Tertiary education experiences of students with visual impairment

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Abstract

An increasing number of students with disabilities are attending tertiary education institutions in New Zealand. Understanding the experiences of students with disabilities will enable education providers to develop policies and practices that promote the inclusion of these students. This study examined the tertiary experiences of students with visual impairment, an understudied group of students with disabilities in New Zealand. It examined their transition, social, and academic experiences.

Qualitative research, critical theory, and participatory research were adopted as the research approach, paradigm, and design, respectively. Semistructured interviews were used to collect data from six students with visual impairment, two accessibility advisors, and an official of Blind Low Vision New Zealand. Students with visual impairment also participated in a focus group discussion. Due to the participatory nature of the study, students with visual impairment were involved in the formulation of focus group questions. The coconstruction of focus group questions ensured that the questions were relevant to participants' lived experiences. The process of coconstruction was also empowering for participants as their feedback shaped the "direction" of the research. For example, the incorporation of transition experience into the study was at the request of participants. The focus group was also empowering as the conversation produced new insights among participants. Three themes emerged from thematic analysis, and these were transition experiences, negotiating the social environment, and learning experiences.

The findings indicate that tertiary institutional support offered to students with visual impairment relates mostly to academic participation (note-taking and examinations) and, thereby, seems to neglect other aspects of students' inclusion. This study found that aspects of tertiary education other than academic issues are equally important to students' inclusion and must be given the needed attention by tertiary institutions. For instance, the social environment, according to some participants, was the most important barrier to inclusion. Further, it emerged that the transition, specifically pre-enrolment factors, could influence students' tertiary experiences.

It was observed in the study that participants experienced both barriers and enablers to inclusion in tertiary education. However, participants experienced more barriers than enablers. The barriers included delays in the provision of support, problems of the physical environment, perceived misconception of disability by peers, disregard for participants' request for support, and inexperienced reader–writers. Some of the enablers were psychosocial and practical support from peers, the contacting of participants prior to enrolment, and support with laboratory experiments. The barriers faced by participants imply disconnect between inclusive education policy and practice in tertiary education. Inclusion is about creating a tertiary environment and system that is barrier-free, flexible, equitable, and supportive for all students.

Based on the findings of the study, it is recommended that tertiary institutions include nonacademic programmes, such as social participation initiatives and transition programmes, in the support they offer to students with visual impairment. Moreover, accessibility advisors and academic staff should be provided with training on disability issues.

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CHAPTER 1

INTRODUCTION

1.1 My motivation for studying students with visual impairments' tertiary experiences

In 2010, I left clinical (optometry) practice to pursue a master's degree in disability, rehabilitation, and development at the Kwame Nkrumah University of Science and Technology in Ghana. My decision to return to school was based on my long-held aspiration of becoming a disability activist, advocate, and researcher. I developed the passion for disability issues because of my close association with a sibling with a hearing impairment. During my studies, I had the opportunity to listen to the academic struggles and social experiences of a student colleague with visual impairment. This student recounted her difficulties in the taking of notes and navigating around the university environment, and the lack of support from friends and university support staff. She further claimed that her academic progress had been derailed by these challenges. Consequently, she had to complete her studies in four years instead of the stipulated two years. Her story kindled in me the enthusiasm for researching the experiences of students with disabilities (SWDs) in tertiary education (TE). I wanted to find out the extent to which TE institutions were providing an inclusive and antidiscriminatory environment for SWDs to participate fully. I became aware of the lack of empirical research regarding the experiences of students with visual impairment (SVIs) as I searched for information about SWDs' participation in TE. This research further explores this aspect of SWDs' participation and contributes to filling the knowledge gap.

As I embarked on a journey to research the lived experiences of SVIs, I found myself embedded in a theoretical conflict. This tension, though conceptual, made me a somewhat unacceptable candidate to conduct such a study. The chief cause of this conflict was my profession as an optometrist. I belong to a profession that is often perceived to be “diametrically opposed” to the social, cultural, and political dimensions of disability. The health profession is often seen by persons with disabilities (PWDs) as championing and perpetuating an individualistic medical concept of disability, tantamount to discrimination and social exclusion (Melville, 2005).

My exposure to disability studies has reoriented my perception of disability. I have come to accept the concept developed by PWDs themselves, which asserts that people experience disability due to the barriers in society and not as a result of impairment (Finkelstein, 2007; Oliver & Barnes, 2012). Thus, in this research, I situated myself at a distance from the medical concept of disability. I used people-first language to refer to the research participants. People-first language refers to the research participants as persons with disability (PWDs) because they are first and foremost people who have individual capabilities and aspirations like all other people (Vivinati, 2020). I also avoided using terms such as handicapped, incapable, victim, disabled, challenged, and visually impaired to describe participants as these labels suggest that PWDs are less competent as compared to people without disability.

The disability rights movement has been critical about the traditional research methods and paradigms adopted by some researchers in disability research (Oliver, 2002; Priestley et al., 2010). Traditional research often exploits and isolates PWDs from research about themselves by using exclusionary research methods (Oliver, 2002). In contrast, my intention was to collaborate with participants and involve them in the research process. In using a participatory research strategy, I sought to hear the true voices of participants by virtue of their empowerment in the research process. This research will therefore contribute to the existing literature on participatory disability research that appears to be lacking in New Zealand and internationally.

I have situated this research in New Zealand, a country that appears to have made progress in the enactment and implementation of inclusive policies and legislations. For instance, the country received the prestigious Franklin Delano Roosevelt International Disability Award in 2008 for the advancement made towards the improvement of PWDs' lives (The Office of the Governor-General, 2008). This research seeks to compare the ideals of inclusive education as enshrined in legislation and practice in New Zealand TE institutions. It is worthwhile to study the inclusive education system of New Zealand, a positive example in the inclusion of PWDs, and apply the lessons to the education systems of other countries that aspire to promote inclusive practices.

1.2 Context of and rationale for the study

The TE sector in New Zealand comprises private training establishments, universities, institutes of skills and technology, wānanga (Māori education providers), and workplace training (New Zealand Qualifications Authority, n.d.). In 2002, the Fifth Labour Government introduced the first Tertiary Education Strategy (TES; Ministry of Education, 2002). An objective of this policy was to eliminate the barriers to SWDs' full participation in TE and thereby increase enrolment and completion rates. The TES was the basis for the development of The New Zealand Code of Practice for an Inclusive TE Environment for Students with Impairments (Achieve, 2004). According to Steve Maharey (former Associate Minister of Education) and Ruth Dyson (former Minister for Disability Issues):

> This Code of Practice is a significant new resource. Providers will undoubtedly find it useful in working towards equity of access and opportunity for their students with impairments. It will help in developing further the kinds of tertiary environments that enable people with impairments to achieve their full potential (Achieve, 2004, p. 7).

The code of practice or the Achieve (2004) document (revised in 2021) includes guidelines intended to support TE providers to achieve an inclusive environment (for SWDs) as envisioned in the TES (Achieve, 2004; ACHIEVE & Tertiary Education Commission [TEC], 2021). Some of the guidelines are: supporting SWDs with the taking of notes (note-taking); moving through the TE environment (orientation and navigation); providing academic information in alternative formats; and ensuring that the physical environment is accessible to SWDs. SWDs can make complaints to the Human Rights Commission if they feel that TE institutions are not providing support that will enable them to succeed (Ministry of Justice, 2002). Some institutions have had major complaints to settle because they have not fulfilled the obligation to ensure SWDs' inclusion (Achieve & TEC, 2021).

Further, in relation to the Achieve (2004) document, ACHIEVE and TEC (2021) state that "the 2004 code of practice created a framework for the development of tertiary disability support services" (p. 9). Disability support services have been established in TE institutions (Claiborne & Smith, 2007), and these centres are generally the first point of contact if SWDs need to access support. A review of the website of TE institutions in New Zealand indicates that these centres provide support, such as note-taking, sign language interpreting, and arranging additional time for examinations. The provision of these services enables SWDs to participate effectively in aspects of TE, such as assessment, examinations, and laboratory experiments (Krebs, 2019).

Inclusive education policies, legislation, and documents, such as the Education and Training Act (2020), Human Rights Act (1993), and TES, seek to enhance the right of school entry, educational participation, equity, and inclusion for SWDs. The introduction of inclusive legislation and policies since the 1990s reflects a shift in educational policy from the medical to the social model of disability. The social model posits that people experience disability due to barriers in society (Oliver & Barnes, 2012) and "advocates for full inclusion and equality within society" (Bunbury, 2019, p.41). Thus, with regards to educational policy, the focus is on modifying TE systems, structures, resources, policies, and practices to accommodate the SWD (Oliver & Barnes, 2010). The medical model views disability as a problem in the individual (Mitra, 2006). Therefore, educational policy is focussed on the rehabilitation of the SWD to fit easily into the TE environment (Cologon & Thomas, 2014). The Tertiary Education Commission (2020) states that the social model underpins the New Zealand Disability Strategy. Further evidence of the shift in educational policy is the establishment of disability support services in TE institutions. Claiborne and Smith (2007) state that "during the 1990s support for university students with impairments gradually moved from counselling centres to student support services as the emphasis changed from medical to social concerns" (p.74).

The emergence of legislation and policies that advocate for inclusive education may have contributed to the positive growth of SWD enrolments in TE in New Zealand (Claiborne & Smith, 2007). The number of domestic SWDs enrolled in TE institutions increased by 14% between 2011 and 2020 whereas the rate of enrolment for students without disability decreased by 15% in the same period (Education Counts, 2021). Bell (2015) mentions that the number of SWDs—as a proportion of the general student population in 2013—had nearly doubled since 1998. Moreover, the Tertiary Education Commission (n.d.) reports that the completion rate at bachelor's and postgraduate levels of study for SWDs (58%) and students without disability (59%) between 2012 and 2018 are almost the same.

Despite improved participation rates and completion rates almost on par with students without disability, there appears to be a lack of information about the TE experiences of SWDs. This observation concurs with Bell's (2015) assertion that there is a lack of information about the support offered to SWDs in TE institutions in New Zealand. Researching SWDs' TE experiences may address this knowledge gap as it would enable us identify the specific support provided to these students and the effectiveness of such support. Further, researching the experiences of SWDs would highlight specific barriers to full participation and set the tone for dialogue to address such challenges (Carey, 2013). Lastly, by listening to the voices of SWDs, we are able to identify the factors that promote inclusion and ascertain what or who inspires them to succeed in TE (Mamiseishvili & Koch, 2011). This information is imperative because an inclusive system built on the interest of SWDs may enhance their capacity to succeed in TE.

The paucity of research about the experiences of SWDs in TE seems to be a global phenomenon. Pena (2014) indicates that from the 1990s, studies on SWDs constitute only 1% of all topics in the best rated journals on TE in the United States. Further, researchers note that some aspects of SWDs' TE experiences are understudied (see, for example, Francis et al., 2019; Likpa et al., 2020; Reed et al., 2015). Reed et al. (2015) note that SWDs' enrolment decisions, particularly reasons for attending TE, is an underexplored area. Other researchers indicate that there is a scarcity of research relating to specific groups of TE SWDs. For instance, Correa-Torres (2018) mentions that there are few studies regarding SVIs' TE experiences.

In New Zealand, research on inclusion of students with disability has mainly focused on their participation in primary and secondary education (see, for example, Basel & Hamilton, 2019; Gaffney, 2012; Kearney, 2016; MacArthur, 2013; MacArthur & Kelly, 2004; McIntyre, 2013). The emphasis of several studies on disability and TE in the country appears to have centred on the inclusion of SWDs in general (see, for example, Claiborne et al., 2011; Murray & Sotardi, 2020). According to Likpa et al. (2020), the lived experiences of disability may be dissimilar among the different groups of SWDs. Therefore, they urge researchers to explore the experiences of specific groups of SWDs in order to identify the unique needs of such students. Fuller et al. (2005) mention that the experiences of students within a specific group of SWDs could be diverse. In essence, Fuller et al. (2005) and Lipka et al. (2020) suggest that the support for including a specific group of SWDs in TE may not lead to inclusion for another group, and the required support for students within a particular group could be diverse.

Considering the importance of researching specific groups of SWDs (Lipka et al., 2020), this study explores the TE experiences of students with visual impairment. SVIs are a group of students with loss of sight that cannot be remediated by surgery, glasses, or medication (Centers for Disease Control and Prevention, 2011; Sapp, 2010). SVIs seem to constitute a small percentage of the TE student population in developed countries (Association on Higher Education and Disability, 2019; Higher Education Student Statistics, 2019). Due to their low number, academic staff and disability support workers may have limited experience working with such students (Reed & Curtis, 2011). Previous research has highlighted barriers to TE SVIs' inclusion. Some of the barriers are lack of learning resources, such as audio books and braille (Correa-Torres et al., 2018; Joshi & Ray, 2020); experiencing a sense of loneliness on campus (Kong et al., 2021); illegible notetakers' notes (Hayden et al., 2008); and difficulty accessing computer-related materials (Fitchen et al., 2009). Other studies have reported enablers to SVIs' participation in TE (see, for example, Joshi & Ray, 2020; Phillips & Tibble, 2014). Phillips and Tibble (2014), whose study was conducted in New Zealand, found that engagement in extracurricular activities and access to technological resources promoted inclusion.

SVIs were among the first group of SWDs to receive special education in New Zealand (Mitchell & Mitchell, 1985). However, it appears that there are few studies that have examined SVIs' participation in education, especially their experiences in TE (See, for example, Pacheco, et al., 2021; Phillips & Tibble, 2014). The study by Pacheco et al. (2021) is based on Pacheco's (2016) doctoral thesis that examined a specific area of SVIs' TE experiences, specifically the transition, and the role of information and communication technology. Moreover, the study by Phillips and Tibble (2014) is limited because it only included the story of one student with a visual impairment. The present study is imperative as it adds to the existing literature in the field of disability and TE in New Zealand. This study does not limit itself to a specific aspect of SVIs' TE experiences and, therefore, offers a broader perspective and comprehensive insight into their TE experiences. It examines their transition, and academic and social participation. Each of these aspects of TE is important in the inclusion of SVIs. For instance, an effective transition strategy could lead to the formation of realistic expectations about TE (McPhail, 2015). Further, DaDeppo (2009) found that a positive social environment contributes to SWDs' persistence and success in TE.

The paucity of research on the experiences of SVIs attending TE institutions in New Zealand is the main reason for conducting this research. Awareness of the experiences of students will provide TE institutions, the Ministry of Education, and the Tertiary Education Commission with the theoretical and practical bases for making realistic improvements for the successful inclusion of SVIs. It also has the potential to inform TE policy and practice beyond this country and provide a foundation for further research.

1.3 Purpose of the study

The aim of this study is to explore the TE experiences of SVIs impairment in New Zealand. I adopted a participatory methodology for this study as this research design seeks to foster collaboration and empower participants in the research process (Titterton & Smart, 2013). Participants' input in the formulation of focus group questions was important because it enabled me to identify themes that I may not have otherwise discovered. For example, based on potential focus group questions and areas of interest submitted by participants, I asked questions related to transition (pre-enrolment and early TE period) in the focus group discussion. Previously, the transition to TE was not a focus of this study as the topic is usually investigated independently. The focus group proved to be informative as it appeared that some participants gained new insights into the issues discussed. The participatory ethos of the focus group discussions was realised as participants engaged in discussions with each other. Some of these dialogues are reported in the findings section. The utilisation of two data collection methods (focus group and semistructured interviews) and the inclusion of three groups of participants (SVIs, accessibility advisors, and an official from Blind Low Vision NZ) allowed for further insight into the TE experiences of SVIs.

1.4 Research questions

1. What are the pre-enrolment and early TE experiences of SVIs?
2. What are the experiences of SVIs with regard to the social aspect of TE?
3. What are SVIs' experiences of the academic environment of TE?

1.5 Organisation of chapters

Chapter 2 presents the literature review. The most prominent models of disability, the transformation of educational policies and legislation in New Zealand in relation to national and international sociopolitical changes, and literature on SWDs' transition, and social and academic experiences are examined.

Chapter 3 consists of the methodology of the study. It discusses the research paradigm (critical theory), research approach (qualitative research), research design (participatory research), selection of participants (random sampling), collection of data (focus group and interviews), analysis of data (thematic analysis), and ethical considerations.

Chapter 4 reports the findings of the study. Participants' enrolment decisions, the critical period of enrolment decisions, the anticipation and realities of TE, the adjustment to TE, and engagement with disability support services are reported. This is followed by a description of participants' social experiences in TE. Specifically, the potential contributory factors for their negative social lives, the consequence of unfavourable social experiences, how they approach the barriers to social inclusion, and their perspectives on social inclusion are discussed. This chapter also highlights participants' experiences with note-taking and examination support, information accessibility issues, lecturer attitudes, and approaches to overcoming academic barriers.

The findings of the study are discussed in Chapter 5. The findings are interpreted and described in relation to existing literature. They are discussed in three themes, and these are transition experiences, navigating the social environment, and learning experiences.

Chapter 6 covers the summary and reflections on the main findings. This chapter also presents the limitations of the study as well as recommendations for achieving a more inclusive TE system.

CHAPTER 2

LITERATURE REVIEW

In this chapter, the existing research on disability and tertiary education (TE) is examined and evaluated in relation to the purpose of the study. The literature review is divided into three sections: models of disability, discourses on disability and education in New Zealand, and experiences of students with disabilities (SWDs) in TE. In the first section, the two most prominent and contrasting models of disability are discussed. Models of disability are social constructs or concepts that guide the development and implementation of disability policies and legislation (Smart, 2004). Thus, by highlighting the principles associated with the models, the assumptions underpinning disability education policy and practice can be better understood. The second section traces the legislative path to inclusive education and helps determine the way for investigating the gap between policy and practice. It offers a historical perspective of the way legislation and policy have shaped the education of persons with disabilities (PWDs) in New Zealand. The third section evaluates the literature on disability and TE with emphasis on the experiences of SWDs.

2.1 Models of disability

Models of disability underpin societal perceptions and attitudes toward PWDs (Smart, 2004). The religious or moral model (prominent in the medieval era) is the oldest model of disability (Goodley, 2016). This model views disability as a punishment (by an external force) for personal transgressions or misdeeds of parents or forebears, caused by evil entities and associated with mysticism or the possession of supernatural abilities (Drum, 2009; Henderson & Bryan, 2004; Olkin, 2001). Although it may seem outdated, contemporary beliefs and practices, such as the depiction of PWDs as villains or evil characters in mass culture and the belief that they possess paranormal abilities, are consistent with the moral model (Donelly, 2016; Padaki & Tzvetkova-Arsova, 2013).

The medical model of disability appears to have been developed in the 19th and 20th centuries, the same era when science and the medical profession began to flourish (Conrad, 2005). The medical model theorises that disability is a problem inherent in a person, and, as a result, the individual is not in a normal state (Brittain, 2004; Mitra, 2006; Oliver, 2004; Oliver & Barnes, 2012). The preferred means to deal with the 'problem' and, consequently, bring the individual into the realm of normalcy is by cure or through educational, medical, or vocational rehabilitation (Barnes, 2003a; Humpage, 2007; Mitra, 2006; Palmer & Harvey, 2012; Verbrugge & Jette, 1994). Until the 1990s, the dominance of the medical model was identified in definitions of disability and policy frameworks. For instance, according to Barnes (2019), the World Health Organization's (WHO) International Classification of Impairment, Disability, and Handicap (ICIDH), which attempted to offer a universally accepted definition of disability in 1980, was influenced by the medical model. Edwards (2005) notes that the ICIDH definition suggests that disability is caused by impairment and, thus, an individual problem that requires therapy and cure. Further, in the educational system, the medical model guided policy through the philosophy of segregation or special schooling (Goodley, 2016). Within the policy of educational segregation, SWDs are offered learning instruction in separate classrooms within a regular school or outside the regular school (Göransson et al., 2020).

According to Oliver (2009), the medical model consciously extricates the role of society as a cause or solution to disability; disability is regarded purely as a medical phenomenon. When people are classified as sick or impaired as per the medical model, they are considered unfit to participate fully in society, and, in the process, they are isolated or excluded socially (Goering, 2015). The Parsonian paradigm, which defines disability in terms of impairment, signs, and difference, is one of the variants of the medical approach that links sickness to the model

(Parsons, 1991). The medical model is also known as the “tragedy model or a charity model, due to the underlying medical model view of people who experience disability as tragic and in need of charity and pity” (Cologon & Thomas, 2014, p. 29).

