mixed-method: Individual interviews, observations and surveys	Hundred and ten trainers, 28 students with disabilities, 30 administrators	Ethiopia
Marsay (2014)	To explore ways of facilitating gainful employment for persons with disabilities.	Qualitative: Individual interviews	Fourteen persons with physical, intellectual, medical, learning and sensory disabilities	South Africa
Lamichhane (2012)	To explore the life-changing experiences of persons with disabilities brought by employment.	Quantitative: Survey	Four hundred and twenty three persons with visual, hearing and physical disabilities	Nepal
Lee, Abdullah and Mey (2011)	To identify drivers and inhibitors of employment for persons with disabilities.	Qualitative: Structured interviews	Twenty four teachers with a visual disability	Malaysia
Naami, Hayashi and Liese (2012)	To describe the issues associated with the unemployment of women with physical disabilities in Tamale, Ghana.	Qualitative: Individual interviews, and focus group discussions	Twenty four women with physical disabilities, 14 disability stakeholders	Ghana
Ned and Lorenzo (2016)	To describe the capacity of service providers in facilitating the participation of disabled youth in economic development opportunities.	Qualitative: Individual interviews and focus group discussions	Four family members, six service providers.	South Africa
Opoku et al. (2017a)	To explore barriers to employment of persons with disabilities.	Qualitative: Semi structured interviews	Thirty persons with physical, hearing and visual disabilities	Kenya
Opoku et al. (2017b)	To examine from the perspectives of participants, the life experiences of persons with disabilities 7 years after the ratification of the CRPD.	Qualitative: Focus group discussions	Thirty six persons with sensory and physical disabilities	Cameroon
Potgieter, Coeertze and Ximba (2017)	To explore the perceptions of individuals living with a disability with regard to career advancement challenges they face in the workplace.	Qualitative: Semi-structured interviews	Fifteen employed persons with disabilities	South Africa
Saigal and Narayan (2014)	To identify various physical barriers limiting the accessibility of persons with disabilities in the formal sector.	Quantitative: Survey	Fifty employed persons with visual and physical disabilities	India
Ta, Wah and Leng (2011)	To investigate employers' perspectives towards employing persons with disabilities and to identify factors that promote or hinder the gainful employment of persons with disabilities.	Quantitative: Survey	Thirty nine employers from private companies	Malaysia

Table 2 continues on the next page→

TABLE 2 (Continues...): Studies reporting on barriers and facilitators of employment of persons with disabilities in low- and middle-income countries.

Authors and year of publication	Aim of the study	Study design/methods	Participants	Low- and middle-income country
Ta and Leng (2013)	To explore and understand the challenges that are encountered by Malaysians with disabilities in the world of employment.	Mixed-method: Survey, face-to-face interviews and focus group discussion	Four hundred and seventy eight persons with physical, intellectual and sensory disabilities, 39 employers	Malaysia
Toldrá and Santos (2013)	To identify facilitators and barriers faced by persons with disabilities in the workforce.	Qualitative: Semi-structured interviews	Ten employees with disabilities	Brazil
Wiggett-Barnard and Swartz (2012)	To identify facilitating factors for the entry of persons with disabilities into the labour market.	Quantitative: Survey	Eighty six human resource managers	South Africa
Wolffe, Ajuwon and Kelly (2013a)	To evaluate the work experiences of employed individuals with visual impairments.	Qualitative: Interviews	Hundred and seventy two employed blind or partially sighted adults	Nigeria
Wolffe, Ajuwon and Kelly (2013b)	To report on the status of individuals in Nigeria who are visually impaired and successfully employed.	Quantitative: Survey	Hundred and seventy two employed blind or partially sighted adults	Nigeria
Yazıcı, Şişman and Kocabaş (2011)	To determine disabled people's problems in the world of work.	Quantitative: Two separate surveys	Thirty two companies; 31 employers; 421 persons with disabilities	Turkey
Yusof et al. (2014)	To identify the employability and working patterns of vocational school leavers with disabilities.	Quantitative: Survey	Ninety nine students with sensory and learning disabilities	Malaysia
Yusof, Ali and Salleh (2015)	To explore the views of employers who hired youth workers with disabilities.	Qualitative: Semi-structured interviews	Three employers	Malaysia

CRPD, Convention on the Rights of Persons with Disabilities.

TABLE 3: Identified factors within the International Classification of Functioning, Disability and Health framework domains.

Domains of the ICF	Number of studies (*n*)	Included studies
Body function and body structure		
Type and severity of disability	8	Amin and Abdullah (2017); Bengisu and Balta (2011); Bhanushali (2016); Lamichhane (2012); Maja et al. (2011); Ned and Lorenzo (2016); Wolffe et al. (2013b); Yazıcı et al. (2011)
Health condition	5	Bualar (2014); Coelho et al. (2013); Cramm et al. (2013); Gudlavalleti et al. (2014); Ta et al. (2011)
Activity and participation		
Schooling	8	Bhanushali (2016); Coelho et al. (2013); Cramm et al. (2013); Lee et al. (2011); Malle et al. (2015); Opoku et al. (2017a); Yazıcı et al. (2011); Yusof et al. (2014, 2015)
Work and employment	7	Agyei-Okyere et al. (2019); Amin and Abdullah (2017); Bhanushali (2016); Cramm et al. (2013); Harun et al. (2020); Khoo et al. (2013); Ta and Leng (2013)
Environmental factors		
Attitudes	20	Amin and Abdullah (2017); Bengisu et al. (2008); Bengisu and Balta (2011); Bualar (2014); Coelho et al. (2013); Cramm et al. (2013); Khoo et al. (2013); Lee et al. (2011); Lamichhane (2012); Maja et al. (2011); Malle et al. (2015); Marsay (2014); Naami et al. (2012); Ned and Lorenzo (2016); Opoku et al. (2017a, 2017b); Potgieter et al. (2017); Ta et al. (2011); Ta and Leng (2013); Toldrá and Santos (2013); Yazıcı et al. (2011)
Services and systems	14	Amin and Abdullah (2017); Bengisu et al. (2008); Bualar (2014); Coelho et al. (2013); Cramm et al. (2013); Gudlavalleti et al. (2014); Khoo et al. (2013); Malle et al. (2015); Marsay (2014); Naami et al. (2012); Ta and Leng (2013); Wiggett-Barnard and Swartz (2012); Wolffe et al. (2013a); Yazıcı et al. (2011)
Policy and legislation	10	Amin and Abdullah (2017); Harun et al. (2020); Lamichhane (2012); Lee et al. (2011); Malle et al. (2015); Marsay (2014); Saigal and Narayan (2014); Wiggett-Barnard and Swartz (2012); Wolffe et al. (2013a); Yazıcı et al. (2011)
Natural and built environment	9	Amin and Abdullah (2017); Bengisu et al. (2008); Bualar (2014); Lamichhane (2012); Saigal and Narayan (2014); Ta and Leng (2013); Toldrá and Santos (2013); Wiggett-Barnard and Swartz (2012); Yazıcı et al. (2011)
Products and technology	7	Agyei-Okyere et al. (2019); Bengisu et al. (2008); Coelho et al. (2013); Saigal and Narayan (2014); Wolffe et al. (2013a, 2013b); Yazıcı et al. (2011)
Support and relationships	7	Bengisu et al. (2008); Bualar (2014); Harun et al. (2020); Lee et al. (2011); Marsay (2014); Opoku et al. (2017a); Ta and Leng (2013)
Personal factors		
Educational qualifications and vocational skills	20	Amin and Abdullah (2017); Bengisu et al. (2008); Bengisu and Balta (2011); Bhanushali (2016); Bualar (2014); Coelho et al. (2013); Cramm et al. (2013); Khoo et al. (2013); Lamichhane (2012); Lee et al. (2011); Maja et al. (2011); Naami et al. (2012); Opoku et al. (2017a, 2017b); Ta et al. (2011); Ta and Leng (2013); Toldrá and Santos (2013); Wolffe et al. (2013a, 2013b); Yazıcı et al. (2011)
Gender and age	11	Bengisu and Balta (2011); Bhanushali (2016); Bualar (2014); Coelho et al. (2013); Gudlavalleti et al. (2014); Harun et al. (2020); Naami et al. (2012); Ta and Leng (2013); Wolffe et al. (2013a, 2013b); Yazıcı et al. (2011)
Disability onset	3	Coelho et al. (2013); Wolffe et al. (2013a, 2013b)
Marital status	3	Bengisu et al. (2008); Wolffe et al. (2013a); Yazıcı et al. (2011)

ICF, International Classification of Functioning, Disability and Health framework.

namely educational qualifications and vocational skills (20; 91%), gender and age (11; 50%), and three studies were reported on the onset of the disability and marital status. Most of the studies were reported on factors within the environment (28; 88%). The presence of attitudes was reported as a major contributing factor to the unemployment of persons with disabilities (20; 71%) whilst other factors were linked to services and systems (14; 50%), policy and legislation (10; 36%), natural and built environment (9; 32%), products and technology (7; 25%) and support and relationships (7; 25%).

Discussion

This study aimed to explore existing literature on barriers and facilitators to the employment of persons with

disabilities in LMICs. The results of the review were aligned to the domains of the ICF. Similar to previous reviews, results indicated a paucity of research regarding the economic participation of persons with disabilities in LMICs (Ebuenyi et al. 2018; Tripney et al. 2019). As the included studies were published post the ratification of the United Nations Convention on the Rights of Persons with Disabilities (UN CRPD) (United Nations 2008) and its optional protocols by the majority of the LMICs, it was therefore assumed that most countries had initiatives in place aimed at eradicating and promoting equal rights. However, despite these efforts, the included studies further reiterate the paucity of research in LMICs with regard to the employment of persons with disabilities and secondly, the poor advancement in the participation of persons with disabilities in the open labour market. Furthermore, the included studies do not, unfortunately, represent half of the listed LMICs, and only 12 (22%) out of 54 countries were represented in the review.