In recent times, disability-related definitions and policies appear to be based on the sociopolitical approach to disability. However, the medical model is still prominent within certain social structures. The perpetuation of the medical model could be as a result of stereotyping or the commonly held perceptions about characteristics of a group (Biernat, 2003). Persons with visual impairment (PVIs) are generally identified by a white cane, a guide dog, dark glasses, closed eyes, and difficulty with walking. PVIs are also perceived to have paranormal abilities and musical talents, and be unable to use Automatic Teller Machines (ATMs), incapable of pursuing science, more suited for some occupations, and more likely to be cheated, among others (Fraser et al., 2019; Hong Kong Blind Union, n.d.; Padaki & Tzvetkova-Arsova, 2013; Śmiechowska-Petrovskij, 2017). Another important stereotype about visual impairment is that PVIs are totally blind and reside in absolute darkness. Only a small proportion of PVIs have no light perception (cannot see light) whereas the majority have residual vision (some amount of sight) and can recognise light, colour, and shapes (Cupples et al., 2012). Visual impairment (VI) is sight loss that cannot be corrected by surgery, glasses, or medication (Centers for Disease Control and Prevention, 2011; Sapp, 2010). VI consists of blindness (absolute or near absolute loss of sight) and low vision (significant sight loss with residual vision; Cupples et al., 2012; Mabeley, 2006).

One of the criticisms of the medical model is the language used to describe persons with disability. Referring to PWDs as handicapped, lame, misfits, and retarded—among other labels—can be debilitating and dehumanising to them (Barton, 2008). Utterances, such as “she is blind and can’t read” or “he can’t pursue science because of blindness”, suggest that individuals are defined by impairment and deemed unfit to participate fully in society. Putting the person before the disability (people-first language) suggests that the person is, firstly, a member of society and capable of participating in social activities or functions (Vivinati, 2020). The term “persons with disability (PWDs)” has been widely adopted as the standard in government documents and scientific publications (Collier, 2012). People-first language has been abandoned by the deaf community, and the identity-first language (placing the disability before the person) is preferred by many people with hearing impairment (Crocker & Smith, 2019). Proponents of the identity-first language contend that the people-first approach separates the person from the disability, and this implies that disability is an insignificant part of PWDs’ identity (Collier, 2012). The use of the identity-first language suggests that disability is an important aspect of PWDs’ identity (Dunn & Andrews, 2015).

Another criticism of the medical model is the power vested in medical professionals to determine the types of services and benefits offered to PWDs, “particularly in social and economic policy areas” (Humpage, 2007, p. 217). The challenge with medical personnel recommending services is that they appear to be oblivious to what PWDs want or value (Humpage, 2007). The medical approach to disability can be useful in certain situations. For instance, a PWD with a chronic condition (related or unrelated to their impairment) may benefit from medical intervention (Linker, 2013).

The medical model places the responsibility of disability on the individual and ignores the role society plays in the creation of disability (Brittain, 2004). Thus, there is no urgency to eliminate societal barriers or transform the environment to create an inclusive society (Jenson, 2018). The medical model is also associated with negative perceptions and stereotypes about PWDs (Barton, 2008; Cologon & Thomas, 2014). The perceived shortcomings of the medical model served as the impetus for the development of an alternative concept of disability known as the social model. The development of the social model began in the 1970s, a period characterised by the advocacy of disability activists and academics for equal opportunities and the right to social inclusion for PWDs (Longmore, 2020). Oliver (2004) mentions that the most influential disability organisation associated with the formulation of the social model of disability was a group called the Union of the Physically Impaired Against Segregation (UPIAS) in the United Kingdom. UPIAS summarised their concerns about the medical model in the following way: "Disability is something imposed on top of our impairments; by the way we are unnecessarily isolated and excluded from full participation in society. Disabled people are therefore an oppressed group in society" (UPIAS, 1976, p. 14). UPIAS also defined disability in social terms, and, for the first time, disability was decoupled from impairment. Accordingly, impairment was defined as "lacking part or all of a limb or having a defective limb or mechanism of the body" (UPIAS, 1976, p. 14) and disability as "the disadvantage of restriction of activity caused by a contemporary social organisation which takes no or little account of people who have physical impairments and thus excludes them from participation in the mainstream of social activities" (UPIAS, 1976, p. 14). Inspired by the disability activism and the ideological stance of the disability movement in the 1970s, a British academic, Mike Oliver, introduced the term "social model" in 1980. Oliver (1990, 2004) distinguished between an "individual model" of which the medical view was a significant component and the social model, derived from the definition of disability by UPIAS.

Advocates of the social model assert that rather than impairment, the oppressive nature of society gives rise to disability (Bunbury, 2019; Campbell & Oliver, 2013; Oliver, 2004; Palmer & Harvey, 2012). They further argue that disability can be overcome through societal transformation that includes the dismantling of disabling obstacles and the creation of equal opportunities for PWDs (Longmore, 2003; Oliver & Barnes, 2012; Owens, 2015). For instance, a person with visual impairment may not view the lack of sight as a disability. Such a person may consider the use of other senses as nothing more than an alternative form of visual perception. It is society’s dependence on vision and the lack of inclusion that prevents PWDs from participating fully in certain situations.

There are various versions of the social model, and these variants give insight into the concept. The British social model confines disability to barriers in the social environment and ignores the role of impairment (Shakespeare, 2004). Critics of this conservative version of the social model advocate for a broader perspective of disability that will take into account the effect of impairment (Haegele & Hodge, 2016; Shakespeare, 2013). For instance, a person with a deteriorating condition that is associated with chronic pain would view the discomfort as an unfavourable aspect of impairment. Social modelists have responded to this criticism by developing moderate versions of the social model. A moderate social perspective of disability maintains that impairment or biological factors are implicated in disability. Disability is thus viewed as an interaction between social, individual, and biological factors (Altman, 2001; Barnes & Mercer, 2003; Shakespeare, 2013). This moderate view of the social model constitutes a unique model (biopsychosocial model), recognised by the WHO, and is the basis for WHO’s International Classification of Functioning (ICF) definition of disability (WHO, 2002). The social relational model is another moderate perspective of the social model. This model asserts that PWDs’ lived experiences of impairment should be considered in analysing disability (Reindal, 2008).

The minority group model suggests that the social oppression and exclusion encountered by PWDs is synonymous to that faced by other marginalised groups, such as gender, ethnic, religious, and sexual minorities (Hahn, 1995; Scotch & Schriner, 1997). This perspective is consistent with the UPIAS (1976) position, which describes PWDs as “an oppressed group in society” (p. 14). The minority group model was North American disability scholars’ approach to defining disability. It emerged in the era of the civil rights movement in the United States of

America (Frum, 2008). Hahn (1997) suggests that the best way of dealing with the marginalisation of PWDs (as a minority group) is through antidiscrimination laws.

The identity or affirmative model views impairment as a human difference (rather than a deficiency) and an essential aspect of human diversity. For example, proponents of the neurodiversity movement argue that autism is merely a difference rather than a disorder (Owren & Stenhammer, 2013). This model is linked to the concept of "disability pride" or the positive self-esteem felt by PWDs about the disability identity. The model of human variation suggests that exclusion could result from the discrepancy between individual characteristics and the environment and may not be deliberate (Schriner, 2001). The human variation model also postulates that all humans—at some points in their lives—become disabled, and their variable physical and mental states can exclude them in some activities or settings (Davis, 2002).

Beyond the social model, other models have been developed to contextualise disability. These include the critical disability theory, social justice model, human rights or rights-based model, interactionist models, and active model of disability (Degener, 2016; Evans et al., 2017; Levitt, 2017; Meekosha & Shuttleworth, 2009; Nathan & Brown, 2018). Some of these models seem inseparable from the social model. For example, along with the human rights model, the social model argues that inclusion could be achieved by recognising and removing the barriers that hinder PWDs from enjoying fundamental rights and freedoms. In essence, the social model views disability as "a human right issue" (Barton, 2008, p. 43). Although the fundamental principles of the above-mentioned models may differ from the social model, they all accept the view that society plays a significant role in disabling PWDs.

In this study, I adopted the social model as the "underpinning" framework for four reasons. First, it was developed by PWDs and offers a better understanding of their lived experiences (Bailey, 2004). Second, it identifies the systemic, structural, and attitudinal barriers that hinder the inclusion of PWDs (Campbell & Oliver, 2013), and, third, it takes into consideration PWDs' lived experiences of impairment (Reindal, 2008). Finally, it seeks to remove the barriers that restrict the participation of PWDs and improve their lives (Brittain, 2004; Oliver, 2013).

2.2 Discourse of disability and education in New Zealand

Disability-related policy frameworks in New Zealand were underpinned by the medical model in the late 19th and for most of the 20th century (Stace, 2010). During this period, PWDs were denied the opportunity to enjoy education on an equal basis with persons without disability. The Education Act (1877) prevented children with disability from receiving primary education, which was free and mandatory for all children. They were excluded by reason of "sickness, danger of infection, temporary or permanent infirmity" (The Statutes of New Zealand, 1877, p. 127, as cited in Selvaraj, 2016).

PWDs' exclusion from the educational system was addressed through the establishment of segregated or special schools. In segregated schooling, education is provided for SWDs in separate institutions or special schools (Göransson et al., 2020). The Sumner Institute for the Deaf and Dumb (the first government-funded school for children with hearing impairment in the world) was established in 1888 in New Zealand. The first special school for children with visual impairment in the country (Jubilee Institute for the Blind) was founded in 1891 (Mitchel & Mitchell, 1985). Eugenics, a set of beliefs that viewed PWDs as having undesirable traits and were, therefore, genetically unfit, was influential in shaping education and welfare policies in the late 19th and early 20th centuries in New Zealand (Chapple, 1903; Stephenson, 2014). Hence, educating children with disabilities in separate schools fulfilled the eugenicist agenda of preventing the transmission of undesirable traits (Garver & Garver, 1991). Segregated education was also viewed by education professionals as the most appropriate system for educating SWDs since PWDs were perceived to share many commonalities with each other than with persons without disability (Osgood, 2005). Many SWDs in New Zealand still receive education in segregated day or residential special schools. There are presently 28 day special schools, and these schools provide education for SWDs for Years 1–13 (Ministry of Education, 2021a). The Convention on the Rights of Persons with Disabilities (CRPD)—which has been ratified by New Zealand—is an international convention on PWDs' human rights (CRPD, 2006). Article 24 of the CRPD (2006) states that "State Parties shall ensure that persons with disabilities are not excluded from the general education system on the basis of disability". The presence of special schools in New Zealand means that the country has not accomplished its commitment under Article 24 of the convention. Research shows that SWDs in regular or general classrooms perform better in academic and social behaviour as compared to their counterparts in special schools (Fisher & Meyer, 2002; Hehir et al., 2016; Oh-Young & Filler, 2015; Turner et al., 2008).

There was an emerging trend towards integration of SWDs in regular schools in the 1970s in New Zealand. In an integrated education system, SWDs (based on academic and social competencies) are placed in regular classrooms with peers without disability for a specified period. Further, some of the students' days are spent in special classrooms in regular or segregated schools (Idol, 1997). Mitchell and Mitchell (1985) state that "a class for physically handicapped children was established at the Roskill Primary School, Auckland in 1971. The children spent some of their day integrated with children in a regular classroom" (p.58). Hornby (2014) also mentions that several special classes were established in primary, intermediate, and secondary schools throughout New Zealand in the 1970s. The shift towards integration may have been influenced by arguments for free and suitable public education for PWDs in the United States that culminated in the passage of the Education for All Handicapped Children Act in 1975 (McLean & Wills, 2008). Dixon (2005) states that "integration involved members of the lesser system (special education) joining the majority and favored (mainstream) system" (p. 35). Thus, integration is concerned with SWDs' adapting or "fitting" in with the pre-existing education system, and this seems to be consistent with the medical model, which seeks “to change the person in ways that make it easier to fit in with society” (Cologon & Thomas, 2014, p.199).

The social model guides the policy of inclusive education (Winzer & Mazurek, 2010). Inclusive education seeks to remove the barriers that hinder the full participation of all students (including SWDs) in the education system (Armstrong et al., 2010, Liasidou, 2012, 2015; Slee, 2001, 2011). It is concerned with changing the curriculum, teaching strategies, school culture, physical environment, polices. and other aspects of the education system to provide all students with equal opportunities for success (Ainscow, 2005, 2020; Ainscow et al., 2012; Persson, 2006; Slee, 2001, 2011). Therefore, inclusive education ensures that the varied educational needs of students are met.

The move towards inclusive education began in the 1980s, an important period in the advocacy for equal opportunities and the right to inclusion for PWDs. The year 1981 was declared the International Year of Disabled Persons by the United Nations (UN; Lucas, 1981). In New Zealand, recommendations by the International Year of Disabled Persons National Committee included amendments to existing education and human rights legislation to ensure that PWDs attend regular schools and are not marginalised in the community (Mitchell & Mitchell, 1985). The Convention on the Rights of the Child, an international agreement that promotes inclusion of children regardless of race, religion, or abilities, was adopted by the UN in 1989 (Convention on the Rights of the Child, 1983) and ratified by New Zealand in 1993 (Ministry of Justice, 2020). The passing of the Education Act (1989) was an important “step” towards the inclusion of SWDs in New Zealand. This Act was the first legislation that gave every child the right to be educated at any school. The Education Act (1989), section (81) states, “every person … is entitled to free enrolment and free education at any state school or partnership school during the period beginning on the person’s fifth birthday and ending on 1 January after the person’s

19th birthday". The right to education is also included in Section 57 of the Human Rights Act (1983)

In the 1990s, New Zealand participated in the Jomtien World Conference on Education for All (Inter-Agency Commission, 1990) and the World Conference on Special Needs Education (United Nations Educational, Scientific, and Cultural Organisation & Ministry of Education and Science of Spain, 1994), which called for inclusive education to be the standard of education for PWDs. New Zealand ratified the Convention on the Rights of Persons with Disabilities (CRPD) in 2008. The CRPD (2006) is a landmark convention that mandates that the human rights and basic freedoms of PWDs are protected. Whereas preceding conventions focused on inclusive education at the basic level, the CRPD encouraged countries to ensure inclusion at all levels of education. Article 24 (1) of the CRPD (2006) states that, "… state parties shall ensure an inclusive education system at all levels and lifelong learning". New Zealand was awarded the prestigious Franklin Delano Roosevelt International Disability Award in 2008 in recognition of its contribution to the development of the CRPD (Office of the Governor-General, 2008).

New Zealand developed an inclusive education document in 1996. The inclusive education policy, known as Special Education 2000, includes seven principles that must be implemented to achieve an inclusive educational system of global repute (Greaves, 2003). The seven principles that guide the Special Education 2000 policy include the following:

1. Learners with special education needs have the same rights, freedoms, and responsibilities as people of the same age who do not have special education needs.
2. The primary focus of special education is to meet the individual learning and developmental needs of the learner.

> 3. All learners with identified special education needs have access to a fair share of the available special education resources.
>
> 4. Partnership between parents and education providers is essential in overcoming barriers to learning.
>
> 5. All special education resources are used in the most effective and efficient way possible, taking into account parent choice and the needs of the learner.
>
> 6. A learner's language and culture comprise a vital context for learning and development and must be taken into consideration in planning programmes.
>
> 7. Learners with special education needs will have access to a seamless education from the time that their needs are identified through to post-school options (Ministry of Education, 2007b, as cited in Powell, 2012, p.6).

According to the Ministry of Education (2012), the implementation of Special Education 2000 has ensured that students with disability are given the necessary support to participate fully in regular schools. The concept of inclusive education in the seminal Special Education 2000 policy reflects a shift towards a social model of education in New Zealand. Previously, education policy was dominated by the medical model of disability. This is evident in the special education philosophy of segregation and integration, the only forms of education for many SWDs for most of the 20th century (Greaves, 2003). Apart from Special Education 2000, other inclusive education initiatives include “Success for All—Every School, Every Child”, a government initiative that seeks to achieve a complete inclusive education system (Ministry of Education, n.d.). The New Zealand Curriculum ensures that the leaning needs of all learners, including SWDs, are met (Ministry of Education, 2020). Further, the Ongoing Resourcing Scheme (ORS) provides SWDs with requisite resources for learning (Ministry of Education, 2021b).

As “it is difficult to trace the history of students with impairments involved in tertiary education in New Zealand” (Claiborne & Smith, 2007, p. 73), the path to inclusive education described in this section relates to pretertiary education. Nevertheless, the concepts of segregation, integration, and inclusion are applicable to TE. Inclusion is not “simply” educating SWDs alongside fellow students without disability (integration; Armstrong et al., 2010). Therefore, TE institutions are not “automatically” inclusive settings even though there is no segregation (teaching SWDs separately). Inclusion is focused on preventing discrimination by removing disabling TE institutional barriers. In the absence of legislation specific to inclusion of PWDs in New Zealand, the Education and Training Act (2020) and Human Rights Act (1993) appear to serve as the antidiscriminatory laws for SWDs’ participation in TE. Some countries have antidiscriminatory legislation solely for PWDs’ inclusion. For example, the Rehabilitation Act (1973) and American with Disability Act (2008) are laws specific to PWDs’ inclusion in the United States of America. Section 504 of the Rehabilitation Act of 1973 mandates TE institutions to provide support for SWDs. Section 504 further mandates institutions to nominate a person who must ensure that the legislation is implemented (Hall & Belch, 2000).

Two important policies released in the early 2000s support the goal of an inclusive TE system in New Zealand. The New Zealand Disability Strategy seeks to transform the country into an inclusive society. Objective 3.7 of the strategy calls for the “promotion of appropriate and effective inclusive educational settings” (Ministry of Health, 2001, p.16), and these include tertiary institutions. The Tertiary Education Strategy (TES), launched in 2002 by the Ministry of Education, sets out the government’s critical goals for TE every five years. The policy recommends adherence to inclusive principles by TE institutions (Ministry of Education, 2002). The TES (2002–2007) was the basis for the development of The New Zealand Code of Practice for an Inclusive Tertiary Education Environment for Students with Impairments document (Achieve, 2004). The landmark document was developed by the National Post-

Secondary Education Disability Network Incorporated, also known as ACHIEVE. The document consists of guidelines for creating a complete inclusive TE system. The guidelines relate to access to support, funding opportunities for SWDs, procedures for complaint, and access to the physical environment, among others. In 2016, ACHIEVE introduced a document known as the Guidelines and Procedures for the Provision Of Alternative Arrangements in Texts and Examinations to Students with Disability/Impairment. The guidelines focus on the provision of separate rooms for tests or examinations, rest breaks, allocation of extra time in examinations, reader–writer support, sign language interpreting, utilisation of computers for examinations, alternative forms of examinations, personal assistants attending examinations, and appropriate furniture and equipment for examinations (ACHIEVE, 2016). The reader–writer (RW) is someone who reads examination questions and writes or types answers for students who have difficulty with reading and writing. ACHIEVE's (2016) procedure for engaging a reader–writer stipulates that the RW should be accommodated with the SWD in a separate room during examinations. Further, it is expected that the RW has some knowledge in a particular subject of examination and possesses good literacy skills. This study is imperative as participants' TE experiences would enable us to ascertain tertiary institutions' compliance to the guidelines and procedures in the ACHIEVE (2016) document.

2.3 Experiences of students with disability in tertiary education

A smooth transition to TE is imperative to the success of students (including SWDs) because the highest rate of withdrawal from TE occurs in this period (Mpofu & Wilson, 2004; Respondek, 2020). Coertjens et al. (2017) define educational transition as "any major changes in students' role requirement or study context" (p. 359). Instead of a single event, the transition is considered as a phase consisting of multiple time spans (Coertjens et al., 2017; Gale & Parker 2012). According to Nicholson and West (1990, 1995), these phases include the period of making preparation for, encountering, and becoming accustomed to and secure in a new setting.

Coertjens et al. (2017) have adopted Nicholson and West’s (1990, 1995) concept of workplace transitions to describe the stages of the transition to TE. The first year of TE seems to correspond to Coertjens et al.’s (2017) encounter phase (experiences of the first week of TE), adjustment phase (gradual adjustment to the norms of TE), and stabilisation phase (stability of social and academic attitudes).

The preparation phase (pretertiary period) of Coertjens et al.’s (2017) transition framework is an important stage of the transition. The pretertiary experiences of SWDs seem to impact students’ engagement and academic outcomes in the first and other years of TE (Beauchamp–Pryor (2013); Lourens & Swartz, 2021; Reed et al., 2015; Rowan, 2014). Rowan’s (2014) study on the tertiary transition of four SWDs in New Zealand found that the previous learning experiences of students shaped their support-seeking behaviour and academic performance in the first year. Her study was conducted in a period when strategies for supporting students with dyslexia were less understood in New Zealand (Dymock & Nicholson, 2013). This could be the reason for the lack of support in high school and subsequent difficulty in accessing support in TE for some of Rowan’s (2014) study participants.

Transition planning in high school is also an essential component of the preparation phase or pre-enrolment period. There is growing awareness that SWDs need support for the transition into postschool life (TE and employment) while in high school (Morgan & Riesen, 2016). Gil (2007) notes that poor enrolment and retention rates of SWDs in TE are ramifications of ineffective transition planning in high school. The National Transition Guidelines is a set of principles aimed at assisting high schools in New Zealand to implement effective strategies for SWDs’ transition into employment and TE (Ministry of Education, 2011). Transition planning for SWDs starts at the age of 14 years and is nonobligatory for high schools in New Zealand (Gladstone, 2014; Ministry of Education, 2011). Few studies have ascertained the process and impact of transition planning in New Zealand’s high schools. Gladstone’s (2014) study with two graduate students with Down syndrome found that students' involvement in transition planning was not a standard practice. Active SWDs' involvement in transition planning helps students to become aware of potential postsecondary problems and learn the required skills to meet such challenges (Arndt et al., 2006). Fraser's (2017) study also examined the transition practices of three secondary schools in New Zealand. He noted that SWDs were taught independent life skills and self-determination skills during transition planning. Teaching these skills to students is important as self-determination skills are needed for effective transition, adjustment, and retention in TE (Barnett, 2014; Getzel & Thoma, 2008).

Another pretertiary experience that has influence on the transition is the type of secondary schools attended by SWDs. Beauchamp-Pryor (2012) and Lourens (2015, 2021) observed in their studies that SVIs from special or segregated schools have a more tumultuous transition than counterparts from inclusive schools. They argue that attending inclusive schools provides SVIs with the appropriate skills (self-reliance and independence) needed to integrate into TE.

An aspect of SWDs' pretertiary experiences that has also received little attention in the literature relates to the factors influencing SWDs' enrolment decisions, including the reasons for enrolling (Reed, 2015). Reed et al.'s (2015) research is one of the very few studies that has examined SWDs' reasons for attending TE. They found that first-year SWDs and students without disability alike attend university to meet people's expectations and also acquire good jobs. Further, they note that upper-year senior secondary school SWDs are less likely to attend TE to please others and attain a good job than their peers without disability. Ascertaining the factors influencing SWDs' enrolment decisions is important as reasons for enrolling impact the TE experience. These factors may affect SWDs' adjustment, academic participation and performance, retention, and satisfaction once enrolled (Kennett et al., 2013; Lobo & Gurney, 2014; Phinney et al., 2006; Reed et al., 2015). Kennett et al. (2013) note that students attending TE for internal reasons, such as interest in a course, are more likely to adjust and attain good grades. Studies in the general student population show that reasons for attending TE are diverse and include enhancing career prospects, interest in a course, individual growth, meeting the expectation of family and society, making friends, and delaying responsibilities (Balloo et al., 2017; Kennett et al., 2013; Kaye & Bates, 2017; van Rhijn et al., 2016; van Herpen, 2017).

Factors influencing the choice of course have also been studied by some researchers. Bacon and Bennett (2013), Beauchamp-Pryor (2013), Palan (2021), and Riddell et al. (2005) found that SWDs are disposed to choosing courses that suit impairment. These studies seem to suggest that SWDs have limited options in the selection of courses. Limitations on course choice as a result of impairment seem to be a barrier to academic participation in New Zealand. For example, thirty percent of PWDs who desire to study in the future perceived that "they would be limited by the course they could do due to a condition" (Earle, 2019, p. 31). Tertiary institutions may also discourage SWDs from selecting specific courses or create barriers for SWDs in the application process (Beauchamp-Pryor 2013; Wainapel, 2015). Wainapel (2015) states that SWDs applying to medical schools in the United States of America face "policy as well as physical barriers to entry" (para. 1). Some SWDs have challenged such oppressive attitudes in the law courts. For example, ruling in favour of an SVI, the Supreme Court of India stated that persons with visual impairment can study and practise medicine. The court held that visual impairment should not be a basis for denying admission to a prospective medical student (Choudhary, 2018).

The adjustment phase of TE is a difficult period in the transition for all students (Adam & Proctor, 2010; Getzel, 2008). However, some researchers note that adjusting to the TE environment is more tumultuous for SWDs than peers without disability. For instance, Lipka et al.'s (2020) study of students in 21 TE institutions in Israel observed that SWDs did not adapt well to the TE system as compared to their counterparts without disability. One reason for this could be the lack of enthusiasm of SWDs to reveal their disability in order to receive support from the institution (Getzel & McManus, 2005; Hong, 2015; Kendall, 2016; Mullins & Preyde, 2013). In some instances, SWDs may not provide information about their disability due to the perceived distress of labeling, according to a study of 13 SWDs attending a TE institution in England (Kendall, 2016). Further, some SWDs consider other aspects of their demography, including gender, sexual orientation, and religion, as being more important than their disability (Tinklin et al., 2004).

Access to support is imperative for the full participation of SWDs in the transition and beyond (Bolt et al., 2011). In most developed countries, SWDs are provided support automatically at high school, but, at TE institutions, SWDs must request and take the requisite steps to receive them (Shaw, 2006; Trammell, 2009). Students desiring to receive support from TE institutions must disclose disability. The process of disclosure often involves the submission of medical documentation as evidence of disability. This process is consistent with the medical model of disability as it reflects the authority conferred on the medical profession to determine the eligibility of support for SWDs (Humpage, 2007). A portion of SWDs do not seek these supports because they are either oblivious about the nature of support or they willingly refuse to accept them based on their high levels of self-determination (Cawthon & Cole, 2010; Wehmeyer, 2005). Some SWDs in Lightner et al.'s (2012) study mentioned that they delayed acquisition of support because of constraints of time, difficulty associated with accessing support, insufficient knowledge about impairment and the process of requesting support, and the cost of medical testing. SWDs who do request and access support have varied opinions about its benefits (Bolt et al. 2011; Kurth & Mellard, 2006; Salzar et al., 2008). SWDs in Kurth and Mellard's (2006) study asserted that support was only effective for three quarters of the time. The authors postulated that support was not effective because it was provided based on the characteristic of impairment rather than the practical needs of SWDs. A study by Claiborne et al. (2011) of four SWDs at a New Zealand university found that unavailability of resources was one of the significant challenges faced by these students.

Access to the physical environment, which includes the built environment, is essential in the inclusive process. To enhance participation of SWDs in TE, Shelvin et al. (2004) and McGuire and Scott (2006) assert that the physical environment, including institutional buildings, transport facilities, and accommodation, must be designed and arranged to accommodate all students. There seems to be a scarcity of information that ascertains the physical accessibility of SWDs. McBroom's (1997) study of SVIs found that students struggled to move comfortably in the TE environment. Therefore, he proposed that TE institutions should offer training for SVIs in orientation and mobility to help them navigate safely. Unavailability of elevators in multistorey buildings, inaccessible lavatories and classrooms, and a lack of ramps are some of the challenges encountered by SWDs, according to Holloway (2001) and Aldakhil (2017). The unavailability of elevators and ramps was not a barrier to physical accessibility in Jeannis et al.'s (2020) study among students with physical disability in the United States. However, in that same study, participants mentioned that physical barriers at the entrance of institutional buildings hindered their movement. Participants in Moriña and Orozco's (2021) study mentioned that physical barriers were the most common impediment to the inclusion of SWDs. Moriña and Orozco (2021) study is inconsistent with most studies on disability and TE, which found that the attitude of academic staff is the most important barrier to inclusion (Moriña, 2017). The disparity could be attributed to the nature of participants in these studies. Participants in Moriña and Orozco's (2021) study were faculty members whereas the other studies explored TE experiences from SWDs' perspectives.

Research into tertiary SWDs' experiences appears to have mainly focused on the support and barriers to academic participation. Hence, there seems to be limited research exploring their social lives on campus. In the general student population, positive social relationships are associated with a smooth transition and positive first-year experience and retention in TE (Hillman, 2005; Maunder et al., 2013; Thomas & Hanson, 2014).

SWDs perceive that the social aspect of campus life is an important factor for their success and retention in TE. For instance, DaDeppo (2009) observed that social inclusion that includes positive relationships with friends, family, and TE workers is the main determinant of success and persistence for SWDs. Van Hees et al. (2015) also found that SWDs were more interested in confronting their social rather than academic barriers. This is consistent with Tobin et al.'s (2014) research, which found that PWDs desire good social relationships. Other studies have observed the benefits of positive social relationships among SWDs and peers without disability. Hodges and Keller (1999) conclude in their studies among 16 students with physical disability that friendship with peers without disability bolstered the self-confidence of SWDs and influenced their tenacity and adaptation in TE. Lombardi et al. (2011) also observed that SWDs are more likely to acquire versatile academic strategies if they become active participants of social support networks with peers without disability. Beauchamp-Pryor (2012) asserts that friendship between SWDs and peers without disability leads to a sense of connectedness and companionship. This sense of connectedness was instrumental in his inclusion in TE, according to Kahurangi, an SVI in Phillips & Tibble's (2014) study.

Given that friendship and good social relationships promote SWDs' inclusion, it is imperative for TE institutions to provide opportunities for the formation of friendships. Thomas and Hanson's (2014) study indicates that institutional-based social programmes could facilitate the retention of students. The participating TE institution in their study formed the Student Engagement Team (SET) to promote underrepresented students' (including SWDs) social engagement with other students. The researchers concluded that SET's engagement with the underrepresented group of students was associated with increased resilience to persist and a sense of belonging in TE.

SWDs, as compared to peers without disability, encounter more barriers to social inclusion (Hadidi & Khateeb, 2013; Sachs & Schreuer, 2011). Hadidi and Khateeb's (2013) study examined the social experiences of 90 SVIs and 70 students without visual impairment attending secondary schools and universities in Jordan. They found that SVIs were more likely to experience loneliness as compared to students without visual impairment. In a study among 78 SVIs in China, Kong et al. (2021) concluded that "the loneliness experienced by visually impaired students is at a high level" (p. 6). They suggest that when SVIs "interpersonal communication needs are not met, they may experience loneliness" (p. 5). Kong et al. (2021) also found a link between loneliness and SVIs' relationships with their parents. SVIs who had antagonistic relationships with their parents experienced a high level of loneliness in TE. This implies that external (outside TE) social relationships and support play an important role in the social experience of TE SWDs.

In some studies, SWDs claimed that peers without disabilities often label and exclude them from groups and networks (Beauchamp-Pryor, 2013; Jacklin et al., 2007). The consequence of labelling, according to Troiano (2003), is the loss of self-esteem and attribution of learning disability to impairment. The fear of being labelled or perceived as different discourages SWDs from disclosing disability to peers. For example, SWDs in Hong's (2015) study desisted from disclosing disability to peers due to the fear of rejection. Specifically, they feared that they would lose their friendship with peers. SWDs in Hong's (2015) study also experienced frequent social stigma. According to the SWDs, they felt that they were disliked by their colleagues for receiving support from academic staff.

It appears that negative social experience is a 'spillover' from high school. SWDs report high levels of bullying as compared to peers without disability in high school (Blake et al., 2012). To determine whether bullying would persist in TE, Mcleod et al. (2019) included questions on bullying in a survey of 3,216 students attending TE in Indiana (United States of America).

Consistent with Blake et al.'s (2012) findings, SWDs reported a higher incidence of bullying than peers without disability. SWDs' involvement in extracurricular activities have also been studied by some researchers. Sachs and Schreuer's (2011) study compared the TE experiences of SWDs and counterparts without disability and found that the academic achievements between the two groups were almost the same. However, the authors observed that SWDs, as compared to their peers, engaged less often in social and extracurricular activities. In an earlier study, Hodges and Keller (1999) found that the need for support with daily self-care activities was a barrier to SWDs' involvement in social activities.

Impairment in itself plays little or no role in the academic performance of a student. For instance, using multivariate regression analysis and controlling for other demographic factors, Richardson and Roy (2002) found that the poor results of SVIs were not as a result of their impairment. SWDs face academic barriers in their pursuit of a TE qualification. According to a study conducted by Katsiyannis et al. (2007), academic challenges encountered by SWDs include lecturers' difficulty in adapting teaching methods that are appropriate to their needs, lack of learning materials and resources, lack of ineffective learning adaptation, and lack of alternative teaching assessment. In the study conducted by Ekelman et al. (2013), SWDs reported that activities related to academics were typically stressful. These students further intimated that they needed a greater amount of time to complete academic work compared to peers without disability. Goode (2007) states that SWDs must study for more hours in order to attain the same grades as students without disability. SWDs claim that they have to invest more effort in academic work because they have to deal with impairment effects and their studies at the same time (Seale et al., 2015). The ramification of negative academic experiences has often been lower academic grades recorded by SWDs than those of their peers without disability according to a retrospective study in Columbia (Padilla-Muñoz et al., 2013).

SWDs' academic experiences, whether positive or negative, depend largely on learning adaptation and awareness of academic staff about the academic needs of students. Kettler et al. (2005) assert that with the requisite learning, support, and adaptation, SWDs can outperform their peers without disability in standardised examinations. One of the tools that aid SWDs' adaptation to the learning environment and promote academic inclusion is technology. Technological tools or assistive technologies promote and support learning and enhance information accessibility among SWDs (Seale et al., 2015). Some of the technological tools for learning include screen reading software, voice recording devices, speech synthesiser technologies, text prediction software, mind mapping tools, and braille materials (Fatima et al., 2014; Seale, 2013).

In spite of its benefits, SWDs report facing difficulty with the use of technology for learning. Challenges pertaining to the use of technological tools relate to difficulties in accessing information and the lack of assistive technology. Difficulties reported by SVIs attending 143 Canadian TE institutions in Fitchen et al.'s (2009) study include inaccessibility of course websites, PDF materials, and PowerPoint slides, and the unavailability of appropriate assistive technologies. Phasha and Mosia's (2017) study conducted at the National University of Lesotho also observed that SVIs were oblivious to the technological resources provided by the institution. Further, they found that computers for accessing information were often either obsolete or dysfunctional. According to Fatima et al. (2014), SWDs may not have access to braille materials because not all TE institutions offer braille printing services. Horwath's (2002) research on the usability of four databases found that persons with visual impairment have difficulty accessing information from the internet as a result of the complex graphical background and interfaces of screen readers.

Moriña (2017) mentions that the most significant barrier to inclusion of SWDs is the attitudes of academic staff. Some students with dyslexia in Mortimore and Crozier's (2006) study felt that their lecturers could not help them because of their busy schedules. SWDs in Hopkin’s (2011) study deplored the delay and provision of lecture notes and study materials in inaccessible formats. Ridell and Weedon (2013), Mullins and Preyde (2013), and Vickerman and Blundell (2010) observed in their studies that lecturers were unwilling to provide support due to the perception of giving SWDs undue advantage. A student in Vickerman and Blundell’s (2010) study requested alternative assessments (owing to impairment) from an academic staff member. The tutor declined the request on the basis that it would be unfair to peers without disability. In Hanafin et al.’s (2007) study, a student reported that he had to be forceful and overly assertive in requesting support from a lecturer. Another student in the same study reported that a lecturer did not consider him as a student with hearing impairment because he could speak. The experiences of these students appear to be consistent with Matshedisho’s (2010), Moriña and Orozco’s (2021), and Mortimore and Crozier’s (2006) studies, which suggest that the lack of awareness, experience of teaching SWDs, or training contributes to the negative attitudes of academic staff. There is increased awareness that training and sensitising lecturers on disability-related issues could promote positive attitudes towards SWDs (Moriña, 2017; Moriña et al., 2020). Academic staff in Moriña et al.’s (2020) study mentioned that they were more inclined to support SWDs if they undergo training related to disability. Studies by Davies et al. (2013) and Murray et al. (2014) have concluded that the training of lecturers on disability-related issues improved academic staff attitudes towards SWDs.

2.4 Conclusion

Models of disability shape policy and practice and attitudes towards PWDs. As Smart (2004) states, “models of disability guide public attitudes, shape legislations, [and] determine the services provided…” (p. 29). This chapter commenced with an analysis of the dominant models of disability. This was important in furthering understanding of past and current disability education policy and practice in New Zealand. The second section highlighted the trend towards inclusive education in New Zealand. It emphasised that much of the country's disability history has been influenced by the medical model of disability. This is evident in the policy of segregation or special education that characterised education policy for most of the 20th century. The introduction of inclusive policies and legislation in the 1990s represents a movement towards the social model of disability. Most of these policies have focused on inclusion at the pretertiary level. However, if implemented, the few TE-specific policies, such as the Tertiary Education Strategy, would lead to a fully inclusive TE system.

An examination of the literature about SWDs' TE experiences suggests that they experience more barriers than enablers to inclusion. Further, the literature implies that SWDs experience more barriers than students without disability (Hadidi & Khateeb 2013; Lipka et al., 2020). Another observation is that the nature of the barriers has mostly remained the same over past decades. For instance, problems of the physical environment were identified as barriers in McBroom's (1997) and Holloway's (2001) studies, and these impediments persisted in Jeannis's (2020) and Moriña and Orozco's (2021) studies. The review indicates that while international and national policies have affirmed the right to inclusive education, much remains to be done in the implementation of these policies.

CHAPTER 3

RESEARCH METHODOLOGY

This study addresses the lived experiences of tertiary education (TE) students with visual impairments (SVIs) from their perspectives. This chapter describes the methodology that I utilised to address the following questions:

1. What are the pre-enrolment and early TE experiences of SVIs?
2. What are the experiences of SVIs with regard to the social aspect of TE?
3. What are SVIs' experiences of the academic environment of TE?

In the first section, the justification for the chosen research paradigm is provided. Further, the nature and appropriateness of qualitative research as the preferred design for the study is discussed. I then talk about how the power, position, interest, and influence of the researcher in conventional research have raised specific methodological issues. I then go on to introduce an alternative to traditional research—participatory research. The second section of this chapter explains the selection of research participants, data collection techniques, data analysis, and key ethical considerations.

3.1 Research paradigm

The philosophical base of this research is founded on the critical paradigm. Research paradigms are crucial because they influence the choice of research agenda, methodology, and methods (Bryman, 2008). Hedrick (1994) refers to a research paradigm as "the philosophy or school of thought guiding the research approach" (p. 47). According to Merriam (1998), research paradigms include positivism (discovering knowledge through scientific methods), interpretivism (interpreting knowledge from participants' subjective experience), and critical theory or research (uncovering injustice and improving the lives of participants).

Critical theory became prominent after the global student uprisings and civil rights movements in the 1960s and the rise of feminism and postcolonial studies in the 1970s (Ali & Watkins, 1998; Davis, 2013). Critical theory emerged with a focus on identifying the patterns of marginalisation and promoting emancipation and transformation through research (Fuchs, 2016). Hence, the goals of critical research are: first, to raise awareness of entrenched discriminatory structures and oppressive practices within society and, second, to use this knowledge to improve society and emancipate the marginalised. Neuman (2014) states that critical theory is "a process of inquiry that goes beyond surface illusions to uncover the real structures in the material world" (p. 110). The present study seeks to uncover institutional structures, policies, and practices that impede or promote inclusion in TE.

Positivism, interpretivism, and critical theory have been utilised in disability research. Positivism assumes that the principles for conducting research in the natural sciences, such as objectivity and neutrality, could be transposed onto the social world (Rioux, 1994). Positivists view disability as a medical entity that must be researched in an objective and scientific way (Oliver, 2002). Interpretivists believe that natural science (physical world) and social research are dissimilar and must be researched differently. Interpretivism also points to a social construction of knowledge with emphasis on the meaning of a phenomenon rather than the cause (Bryman, 2008). Although positivism and interpretivism vary in approach, they are similar in terms of power relations in research. Both paradigms view the researcher as an expert and thereby exclude the researched from all aspects of the research process (Oliver, 2002). Consequently, interpretivism and positivism are considered as paradigms that underpin "the objectification and marginalisation of PWDs in research" (Ward & Flynn, 1994, p.30). Critical research, with its emancipatory and participatory (involving participants in the research process) tendencies, is the preferred paradigm for disability research according to disability scholars (Mercer, 2004; Oliver, 1992). In keeping with the goals of critical theory, the aim of this research is to provide a voice for SVIs and raise awareness of their TE experiences, and use the findings as a basis to enhance inclusion.

3.2 Research approach

According to Creswell (2014), research approaches could be characterised as qualitative, quantitative, or mixed methods. Cresswell (2014) further notes that research philosophy, design, and methods influence the selection of a research approach. Considering the paradigm, design, and methods of this study, I opted for qualitative research. For instance, qualitative research appears to be compatible with the paradigm of this study as Kincheloe and McLaren (2011) state that "qualitative research … frames its purpose in the context of critical theoretical concerns" (p. 286). Further, Patton (2002) states that qualitative research leans on reflexivity, co-construction, and multiple realities, and these beliefs appear to be consistent with critical theory.

Quantitative research is beneficial because it offers scientific credibility and validity to facts, figures, and statistical findings of measurable entities (Bernard, 2013; Punch, 2013). The qualitative approach transcends the measurable qualities to capture the subtle and immeasurable attributes of a phenomenon (Creswell & Poth, 2016; Neuman, 2014; Patten & Newhart, 2017). Therefore, qualitative research would enable us to comprehend the subtleties of the various experiences of TE students with visual impairment.