The study used the ICF as a guiding framework. This enabled an in-depth understanding of challenges and facilitators within the microsystem (i.e. individual-level), mesosystem (i.e. immediate environment) and the macro-system (i.e. societal level). Barriers and facilitators identified were mainly reported in the environment (27; 87%) and personal (23; 74%) domain. Similar to previous studies, 90% of the studies in the review mainly reported on hindering factors as opposed to facilitating factors to the employment of persons with disabilities. This could be attributed to the need to first establish and understand existing barriers to employment of persons with disabilities in LMICs prior to solutions being sought (Ebuenyi et al. 2018).

The reported findings have some commonality to those reported in HICs (Hästbacka et al. 2016; Khayatzadeh-Mahani et al. 2019; Padkapayeva et al. 2017; Vornholt et al. 2018), however, as observed by Mitra and Sambamoorthi (2014), HICs report more on activity limitation, whilst LMICs mostly report on limitations imposed by the disability, therefore an individual is perceived disabled on the virtue of the presence of impairment regardless of whether or not they experience restrictions to participation in daily life situations.

Body function and body structure

The severity and type of disability determine the likelihood of one being employed and also the willingness of employers in hiring a person with a disability (Amin & Abdullah 2017; Bengisu & Balta 2011; Maja et al. 2011). In Amin and Abdullah's (2017) study, employers rejected persons with physical disabilities, citing inaccessible workspaces as the reason for the rejection. Similarly, in a study by Maja et al. (2011), organisations interviewed and reported that the working environments in their companies were not suitable for persons with physical disabilities as a high level of

movement and endurance was required. Also, certain job descriptions were reported as not suitable for certain types of disabilities (Ned & Lorenzo 2016), for example, persons with visual and physical disabilities were limited in terms of variety of job positions (Bengisu & Balta 2011; Lamichhane 2012). Visual disabilities were represented in most studies in the review, perhaps highlighting that this population is more likely to be employed in LMICs. Lamichhane (2012) found an explanation of this phenomenon, wherein 43.42% of persons with visual disabilities in his study were employed within the education profession. This was as a result of advocacy movements in the 1980s that called for the inclusion of persons with disabilities in education colleges and thereby demanded that the government provide support in terms of assistive technology and adapted material.

In the literature, persons with severe disabilities are reported to be disadvantaged in terms of employment opportunities available in LMICs (Mizunoya & Mitra 2013). Likewise, the studies in the review reported the lack of employment opportunities available for persons with disabilities. In a study by Yazici et al. (2011), employers showed a preference in hiring individuals whose disability was less severe in nature, that is, presented with 100% hearing, vision and communication skills (Yazıcı et al. 2011). In Bhanushali (2016), 92% of the participants whose disability was severe in nature opted for self-employment because of the barriers experienced with securing employment. From the findings, it can be deduced that the lack of employment opportunities paints a bleak future outcome. Given the lack of employment opportunities in LMICs, the option of self-employment/entrepreneurship should be further explored for persons with disabilities particularly those who present with a severe disability.

Another hindering factor, poor health was reported to also negatively impact employment outcomes, as frequent sick-leave is required which means time away from work (Bualar 2014). Cramm et al. (2013) found that the unemployment of the majority of the 523 youth with disabilities was associated with poor health. Equally, Gudlavalleti et al. (2014) found that 18.4% of 839 persons with disabilities who participated in the study required medical services more often than those without a disability. It is known that many persons with disabilities have co-morbid or secondary conditions in addition to their disability, and therefore require greater medical attention than their counterparts without a disability (Bright, Wallace & Kuper 2018). It should be noted that poor health in persons with disabilities in LMICs is linked to a lack of access and the unavailability of rehabilitative services and medical care (Lorenzo & Cramm 2012; Mitra et al. 2013). The findings, therefore, highlight the fact that the participation in the employment of persons with disabilities in LMICs can be enhanced by ensuring access to medical and rehabilitative services as part of intervention programmes (Abdel Malek, Rosenbaum & Gorter 2020; Cawood & Visagie 2015).

Activity and participation

Persons with disabilities encounter barriers to participation in major life activities such as education and employment. In this review, the most frequently mentioned barrier to participation in major life areas was the lack of access to schooling (i.e. the lack of access to basic, higher education and vocational training) (Bhanushali 2016; Cramm et al. 2013; Yazıcı et al. 2011; Yusof et al. 2014). This impacts the acquisition of job-related skills that are required for one to be employed (Cramm et al. 2013; Lee et al. 2011). Malle et al. (2015) reported that barriers experienced by persons with disabilities from participating in vocational education were because of the lack of adapted curriculum and educational material, skilled educators and trainers, as well as systemic exclusion from certain types of courses. Also, Yusof et al. (2014) found that persons with disabilities who had graduated from a vocational training programme were employed in positions not related to their qualifications, many of which were in low-paying positions. These results highlight the poor link between skills required in the field and skills provided in vocational training programmes. It is therefore imperative to have an alignment in the type of skills training provided and skills that are in demand in the open labour market (Opini 2010).

Again as reported by studies in the review, employment opportunities were scarce for persons with disabilities (Harun et al. 2020; Khoo et al. 2013; Ta & Leng 2013). Where opportunities were available, they were in low-paying positions that required low-level skills (Amin & Abdullah 2017; Agyei-Okyere et al. 2019; Bhanushali 2016). In a study by Khoo et al. (2013), participants with physical disabilities reported unequal employment opportunities, and the government prioritises employment of the skilled able-bodied population (Khoo et al. 2013). Notably, the focus in most studies in the review was specific to the formal sector, with work based in urban areas (Potgieter et al. 2017; Saigal & Narayan 2014; Wiggett-Barnard & Swartz 2012; Wolffe et al. 2013a). Given that most LMICs rely on self-employment (Mitra et al. 2013), the informal sector was scarcely mentioned (Agyei-Okyere et al. 2019; Bhanushali 2016). For those deciding to start businesses, support in the form of funding from governments is poor (Agyei-Okyere et al. 2019; Bhanushali 2016). Agyei-Okyere et al. (2019) indicated barriers that persons with disabilities faced in participating in the farming business, which were related to a lack of financial support from bank institutions and the government. Similarly, studies in the literature also reiterate that vocational training programmes in LMICs should focus on skills related to the development of businesses and understanding models of funding to sustain those businesses (Tripney et al. 2019).

Integrative employment was a reported facilitator to employment for persons with severe disabilities (Amin & Abdullah 2017; Santos Rodrigues et al. 2013). According to Santos Rodrigues et al. (2013), customised employment provides skills training opportunities, work preparation programmes, and integrates persons with disabilities in employment by linking them to potential employers and business opportunities. In a study by Amin and Abdullah (2017), supported employment workshops that provided employment opportunities to women with physical disabilities were located in remote areas far from urban areas where social and economic activities occur, not to mention that work in these workshops was not only non-stimulating but was of minimal wage. Similar findings are reported in the literature, where the benefits of integrative employment programmes, such as customised and supported employment programmes, are highlighted in the literature, and these programmes facilitate the integration of this population into the open labour market (Tinta, Steyn & Vermaas 2020). The programmes are further said to provide an opportunity for the development of skills required for gainful employment whilst accommodating the needs of persons with severe disabilities (García-Villamisar, Wehman & Diaz Navarro 2002).

Environmental factors

Previous studies have identified barriers and facilitators to be mainly within the environment (Hästbacka et al. 2016; Khayatzadeh-Mahani et al. 2019; Lindsay 2011). In this review, factors were identified within all chapters of the environmental domain, again highlighting the influence of the environment on functioning (Glässel et al. 2011). The most frequently reported factors in this review were attitudes, policies and legislation as well as services and systems.

Negative attitudes from employers, family and society were reported as major factors that hinder participation in employment. Employers' misconceptions held about disability influence hiring practices (Bengisu et al. 2008; Bualar 2014; Potgieter et al. 2017). Employers lack trust and believe that persons with disabilities can be as productive as other employees without disabilities (Lee et al. 2011; Maja et al. 2011; Toldrá & Santos 2013). Furthermore, in a study by Ta et al. (2011), employers reported a lack of knowledge in managing persons with disabilities in the workplace. Persons with disabilities are often perceived by families as incapable of being educated and employed (Khoo et al. 2013; Naami et al. 2012). In extreme cases, persons with disabilities face abandonment from their families as a result of their disability (Bualar 2014; Harun et al. 2020; Ta & Leng 2013). In the same light, support from family is a notable facilitator (Bengisu et al. 2008; Opoku et al. 2017a). Marsay (2014) found that 40% of the interviewed participants with disabilities who were employed reported that support from family and friends played a crucial role in their staying in their job.

The lack of education services (i.e. inclusive and well-resourced schools facilitate the acquisition of skills crucial for employment) (Malle et al. 2015; Naami et al. 2012; Ta & Leng 2013), transportation (Amin & Abdullah 2017; Bualar 2014; Khoo et al. 2013) and health services (Bengisu et al. 2008; Coelho et al. 2013; Cramm et al. 2013) hinders participation in employment. A systematic review conducted on the barriers to accessing rehabilitative services in LMICs indicated that 22 of the 77 included studies were related to distance and

transportation challenges, affordability of services, fear and lack of knowledge about the importance of services (Bright et al. 2018). Other services such as employment services (Bengisu et al. 2008; Cramm et al. 2013; Gudlavalleti et al. 2014; Wiggett-Barnard & Swartz 2012) and communication services (i.e. media such as radio, television and newspapers) (Amin & Abdullah 2017; Lee et al. 2011; Opoku et al. 2017a) were reported as facilitators to participation.

Also, the studies discussed the importance of the availability of legislation and policy that promote the participation of persons with disabilities in education and employment (Amin & Abdullah 2017; Harun et al. 2020; Lamichhane 2012). Yazici et al. (2011) found that 49.9% of the employees with a disability were employed by the Turkish Labour Institution as a result of the set government quota of 3%. Unfortunately, in LMICs, support from the government is limited, with the implementation of policies being poor. Implementation and enforcement of anti-discriminatory law and policies that facilitate the employment of persons with disabilities are therefore imperative.