The qualitative approach also consists of open-ended questions and probes to reveal the ideas behind initial answers (Weller et al., 2018). Further, bricolage appears to influence the process of data analysis in qualitative research. Bricolage is defined by Denzin and Lincoln (2005) as a "pieced set of representations that is fitted to the specifics of a complex situation" (p. 4). As a bricoleur, the qualitative researcher uses disjointed, outlier, and multiple perspectives to construct a meaningful, rich, and coherent interpretation of data (Denzin & Lincoln, 2005).

Therefore, by using open-ended questions, probes, and bricolages, the researcher gains better insights into the diversity of the lived experience of participants. In this regard, Merriam (1998) says qualitative research is “focused on discovery, insight, and understanding from the perspective of those being studied” (p. 1).

Fossey et al. (2002) suggest that individual realities are unique, and, as such, there are multiple perspectives to an experience. Qualitative researchers therefore use participants’ responses to form quotes and themes that reflect the various perspectives (Yin, 2015). The ontological assumption of multiple realities is in contrast to quantitative research that proposes an objective and single (either true or false) reality (Creswell & Poth, 2016). In this study, I seek to highlight the different perspectives and interpretations of participants’ experiences.

3.3 Research design

3.3.1 Making the research process inclusive

Academic researchers often occupy privileged positions as experts in the process of disability research (Mercer, 2002; Oliver, 2002; Priestley et al., 2010). The position and inherent authority of researchers have given them considerable leverage to set research agendas and “control” the stages of the research process, including research ethics, data collection, analysis, and interpretation (Kichin, 2000; Oliver, 2002). The authority and methods adopted by researchers in the process of inquiry have been criticised and challenged by the researched. Oliver (2002) suggests that “disabled people and other oppressed groups will no longer be prepared to tolerate exploitative investigatory research based upon exclusionary social relations of research production” (p. 15). Kitchin (2000) also notes that the researched have long been critical about the intention, outcome, and approach to disability research and, above all, the misrepresentation of their experiences by the researcher. Prominent disability academics have also argued against the traditional methods adopted in disability research. These researchers contend that disability research has often been researcher focused and centred on the ideology, dictates, and inclination of the researcher to the detriment of the researched (Barnes, 2009; Oliver, 1992, 2002; Priestly et al., 2010; Stone & Priestly, 1996; Wamsley & Johnson, 2003; Zarb, 1992). Oliver (1992) argues that the researcher-led approach to disability research culminates in the marginalisation, subjugation, and exploitation of research participants with disability.

Contrary to traditional disability research methodologies that marginalise rather than empower persons with disabilities (PWDs), participatory research seeks to emancipate and empower the researched through the destabilisation of power relations in the research process (Bergold & Thomas, 2012; Rose, 2018). Participatory research (PR) involves building effective partnerships with the researched and actively involving them from the setting of the research agenda to the implementation of recommendations (Kemiss & McTaggart, 2005). For the researched to be actively involved in research and thus become coresearchers and coproducers of knowledge about themselves, French and Swain (1997) insist that researchers must be guided by these questions:

> 1. Does the research promote disabled people’s control over the decision-making processes, which shape their lives?
> 2. Does the research address the concerns of disabled people themselves?
> 3. Does the research support disabled people in their struggle against oppression and the removal of barriers to equal opportunities and a full participatory democracy for all? (p. 32)

There has been an emergence of participatory research, particularly action research, from the late 1990s in New Zealand (McGuirk, 2012). Participatory research methodologies have been applied to research in academic disciplines such as geography, education, ecology, and health care (Farmer et al., 2016; McGuirk, 2012; Written et al., 2000; Williams, 2007). It appears that

PR methodologies have not often been utilised for research in disability studies in New Zealand. In this study, I seek to share knowledge and power with the research participants and use PR methodology to include them in research about their experiences. In adopting a participatory methodology, I am distancing myself from the conventional ethos of research where the researched are uninvolved or passive members in the research process.

3.3.2 From emancipatory to participatory research

The discourse persists about the appropriate methodological approach for conducting disability research. Emancipatory disability research (EDR) appears to be the benchmark for disability research according to prominent disability scholars (Barnes, 2002, 2003b, 2009; Barnes & Sheldon, 2007; Mercer, 2004; Oliver, 1992, 1997, 2002; Priestly et al., 2010; Stone & Priestly, 1996; Zarb, 1992). The perceived shortcomings of traditional disability research contributed to the emergence of EDR. Mainstream disability research operated on the medical model of disability, distorted the experiences of PWDs, and gave credibility to researchers as experts, sole beneficiaries, and absolute producers of knowledge (Danieli & Woodhams, 2005). The critique of mainstream disability research is summarised by Oliver (1992) when he states that "disabled people have come to see research as a violation of their experience, as irrelevant to their needs and as failing to improve their material circumstances and quality of life" (p. 105). Mike Oliver, the revolutionary disability scholar who introduced the term emancipatory research, argues that until the social relations of research production change, emancipatory research cannot be achieved (Oliver, 2002). Transforming the social relations in research means dissolving the "stratified" relationship between the researcher and researched and giving control of the research process to PWDs.

I adopted an emancipatory paradigm for this study. However, at the outset of the study, it became increasingly problematic to situate the research in an emancipatory paradigm. This could be attributed to the ideological, practical, and ethical issues surrounding EDR. For instance, Zarb (1992) suggests that “simply increasing participation and involvement will never by itself constitute emancipatory research unless and until it is disabled people themselves who are controlling the research and deciding who should be involved and how” (p. 128). Therefore, in the strictest sense, EDR excludes researchers without disability. Further, some PWDs have argued that disability research must be conducted solely by researchers with disability (Branfield, 1998; Kitchin, 2000). It could be argued that discouraging researchers without disability from examining the experiences of PWDs is to reproduce the same form of marginalisation and exclusion perpetrated by society on PWDs (Akamanti, 2004).

Adopting an emancipatory framework for this study was also constrained by institutional (ethical) and practical issues. For example, Oliver (1992) states that the three cardinal principles of emancipatory research are gain, reciprocity, and empowerment. The principle of gain in EDR dictates that the research participants—rather than researchers—must be the principal beneficiaries of disability research. It is indisputable that the major beneficiary of this study is myself as the researcher since the aim is to achieve a doctoral degree. Similarly, in the realm of emancipatory research, participants with disability must shape the research agenda, define the research question, and co-own the research (Zarb, 1992). However, as an academic researcher, I am required to submit a proposal containing what should be researched to the university ethics committee before contacting prospective participants. It was therefore not possible for research participants to have formulated the research topic for this study. It is also impracticable to fully share ownership of the research with participants since the study leads to a doctoral degree. Oliver (1997) notes that empowerment in EDR ought not be perceived as a commodity that the researcher must transfer to participants. The role of researchers in the empowerment process is to place their skills and expertise in the hands of participants and then participants decide how to use the skills to empower themselves. Organising training workshops on data collection and interpretation is a way of providing the needed skills for participants' empowerment. In this study, I did not provide research training due to difficulty in recruiting participants for the workshop. Lastly, within an EDR framework, the mode of publicising research findings and selecting the target audience for such information is determined by PWDs and their organisations (Barnes, 2003b). Due to ethical regulations, I determine to whom and how the research outcomes should be communicated.

As mentioned, I was constrained to conduct this study within an emancipatory framework due to ideological and practical issues, and institutional (ethical) regulations. Nevertheless, I believe that in several ways, this study is emancipatory for the participants. Mercer (2002) suggests that the research agenda in EDR must be founded on the social model of disability. This research is situated in the social model because it seeks to promote inclusion by transforming the TE environment and systems instead of equipping SVIs to accommodate the TE environment. Ensuring that participants' voices were heard in this study was a step to empowerment as Berger (2016) suggests that the process of participants articulating their stories is inherently empowering. Moreover, the use of more than one data collection method in this research is in keeping with the principles of emancipatory research (Stone & Priestly, 1996).

I adopted a participatory methodology due to the challenges in conducting emancipatory research. Unlike emancipatory research, participatory research (PR) permits varying degrees of participants' participation and control of the research process (Probst et al., 2003; Zarb, 1992). By involving participants in the research process, participatory research promotes the self-confidence of participants (Titterton & Smart, 2013). Participation also allows participants to critically examine and analyse their "reality" and then begin the collective process of improving their experiences (Etmanski & Pant, 2007). The utilisation of participatory research is supported by Barnes (2003b) when he asserts that some studies that did not fall in EDR have yielded meaningful outcomes for PWDs. Research that is beneficial, valuable, and meaningful to PWDs are inquiries that prioritise the interest of participants (Oliver, 2002). PR welcomes participants' input in the research process and empowers them as well (Titterton & Smart, 2013) I was unable to conduct full participatory research that is actively involving participants in every aspect of the research process. For example, given their busy schedules, I was unable to conduct a collaborative data analysis with participants. Participatory research can occur in various forms and levels of participation (Mikkelsen, 1995; Probst et al., 2003). Thus, limiting the participatory ethos of this study to data collection does not invalidate the essence of collaboration in this study.

3.4 Selection of research participants

Six current and graduated tertiary SVIs, two accessibility advisors, and an official of Blind Low Vision New Zealand (BLVNZ), formerly the Blind Foundation, participated in this study.

Table 1

Profile of SVIs

PSEUDONYM	TYPE OF TE	GRADUATED OR CURRENT STUDENT
Gloria	University	Graduated 3 months prior to data collection
Diana	Polytechnic	Current (Undergraduate)
Alex[Z]	University	Current (Postgraduate)
John	University	Graduated 3 months prior to data collection
Maria[Z]	University	Current (Undergraduate)
Ben[Z]	University	Current (Undergraduate)

[Z] **Attend the same TE institution as the accessibility advisors in this study**

The pseudonyms of the accessibility advisors are Jake and Francis whereas Jane represents the official of the BLVNZ. The Disability Support services in Jake's and Francis's institution is referred to as Accessibility Services (AS). The role of the accessibility advisor is to ascertain the support needs of SWDs and provide the required support that would enable SWDs to succeed in TE. The BLVNZ focuses on supporting and advocating for the inclusion of all persons with visual impairment including SVIs in New Zealand. Therefore, the inclusion of accessibility advisors and an official of the BLVNZ in this study provides a wider perspective into SVIs' TE inclusion.

Participants were recruited through purposive sampling. Purposive sampling is a nonprobability sampling method that involves selecting research participants based on characteristics that better assist the researcher in achieving the objectives of the research (Patton, 2002). Purposive sampling is also a flexible sampling method that does not require any theoretical assumptions or a specific number of research participants (Patton, 2002). The selection of participants was made with recourse to ethical regulations. Bryman and Bell (2007) indicate that the privacy of potential respondents must be ensured in the recruitment process. Thus, in an ethical context, it was not appropriate to contact current and graduated students with visual impairments directly. At the commencement of the study, I contacted three institutions (two TE institutions and BLVNZ) to recruit participants. The institutions were requested to send an email on my behalf, seeking potential respondents to participate in the study. The email (see Appendices section) contained a brief overview of the study, including its purpose and significance and the participatory nature of the study. Initially, I sought to select eight current and graduated SVIs. The first five current SVIs from the TE institutions and first three TE graduates from the BLVNZ who accepted the invitation to participate were to be selected. However, after one month, only four SVIs responded. There was no indication that other SVIs would respond to the invitation, and, therefore, I had to resort to alternative means of contacting participants. At that point, participants were requested to contact their friends with visual impairment who would like to participate. Three SVIs who were friends of a participant agreed to participate in the study.

The seven current and graduated SVIs were formally invited to participate by email, which consisted of an informed consent form and a more detailed information letter (see Appendices section) about the study. The participants were to submit the duly signed consent form via email. Upon interaction with one potential participant, she indicated that, due to sight loss, her child had to print the consent form, help her sign, scan, and email the form to me. The process alluded to by the participant seemed laborious. I recognised that impairment could impede the return of forms in a conventional way, and, hence, I needed to consider alternatives. Consequently, I gave potential participants the alternative of sending an email confirming their intention to participate. I suggested that the email should read like this: “I...................accept the conditions as outlined in the consent form and thereby agree to participate in the research”. Six SVIs submitted the signed consent forms and confirmatory emails and were given further details about the research. Two accessibility advisors and an official of the BLVNZ were also sent an informed consent form and information letter. Subsequently, they submitted the duly signed consent forms to the researcher.

3.5 Building trust in disability research relationships

The absence of trust may endanger the realisation of the intent of research (Mastroianni, 2008) and, according to Ezezika (2014), trust is the basis for fruitful research. Hence, one of the main aspects of ethical regulations is to develop trust in research by actively encouraging transparency and accountability (Baier, 2004). I have outlined the process of informed consent in greater detail in the Appendices section. The building of trust is also relevant as researchers without disability have been viewed with suspicion because of the potential exploitation and misrepresentation of PWDs’ experiences in research (Kitchin, 2000). Stone and Priestly (1996) state that one means of counteracting the mistrust of PWDs is to adapt research methodologies that involve participants with disability in the research process. The participatory nature of this research, including the focus group discussion and coconstructing of focus group questions, appears to have promoted trust and the self-worth of participants. This is evident in the effective cooperation I had from the participants.

With the support of my supervisors, I worked as a volunteer at the BLVNZ. Berger (2016) notes that PWDs are receptive to researchers who have a personal association with the disability community. Therefore, one of my intentions for becoming a volunteer was to gain credibility as an ally of PWDs. Further, my motivation for joining the BLVNZ was to become accustomed to the disability culture. As a volunteer, I engaged and interacted with several persons with visual impairment. Through interaction, I learnt certain values that became useful during the data collection process. For instance, I found that during conversations, it is important for people to identify themselves by mentioning their names and anyone else joining must do the same. It is also essential to verbalise actions and avoid gesticulations when communicating with persons with visual impairment.

Krueger and Casey (2015) mention that some participants in focus groups require a comfortable and “trusting” environment in order to express their opinions. Establishing a good rapport with participants appears to be one of the ways of creating a trusting climate in focus groups. At the outset of the focus group discussion, I introduced myself and shared aspects of my background and what led me to the investigation. The participants were also given the opportunity to introduce themselves individually and share their backgrounds and interests. These activities were intended to create a safe and relaxed atmosphere and enhance a sense of trust among group members. I adopted qualities commonly associated with trust, such as respectfulness, meekness, and affability when engaging with participants. For instance, language construction is an important element of disability culture, and, in order to build trust, I used language that demonstrates an understanding of and a respect for their culture. Instead of referring to participants as blind or low vision, I referred to them as persons with visual impairment.

Referring to participants as persons with visual impairment highlights their humanity and dignity rather than disability.

3.6 Data collection

3.6.1 Choosing the focus group as a data collection method

The focus group is a data collection method that utilises group discussion to generate data (Krueger & Casey, 2015). Focus groups seem to have gained prominence with the rise of participatory research (Morgan, 2002). I decided to use focus groups as a data collection method because of its participatory ethos. In focus groups, the voices of the marginalised resonate through the exchange of ideas, which Kitzinger (1994) describes as supporting and opposing discourse between participants. In essence, it is this discourse that produces empirical information and not the discussion between the researcher and researched (Bagnoli & Clark, 2010; Johnson, 1996). Kitzinger (1994) further states that "…our intentions were to encourage interaction between research participants as much as possible. When group dynamics worked well the co-participants acted as co-researchers … [as they discussed experiences] … which were both complementary (such as sharing common experiences) and argumentative (questioning, challenging, and disagreeing with each other)" (p. 107). Qualitative researchers have emphasised that the peripheral role of the researcher in the focus group distinguishes it from other data collection methods, such as one-on-one interviews and group interviews (Parker & Tritter, 2006). In interviews, the researcher plays a central role as an investigator whose duty is to pose questions, expect feedback, and substantially control the data collection process (Smithson, 2000).

Madriz (2003) also argues that focus group discussions promote the redistribution of power in the research process and consequently empower participants to take control of the research as they speak of their lived experiences. Oliver (1992) advocates that for participation and emancipation to be realised, researchers "must throw off the shackles of methodological individualism with its inadequate and abstracted view of the individual" (p. 113). It appears that focus groups resonate with Oliver's (1992) assertion of casting away individualistic research methods because the process of creating empirical information through group engagement reflects a collectivistic approach to qualitative inquiry (Bagnoli & Clark, 2010). In this study, I extended the frontiers of the participatory ethos of focus groups by collaborating with research participants to coconstruct the questions for discussion.

Apart from its participatory nature, focus groups have other inherent characteristics that are of importance to this study. Focus groups are known to be a reliable, valid, faster, and cost-effective way of data collection among multiple participants (Krueger & Casey, 2015; Parker & Tritter, 2006). Further, focus groups enhance the sense of togetherness among participants and, in effect, participants feel secure to express their opinions (Krueger & Cassey, 2015).

3.6.2 Conducting the focus group discussion

Originally, I planned to conduct a face-to-face focus group with participants. However, I was prevented from conducting the in-person discussion because participants were geographically dispersed. For example, one participant lived about 1,300 kilometres away from me. Therefore, I had to resort to a mediated focus group. A mediated focus group involves discussions that occur through a technological medium, such as computers, telephones, or hand-held gadgets (Tracy, 2013). I proposed to use telephone or Skype as the medium of discussion due to my acquaintance with the two media. In participatory research, the researcher must include participants' input in the research process. Consequently, I sought the views of participants about their preferred medium, and they recommended Zoom conferencing. Eventually, I adopted Zoom conferencing as the medium of the focus group.

The participatory nature of this study was also manifested in the formulation of focus group questions. As coresearchers, the participants were requested to either identify areas of their experience that the research should focus on or submit potential questions for discussion. By requesting participants to provide this information, I was heeding French and Swain’s (1997) advice for researchers to embark on research that “address the concerns of disabled people themselves” (p. 32). I wanted the questions to focus on issues that were relevant to participants’ TE experiences. Some participants submitted potential focus group questions whereas others stated the aspects of their experience on which the research should focus. For instance, the following questions were submitted via email by Ben for discussion:

1. Do you find visual impairment affects your ability to socialise?
2. Is this a direct issue of visual impairment—mobility, etcetera—or, indirect, potential stigma/self-stigma?
3. Do you find enough/appropriate support on campus? What areas of support do you find most valuable as a student?
4. Why do you find these support services so valuable? Could you define any difficulties specific to your condition?

The coresearchers’ potential questions and areas of interest were important as they enabled me to develop a topic list and subsequently formulate the focus group questions. The final focus group questions were presented to participants a week prior to the focus group discussion. The essence of sending the questions prior to the meeting was to enable them to ponder over the questions and provide thoughtful answers.

According to Johnson and Christensen (2004) and Morgan (1997), a viable focus group must include between six and twelve participants. Johnson and Christensen (2004) suggest that researchers should over recruit by at most 25% because not all participants may be present on the day of the focus group discussion. In this study, the number of participants who accepted an invitation to participate in the focus group were six. On the day of the focus group, all six participants were present. Morgan (2002) also indicates that the composition of a focus group must be participants of similar background, and variance in age and sex must not be a hindrance to free expression. The participants in this study consisted of persons with visual impairment. From different locations, the researcher and the participants were connected to each other via Zoom conferencing. The discussion began with greetings, an exchange of pleasantries, and members introducing themselves. Afterwards, participants were informed about the purpose of the meeting. As a participatory study, I attempted to coconstruct the guidelines for discussion with participants. I presented the guidelines to participants and requested participants to also suggest group discussion procedures. The participants mentioned that they concurred with my discussion procedures and therefore the guidelines were accepted unanimously. The focus group proceeded with questions and discussion with each member mentioning their names before making a contribution.

3.6.3 Semistructured interviews

My original intent was to conduct a single focus group discussion among current and graduated SVIs. However, the two hours allocated for the focus group discussion was not enough to completely discuss the questions. It became increasingly difficult to agree upon a time for the next group meeting as participants had different commitments. Due to time constraints, I decided to conduct a synchronous semistructured interview with each student. Synchronous methods of interviews are mediated interviews where the researcher and participant meet and talk together at the same time (Ayling & Mewse, 2009). Five interviews were held via telephone and one interview was conducted through Zoom conferencing. Two accessibility officers and an official of BLVNZ were also interviewed.

3.7 Ensuring the credibility of research

Credibility describes the quality, originality, and veracity of qualitative data and research findings from the perspective of researchers, participants, and readers (Lincoln & Guba, 1985). Tracy (2010) indicates that the credibility criteria involve the confidence that readers ascribe to the truth of research data and findings. It appears that credibility is the most essential benchmark for establishing trustworthiness in qualitative research. Credibility could be equated to reliability, consistency, and internal validity in quantitative research (Lincoln & Guba, 1985). According to Tracy and Hinrichs (2017), credibility can be realised through "thick description, crystallization of data, evidence of multivocality (providing opportunities for voice from a range of stakeholders), and engaging in member reflections with participants" (p. 6). In this present research, credibility was achieved through crystallisation or triangulation, multivocality, and member checking.

Triangulation involves the use of varying data collection methods, multiple sampling methods, multiple researchers, and multiple theoretical perspectives to understand a phenomenon (Cohen et al., 2007; Patton, 1999). Qualitative researchers believe that no single method ever adequately describes a phenomenon and therefore utilise multiple data sources, and multiple researchers and theories to give more insight into findings (Patton, 1999). Researchers such as Ellingson (2009), Richardson and St. Pierre (2005), and Tracy and Hinrichs (2017) refer to triangulation as crystallisation. They claim that crystallisation is compatible with nonpositivistic paradigms because it rejects claims of objectivity and the assumption of a single and universal truth associated with triangulation.

In this study, I used focus group and semistructured interviews to collect data from current and graduated students with visual impairments. The focus group discussion ascertained the general opinions and views about participants' TE experiences, and the semistructured interviews were used to explore their unique experiences. The combination of a focus group discussion and semistructured interviews contributed to a better and broader understanding of their experiences. Another source of triangulation was the incorporation of multiple voices and perspectives in the collection of data and analysis. Apart from current and graduated SVIs, I sought the views of accessibility officers and an official of BLVNZ. Tracy and Hinrichs (2017) describe the triangulation of data through different participants as multivocality and encourage researchers to incorporate different voices in data collection and analysis. The patterns of consistency and discrepancy from different data sources contributed to the credibility of the research findings of this study. Member checking offers participants the opportunity to corroborate the accuracy of information they provide during data collection (Cohen et al., 2007). Transcripts of the focus group discussion and interviews were sent to participants. None of the participants disapproved of any information in the transcripts.

3.8 Data analysis

Braun and Clarke’s (2012) method of thematic analysis (TA) was utilised for data analysis in this study. The stages of Braun and Clarke’s (2012) TA are becoming familiar with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report. According to Braun et al (2016) and King (2004), thematic analysis provides quality, rich, comprehensive, and multifaceted accounts of data while maintaining theoretical flexibility. Hence, applying TA to this study provides a rich description of the TE experiences of students. TA also produces a clear and organised account of data because it ensures that research data is systematically handled (Braun & Clarke, 2013).

Analysis began with the transcription of focus group and interview data. Transcription was the first step in becoming conversant with the data. As recommended by Braun and Clarke (2013), I read and re-read through each transcript (after transcription) to become familiar with all aspects of the data. Reading the whole data also enabled me to observe the preliminary patterns of ideas. The second stage of data analysis was to assign initial codes to the data. During coding, I highlighted sections of the text and assigned words or phrases that captured the essence, salience, or description of the content of the text, as suggested by Saldaña (2009). I highlighted texts and wrote codes in the comment section of Microsoft word.

The next stage after coding was to search for themes. Codes recognise interesting details about the text while themes are extensive and determine the meaning of the code and data (Tracy, 2013). I developed a list of codes that appeared to relate to the research questions and organised similar codes into a set. Subsequently, the set was labelled as initial themes and reflected the aggregate meaning of the codes. For instance, selective about friends, start conversation, cane attracts peers to me, explain VI, and other similar codes were organised into a provisional theme referred to as “making friends”. Braun and Clarke (2012, 2013) state that visual displays are useful for organising codes into themes. I used tables that enabled me identify the patterns among codes while analysing large amounts of data.

The next phase of data analysis was to refine the initial themes. I read through the coded data of a corresponding theme to explore whether they supported a particular theme. Further, if the coded data aligned with the theme, I read the individual themes in relation to the whole data. By reading the theme in relation to extracts and whole data, I was able to ascertain the differences and similarities between themes. I noticed that some of the themes overlapped, and such themes were merged. The initial themes were continuously reviewed, modified, and refined until coded extracts and themes told a consistent story. Subsequently, the themes were named. The names of themes reflect the story the themes tell and their relation to the aims of the study.

3.9 Key ethical considerations

Research involving human participants must be conducted in an ethical manner. As this study involved human participants, I reviewed the University of Waikato Ethical Conduct in Human

Research and Related Activities Regulations. From the regulations, it is the researcher's responsibility to:

1) Ensure that participants provide informed consent before commencing the research—The principle of informed consent, according to Vanclay (2013), specifies that participation in research should be voluntary, and the decision to participate should be based on detailed explanation of the research and consequences of participation. I sent an information letter and consent form to potential participants. The information letter contained relevant information about the study, including its purpose and significance and the responsibility of participants. Participants read the information letter, and signed and returned the consent form prior to data collection.

2) Safeguard identity of participants—Ethical practices, including confidentiality and anonymity, safeguard the privacy of participants (Bos, 2020). To ensure that participants are not easily identified (anonymity), neither their actual names nor specific TE institutions are included in this thesis. Also, raw and identifiable data have been stored in a way that would be inaccessible to any other party. Further, although the findings of the study would be shared in several ways, such as by publication and conferences, I will ensure that the identity of participants is protected.

3) Minimise the likelihood of harm to participants—A basic ethical principle is that participants should not suffer any harm owing to their participation in research (Vanclay, 2013). I was keen to uphold participants' dignity and minimise as much as possible the risk of harm. As negative interaction may cause psychological distress, I decided to become a volunteer at BLVNZ in order to become familiar with the disability etiquette. I incorporated some of such etiquette, such as verbalising actions and avoiding gesticulations during data collection.

4) Make participants know about their right to withdraw from the study—In the information letter, participants were informed that participation in the study was voluntary. They were also informed that they could withdraw from the research until data analysis, and they would not be required to provide reasons to do so.

5) Seek approval from the Ethics Committee—Having fulfilled the ethical regulations, I was granted approval from the University of Waikato Human Research Ethics Committee to conduct the research.

3.10 Conclusion

This chapter discussed the research principles that shaped this study. Justification for choosing qualitative research and critical theory as the research approach and paradigm, respectively, was provided. At the outset of the study, participatory research was chosen for the research design due to the constraints of conducting emancipatory research. The participatory nature of the study was manifested in the formulation of the focus group questions and the focus group discussions. The second section of this chapter outlined the methods for selecting participants, collecting and analysing data, and ethical considerations. The method of selecting participants was explained. Data was collected using focus group and semistructured interviews and analysed by means of thematic analysis. Credibility was enhanced through crystallisation, multivocality, and member checking. Ethical conduct was also enhanced through informed consent, confidentiality, anonymity, minimising the risk of harm, and ethical approval from the University of Waikato.

CHAPTER 4

FINDINGS OF THE STUDY

The aim of this research is to explore SVIs' TE experiences. Data was collected from participants via a focus group discussion and semi-structured interviews and analysed by thematic analysis. Three themes emerged after continuous revision, modification, and refinement of the initial themes. These themes are transition experiences, navigating the social environment, and learning experiences. The findings of this study are reported according to these themes.

4.1 Theme 1: Transitional experience

It was not my intention to explore participants' transition into tertiary education (TE). I envisaged that exploring transition experiences could change the focus of the study as the subject is usually investigated independently. However, during the codevelopment of questions, some participants requested the inclusion of such experiences in the focus group discussion. Therefore, the theme "transitional experiences" was "framed" to depict participants' perspectives on their transition. The theme explores aspects of the "journey" to TE and early experiences of campus life. The reasons for enrolling, the critical period of enrolment decision-making, and prior expectations of participants are highlighted in the pre-enrolment period. Early TE experiences consist of participants' views about their adjustment to TE, the physical environment, and engagement with accessibility services (AS).

When asked about their reasons for enrolling, three participants said that they pursued TE to study for a specific career. For Ben and John, that motivation (studying for a career) was inextricably linked to their perceptions of disability. Ben believed that visual impairment (VI) would not hinder his work as a psychologist. Further, he spoke about the perceived benefit of disability to his desired career. He stated that "psychology practice might be a bonus because at least my patients or clients are less likely to think that I am judging them, particularly in a visual way". John's motivation to study for a career was also impairment related. With the requisite knowledge in biomedicine, he hoped to find a cure for deteriorating VI. Maria also entered TE to study for a career. However, her desire to become a lawyer was not associated with the perception of disability but self-belief in ability. She said that "I think law is a competitive industry, but I think I could compete with the best". Another reason for coming to TE was to enhance career prospects. Gloria believed that a TE would provide opportunities for a good career, as she explained: "if you want a good job you have to get a degree". Additionally, she stated that "my mother made it very clear that it was important to her. And I thought it was important too and society expected it of me".

Participants' decisions to pursue TE were not limited to the reasons for enrolling but also included the motives for selecting a course of study. Three participants selected an academic programme based on interest. Ben was interested in psychology but also had an impairment-related motive for choosing the course. He said, "basically, as a student with visual impairment, there is little or if any hindrance studying the course". Maria had an interest in the law course and was convinced that, like her peers, she was capable of succeeding. She said that, "I believe am equally competent based on my ability; as an intellectual discipline, like my peers, I am capable of doing it". Gloria chose health and environmental science based on interest. She provided an insight into how she arrived at this decision:

> When I was 18 years old from high school, I went straight to a degree with my university and studied physiotherapy. I chose physiotherapy because I believed that was the only clinical course I could pursue as a visually impaired person. Moreover, it was recommended as suitable for visually impaired people when I spoke to others. Although I was accepted into three programmes, I chose physiotherapy over speech and language because I perceived that the former involved touching with hands and the latter requires

> the practitioner to visually observe how the client is talking. But, a year and a half into the degree … I realised that this degree was not for me. It was not what I wanted for my future, so I stopped. I went to study what I actually wanted; not just that, this is what blind people study.

Academic interest was not always the major factor for selecting a course of study. Diana pointed out that business administration did not align with her preferred future career. However, she chose business administration to "experience" the course and acquire knowledge in computer skills.

Another issue arising from participants' pre-TE experiences could be referred to as the critical period. Three participants spoke about the complex circumstances surrounding their decision to enrol. The decision to enrol, according to these participants, was made at critical periods in their lives. For example, John decided to pursue TE as his eyesight deteriorated "quickly". Amid the difficulties, it became apparent that his prospects were better if he pursued TE:

> Basically, because I have a degenerative condition, my eyesight got worse. It reached a point where my eyesight got worse quite suddenly when I was 19, and, at the time, I was working as a make-up artist. I had lived in Australia for a while, and I was just having fun time as you did when you are nineteen. I didn't plan to go to university at all, but then I began losing my eyesight, and I was very depressed for the entire year. During that year, I talked to a lot of people, and I did a bit of research and came to the conclusion that nobody is going to do anything about my situation. I decided to make the efforts by myself, and that is why I chose to go to university.

Re-enrolment into TE was not a prime concern for Ben as his eyesight deteriorated. He began to view TE as a possibility through counselling from Blind Low Vision New Zealand (BLVNZ). Ben still had doubts about his capability to pursue TE as he said: "I know what I want to study, but I don’t know if I can”. Through further counselling, he “accepted the challenge” to enrol in TE. Maria was determined to pursue TE, and distance could not hinder her academic ambition. Having taken a break from education after high school, she decided to enrol in TE. She had to relocate with her family to the city where the TE institution was situated. Maria said that, “seriously, I sold my house and bought another one down here, so you can’t fail if you do that”.

In the course of exploring participants’ pre-TE experiences, they were requested to describe their prior expectations about TE. The request was a follow-up to the question: “How would you describe your transition from high school to TE?” These expectations differed from the basic anticipation of attaining an educational qualification. Gloria spoke about how her expectations had evolved from anticipation based on lack of awareness to awareness of the TE system:

> I have to say my expectations were massively different from when I came in as a fresh-faced 18-year-old. I believed it was going to be really easy, like high school, where you would just sit in a lecture, absorb, and less study was required. However, I had a really big shock in Semester 2 when we were into materials that I had never seen. I truncated my course and came back four years later to do this degree, and I was aware of the system and, consequently, my grades improved. I think it is a little bit of life experience but also general age.

Maria neither expressed apprehension nor expectation (apart from earning a degree) about TE. She said that “my only expectation was to get a law degree”. John’s expectation about TE could be described as “guarded”. Although John believed that TE would be an enabling environment to a certain extent, he was ready for any eventuality, noting, “I expected that they would help in some way, but I didn’t really have specific expectations. I was of the mindset that even if they didn't help me at all, I would just have found some way to help myself". Alex commenced TE with the expectation that his institution would ensure easy access to academic information. He said that, "I expected the TE to be accessible, at least in terms of basic academic needs". His expectation was unmet, and the disparity between expectation and reality became a source of frustration. In particular, he was appalled by the "settings" on the library computers that hindered him from accessing information. As a first-year student adapting to the TE system, Alex described such experience as "very hurting". Difficulty with accessing information on campus remained throughout his studies and will also be discussed in the theme, "learning experiences". Ben's expectation about TE was driven by a degree of anxiety. He described his expectation as pessimistic and anticipated that TE would be challenging due to degenerative eyesight. He stated that, "I was very worried about the possibility of losing my entire vision and the effect it would have". On commencement, he found that the TE "system" was not as complicated as envisaged. He said that "I was quite surprised that it wasn't so much difficult although it was quite taxing on my remaining vision".

As participants were discussing their transition experience, the issue of adaptation to the TE system emerged. Adaptation to the student identity and the TE environment forms part of their early TE experiences. Diana rejected the notion that she was a person with VI while in high school by saying, "I just wanted to be a sighted kid". Denial of disability became a source of frustration as she said that, "I have become older and my sight hasn't become better". The early period of TE was a time of accepting that she is a person with disability (PWD) or, as she said, "accepting who I am and what my limits are". Diana's immediate priority in TE was to become familiar with the "physical" environment. She wanted to become conversant with the road crossing, lecture theatres, and navigation of the campus. Adjusting to the learning environment was not a foremost priority. She said that, "I foresaw that the other matters related to learning will become better as the semester progressed". Maria stated that she requested a "guide" because a major difficulty when commencing TE was mobility—that is, moving freely and easily on campus. At the outset, participants reported that they depended on peers or accessibility advisors to walk to the lecture theatres. They said that they became familiar with the layout of campuses by memorising routes and the positions of various facilities. For instance, John said that, “I remember when I first started, I had to rely on one of the ladies from the disability office or a friend to show me where my classroom was, and, at all cost, I had to remember the way”.

Participants stated that the white cane was an important aid for navigating the campus. Alex mentioned that peers stared at him when he used the white cane. He said that “my vision impairment is not a problem; people want to stare at me, but it doesn’t bother me”. John stated that walking with the cane made navigation less difficult. Due to anxiety associated with its use, he seldom walked with the cane. Anxiety was related to the perception of being “different”. He stated that, “it is like just not wanting to seem inferior or different or incapable or disabled basically”. Diana said that she was required to use the white cane but did not often move around with it. To avoid anxiety, Diana said that she visited a “new class” before the “actual class”. Gloria intermittently used the cane but noted that she “pre-plans” to locate a class, especially if it is new. John always used the cane when walking and stated that he always uses a specific path to his destination.

Three participants expressed concerns about the accessibility of the physical environment. Diana said that walking through the “big hub” was “quite chaotic” because of the “display of chairs, tables, and cafes”. Gloria stated that the layout of some classes was not logical. By illogical layout, she meant that the classroom “addresses” were not arranged sequentially. She said that, “if you wanted room WG and think WH is the next room, you might actually have to walk for ten minutes”. Alex believed that the physical environment in his institution could be improved. He was particularly unimpressed by the lack of tactile tiles. He explained that tactile tiles are the yellow tiles in front of pedestrian crossings. He stated that:

> I don’t think it is accessible as it could be. There are so many stairs over there, and all the ramps are confusing. Things are just not organised, and that made it stressful at times. For example, they didn’t have the tactile tiles. They didn’t have the tactile tiles on the stairs. Therefore, it was quite difficult navigating the stairs at times. Moreover, when you are going for lectures, you have to walk up and down all these stairs, and it is not easy unless you know your destination very well. I think it is not too bad but definitely could be improved as well.

Jake, an accessibility advisor (from the same institution as Alex), disclosed that AS had received reports about difficulty with navigating the campus. He said that AS was implementing measures to improve the physical environment.

Another aspect of participants’ early TE experience relates to SVIs’ engagement with AS. Commenting on the role of AS, Francis, an AS advisor, said that the centre strove to support the needs of SWDs by providing an inclusive and equitable environment. According to Jake, Disability Services was renamed Accessibility Services to reflect the institution’s objective of “including” all students. He also said that the renaming was to reduce the stigma associated with disability:

> I think there was a lot of stigma with the name, “disability service”. I have spoken to students who have come in to use the service and indicated that they don’t have a disability. Obviously, their definition of disability didn’t match the support they were receiving. We have heard from a few students who assume that the services they receive would be recorded in their academic transcript. Some students assume that using our

> services may make them easily traceable by the TE. We are trying to dispel these assumptions.

Participants' understanding of disability and inclusion, and their knowledge of inclusive policies were explored as part of SVIs' engagement with AS. Accessibility advisors' definitions of disability were consistent with the perspectives of other participants, with the exception of John, Gloria, and Jane (from BLVNZ). For example, Francis stated that, "disability is never the person. It is always the environment which is disabling". Diana said that, "it is society's barriers that create disability". Gloria and Jane suggested that disability emanated from a combination of factors other than the social. For example, Jane said that, "disability is a social problem. It could also result from a medical condition". John was not certain about the definition of disability. He said, "some people think about it as a lack or deficit of ability or doing things differently". John's uncertainty was also evident when the concept of disability was further probed.

> Researcher: What do you consider as the association between impairment and disability?
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> John: I don't see any difference between impairment and disability. It is almost the same.
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> Gloria: Impairment is something a person has, such as a vision impairment and hearing impairment, whereas a disability is where this impairment interacts with barriers in the environment. In that sense, you become disabled, and the world is inaccessible to you.
>
> John: I think Gloria explained it better than I did.

The accessibility advisors' and Jane's views about inclusion differed from the SVIs' views. The SVIs suggested that inclusion is limited to PWDs. As John said, "inclusion involves putting in place appropriate structures to help SWDs overcome barriers in their educational journey". Jane, Francis, and Jake asserted that inclusion transcends disability. For example, Jane said that, "inclusion affects everybody. Inclusion goes beyond disability and promotes the effective participation of various age groups, ethnicity, … among others".

In terms of policy, Jake noted that accessibility advisors must endeavour to be more conversant with existing inclusive policies and legislation. Francis said that his institution is a member of the National Post-Secondary Education Network Incorporated (ACHIEVE). Therefore, the AS is guided by the ACHIEVE policy. He further mentioned that the ACHIEVE policy has brought consistency in support provision across TE institutions in New Zealand. The SVIs stated that they had no knowledge about inclusive policies and legislation. Alex believed that the requisite knowledge about inclusive policies would be empowering to students with disability (SWDs). He argued that the more insight SWDs have about these policies, "the better it will be to challenge the discrimination against us". Similarly, Jane was concerned about SWDs' lack of knowledge about inclusive education policies and emphasised that lack of awareness could stifle advocacy. She stated that:

> Firstly, these policies are not enough. Secondly, the people with blind and low vision who engage in TE education are not necessarily made aware of what these policies are. Once they are not aware, then they wouldn't know their rights and obligation. Disabled people start advocating early in life, but, if they are not aware of a policy, they can't advocate for their rights. I think the intentions are good, but I think the policies don't go far enough in students' engagement in advocacy.

In response to the question about how SVIs become aware of the AS, Francis said that the centre does not have the mechanisms to identify prospective students. Moreover, he said that SWDs were those initiating contact or approaching the centre. This method of contacting AS was corroborated by Maria (from the same institution as Francis). During the first year, she assumed that there would be a centre for providing academic support to SWDs and took the initiative to search for AS. Jake disclosed that the inability to contact prospective students beforehand led to delays in the provision of support. Some SWDs told Jake that they would have been more comfortable in TE had they received support earlier. Jake explained that AS endeavours to remedy the situation by linking enrolments to the centre. He stated that "we are quite hopeful that very soon, when new students enrol, we will be notified and then will contact them". John and Gloria described the AS in their institution as being proactive because they were contacted by accessibility advisors prior to enrolling. Gloria said that:

> I eventually studied at my TE, but they have got a really good process in the beginning. If you have medical condition or access needs, they are really proactive. Prior to my first day at TE, they had assigned me note takers and worked with me around the Workbridge funding application. So, there was a lot of assistance. I knew some other universities were much less supportive based on friends and their feedback.

SVIs' initial interaction with AS was also discussed as part of their early TE experience. In his first meeting with AS, John stated that accessibility advisors inquired of the support that best suited his academic needs. He was unaware of suitable support as he said that, "unfortunately, I was studying with low vision for the first time and, as such, didn't know what I needed". Ben concurred with Alex by saying, "we don't know what makes TE inclusive; as we adapt to VI, we will be learning more, then inform AS". Jane (from BLVNZ) contended that the "independent nature" of TE made it difficult for SVIs to know their needs. She explained that in high school, there were resource persons specialised in visual impairment, teacher aides, support, and advocacy for students. However, she argued that in TE, the onus is on the learner to know their needs and express them.