Personal factors

Facilitators to employment reported include interpersonal skills that facilitate employment such as academic (e.g. reading and writing), and job-related skills (Coelho et al. 2013; Harun et al. 2020; Lee et al. 2011; Yusof et al. 2015). Similarly, the lack of education limits employment opportunities available to an individual with a disability (Opoku et al. 2017a; Toldrá & Santos 2013). Khoo et al. (2013) found that 158 out of 287 persons with a physical disability (55%) encountered barriers to securing employment because of low levels of education. Important to realise, however, is the fact that the lack of access to education and the unavailability of education services and systems greatly contribute to poor levels of education (Mitra et al. 2013). These findings highlight the complex interplay between an individual's condition and factors within the environment that either hinder or facilitate participation in employment.

Existing systems tend to favour men rather than women with men having increased access to education and employment opportunities (Amin & Abdullah 2017; Lamichhane 2012; Toldrá & Santos 2013). Naami et al. (2012) highlighted the double prejudice faced by women with disabilities in Ghana, firstly based on their gender and secondly on their disability. These prejudices are further complicated by issues of culture, religion, class and geographic location (Bualar 2014; Opoku et al. 2017a; Ta et al. 2011). Marital status increases the likelihood of being employed (Bengisu et al. 2008; Yazıcı et al. 2011). In a study by Wolffe et al. (2013b), persons with visual disabilities who were married worked more hours, experienced less difficulty in accessing learning and employment opportunities and earned more than those who were unmarried. Using the ICF, the multitude of factors that impact women with disabilities beyond their diagnosis could be identified. Persons with developmental disabilities

were more likely to be found in employment than those with disabilities acquired later in life (Coelho et al. 2013; Wolffe et al. 2013a, 2013b). In the same light, age predicted whether one would be employed or not (Coelho et al. 2013; Wolffe et al. 2013a, 2013b). Older persons with disabilities were found to be in employment compared to those who were younger as they were found to be still pursuing some sort of educational qualification (Wolffe et al. 2013a).

Although the personal domain is not coded within the ICF, these results reiterate the influence of personal factors on functioning and subsequent participation in employment (Glässel et al. 2011). Intervention programmes should take into consideration an individual's personal factors in addition to their diagnosis and identified factors within the environment (Momsen et al. 2019).

Limitations of the study

A few limitations exist in this study. Firstly, only peer-reviewed journal articles and original studies were included in the review. The authors acknowledge that the inclusion of other sources such as dissertations and disability reports could have yielded a higher number of studies and therefore, richer information. Secondly, only studies published in English were included. However, English is not an official language in most LMICs. Future studies should thus consider the inclusion of studies in other common languages other than English. Lastly, a handful of LMICs were represented in the study and therefore results cannot be generalised. It is thus recommended that future studies include a wide representation of LMICs.

Conclusion

The findings of this study ICF highlight the fact that persons with disabilities in LMICs still face marginalisation in participating in employment. The ICF proved to be a suitable tool for describing factors in LMICs that hindered and facilitated participation. In the review, contextual factors (personal and environmental factors) were found to be major barriers or facilitators to employment. This information indicates the influence of individual factors in addition to external factors on functioning. The findings should be taken into consideration by researchers, clinicians and policy makers when developing strategies aimed at increasing the participation of persons with disabilities in LMICs. Based on the findings from the study, it is recommended that future studies explore how the identified facilitators to employment of persons with disabilities can be practically implemented in LMICs.

Acknowledgements

Competing interests

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

Authors' contributions

R.E.M. was responsible for conducting the literature search, data extraction, analysis of data and the writing and conceptualisation of the manuscript. S.D. was responsible for reviewing the screening of articles at the abstract and full title level, data extraction, analysis and the writing and conceptualisation of the manuscript, and J.B. assisted with the writing and conceptualisation of the manuscript. All authors reviewed the final manuscript.

Funding information

Data availability

Data sharing is not applicable to this article as no new data were created or analysed in this study.

Disclaimer

The views and opinions expressed in this article are those of the authors and do not necessarily reflect the official policy or position of any affiliated agency of the authors.

References

Abdel Malek, S., Rosenbaum, P. & Gorter, J.W., 2020, 'Perspectives on cerebral palsy in Africa: Exploring the literature through the lens of the International Classification of Functioning, Disability and Health', *Child: Care, Health and Development* 46(2), 175–186. https://doi.org/10.1111/cch.12733

Agyei-Okyere, E., Nketsia, W., Opoku, M.P., Torgbenu, E.L., Alupo, B.A. & Odame, L., 2019, 'Sustainable employment opportunities for persons with disabilities in Ghana: Exploring perceptions and participation in agriculture', *Business Strategy & Development* 2(2), 68–76. https://doi.org/10.1002/bsd2.43

Amin, A.S. & Abdullah, S.H., 2017, 'Malaysian disabled women experiences in employment', *International Journal for Studies on Children, Women, Elderly and Disabled* 11(4), 259–271.

Babineau, J., 2014, 'Product review: Covidence (systematic review software)', *Journal of the Canadian Health Libraries Association* 71(2), 68–71. https://doi.org/10.5596/c14-016

Banks, L.M., Kuper, H. & Polack, S., 2017, 'Poverty and disability in low- and middle-income countries: A systematic review', *PLoS One* 12(12), e0189996. https://doi.org/10.1371/journal.pone.0189996

Bengisu, M. & Balta, S., 2011, 'Employment of the workforce with disabilities in the hospitality industry', *Journal of Sustainable Tourism* 19(1), 35–57. https://doi.org/10.1080/09669582.2010.499172

Bengisu, M., Izbırak, G. & Mackieh, A., 2008, 'Work-related challenges for individuals who are visually impaired in Turkey', *Journal of Visual Impairment & Blindness* 102(5), 284–294. https://doi.org/10.1177/0145482X0810200504

Bhanushali, K., 2016, 'Issues and challenges to self-employment among persons with disabilities: Micro-level study of Ahmedabad', *The Journal of Management Awareness* 19(1), 51–59. https://doi.org/10.5958/0974-0945.2016.00005.4

Bright, T., Wallace, S. & Kuper, H., 2018, 'A systematic review of access to rehabilitation for people with disabilities in low- and middle-income countries', *International Journal of Environmental Research and Public Health* 15(10), 2165. https://doi.org/10.3390/ijerph15102165

Bualar, T., 2014, 'Barriers to employment: Voices of physically disabled rural women in Thailand', *Community, Work and Family* 17(2), 181–199. https://doi.org/10.1080/13668803.2013.806125

Cawood, J. & Visagie, S., 2015, 'Environmental factors influencing participation of stroke survivors in a Western Cape setting', *African Journal of Disability* 4(1), 1–9. https://doi.org/10.4102/ajod.v4i1.198

Cieza, A., Fayed, N., Bickenbach, J. & Prodinger, B., 2019, 'Refinements of the ICF linking rules to strengthen their potential for establishing comparability of health information', *Disability and Rehabilitation* 41(5), 574–583. https://doi.org/10.3109/09638288.2016.1145258

Cobley, D.S., 2013, 'Towards economic participation: Examining the impact of the convention on the rights of persons with disabilities in India', *Disability & Society* 28(4), 441–455. https://doi.org/10.1080/09687599.2012.717877

Coelho, C.M., Sampaio, R.F., Luz, M.T. & Mancini, M.C., 2013, 'Work reality perceived by individuals with impairments: A biopsychosocial experience', *Work* 45(4), 537–551. https://doi.org/10.3233/WOR-131640

Cramm, J.M., Nieboer, A.P., Finkenflügel, H. & Lorenzo, T., 2013, 'Comparison of barriers to employment among youth with and without disabilities in South Africa', *Work* 46(1), 19–24. https://doi.org/10.3233/WOR-121521

Ebuenyi, I.D., Syurina, E.V., Bunders, J.F.G. & Regeer, B.J., 2018, 'Barriers to and facilitators of employment for people with psychiatric disabilities in Africa: A scoping review', *Global Health Action* 11(1), 1463658. https://doi.org/10.1080/16549716.2018.1463658

Erickson, W.A., Schrader, S., Bruyère, S.M. & VanLooy, S.A., 2014, 'The employment environment employer perspectives, policies, and practices regarding the employment of persons with disabilities', *Rehabilitation Counseling Bulletin* 57(4), 195–208. https://doi.org/10.1177/0034355213509841

García-Villamisar, D., Wehman, P. & Diaz Navarro, M., 2002, 'Changes in the quality of autistic people's life that work in supported and sheltered employment: A 5-year follow-up study', *Journal of Vocational Rehabilitation* 17(4), 309–312.

Glässel, A., Finger, M.E., Cieza, A., Treitler, C., Coenen, M. & Escorpizo, R., 2011, 'Vocational rehabilitation from the client's perspective using the International Classification of Functioning, Disability and Health (ICF) as a reference', *Journal of Occupational Rehabilitation* 21(2), 167–178. https://doi.org/10.1007/s10926-010-9277-x

Groce, N., Kembhavi, G., Wirz, S., Lang, R., Trani, J.-F. & Kett, M., 2011, 'Poverty and disability – A critical review of the literature in low and middle-income countries', *Leonard Cheshire Research Centre Working Paper Series*, 16, p. 31.

Gudlavalleti, M.V.S., John, N., Allagh, K., Sagar, J., Kamalakannan, S. & Ramachandra, S.S., 2014, 'Access to health care and employment status of people with disabilities in South India, the SIDE (South India Disability Evidence) study', *BMC Public Health* 14(1), 1125. https://doi.org/10.1186/1471-2458-14-1125

Harmuth, E., Silletta, E., Bailey, A., Adams, T., Beck, C. & Barbic, S.P., 2018, 'Barriers and facilitators to employment for adults with autism: A scoping review', *Annals of International Occupational Therapy* 1(1), 31–40. https://doi.org/10.3928/24761222-20180212-01

Harun, D., Din, N.C., Rasdi, H.F.M. & Shamsuddin, K., 2020, 'Employment experiences among young Malaysian adults with learning disabilities', *International Journal of Environmental Research and Public Health* 17(1), 115. https://doi.org/10.3390/ijerph17010115

Hästbacka, E., Nygård, M. & Nyqvist, F., 2016, 'Barriers and facilitators to societal participation of people with disabilities: A scoping review of studies concerning European countries', *Alter* 10(3), 201–220. https://doi.org/10.1016/j.alter.2016.02.002

Jenkins, R., Baingana, F., Ahmad, R., McDaid, D. & Atun, R., 2011, 'Social, economic, human rights and political challenges to global mental health', *Mental Health in Family Medicine* 8(2), 87–96.