Jake referred to the process of identifying the requisite support essential for SWDs' inclusion as "needs assessment". According to Francis, most SWDs receive support from high school. He said that AS often relied on the support that "worked for them" in high school as a guide in the assessment. Gloria (from a different institution to Jake and Francis) said that at the outset, her academic-related needs were contained in an accommodation memorandum. Subsequently, she had to ensure that the accommodation memorandum was updated in order to receive support. Jake also said that students must submit medical documentation about disability in order to register with AS. He further stated that students contacting AS without documentation are advised about the avenues for medical assessment. Francis said that support offered to SWDs is confidential, and students are required to sign a confidentiality agreement as a prerequisite for registration. By signing the document, he stated that AS was given permission to discuss issues related to students' inclusivity with relevant staff.

Five participants (three from the same institution) received support from the AS in their respective institutions. According to Diana, her institution did not have a functional AS and therefore she had to "navigate" the first year and the TE journey independently. Francis said that AS provided two types of support, that is, "note-taking and alternative arrangement for text and exams". These supports are discussed in greater detail in the theme "learning experiences" as they pertain to the first year and entire period of TE.

Participants commended accessibility advisors for their desire to assist students. Nevertheless, they suggested that advisors do not have the requisite expertise in the field of VI and, hence, may provide support that is not appropriate for them. Maria's statement below reflects the sentiments of the other participants:

> I absolutely concur with the other participants. The disability spectrum has become so wide, diverse, and divergent that you have well-meaning people who don't have the

> skill set that will be applicable to each field. They will give you a note taker and won't give you a guide. For example, one of the biggest challenges on commencing TE was that I was not familiar with campus and, as such, I needed a guide. They refused to give me a guide and, instead, I was given a note taker. I did not need a note taker because I could write my notes. I had to find some alternative methods to navigate around campus. Now I have made friends, and they help me move around, but, in the beginning, it was the real lack of support. Some of the support at TE is not necessarily tailored to your needs. They are fixed.

Jake mentioned that although the AS's mandate is to provide academic support, the centre may provide nonacademic support when necessary:

> Certainly, if a student asked, we would see what we could do to help. We certainly wouldn't turn anybody down. Our role is very much focussed on them studying here at TE. Therefore, we do not offer a wide range of social support to students. Certainly, if somebody came to us with, for instance, an accommodation issue, we would look at ways to assist them. The assistance could be in the form of referring the student to the appropriate office. I mean we have offered assistance in terms of tutoring. We had a student who needed academic support. Fortunately, the note taker was doing a master's degree in the student's field of study. Therefore, the note taker helped the student to some extent by offering additional tuition. This is usually an isolated case because we would often refer such students to student learning. We usually utilise other services in the TE.

4.2 Theme 2: Navigating the social environment

There seems to be an overemphasis on research about the academic experiences of SWDs in TE to the detriment of a focus on other aspects of campus life. This theme explores the factors influencing participants' social experiences in TE. Information concerning participants' social experiences were mainly derived from the focus group question (or follow-up to this question): To what extent do your experiences in TE education match your views on inclusive education?

This aspect of the findings begins by exploring the factors that were identified as having an unfavourable effect on the social lives of participants. Gloria's social life is indicative of the social challenges encountered by participants on campus. She described her present TE study as an improvement over her previous TE by stating that "I came back four years later … and was aware of the system and consequently my grades improved". In spite of the improvements made in her academic study, Gloria's negative social experiences, particularly barriers to friendship, remained unchanged. Gloria revealed that she had "only one friend" in her current and previous TE institutions. The lack of friends and social engagement resulted in isolation. Further, loneliness affected Gloria's wellbeing. She said:

> I spent a lot of the time alone, and, because of that, I used to have panic attacks regularly. Depression and anxiety had the better of me for most of my life during that period. It was really hard to be optimistic.

Participants outlined the possible causes of an unfavourable social experience. A negative social experience was associated with perceived misconception of disability, effect of visual impairment (VI), large class size, lack of exposure to persons with disability, and deprioritising social life. Most participants did not appear "conventionally blind" (that is, VI was not apparently noticed by their appearance). Consequently, people presumed that participants had perfect eyesight. Gloria gave credence to the notion of "unnoticeable" visual impairment by stating that "my mother forgets that I am blind … sometimes, she tells me to clean, and I have to remind her that I have no central vision". In the TE institution, the perceived misconception of disability by peers was related to the "effect" of VI. Gloria described the effect of VI, saying, "due to Stargardt's, I have difficulty recognising faces". Due to her difficulty in identifying faces and the corresponding social behaviour of her peers, Gloria suggested that her behaviour may have been misconstrued as antisocial:

> I would sit in class and couldn't see anyone. People saw me and had conversations in my presence, but [I] could not engage with them because I could never look … them straight in the eye. Perhaps they perceived that I was cold or unfriendly or unreachable. I was very easily ignored because I didn't contribute to banter before class. I could never see who is talking and never felt comfortable in joining.

Three focus group participants reported anxiety pertaining to making friends as a result of the effect of VI. According to Gloria, she was extroverted and sociable, but the difficulty with seeing peers made her uncomfortable participating in social interactions. Diana echoed Gloria's feelings, saying, "my inability to [make] eye contact increases my anxiety about making those connections because it is the main way people communicate". John's social anxiety was also related to the perception of "difference". Owing to his inability to look straight into the eyes of his peers and his "posture", John believed that "they may have thought I was on drugs". He deliberately avoided interacting with peers because of the possible fear of being labelled a social deviant. Moreover, he stated that the consciousness of being "different from the rest" led to anxiety whenever he was in class. Consequently, he avoided "in-class" lectures and rather listened to audiovisual recordings. John also described his experience as "socially isolating", ascribing this experience (in part) to large class sizes. John stated that he was unable to recognise the faces of the "130 students" in the pre-medicine class. He explained that his difficulty identifying faces made him socially secluded and, more significantly, made it difficult to make friends. As a consequence, he made "one or two friends" in his entire period of TE. In contrast to the classroom, John said that he was able to build friendships in the laboratory because there were only six students in each room.

It was clearly evident from the focus group and interviews that most participants attributed a negative social experience to the misconception of disability by peers. Ben said that this misunderstanding of the nature of visual impairment was a major concern to SVIs:

> Basically, a lot of students are at a point where they have lost enough eyesight, and that has an effect on their ability to learn in the class. So, they have to change the way they learn. But, at the same time, they could still use their remaining vision in little ways. But there is also a potential stigma that they may face because a lot don't understand that there is an "in between" in vision loss. Basically, they question the legitimacy of our visual impairment, and we are concerned about that.

Alex also spoke about the patronising behaviour of peers. He described his social experience as favourable but expressed reservations about unsolicited but well-intentioned assistance from peers:

> It is not isolation but understanding. Understanding is the biggest issue in my engagement with people, even close friends of mine. I have to explain to them not to help when they genuinely think they are assisting me. They usually take over the activities instead of stepping back and letting you do it in your own way. We all have our own ways of doing things, and, with some exceptions, we might be a bit slower or may be perceived as doing things in a weird way. In any case, that is our way of doing an activity. I have experienced a bit of that in TE.

Alex also argued that unless peers knew or had previously interacted with a person with "unnoticeable" visual impairment, they may find it challenging to socialise. Alex's views about prior exposure to persons with visual impairment and misconceptions of disability were supported by John during the focus group discussion. John claimed that his fellow students were "immature" and, hence, lacked a "lot of life experience". He assumed that his peers may not have come into contact with many persons with VI. Notably, John said that he withdrew from social interactions with peers because he wanted to extricate himself from “what they didn’t understand”. In the context of extricating oneself from social interactions, Gloria also stated that, “my peers were unaware of me, so I couldn’t connect”. Gloria also stated that she was able to make one friend in TE. She said that she became friends with a “gregarious” student who was aware of vision loss since he once sat by her in a lecture.

The contributory factors for the negative social experiences were not limited to the effects of VI, large class sizes, and misconceptions of disability, as discussed in the preceding paragraphs. For some participants, forming social relationships with peers was not a prime concern. When asked about his social experience, John explained that he did not give an important consideration to the social aspect of TE. He said that the intention for attending TE was to study and “not to make friends”. Intriguingly, his outlook on social life on campus was against the backdrop of a good social experience in high school. Although John did not provide reasons for his favourable social life in high school, he mentioned that his eyesight was better in secondary school than in TE. He revealed that his eyesight deteriorated quickly in TE, putting a strain on his “social skills”. Gloria’s opinion about social inclusion was similar to John’s perspective. Her disregard for social life on campus partly stemmed from the high academic expectations she set for herself. As an excellent student in high school, Gloria disclosed that she came to TE with the mindset that “anything less than grade ‘A’ was not acceptable”. To fulfil her academic aspirations, Gloria believed that she had to prioritise academic work over other nonacademic pursuits. Gloria’s social life in high school contrasts with John’s favourable secondary school experience. In high school, Gloria faced an additional challenge of dealing with a life-threatening disease. She had to cope with VI and illness and, hence, had “minimal energy” to study and much less make friends. Despite her poor social experience, Gloria excelled in high school.

Other participants also provided reasons for perceiving social life as insignificant to their TE journey. Prior to enrolling in TE, Alex said that he was a customer service representative. By interacting with people regularly, Alex claimed that he was very sociable. However, with his decline in vision (eyesight) and high academic demands, Alex became less sociable in TE. He believed that being socially active would be detrimental to his academic life. Alex also stated that deprioritising social life and overemphasising academic work often led to isolation—an experience echoed by Gloria. Gloria, Diana, and John also revealed that the disregard for social activities was due to the heavy academic workload. They reported that due to the effects of impairment, it took longer to complete academic tasks as compared to their peers without VI. Diana said that she had to "work three times harder" than her peers to complete academic tasks. The longer periods for learning therefore minimised the amount of time to socialise. In the midst of minimal socialisation, Diana and Gloria expressed the desire to complete TE and re-activate their social lives. Diana stated:

> I found that my polytechnic education just demands a lot from me, so it decreases the amount of time and energy I had to socialise. I actually can't wait to finish my degree so I can have a life again.

When asked about how they approached the barriers to social inclusion, participants said they employed various strategies to form social relationships and improve "social" wellbeing. These included covert or overt explanations of VI, compensating for social life, and "connecting with peers' commonality"—that is, finding peers who share similar attributes and using the common qualities as a basis for socialisation. By adopting these strategies, most participants rated their overall social experience as favourable. With respect to explaining VI, some participants decided to educate peers about vision loss rather than withdraw from social interactions. For instance, making friends in the early days of TE was a daunting task for Alex. Similar to Gloria, peers were "unaware" of him, and, hence, he was not approached by classmates. Feeling socially isolated, he decided to initiate conversation with peers. Alex described the attempt to initiate dialogue as “pushing myself to engage with other students”. According to Alex, he initiated communication and, notably, educated peers about the nature of VI. Alex said that he was composed and not perturbed in explaining his identity to peers, stating, “talking about my vision does not bother me”. As he began to “open up” about vision loss to peers, he said that misconceptions of disability faded, and the building of friendships became a possibility. Alex stated that his overall social experience was “not too bad”. Similar to Alex, Diana had to “push herself” to engage with peers in order to eliminate the misconception of disability. She initiated dialogue with peers, despite the anxiety associated with making eye contact. In her view, overcoming her anxiety, initiating dialogue, and providing an objective perspective of VI enhanced the building of friendships. To this effect, she noted that the social aspect of TE was the high point of her TE studies:

> I explain to them that I may appear to be unfriendly, not because I am rude—rather, I can’t see and recognise people’s faces. I would say that jokingly and use that to connect with people I wanted as friends. My social connections are what has actually seen me through higher education. It is the social aspects that have been my strength, and everything else has been my weakness.

Ben said that peers did not know “how to engage” with people with VI and, hence, their reluctance to approach him. Thus, he decided to initiate conversation and create awareness about vision loss and, more importantly, his social behaviour. Ben informed peers that as a person with congenital (present from birth) VI, he had a deficit in the skills needed to interact and socialise. According to Ben, once peers were informed, they became receptive and yearned for additional information about the nature and impact of vision loss. Ben was of the opinion that being transparent about social limitations promoted understanding of disability and enhanced the making of friends. He stated that peers comprehend “my disability” but they also understand me as “a person”. Generally, he described his social experience as very good.

During the focus group discussion, Gloria was clearly surprised to hear about the positive social experiences of other participants in relation to “pushing themselves” to engage with peers. Gloria said that she also pursued similar strategies, such as being vocal and not hiding impairment, yet she was unable to form friendships. She was of the opinion that peers’ uncooperativeness was peculiar to her TE institution:

> It is really interesting hearing you guys talk about your experiences, but I did that. There was no shyness surrounding my visual impairment. I was very vocal, but I think maybe the field I studied in or the people that were in my class—my peers—and their expectations…. They weren’t comfortable about it. Maybe it is a community thing. So, while the university was quite accessible, it was my social experience that was difficult … The biggest barrier for me at the university was social.

Gloria also believed that her social life would have been better if she had attended TE with friends:

> I would like to have friends. I will want to have friendships that I will establish before class. If I attended university with friends I already knew, I would be better off. Because then I would maintain the relationships because they are external friends and they know who I am. They know my needs and are receptive to me. A friend of mine started studying in the same university in the last two semesters of high school, and, whenever he saw me—whether in the same class or the same campus—he would approach me … make contact … because we were friends outside the university. I think that is what I would like. I wish I would have come to university with people who were my friends outside university.

It became apparent from the focus group that not all participants subscribed to the concept of "pushing oneself" to engage with peers. Maria was a participant with "obvious" VI. She expressed a different view about the approach to making friends. For Maria, once impairment was noticeable by looking at her eyes, she did not deem it prudent to educate peers about vision loss. A dialogue ensued between Maria and other participants regarding the former's comment:

Maria: Regarding educating people about our vision, my notion has always been that sometimes it is best not to draw attention to what is already obvious, that is what we ought to do. Because it obvious to people that you can't see.

> Gloria and Diana: No (both participants spoke concurrently).
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> Gloria: People keep forgetting.
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> Maria: They keep forgetting!
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> Gloria: My mother forgets that I am blind sometimes.
>
> Diana: Same with me.
>
> Maria: They keep forgetting! You know how comforting that is? Someone isn't fixated on the fact that you don't have your sight.
>
> Gloria: It makes a huge difference when you say listen, I can't do this because I have a vision impairment.

As noted, Maria did not "push" herself to communicate with peers. Rather, she said that peers approached her for conversation. Further, Maria said that she did not set about to explain vision loss unless requested by peers. Maria preferred socialisation by "connecting with peers' commonalities" to drawing attention to the presence of vision loss. For instance, as a parent, Maria stated that she used her parental status as a leverage to "connect" with other peers who are parents. Generally, Maria was able to build friendships on campus and, hence, reported that her social experience was satisfying.

Another strategy for overcoming negative social experience—and suggested by two participants—was indirect disclosure or covert means of communication. Alex recalled that in the early semesters of TE, he walked unaided (that is, without the use of a white cane) and, as such, peers were oblivious to his vision loss. However, as he began using a cane, peers became aware of his VI. He stated that when peers saw him using the cane, they approached and inquired about its importance, and they then struck up a dialogue. As friendships developed, peers inquired about the nature of VI and its effect on daily activities. Alex said that he willingly provided the best answers to their inquiries because he felt confident disclosing his disability identity:

> They just don't understand how to engage with us. I think they are oblivious to visual impairment unless they know somebody or interact with somebody with a disability. With my own experience in the university, it took quite a while for people to understand. When I started using the cane, people would ask me about the essence of the cane and that generated into a conversation. They become my friends and asked more questions about the visual impairment. They usually tell me that they wouldn't have known that I had an issue with my vision had I not used the cane. Once they become aware of my capabilities, they understand the reason I do certain activities in a particular way.

Additionally, with respect to indirect disclosure, John seldom walked with an aid but admitted that the use of the white cane helped demystify false perceptions about his social behaviour. He said that by using the cane, "peers don't think you are on drugs". In spite of the benefit of walking with a cane, most participants seldom used it.

Most participants held a satisfactory view about their social life owing to the strategies they adopted. John and Gloria described their social experience as abysmal. In the midst of despair, they relied on their family and outside-of-TE social networks to compensate for their social lives. Gloria's family was an integral part of her social life. Gloria said that she received support from them to cope with stress and isolation, and they supported her to engage in social activities outside of TE. Gloria recalled that her parents took her for picnics and, during certain periods, to the gym. John also relied on the social network he had formed prior to enrolling to counteract the negative social life in TE. Had he not made friends outside of TE, John believed that his social life would have been bleaker.

Participants reported of benefits to forming friendship with peers as they described their social experience. The assistance provided by peers could be categorised as either emotional or practical support. Concerning emotional support, Alex and Diana stated that they were selective in choosing close friends. Both participants emphasised that trustworthiness was of utmost importance for selecting friends. Alex chose friends that he could trust with the aim of reaching out to them when needing help. Diana said that VI and the use of an assistive device could make her appear different. Therefore, she needed to associate with friends who would not "focus" on her visual loss.

Diana's hope of finding trusted friends was fulfilled since she stated that close friends accepted her as a person. Moreover, Diana said that she felt comfortable among peers because they "adopted a nonjudgemental" attitude towards her. Alex's experience with his close friends was consistent with Diana's perspective. He mentioned that forming friendships provided a sense of inclusion and self-worth because peers treated him like all other persons. Consequently, Alex said that he did not "feel any different" from peers without a disability.

The benefits of making friends included practical support, according to two participants. Diana endeavoured to be an independent learner but, at certain periods, she requested friends to read to her. She depended on friends for assistance with reading when learning materials were in an inaccessible (difficult to read) format. Diana said that she was reasonable in her demands for support and only requested reading assistance after exhausting all other options. In response to a question about her transition experiences, Maria spoke about the practical benefits of friendship. Her request for a guide was declined by the AS, and, therefore, she had to rely on friends to move around. For Maria, friends were crucial in helping her navigate safely from one destination to another on campus.

During the focus group discussion, a dialogue ensued between Gloria and Maria regarding the appropriate approach to social inclusion:

> Gloria: An inclusive institution is where the university establishes clubs or community groups for people with low vision as it exists for LGBT and others. The clubs for students with visual impairment would help us make friends and find mentors. In effect, such clubs would help us overcome loneliness.
>
> Maria: My only concern is that when we start to have groups of minorities, such as low vision clubs, then we may forfeit the essence of inclusion.
>
> Gloria: No, that I agree.
>
> Maria: I really have concerns about that and wouldn’t want to be involved with such clubs because it sends a signal that we don’t want to integrate. If we want inclusivity, then I think we don’t want to exclude ourselves by virtue of clubs.
>
> Gloria: That may be true. I am not saying that would be the exclusive thing to do. Obviously, clubs and communities would help people feel less alone. I remember the experience of finding out that there was someone else at the university with low vision.

> That gave me an assurance that I am not only one struggling. It is just a starting point that could precipitate integration. I understand it is challenging, but it is the need for community. I really struggled with the lack of community that I had when I saw other students around me who clearly had strong community with their fellow students. I feel a deep sadness knowing that I missed that.
>
> Maria: But it is the desire for community amongst all your peers is what you really want.
>
> Gloria: Yes, absolutely. I guess the question is how would you go about it?
>
> Maria: I don’t think you would go about that with an exclusive group. I understand your concern of isolation, but I don’t think what we do is to exclude ourselves from the general population.

John’s view about inclusion resonates with Gloria’s view of a disability community. John disclosed that he did not have friends with visual impairment on campus. He said that as a student adapting to VI, it would have been beneficial associating with peers with vision loss:

I would have loved to meet other students that had low vision. I didn’t know anyone, apparently, who had low vision. For me, going through the journey of coming to terms with my deteriorating vision, it would have been beneficial. There was something social that was missing. I went to places like queer space and I met a few people there, and that was really pleasing. It would have been good if there was a disability-like zone as there is queer space.

4.3 Theme 3: Learning experiences

The theme “learning experiences” explores participants’ experiences of learning in TE. It identifies the learning needs of participants and TE institutions’ responses to academic demands. The theme illustrates the learning barriers faced by participants and the support that promotes academic participation. These barriers and enhancers are related to the attitudes of lecturers, support offered by AS and information accessibility issues.