Khayatzadeh-Mahani, A., Wittevrongel, K., Nicholas, D.B. & Zwicker, J.D., 2019, 'Prioritizing barriers and solutions to improve employment for persons with developmental disabilities', *Disability and Rehabilitation* 42(19), 2696–2706.

Khoo, S.L., Tiun, L.T. & Lee, L.W., 2013, 'Unseen challenges, unheard voices, unspoken desires: Experiences of employment by Malaysians with physical disabilities', *Kajian Malaysia* 31(1), 37–55.

Lamichhane, K., 2012, 'Employment situation and life changes for people with disabilities: Evidence from Nepal', *Disability & Society* 27(4), 471–485. https://doi.org/10.1080/09687599.2012.659462

Lee, M., Abdullah, Y. & Mey, S.C., 2011, 'Employment of people with disabilities in Malaysia: Drivers and inhibitors', *International Journal of Special Education* 26(1), 1–30.

Lindsay, S., 2011, 'Discrimination and other barriers to employment for teens and young adults with disabilities', *Disability and Rehabilitation* 33(15–16), 1340–1350. https://doi.org/10.3109/09638288.2010.531372

Lindsay, S., McDougall, C., Menna-Dack, D., Sanford, R. & Adams, T., 2015, 'An ecological approach to understanding barriers to employment for youth with disabilities compared to their typically developing peers: Views of youth, employers, and job counselors', *Disability and Rehabilitation* 37(8), 701–711. https://doi.org/10.3109/09638288.2014.939775

Lorenzo, T. & Cramm, J.M., 2012, 'Access to livelihood assets among youth with and without disabilities in South Africa: Implications for health professional education', *South African Medical Journal* 102(6), 578–581. https://doi.org/10.7196/SAMJ.5675

Maja, P.A., Mann, W.M., Sing, D., Steyn, A.J. & Naidoo, P., 2011, 'Employing people with disabilities in South Africa', *South African Journal of Occupational Therapy* 41(1), 24–32.

Malle, A.Y., Pirttimaa, R. & Saloviita, T., 2015, 'Inclusion of students with disabilities in formal vocational education programs in Ethiopia', *International Journal of Special Education* 30(2), 57–67. https://doi.org/10.1111/1467-9604.12084

Marsay, G., 2014, 'Success in the workplace: From the voice of (dis)abled to the voice of enabled', *African Journal of Disability* 3(1), 1–10. https://doi.org/10.4102/ajod.v3i1.99

Mitra, S. & Sambamoorthi, U., 2014, 'Disability prevalence among adults: Estimates for 54 countries and progress toward a global estimate', *Disability and Rehabilitation* 36(11), 940–947. https://doi.org/10.3109/09638288.2013.825333

Mitra, S., Posarac, A. & Vick, B., 2013, 'Disability and poverty in developing countries: A multidimensional study', *World Development* 41(1), 1–18. https://doi.org/10.1016/j.worlddev.2012.05.024

Mizunoya, S. & Mitra, S., 2013, 'Is there a disability gap in employment rates in developing countries?', *World Development* 42(1), 28–43. https://doi.org/10.1016/j.worlddev.2012.05.037

Mizunoya, S., Yamasaki, I. & Mitra, S., 2016, 'The disability gap in employment rates in a developing country context: New evidence from Vietnam', *Economics Bulletin* 36(2), 771–777. https://doi.org/10.2139/ssrn.2766103

Momsen, A.H., Stapelfeldt, C.M., Rosbjerg, R., Escorpizo, R., Labriola, M. & Bjerrum, M., 2019, International Classification of Functioning, Disability and Health in vocational rehabilitation: A scoping review of the state of the field', Journal of Occupational Rehabilitation 29(2), 241–273.

Munn, Z., Peters, M.D.J., Stern, C., Tufanaru, C., McArthur, A. & Aromataris, E., 2018, 'Systematic review or scoping review? Guidance for authors when choosing between a systematic or scoping review approach', *BMC Medical Research Methodology* 18(1), 143. https://doi.org/10.1186/s12874-018-0611-x

Naami, A., Hayashi, R. & Liese, H., 2012, 'The unemployment of women with physical disabilities in Ghana: Issues and recommendations', *Disability & Society* 27(2), 191–204. https://doi.org/10.1080/09687599.2011.644930

Ned, L. & Lorenzo, T., 2016, 'Enhancing public sectors' capacity for inclusive economic participation of disabled youth in rural communities', *African Journal of Disability* 5(1), 1–9. https://doi.org/10.4102/ajod.v5i1.189

Nyanchoka, L., Tudur-Smith, C., Thu, V.N., Iversen, V., Tricco, A.C. & Porcher, R., 2019, 'A scoping review describes methods used to identify, prioritize and display gaps in health research', *Journal of Clinical Epidemiology* 109, 99–110. https://doi.org/10.1016/j.jclinepi.2019.01.005

Oliver, M., 1990, *Politics of disablement*, Macmillan International Higher Education, s.l.

Opini, B.M., 2010, 'A review of the participation of disabled persons in the labour force: The Kenyan context', *Disability and Society* 25(3), 271–287. https://doi.org/10.1080/09687591003701181

Opoku, M.P., Mprah, W.K., Dogbe, J.A., Moitui, J.N. & Badu, E., 2017, 'Access to employment in Kenya: The voices of persons with disabilities', *International Journal on Disability and Human Development* 16(1), 77–87. https://doi.org/10.1515/ijdhd-2015-0029

Opoku, M.P., Mprah, W.K., Mckenzie, J., Sakah, B.N. & Badu, E., 2017, 'Lives of persons with disabilities in Cameroon after CRPD: Voices of persons with disabilities in the Buea Municipality in Cameroon', *International Journal on Disability and Human Development* 16(1), 67–75. https://doi.org/10.1515/ijdhd-2016-0009

Padkapayeva, K., Posen, A., Yazdani, A., Buettgen, A., Mahood, Q. & Tompa, E., 2017, 'Workplace accommodations for persons with physical disabilities: Evidence synthesis of the peer-reviewed literature', *Disability and Rehabilitation* 39(21), 2134–2147. https://doi.org/10.1080/09638288.2016.1224276

Potgieter, I.L., Coetzee, M. & Ximba, T., 2017, 'Exploring career advancement challenges people with disabilities are facing in the South African work context', *SA Journal of Human Resource Management* 15, 1–11. https://doi.org/10.4102/sajhrm.v15i0.815

Saigal, N. & Narayan, R., 2014, 'Structural barriers at the workplace for employees with vision and locomotor disabilities in New Delhi, India', *Work* 48(3), 329–337. https://doi.org/10.3233/WOR-141910

Santos Rodrigues, P. Dos, Luecking, R.G., Glat, R. & Daquer, A.F.C., 2013, 'Improving workforce outcomes among persons with disabilities in Brazil through youth apprenticeships and customized employment', *Journal of Vocational Rehabilitation* 38(3), 185–194. https://doi.org/10.3233/JVR-130633

Schneider, M. & Nkoli, M.I. 2011, 'Affirmative action and disability in South Africa', *Transformation: Critical Perspectives on Southern Africa* 77(1), 90–106. https://doi.org/10.1353/trn.2011.0041

Ta, T.L. & Leng, K.S., 2013, 'Challenges faced by Malaysians with disabilities in the world of employment', *Disability, CBR & Inclusive Development* 24(1), 6–21. https://doi.org/10.5463/dcid.v24i1.142

Ta, T.L., Wah, L.L. & Leng, K.S., 2011, 'Employability of people with disabilities in the Northern States of Peninsular Malaysia: Employers' perspective', *Disability, CBR & Inclusive Development* 22(2), 79–94. https://doi.org/10.5463/dcid.v22i2.28

Tinta, N., Steyn, H. & Vermaas, J., 2020, 'Barriers experienced by people with disabilities participating in income-generating activities: A case of a sheltered workshop in Bloemfontein, South Africa', *African Journal of Disability* 9, a662, 1–9. https://doi.org/10.4102/ajod.v9i0.662

Toldrá, R.C. & Santos, M.C., 2013, 'People with disabilities in the labor market: Facilitators and barriers', *Work* 45(4), 553–563. https://doi.org/10.3233/WOR-131641

Tricco, A.C., Lillie, E., Zarin, W., O'Brien, K.K., Colquhoun, H., Levac, D. et al., 2018, 'PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation', *Annals of Internal Medicine* 169(7), 467. https://doi.org/10.7326/M18-0850

Tripney, J., Hogrebe, N., Schmidt, E., Vigurs, C. & Stewart, R., 2019, 'Employment supports for adults with disabilities in low- and middle-income countries: A Campbell systematic review', *Research on Social Work Practice* 29(3), 243–255. https://doi.org/10.1177/1049731517715316

United Nations, 2006, *Convention on the Rights of Persons with Disabilities and Optional Protocol,* viewed 20 April 2020, from http://www.un.org/disabilities/docu ments/convention/convoptprot-e.pdf

United Nations Flagship Report, 2018, *Disability and development report 2018: Realizing the sustainable development goals by, for and with persons with disabilities*, United Nations, New York, NY.

Visagie, S., Eide, A.H., Dyrstad, K., Mannan, H., Swartz, L., Schneider, M. et al., 2017, 'Factors related to environmental barriers experienced by persons with and without disabilities in diverse African settings', *PLoS One* 12(10), 1–14. https://doi.org/10.1371/journal.pone.0186342

Vornholt, K., Villotti, P., Muschalla, B., Bauer, J., Colella, A., Zijlstra, F. et al., 2018, 'Disability and employment–overview and highlights', *European Journal of Work and Organizational Psychology* 27(1), 40–55. https://doi.org/10.1080/1359432X.2017.1387536

Wiggett-Barnard, C. & Swartz, L., 2012, 'What facilitates the entry of persons with disabilities into South African companies?', *Disability and Rehabilitation* 34(12), 1016–1023. https://doi.org/10.3109/09638288.2011.631679

Wolffe, K., Ajuwon, P. & Kelly, S., 2013a, 'Working with visual impairment in Nigeria: A qualitative look at employment status', *Journal of Visual Impairment & Blindness* 107(6), 425–436. https://doi.org/10.1177/0145482X1310700605

Wolffe, K., Ajuwon, P. & Kelly, S., 2013b, 'A quantitative analysis of the work experiences of adults with visual impairments in Nigeria', *Journal of Visual Impairment & Blindness* 107(6), 411–425. https://doi.org/10.1177/0145482X1310700604

World Health Organization, 2001, *International classification of functioning, disability and health: ICF* World Health Organization, viewed 20 April 2020, from https://apps.who.int/iris/handle/10665/42407.

World Health Organization & World Bank, 2011, *World report on disability 2011*, World Health Organization, viewed 20 April 2020, from https://apps.who.int/iris/handle/10665/44575.

Yazıcı, B., Şişman, Y. & Kocabaş, F., 2011, 'Determining the problems of disabled employees: A survey study conducted in Eskişehir, Turkey', *Disability & Society* 26(3), 285–292. https://doi.org/10.1080/09687599.2011.560373

Yusof, A.M., Ali, M.M. & Salleh, A.M., 2014, 'Employability of vocational school leavers with disabilities', *Procedia – Social and Behavioral Sciences* 112, 1064–1069. https://doi.org/10.1016/j.sbspro.2014.01.1270

Appendix 1

TABLE 1-A1: Search strategy used in the study.

Criteria	Component	Terms
Population	Persons with disabilities	Disab*OR Condition OR Disorder OR Ailment OR Illness OR Malady OR Disease OR Disable OR Incapacity OR Special Need OR Handicap OR Abnormality OR Defect OR Impairment OR Developmental Delay OR Long-Term Health Conditions OR Childhood disability OR Restriction AND
Context	Low- and middle-income country	Countr* OR emerging econom* OR Developing Countr* OR Low middle income Countr* OR Low Income Countr* OR Middle Income Countr* OR Third World OR Underdeveloped Countr* OR Afghanistan OR Benin OR Burkina Faso OR Burundi OR Central African Republic OR Chad OR Comoros OR Congo OR Eritrea OR Ethiopia OR Gambia OR Guinea OR Guinea-Bissau OR Haiti OR Korea OR Liberia OR Madagascar OR Malawi OR Mali OR Mozambique OR Nepal OR Niger OR Rwanda OR Senegal OR Sierra Leone OR Somalia OR South Sudan OR Tanzania OR Togo OR Uganda OR Zimbabwe OR Armenia OR Bangladesh OR Bhutan OR Bolivia OR Cabo Verde OR Cambodia OR Cameroon OR Congo OR Côte d'Ivoire OR Djibouti OR Egypt OR El Salvador OR Ghana OR Guatemala OR Honduras OR India OR Indonesia OR Kenya OR Kiribati OR Kosovo OR Kyrgyz Republic OR Lao PDR OR Lesotho OR Mauritania OR Micronesia OR Moldova OR Mongolia OR Morocco OR Myanmar OR Nicaragua OR Nigeria OR Pakistan OR Papua New Guinea OR Philippines OR Samoa OR São Tomé And Principe OR Solomon Islands OR Sri Lanka OR Sudan OR Swaziland OR Syrian Arab Republic OR Tajikistan OR Timor-Leste OR Tonga OR Tunisia OR Ukraine OR Uzbekistan OR Vanuatu OR Vietnam OR West Bank And Gaza OR Yemen OR Zambia OR Albania OR Algeria OR American Samoa OR Angola OR Argentina OR Azerbaijan OR Belarus OR Belize OR Bosnia And Herzegovina OR Botswana OR Brazil OR Bulgaria OR China OR Colombia OR Costa Rica OR Cuba OR Dominica OR Dominican Republic OR Ecuador OR Equatorial Guinea OR Fiji OR Gabon OR Georgia OR Grenada OR Guyana OR Iran OR Iraq OR Jamaica OR Jordan OR Kazakhstan OR Lebanon OR Libya OR Macedonia OR Malaysia OR Maldives OR Marshall Islands OR Mauritius OR Mexico OR Montenegro OR Namibia OR Palau OR Panama OR Paraguay OR Peru OR Romania OR Russian Federation OR Serbia OR South Africa OR St Lucia OR St Vincent And The Grenadines OR Suriname OR Thailand OR Turkey OR Turkmenistan OR Tuvalu OR Venezuela AND
Concept	Employment	Employ* OR Trade OR Recruit* OR Income OR Hiring OR Work OR Job OR Vocation OR Business OR Entrepren* OR Workplace OR Occupation

Disab., disability/disabilities; Countr., country/countries; Entrepren., entrepreneur/entrepreneurship; Employ., employment; econom., economy/economies.

APPENDIX B

Ethics Approval from the Research Committee of the Faculty of Humanities, University of Pretoria

13 August 2019

Dear Miss RE Morwane

Project Title:	Barriers to and facilitators of employment of persons with disabilities: Support from Specialised Recruitment Agencies
Researcher:	Miss RE Morwane
Supervisor:	Prof S Dada
Department:	CAAC
Reference number:	27511856 (HUM032/0519)
Degree:	Doctoral

I have pleasure in informing you that the above application was **approved** by the Research Ethics Committee on 13 August 2019. Data collection may therefore commence.

Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should the actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

We wish you success with the project.

Sincerely

Prof Maxi Schoeman
Deputy Dean: Postgraduate and Research Ethics
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: PGHumanities@up.ac.za

APPENDIX C

Information Letter and Reply Slip Form for Cognitive Interview

Dear Sir/Madam

Request: Participation in Semi-structured Interviews

My name is Refilwe Morwane. I am a Ph.D. student at the Centre for Augmentative and Alternative Communication (AAC), Faculty of Humanities, University of Pretoria. I am also a speech therapist who works with youth with severe disability. My Ph.D. topic is entitled: *"Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents".* The aim of the study is to explore services offered by specialised recruitment agencies through multiple perspectives.

I would like to gain in-depth knowledge in the types of services and support they offer to both persons with disabilities as well as steps they follow when placing a person with a disability in a job. I would, therefore, like to request your consent to participate in a cognitive interview in the study.

What is expected of you?
Should you consent to participate in this study, you will be required to undergo **an approximately one-hour cognitive interview** at a time and place convenient for you. The purpose of the cognitive interview is to determine your perception regarding barriers and facilitators experienced by persons with disabilities finding employment through a technique, 'thinking aloud.' Thinking aloud involves saying aloud anything that comes in your mind while reading, hearing, or seeing something. The key the 'think aloud' technique is to be aware that you have a thought, feeling, or reaction about something, and say it aloud instead of keeping it to yourself.

The interview will be recorded to assist with the transcription of the interviews for data analysis purposes. Your participation in the study is completely voluntary. You may withdraw at any stage of the study without any negative consequences.

All your information and audio recordings will be treated confidential. The interviews will only be used to inform the final interview questions included in the study for persons with severe communication disabilities.

273

Kindly complete the attached reply slip.

Should you require any further information, please don't hesitate to contact either my supervisors or myself.

Kind regards,

Miss Refilwe Morwane	**Prof Shakila Dada**	**Prof Juan Bornman**
PhD Student/Researcher	Main Supervisor	Co-Supervisor
Email address:	Email address:	Email address:
refilwe.morwane@up.ac.za		

REPLY SLIP

Research Topic: Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents

I, _____, (full names and surname)

I declare that I have read and understood the information letter on the above-mentioned study.

I hereby (please tick appropriate):
- Agree that I will voluntarily participate in the study as outlined above. I have the right to agree or disagree to participate in the study;
- Understand that I will at no stage during the research process be exposed to any harmful situations;
- Agree that I have the right to withdraw from this study should I wish to do so for any reason whatsoever without providing any explanation at any given time;
- Understand that there is no direct benefit or financial gain when participating in this study. However, information gained in the study is hoped to add to research on the employment of persons with disabilities.
- Understand that the content of the data will be handled with confidentiality and used for research purposes, presentations at conferences, publication of journal articles and to complete a dissertation;
- Understand that no identifying information will be given in the long term and that the data will be stored for a period of 15 years in a safe place at the Centre for AAC, University Pretoria for archival purposes.

☐ Give permission   ☐ Please tick this box if you would like a link of the copy of the thesis.

　　　　Please indicate your Email address_____

☐ Do not give permission

_____   _____   _____
Full Name: **Signature:**   **Date:**

275

APPENDIX D

Invitation Facebook Message

Good day (Name XXX),

I am Refilwe, a speech therapist conducting research through the University of Pretoria. I am interested in finding out the experiences of persons with a communication disability concerning looking for a job.

Would you be interested in knowing more about my research? Please click the following link Information Letter for more information regarding my study.

Kindly contact me on 078 XX XXXX should you be interested in taking part in the study.

Information Letter and Reply Slip Form for Participants with a Severe Communication Disability

Dear Sir/Madam

<u>**Request: Participation in Semi-structured Interviews**</u>

My name is Refilwe Morwane. I am a Ph.D. student at the Centre for Augmentative and Alternative Communication (AAC), Faculty of Humanities, University of Pretoria. I am also a speech therapist who works with youth with severe disability. My Ph.D. topic is entitled: *"Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents."* The aim of the study is to explore services offered by specialised recruitment agencies through multiple perspectives.

I would like to gain in-depth knowledge in the types of services and support they offer to both persons with disabilities as well as steps they follow when placing a person with a disability in a job. I would, therefore, like to request your consent to participate in the study.

What is expected of you?
Should you consent to participate in this study, you will be required to undergo **an approximately one-hour semi-structured interview** conducted by me through WhatsApp™ at a time that is convenient for you. The interview will be recorded to assist with the transcription of the interviews for data analysis purposes. In the interview, you will be required to share information about your experiences as a person with a disability seeking employment and experiences with working with recruitment and placement agencies. Furthermore, you will be asked to share what you think supported you or is required in order for a person with a disability to secure employment.

Your participation in the study is completely voluntary. You may withdraw at any stage of the study without any negative consequences.

All your information and audio recordings will be treated confidential. The interviews will only be used for research purposes (conference presentations, journal articles and in completing the Ph.D. dissertation) and no identifying information will be used.