4.3.1 Note-taking and examinations

The accessibility advisers were asked to describe their experiences working with SVIs. They identified issues related to note-taking and examination support, and these were explored with the SVIs. According to Francis (an accessibility advisor), "the notetaker is someone who sits with students in class to objectively write notes from the lectures". He stated that students must be registered with the AS to access this support in his institution. Jake, another accessibility advisor, explained that the note-taking support is anonymous; that is, the note taker and peers were unaware of the SVIs receiving the support. Gloria indicated that there was flexibility in the anonymity of note-taking in her institution. She said that a note taker could assist multiple students in a class, and "you can elect to be anonymous or not". Jake said that notes are "electronically uploaded" and "made available" to students within a twenty-four-hour period. He did not mention the specific (electronic) means of uploading notes, but Alex and Gloria stated that note takers emailed notes to them. John stated that the note takers were all students whereas Gloria said that, "most of the people that helped me were old ladies who were [in] retirement".

Most participants indicated that note takers were not generally useful in meeting their needs. They stated that notes written by note takers lacked detailed information and clarity. For example, John said that some of the notes were difficult to comprehend. He stated that some note takers only copy the text on the slides and thereby miss relevant information. As a science student, he was of the view that detailed information, including descriptions of diagrams, was important. Alex also stated that he had to "interpret" the notes because they were not written in a clear and coherent style. He said that some of the notes were written in "shorthand" and, hence, difficult to understand. Gloria disregarded notes written by note takers because she could not read them. Thus, like Diana, she decided to use her "other senses to engage". She listened attentively during lectures and claimed that "my memory was better than the notes". She also said that some note takers were not knowledgeable in specific courses and, therefore, could not take notes appropriately.

Two participants described their relationship with note takers. Alex's physics note taker eventually became his "private tutor". Alex stated that he was "weak at mathematics", but the detailed and coherent notes and tutoring by the note taker enabled him to pass physics. He described the note taker as going "above and beyond". Further, Alex said that he did not meet nor communicate with the other note takers except by an introductory email. In the email, Alex introduced himself and told them his preferences regarding note-taking. Gloria expressed concerns about the relationship between note takers and students:

> Their role is very simple. They only take notes and don't talk to you. They come to lectures, take notes, and email them to you. That was the limitation of the service. Luckily, one of the notetakers I had was chatty. I had met her the first time when I started university; I had already built a relationship with her. Whenever I saw her, she would ask about how I was faring. She was my exam support and was dutiful. She was just like any old lady. Sometimes, she gave me candies. She was also concerned about my mental wellbeing.

Another support offered by AS, according to participants, was alternative examination arrangements. Francis said that AS had received feedback from some students, which attested to the alternative examination arrangement being a "life-saving service". According to Francis, some students reported that without the "service" they would not have succeeded in TE. Three participants confirmed Francis's view, indicating that examination support was essential. Maria stated that "support in testing and exams are predominantly what I need their help with—

nothing else”. Jake reported that AS provided modified examination support that included “extra time, a separate room, and reader–writer services”.

Gloria said that during an examination, the reader–writer (RW) “would read the question and write my answer”. Alex also stated that “for me, pairing up with the preferred reader–writer is the best”. Gloria explained that RWs were randomly assigned, but she “swiftly” requested specific RWs in some subjects. Due to past experience with an “inexpert RW”, she preferred a note taker who had written notes in a course to become the RW for the same subject of examination. Further, she claimed that the good relationship with accessibility advisors contributed to the approval of her request for “preferred” RWs in an examination, maintaining that:

> Support during exams was useful. What I found valuable was the fact that I built relationship with support staff and then, when it came to exams, I was given a person that I knew. That person had attended my classes. Therefore, in certain aspects, the note takers were valuable because when I was paired up with someone that had taken notes in a course, they were comfortable reading the materials to me. I am aware of that because I sat in one exam with a reader–writer who did not know about statistics. Consequently, I attained a C+ in that course although I am an A student. He could not read the information in a way that I understood. He emphasised the wrong pieces and [wrote] the names wrongly. He was just useless. Hence, I complained, and, in the next exam, I had someone who obviously knew what he was doing, and I scored an A.

Like Gloria, Alex noted that the lack of RWs’ expertise in a subject contributed to poor performance. Hence, he requested RWs who were postgraduate students to assist during examinations. His difficulty with postgraduate RWs was their replacement with “inexperienced” personnel during breaks. Alex said that postgraduate RWs were replaced by "others, such as an old lady, Edna, from the retirement village down the road, who has no idea about the subject". Other challenges associated with the RW support included the lack of fluency, unavailability of RWs, and unfamiliarity with their roles. Maria said that some RWs were not fluent in English. Therefore, they could not read questions properly nor write answers appropriately. Likewise, Ben stated that some RWs were unable to read Māori words properly in a text. He said that, "it is unfortunate because that is why I have a reader–writer so they can do the reading for me". Gloria recalled that examinations were postponed in some instances because of the unavailability of RWs. Ben mentioned that some RWs were ignorant of their roles. He maintained that "some may go in there not knowing if they need to read or write".

Three participants resorted to the use of assistive technologies to complement the RW support. Ben read from the computer along with the reader–writer during examinations. His major difficulty was the lack of access to the right format of examination texts. He noted that his computer software could only read PDF documents, but he was often provided with text in a different format. Alex preferred to use assistive technologies for writing essays in examinations. He stated that the most difficult part of examinations is writing essays as it is difficult to "verbally plan". To improve the problems with writing essays, he adopted a "camera technique". His "improvised" approach to writing essays is presented below:

> To offset the challenges with essays, I got a little camera towards the end of my degree. I used this little handheld camera screen to write out an essay draft myself and filled in the gaps as I dictated to the reader–writer. It was a difficult approach.

Maria used a hybrid of RWs and computers during examinations. She utilised the RW support for multiple-choice and short-answer questions. For essays and long-answer questions, she said that the text was uploaded onto a laptop for the reading software to read. Subsequently, she would type the answers with the computer. Maria recalled a challenge with her choice of examination support. The challenge was due to a discrepancy between her examination needs and the support provided by AS:

> I was told by the advisers that I could have a reader–writer for law exams, which is an impossibility because I need to be able to type my answers. I can’t dictate an essay for someone because I have to write it so well. They lack awareness about some of these issues. I told them that I would bring my laptop, which has … reading software, Job Access with Speech (JAWS). They replied in the negative and said that I should use the computer provided by the university. I insisted that I would use my computer because the university computers do not have JAWS. Finally, they told me that they could write the answers for me. I replied that it was impossible.

Issues related to additional time were also discussed by participants as part of their examination experiences. They referred to additional time in examinations as “extra time” and also stated that in assessments other than examinations, it was known as “extension”. According to Diana and Gloria, peers felt that they were lazy as a result of the frequent use of extensions. However, the two participants justified the frequent use of extensions by explaining that due to vision loss and the use of assistive devices for learning, it took longer to complete assessments. Gloria and Alex stated that they were allowed 20 minutes extra time for each hour of examination. Jake, from AS, said that at his institution, the standard additional time was 10 minutes for each hour of examination. He explained that the extra time could be varied, depending on the directive obtained from medical documentation. Three participants (Gloria, Alex, and Ben) stated that extra time in examination was useful but not adequate. Gloria believed that extending the additional time contributed to improved grades. Once again, she indicated that the good relationship with AS influenced the decision to extend the extra time:

> I was originally given 20 minutes per hour and, at the end of my degree, a young woman came in, and she was given 45 minutes per hour. She had double … the time I was given. I made sure to develop [a] really good relationship with the head of the department, and, therefore, he was constantly aware of my present needs. When another student was given more time, he asked if I would want my time to be extended. I accepted the extra time. Consequently, I had a good grade for my biopsychology paper even though I had to write three essays. I had a good grade in that paper because I was given enough extra time. My last year exams were very long, but then it meant that I could complete all the content, which was great. I wish I had that earlier.

4.3.2 Information accessibility

Participants spoke about information accessibility problems in the course of inquiring about their academic experiences. They shared their experience about accessing information in a preferred format, utilisation of IT by lecturers, and computer usage on campus. The predominant means of reading and accessing information for five participants was through screen-reading software. Gloria said that the screen reader converts digital text into audio format. She stated that "when you access [a] Word document or PDF, the screen-reader software on the computer reads it to you". Apart from the computer, participants said that they used screen readers on handheld devices, such as mobile telephones and IPads. Maria referred to screen readers on such devices as "voice over". Alex was the only participant who did not utilise screen readers. He read and accessed information by making the reading text bigger on the computer screen. Alex admitted that it would be useful to become conversant with other forms of accessing information as his eyesight was deteriorating.

The challenges associated with accessing information in an "unpreferred" format was emphasised by participants. Specifically, accessing information in a printed format was difficult for participants, and, therefore, they preferred electronic information. For example, Maria accessed printed information by either taking pictures of documents with a mobile telephone or scanning them onto a computer and then using screen-reader software to read the text. According to Maria, the reading accuracy of the screen reader depended on the quality of scanned images. She said that the software "needs perfect print to read". Maria claimed that due to sight loss, she found it difficult to take pictures in good focus and scan reading materials by herself. Further, she said that some reading materials for her course of study were provided in a "form of handbook" with a lot of poor quality print. As a result, the screen reader could not accurately read some portions of the book. She stated that "persons without visual impairment can read those poor-quality photocopied prints, but my assistive technology cannot read them". Another challenge to accessing information, as disclosed by Jane (from BLVNZ), was copyright restriction on published literature. She explained that as per copyright regulations, permission is required for reproduction of published literature into a format that persons with VI could access. Moreover, she stated that, globally, 90% of published information is not available in formats accessible by persons with VI:

> I think that is a huge issue in TE education. Access to published material in a format that is useable for blind and low vision people is important. Students with visual impairment need reading materials in large print, braille, or electronic format. A TE student still needs to purchase a book and then attain permission from the publisher to convert it into an accessible format. There is time spent having to ask permission [and] reproducing the book into the appropriate format as the formatting company may have several requests. There is likely to be waiting times, and that could mean that students might have to wait as the semester is on course while they don't have the reading materials like their peers. I think it is a challenge for that small part of their TE experience.

Francis and Jake confirmed that AS, through a student's proactivity, managed to convert a book into an audio version by contacting the publishers:

> Francis: One of the students with visual impairment has made us think outside the box. He brought a book he couldn't read, and we managed to obtain an audio version for him.
>
> Jake: Yes, we managed to provide him the PDF version of the book from the publisher and then he used his own software to read the text. He was very proactive in obtaining the information in time. Indeed, proactivity is essential.

Another barrier to accessing academic information was the inaccessibility of academic materials shared by lecturers. As an example, Diana said that some lecturers offered students printed material and "forget that I need it electronically". Gloria also stated that the screen-reader software was not "compatible" with the institution's online platform. She said that most lecturers disregarded the specification for uploading webpages that enabled easy access for all students. Further, Maria said that some lecturers were "extremely disorganised and put information anywhere" on the online platform. Ben said that in some instances, the "links" attached to files were ineffective and, hence, he could not open such documents. John spoke about the difficulty with accessing PDF files. He stated that some PDFs are scanned documents and appear as an image file instead of a text file. Diana also described the inaccessibility of some PDF documents on her institution's website as a "big barrier for me". John noted that the formatting of some documents led to different text in such documents interrupting each other. He reported that "you would be in [the] middle of a paragraph and a relevant text would pop up and then lose focus". Diana had difficulty accessing notes due to the arrangement of PowerPoint slides. She said that the screen reader could not read some notes because of the "borders and other things lecturers put on the slides".

In some instances, the difficulty in accessing information was related to the general function of screen readers. John emphasised that by using the screen reader or magnifier, the SVI loses the ability to “scan and skim” through portions of a page. Hence, in his opinion, the process of systematically reading through academic materials to eliminate irrelevant information prolonged the completion of assignments. Gloria concurred with John’s claim and stated that the process of using a screen reader to access information from online sources was strenuous and time consuming. Therefore, she requested the service of a peer mentor to help skim, scan, and read relevant portions of articles. She explained that a peer mentor was a student assigned by AS to assist with assessment and proofreading. Gloria stated, “when I am researching and trying to sift through the database, the peer mentor sits with me and reads”. Further, Diana said that she needed assistance to read footnotes because the screen reader could not read them. She found it difficult to “put the footnote” in the text and the corresponding details at the end of a report. John also pointed out that the reading software and footnotes were incompatible. He said that “with the footnotes, it is the same. The screen reader pops it in the middle of whatever you are reading”.

Three participants indicated that they had difficulty accessing information on their institutions’ computers. For instance, Gloria mentioned that computers in the library were not accessible because they lacked the screen-reader software. She said that the software was expensive and speculated that due to financial constraint, the institution would not acquire them. Glare on the computer screen discouraged Ben from using computers in the library. He stated that it was difficult to locate a computer that is “out of the light because if I get a computer with any light on it, I can’t read the screen”. Alex said that he had difficulty accessing information because the basic settings for enlarging text on the computer screen had been disabled. He expressed his frustration about access to information when he said that:

> I didn’t use any of the facilities at the library facilities, such as computers and printers, because I couldn’t access [them]. There was [a] security issue, and I just couldn’t access the computer screen. They told me, apparently, that they have locked the basic settings that make texts bigger on the screen. They locked those features and, for unknown reasons, the IT staff couldn’t unlock [them]. I can’t remember the reason for their inability to unlock [them]. It was stressful and annoying when I had to pay the same fees as others but couldn’t use academic services. I don’t think it was acceptable, and I did get upset about it.

4.3.3 Lecturers’ attitudes

In response to a question about the academic aspect of TE, participants spoke about the attitudes of academic staff towards SVIs’ inclusion. Barriers related to access to notes, teaching methods, and response to SVIs’ academic needs were mentioned by participants. John said that lecturers’ unfavourable attitudes towards SVIs were attributable to the lack of understanding about disability and the “fact that they have not had prior experience with persons with disability, including those with visual impairment”.

One of the barriers associated with lecturers’ attitudes, according to three participants, was delayed access to notes. These participants stated that accessing lecture notes, either by electronic mail or via online platforms, before classes was essential as they could not read slides on a projector during lectures. For example, Gloria said that “it didn’t matter what was put on the slide, I could not see”. Hence, early access to notes enabled participants to read the slides, become familiar with the contents, and “follow” lectures. Gloria stated that, “I do prereading, read the slides, think about it, and go to class”. Similarly, Diana downloaded the notes in the appropriate “format” and used them as a reference during classes. According to Diana and Gloria, lecturers did not release notes before classes in certain instances. Alex expressed concern about delays in uploading notes. His request for early access to notes was unsuccessful, and the denial made it unappealing to demand support from other lecturers. He said that:

> The other was one of my lecturers. I approached her for support because I couldn't read the writing on the projector and requested her to upload the reading material a bit early. The lecturer told me she can only work as fast as she could and that was uploading [at] the last minute [before] lectures. Her response did not give me the confidence to approach the other lecturers.

Like Alex, other participants mentioned that their request for support was disregarded. Some lecturers responded to Gloria's request for support, saying "please follow the system". She perceived that was as an alternative and polite way of saying, "I can't help you". Gloria claimed that lecturers' unfamiliarity with SVIs' academic needs and relevant support was a potential reason for the denial of requests. Alex also reported that his request for assistance to comprehend mathematical information was denied by a tutor. He considered that academic staff should be a "little bit more willing to adapt to our learning needs and our learning styles".

Participants stated that the tone and verbal expression of lecturers was critical as they relied on the auditory sense (listening) for information. For example, Gloria said that lectures were "completely auditory for me". Diana also said that, "what was being said was most important. I can use my other senses to engage". As some lecturers did not "verbalise" information on the slides, Maria reported difficulty concentrating in lectures and also said that "it is those things that annoy me and make it unequal". Gloria also had difficulty "following" some lectures as she said that some lecturers spoke in a low and monotonous voice. Further, she stated that some lecturers were "super upbeat" but their slides were "completely empty".

Diana and John spoke about the challenges related to assessment and video recording of lectures. Due to social anxiety and inability to see slides, John said that he avoided "in-class" lectures and relied on audiovisual recording of lectures. He found this problematic as, in a few instances, lectures were not recorded. Diana believed that she was penalised for submitting an assignment in a format compatible with her reading software. She stated that:

> Yes, a good example is a few weeks ago I had an assignment that was due for submission. The first part of the assignment was a written essay and then the other half was presenting that work to the class. In the marking criteria, it says we could use a PowerPoint and another creative media. I am unable to use PowerPoint properly because of my vison. Therefore, I presented the assignment in a big poster format. The lecturer marked me down because I didn't present it in the standard format of PowerPoint. The lecturer has known about my visual impairment for the entire four years, but he didn't allow me to express my ideas in a creative way. I wasn't supported in any way, and I was marked down because I did it in a different format.

Three participants described the support provided by academic staff that was useful in meeting their academic needs. Alex had difficulty handling laboratory equipment and using chemicals due to loss of sight. Nevertheless, he was able to perform experiments effectively through the support of laboratory assistants. He stated that:

> I had my personal laboratory assistant, and that was given to me through the disability office. The lab assistants were often master's or PhD students. In the beginning of my lab activities, I would try pipetting and microscopy, but I couldn't see enough fine details. I also did not want to waste expensive ingredients or accidentally break slides. Eventually, I would do all the calculations and the theoretical work, and would basically instruct the lab assistants to put an amount of regent in a pipette and label test tubes. I was their brain, and they were my hands. The collaboration with the lab assistants worked well and improved my lab work.

Some lecturers supported participants by offering alternative and "preferential" support. Alex said that a lecturer provided a "special whiteboard effect" that would make slides on [the] projector darker and the text more visible. Although he could not see the text on the modified slides, he was highly appreciative of the support. He stated that "the fact that he was trying to help me was really amazing". He further noted that the lecturer's assistance enabled him to obtain an A grade, although he was not specific about the type of support involved. Maria emailed lecturers to request that they change the formatting of PowerPoint slides, but only a few of them replied. According to Maria, one of the lecturers resolved the accessibility issues by teaching her the means of converting slides into a format compatible with her reading software. Although the difficulty to access notes persisted, Maria reported that the lecturer's intervention reduced the problem significantly. John claimed that lecturers' awareness of his academic needs was crucial in providing academic support. He said that most lecturers were aware of his academic needs because the AS informed the course coordinators. In turn, course coordinators informed the "individual" lecturers. In instances where notes were not uploaded onto the online platform, he stated that lecturers emailed the notes exclusively to him. John also believed that he was given "concessions" by lecturers in examinations:

> If the question requires diagrams or graphs, I had to draw some version. The markers were made aware that my drawings were strange because I couldn't see properly. I think they took that into account when they were marking.

4.3.4 Approach to overcoming barriers

This theme considers participants' approaches to overcoming or coping with barriers to academic inclusion. Gloria believed that through the nature of classroom dynamics, lecturers were more likely to treat students with disability like any other student. Therefore, she suggested that students with disability must be "proactive" in order to receive support from lecturers. She stated that, "if I wanted a lecturer to know, then I walked up to them and say, 'I am Gloria, I have Stargardt'. This is what it means to me, and this what I need from you. Otherwise, I didn't exist". Like Gloria, Alex said, "sometimes you have to speak up and make your barriers known". However, he admitted that "speaking up" was not a panacea for addressing academic challenges and, at certain times, he had to find alternative means of coping. He said that "unfortunately, that time I wasn't really listened to, and I had to use my own computer". Diana also learnt the use of technology for learning by herself when support from her institution was not forthcoming. She said that, "I taught myself voice over and other things because there is no support at polytechnic". Beyond speaking up, Gloria suggested that building a warm and strong relationship with AS was vital in securing preferred RWs, sorting the extension of additional time, and rescheduling examinations. Diana appealed to an outside agency for support as her institution failed to provide a suitable learning space. She said that:

> At polytechnic, I didn't have an adequate space (room) to study in for the first two years. I was jumping from random classroom to classroom and the library, and also the lighting system was not good. I asked someone at the polytechnic for [a] study room, and they gave me a small room that looks like an observation space. The room could be described as representing the medical model because there was a big standing CCTV, a slanted desk, and no windows. I stayed in the room for two-and-a-half years. Fortunately, over the last few months, I have found an awesome external support where I am integrated into an office in town. It is a big open-plan office with an adjustable desk. I felt isolated studying in a small room for hours and days at the polytechnic. My current office is open plan and located in a business complex frequented by others. Although it could be somewhat embarrassing using my assistive technology in an open-plan office, … it has actually been very good in noticing the importance of equity. It feels like moving from the medical model to the social model.

4.4 Conclusion

The findings have reported various aspects of participants' TE experiences. Commencing with the transition period, participants' enrolment decisions (reasons for attending TE and motives for selecting a course of study), the "critical" period, prior expectations and realities, adaptation to TE, and engagement with AS were presented. Studying for a specific career, perception of disability, self-belief in ability, and interest in a course of study were some of the factors influencing participants' enrolment decisions. Participants also spoke about the events that instigated the decision to enrol in TE. These events occurred in a specific period referred to as the critical period. Apart from the expectation of gaining a TE qualification, participants had notions about what to expect in TE. A mismatch between prior expectations and realities were identified in some participants' responses. Adaptation to the disability identity and physical environment were aspects of participants' early TE experiences. For some participants, acclimatising to the physical environment was an immediate priority in TE. Participants highlighted some challenges, such as illogical layout of classrooms and the lack of tactile tiles, in the physical environment and the strategies for navigating through the environment, such as memorising routes and using the white cane. SVIs' engagement with AS in their respective TE institutions was also reported in the early TE period. There were differences in participants' views about the definition of disability and inclusion. Further, there was lack of knowledge regarding inclusive legislation and policies among participants. Participants stated the approaches (SVIs initiating contact or AS initiating contact) to contacting AS in the early TE period. Accessibility advisors spoke about needs assessments, confidentiality of support provision, and disclosure of disability as prerequisites to receiving support.