Therefore, only the researcher, supervisors, and appointed research assistants (who will sign a non-disclosure agreement) will have access to the interviews. Recordings of the interviews will be in stored at the Centre for Augmentative and Alternative Communication University of Pretoria for 15 years for archival purposes.

How will the findings of the study be reported to me?
You will receive a brief summary of the study which will be a combination of the combined responses of all the participants in the study. At a later stage, I will email a link to the copy.

Kindly complete the attached reply slip.

Should you require any further information, please don't hesitate to contact either my supervisors or myself.

Kind regards,

Miss Refilwe Morwane	**Prof Shakila Dada**	**Prof Juan Bornman**
PhD Student/Researcher	Main Supervisor	Co-Supervisor
Email address:	Email address:	Email address:
refilwe.morwane@up.ac.za		

REPLY SLIP

Research Topic: Barriers to and facilitators of employment of persons with severe communication disabilities: Support from specialised recruitment agencies

I, _____, (full names and surname)

I declare that I have read and understood the information letter on the above-mentioned study.

I hereby (please tick appropriate):
- Agree that I will voluntarily participate in the study as outlined above. I have the right to agree or disagree to participate in the study;
- Understand that I will at no stage during the research process be exposed to any harmful situations;
- Agree that I have the right to withdraw from this study should I wish to do so for any reason whatsoever without providing any explanation at any given time;
- Understand that there is no direct benefit or financial gain when participating in this study. However, information gained in the study is hoped to add to research on the employment of persons with disabilities.
- Understand that the content of the data will be handled with confidentiality and used for research purposes, presentations at conferences, publication of journal articles and to complete a dissertation;
- Understand that no identifying information will be given in the long term and that the data will be stored for a period of 15 years in a safe place at the Centre for AAC, University Pretoria for archival purposes.

☐ Give permission   ☐ Please tick this box if you would like a link of the copy of the thesis.

Please indicate your Email address _____

☐ Do not give permission

_____   _____   _____
Full Name: **Signature:**   **Date:**

279

APPENDIX F

Biographical Questionnaire for Participants with Severe Communication Disabilities

1. Name: _____

2. Date of Birth: _____

3. Gender
(please tick √ the appropriate answer)

3.1 Male ☐

3.2 Female ☐

4. What is your primary language? _____

5. If your primary language is not English, are you comfortable with being interviewed in

English? (please tick √ the appropriate answer)

5.1 Yes ☐

5.2 No ☐

6 Please indicate your disability as diagnosed by a medical specialist

_____

7 Do you have a disability in the following areas: (please tick √ one or all that apply)

7.1 Vision ☐

7.2 Hearing ☐

7.3 Mobility ☐

7.4 Communication ☐

7.5 Other ☐

Please specify _____

8 What is your highest qualification? (please tick √ one or all that apply)

8.1 Grade 7 to Grade 9 ☐

8.2 Grade 10 to Grade 11 ☐

8.3 Matric ☐

8.4 Tertiary ☐

Please specify (e.g. Diploma, Honours, Masters, etc.)

_____

8.5 Other ☐

(please specify) _____

9   Are you employed?

9.1 Yes ☐

9.2 No ☐

If answered No, please skip question 11, 12, 13 and 14

10 Which type of employment

11.1   Work full-time ☐

11.2   Work Part-time ☐

11.3   self-employed ☐

11.4   Other ☐

(please specify) _____

11 How long have you been employed?

Please give a brief indication in years and months_____

12   Did you get your job through a disability and employment support agents? (please tick √ the appropriate answer)

12.1   Yes ☐

12.2   No ☐

13 Did you require reasonable accommodations in the workplace? (please tick √ the appropriate answer)

14.1 Yes ☐

14.2 No ☐

Please give a description _____

_____

15 Do you require or use assistive technology?

15.1 Yes ☐

15.2 No ☐

If yes, please give a brief description

_____

16. If unemployed, Are you currently looking for a job?

16.1. Yes ☐

16.2. No ☐

17. If unemployed, how long have you been searching for employment?
   Please specify period (e.g. Weeks, Months or Years)

_____

18. When seeking employment, did you use the services of a specialised recruitment agency?

18.1 Yes ☐

18.2 No ☐

APPENDIX G

Communication and Motor Function Checklist

---

1. Gross Motor Function Classification System - Expanded & Revised (GMFCS - E&R)

Palisano, Rosenbaum, Bartlett, Livingston, Walter, Russell, ... and Galuppi (2007)
Palisano, Rosenbaum, Walter, Russell, Wood, and Galuppi (1997)

		TICK
Level I	Walks and climbs without limitations.	
Level II	Walks with limitations and may need support when climbing stairs rail.	
Level III	Walks using walking frame of some sort of hand-held mobility device. Requires a self-propelled wheelchair when travelling longer distances.	
Level IV	Uses a powered wheelchair there is some control of physical movement.	
Level V	Physical disability restricts voluntary motor control. No means of independent mobility. Transported in a manual wheel chair.	

2. Manual Ability Classification System for Children with Cerebral Palsy (MACS)

Eliasson, Krumlinde-Sundholm, Rösblad, Beckung, Arner, Öhrvall, and Rosenbaum (2006)

		TICK
Level I	Has good fine motor skills. Lifts, writes and manipulates small objects with no difficulty.	
Level II	Fine motor function is somewhat restricted. Handles most objects but with somewhat reduced quality and/or speed of achievement.	
Level III	Fine motor function is restricted. Handles objects with difficulty; requires assistance with fine motor activities.	
Level IV	Fine motor function is severely restricted, able to complete tasks with adaptions.	
Level V	Not able to complete to complete fine motor tasks. Individual requires total assistance.	

3. Communication Function Classification System (CFCS)
Hidecker, Paneth, Rosenbaum, Kent, Lillie Eulenberg, Chester, Johnson, Michalsen, Evatt, and Taylor (2011)

		TICK
Level I	Effective communication with unfamiliar and familiar partners.	
Level II	Effective but slower paced communication with unfamiliar and/or familiar partners.	
Level III	Communication is not consistently effective with most unfamiliar partners, but is usually effective with familiar partners.	
Level IV	Inconsistent communication with familiar partners.	
Level V	Communication not effective with familiar and unfamiliar partners. communication is difficult for most people to understand. the person appears to have limited understanding of messages from most people.	

4. **Methods of communication** used by the participants with severe communication disabilities.

Unaided means of communication	Aided means of communication
o Unintelligible Speech o Vocalisations Sounds (e.g. aaaahhh, eeeehhh) o Eye gaze o facial expressions o gesturing, and/or o pointing (e.g., with a body part, stick, laser)	o Manual signs o Communication book, boards, and/or pictures o Voice output device or Speech-generating device o Writing down messages o Other

APPENDIX H

Semi-Structured Interview Questions for Employed Participants with Severe Communication Disabilities

INTERVIEW QUESTION	PROMPTS
1. Please tell me about the type of job that you do.	What is your job? What does your job entail?
2. Tell me about the steps you took to find your job?	Who/ what helped you find a job?
3. What were the most important things that helped you find a job?	Is it because of your qualifications?
4. How did your disability affect you finding a job?	Do you think being a person with a disability prevented you from getting a job?
5. What helped you overcome your challenges in finding a job?	What were the opportunities that were available?
6. What accommodations did you require in order to do your job?	What were the things you needed in order to do your job?
7. What are the things that help you to do your job?	What makes it easier for you to do your job?
8. What would help you do your job well?	What else do you think you require to help you do your job better?
9. Do you regard this as your ideal job? Why or why not?	Is this the job you have always wanted have?
10. How have your career choices been affected by your disability?	Did you need to choose a job that is not your ideal job because of your disability?
11. What do you need to find and keep your ideal job?	What steps do you need to take in order to find this ideal job?
13. What do you think will help people with disabilities find jobs?	What kind of skills or resources should persons with disabilities have in order to find a job?
14. What do you think prevents persons with disabilities from finding a job?	What are the barriers or challenges that prevent persons with disabilities to find a job?
15. What advice would you give to someone with a disability who is looking for a job?	What would you say are the things that a person with a disability need to consider in order to prepare for finding a job?
16. What advice would you give to a professional who is helping persons with disabilities find jobs?	What would you say are the things that a professional such as a speech therapist, occupational therapist or teacher should consider in order to prepare persons with disabilities to find jobs?
17. What would you like to tell me that i have not asked?	Do you have anything else to add?

APPENDIX I

Semi-structured Interview Questions for Unemployed Participants with Severe Communication Disabilities

INTERVIEW QUESTION	PROMPTS
1. Tell me about your ideal job.	What kind of job would you like to have?
2. What supports and services have you used to look for a job?	Who/ what would help you job?
3. What service or support have been helpful in your job search?	What do you usually find most useful when looking for a job?
4. What services or supports weren't helpful in your job search?	What sort of things are not helpful when looking for a job?
5. What information do you need in order to find a job?	Do you need information on where jobs are advertised?
6. How has your disability affected you finding a job?	Do you think you not been able to do certain things due to your disability as a reason you find it difficult to find a job?
7. How have your career choices been affected by your disability?	Do you think you only decide on applying for certain kind of jobs because of your disability?
8. What supports and services do you need to find a job and stay employed?	What else do you think you require in order to find a job?
9. Where will you go to find these supports and services?	Do you know where to go to find these supports and services?
10. What do you think will help people with disabilities find jobs?	What kind of skills or resources should persons with disabilities have in order to find a job?
11. What do you think prevents persons with disabilities from finding a job?	What are the barriers or challenges that prevent persons with disabilities to find a job?
12. What advice would you give to someone with a disability who is looking for a job?	What would you say are the things that a person with a disability need to consider in order to prepare for finding a job?
13. What advice would you give to a professional who is helping persons with disabilities find jobs?	What would you say are the things that a professional such as a speech therapist, occupational therapist or teacher should consider in order to prepare persons with disabilities to find jobs?
14. What would you like to tell me that i have not asked?	Do you have anything else to add

Appendix J

Disability Groups request letter and Permission Form

Same form provided to the different organisations, i.e., Disabled People of South Africa [DPSA]; Autism South Africa; South African Disability Alliance [SADA]; Gauteng Provincial Association for Persons with Disabilities [GPAPD]) and organisations (i.e., South African Employers for Disability [SAE4D])

The Director
Email:

Dear Chairman,

RE: <u>Request to recruit participants</u>

My name is Refilwe Morwane. I am a Ph.D. student at the Centre for Augmentative and Alternative Communication (AAC), Faculty of Humanities, University of Pretoria. I am also a speech therapist who works with youth with severe disability. My Ph.D. topic is entitled: *"Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents"*. The aim of the study is to explore services offered by specialised recruitment agents through multiple perspectives.

I would like to gain in-depth knowledge of the processes and factors that Support from Specialised recruitment agents need to offer persons with disabilities seeking employment. I would, therefore, like to request permission to access the different types of disability support services registered in your database for employment of persons with disabilities as well as persons with disabilities who are part of your organisation to recruit participants for my study.

Who are eligible to participate in this study
Individuals and organisations that offer employment support services for persons with disabilities (that is, HR managers, recruitment and placement agents, occupational therapists, etc), employed and unemployed persons with disabilities.

What will be expected of South AfricaE4D?
You will be requested to distribute the written consent letters via your data base. Participation is voluntary and participants can therefore withdraw at any time from the study. Data will be stored Centre for AAC for 15 years.

Kindly complete the attached reply slips.

Should you require any further information, please don't hesitate to contact either my supervisors or myself.

Kind regards,

_____   _____   _____
Miss Refilwe Morwane   **Prof Shakila Dada**   **Prof Juan Bornman**
PhD Student/Researcher   Main Supervisor   Co-Supervisor
Email address: Email address: Email address:
Tel no:

REPLY SLIP

Research Topic: Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents.

I _____ have read and understood the information letter attached.

I hereby (please tick appropriate box):

☐   Agree to distribute informed consent letters to potential participants on our database.

   OR

☐   Do not Agree to distribute informed consent letters to potential participants on our database.

_____   _____   _____
Name   **Signature**   **Date**
Contact:

_____   _____   _____
PhD Student/Researcher   **Signature**   **Date**
Refilwe Morwane
Tel:
Email:

APPENDIX K

Approval South African Employers for Disability

SOUTH AFRICAN EMPLOYERS FOR DISABILITY

REPLY SLIP

Research Topic: Barriers to and facilitators of employment of persons with disabilities: Support from specialised recruitment agencies

I, **Dr Jerry Gule** have read and understood the information letter attached.

I hereby (please tick appropriate box):

☒ distribute contact details of potential participants listed on the SAE4D database. Please see attacned list.

OR

☐ Do not Agree to distribute contact details of potential participants listed on the SAE4D database.

Dr Jerry Gule	_(signature)_	01/07/2019
Name	**Signature**	**Date**
Chairperson: SAE4D		
jgule@irm.co.za		

_____	_____	_____
Name of chairperson	Signature	Date

_____	_____	_____
PhD Student/Researcher	**Signature**	**Date**
Refilwe Morwane		
Tel: 078 662 3184		

_____	_____	_____
PhD student	Signature	Date

South African Employers for Disability
Postnet Suite 491, Private Bag X9, Benmore, 2010, Johannesburg
Web-site: www.sae4d.co.za Email: info@sae4d.co.za
Reg. no: 2012/135836/08
Directors: Ms Losh Pather, Advocate Bobby Barua, Dr Jeremia Gule,

290

APPENDIX L

Expert Panel Review Request Message and Feedback Form

Dear Ph.D. class hope everyone is in good health and progressing well with your studies.

As part of my study, I will be using telephone interviews to collect data. The aim of the semi-structured interviews is to explore current practices of specialised recruitment agents and barriers and facilitators to recruitment and placement of persons with disabilities in employment. This questionnaire will be completed by the specialised recruitment agents.

The questions were developed based on existing literature on barriers and facilitators to the employment of persons with disabilities as well as results from a scoping review conducted in the earlier phases of the study.

The survey consists of two sections. Section A consists of biographical questions while Section B includes questions regarding current practices of specialised recruitment agents. The final survey will be distributed to specialised recruitment agents via email using survey software, Qualtrics™. You are therefore requested to review the relevance of the included questions in both section A and B.

A link of the survey with open-ended questions have been sent to you. Please let me know if you have not received the email sent via Qualtrics™.

Kindly give input on the following:

Areas to be reviewed	Feedback
1. Content of the body of the email (clarity and conciseness) 2. Clarity and conciseness of questions 3. Questions to be deleted or not relevant 4. Questions to be added 5. Grammar 6. The layout of the survey 7. Length of the survey 8. Any other input or comment	

Furthermore, kindly complete the online survey after reviewing the questions, so I can get a feel of how responses will be captured and received from the survey. Please note that further pilot testing will be conducted with two specialised recruitment agents after the finalisation of the survey. I have also attached an electronic copy for you to revert to when reviewing questions.

I would appreciate your feedback by Friday 31 August 2019.

Your expert opinion and time taken to review the questions is highly appreciated.

Kind Regards,

Refilwe Morwane

APPENDIX M

Pilot Telephonic Interview Questions for Specialised Recruitment Agents

1. What services as a specialised recruitment agency do you offer? (e.g., recruitment, job training, job placement, employer training, etc.)

2. What services do you provide to a person with a disability who is already placed in employment?

3. What do you think are the barriers or challenges faced by persons with disabilities in finding employment? (e.g., lack of education, lack of support, etc.)

4. What do you think are facilitators or things that enable the employment of persons with disabilities? (e.g., availability of policy and guidelines, government initiatives, etc.

5. What are the steps you take to recruit someone with a disability?
(contact schools you work with, databases searched, etc.)

6. What support do you offer a person with a disability seeking employment and approaching your agency for the first time? (e.g., CV preparation, interview preparation, etc.)

7. What service and support do you provide to potential employers seeking to employ a person with a disability?

8. What specific activities do you think would help a person with disability secure employment? (e.g., attending training workshops, undergoing vocation training or job preparation training, being exposed to in-job training, etc.)

9. What employment opportunities (type of jobs) are mainly available for persons with disabilities?

10. What are the challenges of finding employment for different types of disabilities?
(e.g., Persons with Autism vs Persons with Cerebral palsy)

11. What accommodations have you requested for a person with a disability you placed in employment? (e.g., purchase of assistive technology, physical adaptations, printing documents in Braille) You may state the type of disability you requested accommodations for.

12. What advice would you give to youth with disabilities preparing to transition from school to work?

13. What advice would you give to a professional who is helping persons with disabilities to be employed?

14. What do you think employers could do to respond better disability employment issues?

15. What do you think government could do different to improve disability employment issues?

16. Is there any other information you would like to add?

APPENDIX N

Information Letter and Reply Slip for Specialised Recruitment Agents

Dear Sir/Madam

Request: Participation in Telephonic Interview for a Research Study

My name is Refilwe Morwane. I am a Ph.D. student at the Centre for Augmentative and Alternative Communication (AAC), Faculty of Humanities, University of Pretoria. I am also a speech therapist who works with youth with severe disability. My Ph.D. topic is entitled: *"Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents."* The aim of the study is to explore services offered by specialised recruitment agents through multiple perspectives.

I would like to gain in-depth knowledge in the types of services and support they offer to both persons with disabilities as well as steps they follow when placing a person with a disability in a job. I would, therefore, like to request your consent to participate in the study.

What is expected of you?
Pending your consent. You will be requested to complete a 60-minute telephonic interview with regards to services provided by disability and employment support services (referred to in this study as specialised recruitment agents).

Your participation in the study is completely voluntary. You may withdraw at any stage of the study without any negative consequences.

How will confidentiality be ensured?
Information acquired from the online survey will be handled with confidentiality. All surveys will be identified via a number and information will only be research purposes (conference presentations, journal articles and in completing the Ph.D. dissertation).

Centre for Augmentative and Alternative
Communication, Room 2.36, Com path
Building, Lynnwood Road
University of Pretoria, Private Bag X20
Hatfield 0028, South Africa
Tel +27 (0)12 420 2001
Fax +27 (0) 86 5100841
Email saak@up.ac.za
wwwcaac.up.ac.za

Fakulteit Geesteswetenskappe
Lefapha la Bomotho

Therefore, only the researcher, the allocated supervisors and appointed research assistants (who will sign a non-disclosure agreement) will have access to the interviews. Records of the online surveys will be in storage at the Centre for AAC, University of Pretoria for 15 years for archival purposes.

How will the findings of the study be reported to me?
You will receive a brief summary of the study which will be a combination of the combined responses of all the participants in the study. Should you be interested in the final dissertation – I can email a link of the copy.

Kindly complete the attached reply slip.

Should you require any further information, please feel free to contact me or my supervisor.

Kind regards,

_____   _____   _____
Miss Refilwe Morwane   **Prof Shakila Dada**   **Prof Juan Bornman**
PhD Student/Researcher   Main Supervisor   Co-Supervisor
Email address: Email address: Email address:
refilwe.morwane@up.ac.za

REPLY SLIP

Research Topic: Barriers to and facilitators of employment of persons with disabilities: Support from specialised recruitment agents

I, _____, (full names and surname)

I declare that I have read and understood the information letter on the above-mentioned study.

I hereby (please tick appropriate):

- Agree that I will voluntarily participate in the study as outlined above. I have the right to agree or disagree to participate in the study;
- Understand that I will at no stage during the research process be exposed to any harmful situations;
- Agree that I have the right to withdraw from this study should I wish to do so for any reason whatsoever without providing any explanation at any given time;
- Understand that there is no direct benefit or financial gain when participating in this study. However, information gained in the study is hoped to add to research on the employment of persons with disabilities.
- Understand that the content of the data will be handled with confidentiality and used for research purposes, presentations at conferences, publication of journal articles and to complete a dissertation;
- Understand that no identifying information will be given in the long term and that the data will be stored for a period of 15 years in a safe place at the Centre for AAC, University Pretoria for archival purposes.

☐ Give permission ☐ Please tick this box if you would like a link of the copy of the thesis.

Please indicate your Email address _____

☐ Do not give permission

| _____ | _____ | _____ |
| **Full Name** | **Signature** | **Date** |

APPENDIX O

Invitation Email request Participation of Specialised Recruitment Agents

Dear Prospective Participant,

My name is Refilwe Morwane. I am a Ph.D. student at the Centre for Augmentative and Alternative Communication (AAC), Faculty of Humanities, University of Pretoria. I am also a speech therapist who works with youth with severe disability. My Ph.D. topic is entitled: *"Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents."* The aim of the study is to explore current disability and employment support services offered by placement, recruitment and employment agents (referred to in this study as specialised recruitment agents).

The study has been approved by the ethics committee of Humanities, University of Pretoria. Please see Information letter outlining full details about the study. I would, therefore, like to request that you complete a 60-minute telephonic interview.

If you would like to take part in the study, kindly follow the link to the survey and indicate **Yes or No** as prompted.

I would be grateful for your time and input.

KIND REGARDS,
Refilwe Morwane
Speech-Language Therapist and Ph.D. Student
Centre for Augmentative and Alternative Communication
Email:
Tel:

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}

APPENDIX P

Biographical Questionnaire for Specialised Recruitment Agents

1. Date of birth (day/month/year)
2. Age (please specify relevant age group)
3. Kindly state whether you are a male or female specialised recruitment agent
4. What is your home-language?
5. In what language(s) do you offer services?
   (choose all that apply)
6. What is your highest qualification?   (please select the appropriate answer)
7. How many years of experience do you have in working as a specialised recruitment agent?   (please specify)
8. How would you describe your appointed role? (e.g., recruitment officer, HR manager, talent manager, etc.)
9. Are you a member of any professional body (e.g., APSO) or organisation (SAQA, SAE4D)?
10. How would you describe your organisation?

○ Private Company

○ Non-Government Organisation (NGO)

○ Non-Profit Organisation (NPO)

○ Disabled Persons' Organizations (DPO)

○ Skills Training Centre

○ School

○ State owned institution

11. In which areas do you find your clients i.e., persons with disabilities seeking employment?
12. Which organisations do you offer services mostly to? (e.g. private companies, state owned companies, etc.) (please specify)
13. Kindly give a description of the types of disabilities you have experience working with? (choose all that apply)

Appendix Q

Hypothetical Case Study

Question 1   I would like you to think about clients you see on a regular basis in your office when answering the questions, I am going to ask you.

Kindly let me know what steps you take to recruit and place a person with a disability in employment. Please start with the recruitment process, interview, and placement.

Probing questions:
1. Who do you contact to get their details?
2. What usually happens before the interview?
3. How do you prepare them?
4. Please tell me more
5. What was the outcome?
6. Please give more detail about the process?

Finally, could you tell me what you feel are the strategies of support that you offered that worked or did not work?

Question 2   I will **NOW** ask you what you think should be the steps one should take to recruit and place a person with a disability from a case study I am going to read to you now. Just like the previous questions, start with the recruitment process, interview, and then placement.

JBS is 28-year-old diagnosed with cerebral palsy who lives in Atteridgeville. She is ambulatory, uses an IpadTM to communicate and has good function of only one hand. Her highest qualification is Matric obtained from a special school. She has experience working in an administrative office and thus presents with good computer skills and uses excel, word, and adobe with no problems.

Probing questions:
1. Please share a bit more detail about the type of support you would offer
2. What usually happens before the interview?
3. How do you prepare them?
4. Please tell me more
5. What was the outcome?
6. Please give more detail about the process?

If you do not know how to assist, who do you consult for assistance?

APPENDIX R

Telephonic Interview Questions for Specialised Recruitment Agents and Schedule

Greeting	Thank you for consenting to be part of the interview.
Introduction	This study aims to explore barriers and facilitators to the employment of persons with severe communication disabilities, by exploring the role of specialised recruitment agents in the assisting them secure employment disabilities.

I am conducting this study as part of my Ph.D. studies.

1. As I explained in the information letter, Specialised Recruitment Agents are defined in my study as individuals or organisations that offer disability employment support services such as HR managers, recruitment and placement agents, occupational therapists and other people.

2. It is anticipated that the data obtained from all phases of the study will provide an understanding of the roles and services provided by these agents as well as processes that support successful recruitment and placement of person with disabilities in employment.

3. Please note that the information shared during the interview will be kept confidential including your identity (that is, name or name of your organisation).

4. The interview will be with your permission to be audio recorded. These recordings will be transcribed by myself (the researcher). Upon completion, the data will be stored in a secured place and access to this information will be restricted to my supervisors, research assistant and myself.

5. Kindly note that participation in this interview is voluntary and you may withdraw at any stage during the interview without consequence.

6. Do you have questions so far about everything I have explained prior to the commencement of this interview?

1. What services as a specialised recruitment agency do you offer? (e.g., recruitment, job training, job placement, employer training, etc.)

2. What services do you provide to a person with a disability who is already placed in employment?

3. What do you think are the barriers or challenges faced by persons with disabilities in finding employment? (lack of education, lack of support, etc.)

4. What do you think are facilitators or things that enable the employment of persons with disabilities? (e.g., availability of policy and guidelines, government initiatives, etc.)

5. What are the steps you take to recruit someone with a disability?
   (contact schools you work with, databases searched, etc.)

6. What support do you offer a person with a disability seeking employment and approaching your agency for the first time? (e.g., CV preparation, interview preparation, etc.)

7. What service and support do you provide to potential employers seeking to employ a person with a disability?

8. What specific activities do you think would help a person with disability secure employment? (e.g., attending training workshops, undergoing vocation training or job preparation training, being exposed to in-job training, etc.)

9. What employment opportunities (type of jobs) are mainly available for persons with disabilities?

10. What are the challenges of finding employment for different types of disabilities? (Persons with Autism vs Persons with Cerebral palsy)

11. What accommodations have you requested for a person with a disability you placed in employment? (e.g., purchase of assistive technology, physical adaptations, printing documents in Braille) You may state the type of disability you requested accommodations for.

12. What advice would you give to youth with disabilities preparing to transition from school to work?

13. What advice would you give to a professional who is helping persons with disabilities to be employed?

14. What do you think employers could do to respond better disability employment issues?

15. What do you think government could do different to improve disability employment issues?

16. Is there any other information you would like to add?

APPENDIX S

Non-disclosure Agreement Form

NON-DISCLOSURE AGREEMENT
FOR RESEARCH ASSISTANTS
Pertaining to the agreement between
CENTRE FOR AUGMENTATIVE AND ALTERNATIVE COMMUNICATION,
UNIVERSITY OF PRETORIA (PhD Project)
(hereinafter referred to as "the University")
and
RESEARCH ASSISTANT
(hereinafter referred to as "the Party")

It is recorded that the University intends to share information with the Party on a PhD project titled:

Barriers to and facilitators of employment: Perspectives of persons with severe communication disabilities and specialised recruitment agents (hereinafter referred to as "the Purpose").

1. I acknowledge that in connection with the Purpose it will be necessary for certain Confidential Information to be exchanged between the University and the Party.

   1.1. The University will make available to me from time-to-time certain information that is highly confidential. This Confidential Information means any information disclosed by the University pertaining to the Purpose, whether it has been marked as confidential or is identified as confidential by the University at the time of disclosure, or not, as well as all materials, technologies, inventions, Know-How, research strategies, trade secrets and material embodiments thereof, and the logic, coherence and methods of use or implementation of any of the aforementioned that the University has created, acquired or has rights in, and anything derived from any of the above;

2. I specifically agree not to disclose any Confidential Information to a third party and to protect it through the exercise of reasonable care.

   2.1. I agree to keep the Confidential Information in a secure environment, and not copy or use the Confidential Information except as it is reasonably necessary in connection with the Purpose.

2.2. I understand that my access to this Confidential Information is for the sole purpose of the Purpose and agree that breach of confidentiality by me may result in sanctions, civil or criminal prosecutions against the University or myself and/or University disciplinary action against myself.

3. This Agreement shall commence on the Signature Date and shall remain in force and effect indefinitely, unless replaced by another agreement concluded between the University and the Party superseding this Agreement.

_____	_____	_____
Research assistant (Print Name)	**Signature**	**Date**

_____	_____	_____
Miss Refilwe Morwane	Prof Shakila Dada	Prof Juan Bornman
PhD Student/Researcher	Main Supervisor	Co-Supervisor
Email address:	Email address:	Email address:

APPENDIX T

Description of Services Provided by SRAs

Services provided to candidates with disabilities	
Employment-seeking assistance	Assistance is provided in the job-seeking process, which involves application for job positions, CV development and preparing for interviews.
Career counselling	Counselling involves guidance on career options available and steps required to achieve successful employment. Counselling may also involve discussions about career planning.
Placement assistance	Assistance with selection of job positions the candidate is interested in. SRAs refer candidates for interviews of selected job positions. Once successfully interviewed, the SRAs support the candidate to accept the job offer made by the employer. Referral to interviews for selected job positions. The SRAs communicate with the potential employer on behalf of the candidate.
On-the-job support	In order to ensure retainment in employment, SRAs offer support in the form of job coaching to the appointed candidate. Regular follow-ups are conducted, and support is provided when needed (e.g., conflict resolution).
Induction training	Training to ensure the candidate understands what is expected of them. The candidate is familiarised with their job description and job tasks, and the candidate is introduced to the employment environment and colleagues
On-the-job training	This is training provided to candidates as part of skills development training offered by employers. On-the-job training is provided in learnership appointments and candidates receive remuneration while developing the skills required by the employer. Upon completion, the candidate will be integrated into the company and offered full-time employment.
Transportation assistance	Support on accessing transportation to and from work is provided. In some instances, this involves arranging a transportation service; in other instances, it involves ensuring the candidate knows how to use the public transportation system.
Services provided to employers	
Disability employment equity plan	This plan outlines the employer's plan in reaching equity targets, that is, how they intend to implement affirmative action with regard to the hiring of persons with disabilities.
Employment recruitment strategy	A formalised plan of action to recruit and attract candidates with disabilities. This plan outlines strategies to be used that will ensure that suitable candidates are attracted to apply for the open job positions.
Skills development plan	A plan designed to support the skills development training of candidates with disabilities.

Accessibility audits	Evaluation of the accessibility of the work environment. SRAs mostly perform a physical accessibility audit.
Disability-related training	Training regarding the types of disabilities and reasonable accommodations required for successful placement. This training is provided to both employers and employees.