The theme "negotiating the social environment" described the social experiences of participants. Five participants reported a negative social experience at some stage in their TE journey. Some of the negative social experiences were feeling patronised, a sense of isolation, and emotional distress. The reasons for the negative social experience included the lack of understanding about disability and lack of social skills. Most participants indicated that they had a favourable social life. The mechanisms for making friends were explored in this theme. Some participants used common attributes between themselves and their peers to “connect”. Other participants drew attention to themselves by using a white cane, and approached and explained the effects of visual impairment to their peers. Participants also described the benefits of positive social engagement with peers, including practical and psychosocial support. There was a divergence of opinion about the method for achieving social inclusion. One participant preferred integration with all students as the basis for inclusion whereas others said that belonging to a disability group must be the starting point for social inclusion.

The theme “learning experiences” explored note-taking and examination support, lecturers’ attitudes, and information technology issues. There were challenges associated with the note-taking and reader–writer support. For instance, participants had difficulty with note-takers’ notes as they pointed out that they were poorly written. All participants except Maria received note-taking support. Further, some RWs were not knowledgeable in the field of study and unable to assist participants appropriately during examinations. Issues related to additional and extra time and the use of assistive devices in examinations were also explored. Unfavourable lecturers’ attitudes reported by participants included denial of request for support, lecturers speaking in a low and monotonous voice, and delayed access to notes. Tutors supported a participant with laboratory experiments, and lecturers provided alternative and preferential support to some participants. Glare on computer screens, lack of screen-reader software on campus computers, and the provision of reading materials in printed format were some of the difficulties related to the use of information technology.

CHAPTER 5

DISCUSSION

Guided by three research questions, this study has explored different aspects of students with visual impairments' (SVIs') tertiary education (TE) experiences. The research questions are:

1. What are the pre-enrolment and early TE experiences of SVIs?
2. What are the experiences of SVIs with regard to the social aspect of TE education?
3. What are SVIs' experiences of the academic environment of TE education?

Chapter 3 of this study has described the methods used to collect and analyse data from three groups of participants. Chapter 4 has reported the findings in three parts. In this chapter—Chapter 5—I delve into the meaning, relevance, and implications of the findings and also discuss the results with regard to the research questions and previous literature.

5.1 Transition period

Successful transition to TE has a positive influence on the retention and academic progression of students (Kift, 2015; Wingate, 2007). Accordingly, there seems to be a steady increase in research into TE transitions (see, for example, Coertjens et al., 2017; Kift, 2015; Tertiary Education Commission [TEC], 2018; Thompson et al., 2021; van Herpen et al., 2020). However, such studies seldom include the transition experiences of SWDs (Fraser, 2017; Nuske et al., 2019; Reed et al., 2015; TEC, 2018). The TEC (2018) states that, "There is an opportunity to find out how the experience of students with disabilities or chronic illnesses differs from that of an able-bodied student in good health" (p. 41) with regards to the transition to TE in New Zealand. This study examined the pre-enrolment and early TE experiences of six SVIs, and perspectives of two accessibility advisors and an official of BLVNZ. Consistent with literature on the transition to TE (see, for example, Coertjens et al., 2017), the period of transition in this study includes aspects of the pre-enrolment phase and first year of TE.

Studying for a specific career was the main reason for enrolling in TE according to participants in this study. This is consistent with studies in the general student population, which also found that career consideration was the main factor influencing enrolment decisions (Balloo et al., 2017; Kaye & Bates, 2017; Krutii & Fursov, 2007). The data from the current study shows that most participants enrolled in courses, including law, biochemistry, and psychology, relevant to their career ambitions. The importance of career considerations in academic decisions generally has been emphasised by a number of researchers. Busteed and Auter (2018) mention that students are more likely to persist in TE when they can foresee a path from education to a desired career. In an earlier study, Perry et al. (1999) note that academic decisions devoid of career consideration could lead to withdrawals.

The findings indicate that perception of disability—selecting courses based on the perception that it suits impairment—was an important factor that shaped the enrolment decisions of some participants. This is similar to the findings of other studies (Bauchamp-Pryor, 2013; Bacon & Benett, 2012; Fuller et al., 2004; Ridell et al., 2005). In Ridell et al.'s (2005) study, students with dyslexia (difficulty with reading and writing) were more inclined to choose courses that demanded minimal written work, such as fine arts and creative design. Past educational experiences could have discouraged participants in the present study from studying perceived sight-based courses. Perceived sight-based courses, such as mathematics, science, and physics, have been reported to be inaccessible for SVIs in secondary schools (Haegele et al, 2017; Opie, 2018; Palan, 2021). Hence, SVIs could perceive themselves as less competent to pursue such courses since they may not have gained competency in related subjects. They could also anticipate that the barriers to learning perceived sight-based courses may persist in TE. In this case, they may opt for courses that they perceive will not be as challenging on their visual impairment.

Social persuasion is a more probable reason for some participants' attitudes towards perceived sight-based courses. Persons with visual impairment are generally considered to be limited in performing activities that require the use of sight (Fraser et al, 2019; Hong Kong Blind Union, n.d.). Some participants' comments seem to reflect this perception. Ben chose psychology because he believed that visual impairment would not be an obstacle to practising as a psychologist. Gloria said that physiotherapy was "recommended as suitable for visually impaired people when I spoke to others". Persons with disabilities' (PWDs') acceptance of stereotypical beliefs about themselves is known as internalisation (Watermeyer & Görgens, 2014) and this phenomenon could account for SVIs' stereotypical choice of courses.

Gloria's account suggests that the perception of disability was a barrier to choosing a course she was interested in. Having chosen a course solely on the basis that it suits her impairment, she said, "It was not what I wanted…, so I stopped. I went to study what I actually wanted; not just that, this is what blind people study". Interest is an important factor in academic and career-related activities. Lent et al. (2010) state that individuals are more likely to make greater effort to excel in activities that they are interested in. The lack of interest in a course may reduce a student's motivation and determination to excel and, as a result, stifle the academic progress of the student.

An important factor associated with students' adjustment and retention is their expectation before enrolling in TE (Hassel & Ridout, 2018). Anticipation could influence how an individual experience an event and their reaction to the occurrence. The findings reveal that participants' expectations of TE study were unrealistic, realistic, guarded, or pessimistic.

Gloria's expectation could be described as unrealistic because she had an inaccurate conception about the learning environment. Consistent with students in Crisp et al.'s (2009) and Scutter's (2011) studies, Gloria underestimated the academic demands regarding workload and learning.

The learning skills acquired in one environment do not automatically enable a learner to flourish in a new academic environment (McPhail et al., 2009). Thus, within the first year, students must develop the academic skill set relevant to learning as they adjust to the new academic environment (Goldfinch & Hughes, 2007). The “rigid” prior conception about learning may have been a barrier to the formation of Gloria’s learning skills and, hence, difficulty coping with learning demands of TE. Lack of effective transition programmes in TE and high school may have contributed to unrealistic expectations and subsequent withdrawal. It may well be that Gloria did not receive adequate information about the learning environment prior to enrolling. Further, her transition planning in high school may have been poorly implemented. An effective transition programme ensures that SWDs recognise postsecondary difficulties and acquire the skills to meet them (Arndt et al., 2006). A study by McPhail (2015) provides justification for an effective transition strategy in the formation of realistic expectations. In her study, 447 students from 50 high schools in Queensland (Australia) participated in a pre-TE programme that exposed them to the realities of campus life. McPhail found that students who participated in the programme had more realistic expectations and were well prepared for TE. Gloria’s re-enrolment experience lends credence to McPhail’s (2015) observation that exposure to the TE system leads to the formation of realistic expectations. Gloria mentioned that “I was aware of the system and, consequently, my grades improved”.

TE institutions must ensure that the diverse academic needs of students are met (Young et al., 2007). Alex’s expectation of access to academic information in TE could be described as realistic. Urquhaat and Pooley (2007) mention that realistic expectation about TE leads to successful adjustment and transition. Alex’s early experience is not supported by their suggestion as he said that “my biggest concern when I started TE was my inability to use campus computers”. According to Yorke and Longden (2004), a consequence of unmet expectation is dissatisfaction. Alex expressed his frustration about the failure of the TE institution to make campus computers accessible to users with visual impairment (VI). His early experience seems to be an indication of how the TE system could place SVIs at a disadvantage at the outset of TE. This underscores the need for TE institutions to make every facet of TE life—including the transition—inclusive as this would fulfil SVIs' realistic expectations.

Ben's anticipation of TE could be characterised as pessimistic. He envisaged that TE would be challenging and complicated for a learner with VI. It seems that a level of optimism is important for adjustment to TE. Jackson (2000) found that students who were apprehensive about TE were more prone to depression and less likely to adjust compared to peers with optimistic and realistic expectations. Morton et al. (2014) also observed that students with a greater degree of optimism were more likely to adapt better to campus life. Past negative experience could be a possible factor for Ben's anticipation that TE would be challenging for an SVI. This is consistent with Maunder et al.'s (2013) assertion that students' expectations of TE are influenced by prior cultural experience. As PWDs are accustomed to exclusion, they may anticipate exclusion or difficulty of inclusion in future social settings (Cechnicki et al., 2011).

The findings present participants' views on disability and inclusion. Beliefs about disability form the basis for attitudes towards SWDs and inclusive practices (Zaretsky, 2005). Most participants' definitions of disability resonate with the social model of disability. They viewed disability as a social problem perpetrated through discrimination and environmental barriers. The model is recognised as the most effective approach to fulfilling the needs of SWDs because it shifts the focus from impairment to the restructuring of the TE environment (Oliver & Barnes, 2010). Two participants perceived disability neither as an individual problem nor produced by society alone but by an interplay between the person and the environment. This view of disability represents a moderate view of the social model (Reindal, 2008). This moderate view seems to offer a broader approach to understanding disability as it recognises the social origins of disability without neglecting the importance and impact of impairment.

According to the accessibility advisors, Disability Services in their institution was renamed Accessibility Services (AS) to dispel the stigma surrounding the term “disability” and attract students who do not want to be labelled as PWDs. Thus, changing the term “disability” may allow AS to offer support to more students. Adopting the term “accessibility” is consistent with the social model as it shifts emphasis from the presence of disability to equal opportunities and access to the environment for all persons (Rios et al., 2016). In contrast, the term “services” seems to be closely aligned to the medical model of disability. The term implies that disability is a problem for the SWD and, hence, by default, the provision of services would empower the SWD to overcome or rectify the problem. This is contrary to the social model, which recognises that society has a responsibility to eliminate the barriers that hinder PWDs’ participation (Owens, 2015). In essence, the social model advocates for the automatic incorporation of inclusive principles in all aspects of the TE system. Although the term “accessibility” may resonate with students who do not want to be identified as PWDs, it may be antagonistic to some students. Belittling and retracting the term disability could eliminate a sense of identity for students who view disability as a principal part of their personality or an important aspect of human diversity. Embracing diversity through positive disability identity or disability pride is consistent with the affirmative model of disability (Swain & French, 2000). Additionally, Disability Services is the traditional name that is still used in numerous TE institutions. Consequently, SWDs entering HE are more likely to be familiar with that designation.

From participants’ responses, it appears that the views of SVIs on inclusion did not differ ‘considerably’ Jane, Francis, and Jake. For SVIs, inclusion was related to the full participation of SWDs in TE. The accessibility advisors and the official of the BLVNZ viewed inclusion as not only beneficial to SWDs but all students. An “expanded” view of inclusion—that is, providing equal educational opportunities for all learners—helps reduce discrimination, and facilitate diversity and participation (Armstrong et al., 2010; Slee, 2011). Inclusive education involves transforming policy in an academic setting to ensure the participation of every student. Hence, the government of New Zealand and education stakeholders have instituted policies to address challenges pertaining to SWDs' inclusion, such as the National Education and Learning Priorities and TE Education Strategy. Participants' responses suggest that beneficiaries of inclusive education are not always aware of such policies. Accessibility advisors had limited awareness of their obligation—in terms of policies and legislation—towards SWDs whereas SVIs had no knowledge of such policies. Insufficient awareness of inclusive policies could lead to unsuccessful implementation as knowledge of policy influences its practice (Kaplan & Lewis, 2013). As stated by two participants, knowledge of legislation and policies could help SWDs recognise, contend, and claim their inclusive rights in TE.

The accessibility advisors in this study stated that SWDs must disclose disability to AS in order to receive support. A review of the websites of universities in New Zealand indicates that disclosure of disability is a prerequisite for obtaining support. Five SVIs indicated that they had a functional AS in their respective institutions. These participants also mentioned that they received support from AS, and, therefore, it is most likely that they disclosed disability. This is contrary to similar studies that indicate that some SWDs seldom disclose disability (Getzel & McManus, 2005; Hong, 2015; Jacklin, 2011; Kendall, 2016; Mullins & Preyde, 2013). Evans (2014) notes that learners who accept the disability identity or perceive themselves as PWDs are more likely to disclose disability. The disclosure of disability, as noted in this study, consists of providing medical evidence that confirms the presence of disability. In 2016, a student in York (Canada) university contested in court the disclosure of disability on the grounds of labelling and infringement of privacy. In response to the court verdict, York university has eliminated the policy requiring SWDs to divulge a disability diagnosis in order to obtain support (Stevens, 2016). This ruling suggests that the attention of TE institutions must be more focused on the provision of support rather than rigid medical documentation.

Based on participants’ accounts, TE institutions’ approach to the provision of support in the early TE period could be described as either “retroactive” (participants approached or initiated contact with AS) or “proactive” (AS initiated contact with participants). The different approaches (retroactive or proactive) could be due to the flexibility related to identifying students in TE (Shaw, 2006). The data illustrates that a retroactive approach was a barrier to inclusion as it led to delay in the provision of support. Support that promotes SWDs’ inclusion must be provided as soon as possible since delays in support provision in the transition period could lead to withdrawals (Mpofu & Wilson, 2004). Two participants commended AS in their respective institutions for contacting them and providing support prior to enrolment. Such proactive approaches may enhance SWDs’ adjustment to TE (Connor, 2012; Phillips & Clarke, 2010).

The accounts of participants show that there were challenges in the physical environment. These barriers included poorly arranged physical spaces, absence of tactile tiles, illogical arrangement of classrooms, and several stairs. SWDs in other studies have also spoken about problems of the physical environment (Aldakhil, 2017; Hollaway, 2001; Jeannis et al., 2020). The barriers in the physical environment identified in the current study may hinder SVIs from being more independent in TE. For example, due to the absence of tactile tiles, Alex may need to move around with another person who could alert him to potential hazards in the TE environment. Participants’ comments about the physical environment also suggest that the Building Act (2004) has not been implemented to the fullest extent in their respective institutions. Section 118 of the Building Act (2004) of New Zealand states that “reasonable and adequate provision by way of access … must be made for PWDs who may be expected to visit or work in that building and carry out normal activities and processes in that building”. This calls for TE institutions to make spaces and buildings accessible (such as well- arranged physical spaces and the provision of tactile tiles) for SVIs to move freely and participate in TE on an equal basis with students without disabilities.

The provision of support by AS did not meet the specific needs of SVIs according to some participants. As an example, Maria said that, "I told them that I didn't need a notetaker. I can write my notes, but what I needed was a guide". Maria was offered a notetaker despite her persistent request for a guide (a person who would assist her to navigate the physical environment). According to participants, a potential reason for such unfavourable attitudes was accessibility advisors' lack of knowledge about the inclusion of TE SVIs. This reason concurs with Mutanga and Walker's (2017) assertion that the unawareness of issues related to disability by TE staff is a barrier to SWDs' inclusion. The attitude of accessibility advisors seems to suggest that they were the professionals or experts whereas participants were "mere" beneficiaries of support. PWDs are the experts regarding their issues, and, hence, their input must be considered when making decisions (Convention on the Rights of Persons with Disabilities, 2006).

5.2 Social experiences

Despite the surge in enrolment of SWDs in TE in developed countries (Education Counts, 2021; Newman, 2011), little attention appears to have been given to research about their social lives on campus. The present study deepens knowledge about SVIs' social participation in TE and indicates that the social aspect of TE is of critical importance to SVIs' inclusion. For instance, the social environment, according to some participants, was the most important barrier to inclusion. Thus, TE institutions must give more attention to promoting the social inclusion of SVIs. The social experiences of participants in relation to their positive and unfavourable experiences, strategies for friendship formation, and perspectives on social inclusion are discussed in this section.

The impact of positive social experience on student achievement and success is evident in literature. Positive peer relationships appear to be associated with a smooth transition and favourable first-year experience (Hillman, 2005, Maunder et al., 2013). Further, affability among peers contributes to the positive "campus" experience of students (Maunder, 2018; Nevill & Rhodes, 2004). The benefits of friendship between participants and peers could be classified as psychosocial (sense of belonging) and practical (assistance with reading and navigation). Thomas and Hanson (2014) found that a positive social life increases the likelihood for students to remain in TE. This was the case for Diana as she claimed that, "my social connections are what has actually seen me through higher education". The positive association between retention and persistence in TE and favourable social experience could be attributed to a sense of belonging. The feeling of belonging to the TE environment is linked to enhanced academic motivation, increased confidence in participating in academic activities, and dedication to studies (Einfalt & Turley, 2013).

Biernat (2003) describes the common and oversimplified beliefs that are used to describe the appearance, personality, ability, and behaviour of a group as a stereotype. Some common stereotypes about persons with visual impairment (PVIs) are that they must have closed or disfigured eyes, wear dark glasses, and walk with a dog or white cane. Cupples et al. (2012) state that few people with visual impairment use a guide dog, white cane, and electronic navigation aids. Stereotyping therefore overlooks the presence of persons with unnoticeable VI in society since they do not appear "conventionally blind". In terms of socialisation, persons with unnoticeable VI would be expected to be conversant with the skills of social interaction like persons without disability. However, similar to persons with obvious VI, those with unnoticeable impairment have difficulty with social skills, such as eye contact (Rainey et al., 2016). This is due to absent or restricted visual input (information from eyes to the brain; Sapp, 2010). Consequently, Hill and Blasch (1980) view VI as a significant limitation since 85% of what we learn socially is achieved through vision. There is evidence of this limitation in this study, in which participants stated that they could not identify faces nor make eye contact. I refer to limitations related to the common means of interaction as the "effect of impairment".

It appears that the effect of impairment was a barrier to social inclusion as some participants said that they could not see peers nor make eye contact and therefore felt uncomfortable engaging in social interactions. Social skills are not limited to eye contact, or seeing or recognising faces but a range of strategies that promote communication and interaction with others (Davies et al., 2015). Sapp and Hatlin (2010) state that the teaching of social skills at the early stages of SVIs' education could maximise social inclusion in adult life. It is possible that the necessity of social skill acquisition was not emphasised by teachers in previous education—hence participants' difficulty with social interaction. This proposition is supported by Miyauchi's (2020) claim that SVIs in high schools are not acquiring the requisite training in the aspect of the Expanded Core Curriculum. This curriculum, specifically designed for SWDs, entails strategies for the development of skills in social interaction. TE could also provide opportunities for the development of SVIs' social skills. The provision of social skill training to SWDs in TE may lead to positive TE experiences since it is likely to enhance the social interaction skills of students. From the narratives of accessibility advisors, social skill training was excluded from the support they offered SWDs.

The accounts of participants suggest that negative social experiences were also attributable to the misconception of disability by peers. Stereotypical beliefs (not appearing blind) and effect of impairment (lack of social skills) seem to have portrayed participants as disinterested in social interactions. In this regard, it could be argued that peers were not sure about how to interact with participants. Misconception of disability was also related to patronisation according to a participant. The sense of patronisation or condescension stemmed from unsolicited assistance from peers. In this sense, disability appears to have been portrayed as agony, weakness, and misfortune and conferred peers the right to intrude and the obligation to assist (Findlay, 2015). Therefore, by showing his frustration about such assistance, Alex was affirming that PWDs want to be seen as independent like everyone else.

According to two participants, the misconception of disability by peers was due to students' lack of "prior exposure" to SWDs. Their view is supported by Aiden and McCarthy (2014), who found that about 43% of the British public were unaware of anyone with disability. Participants' views about misconception of disability and prior exposure to SWDs also reflect Allport's (1954) contact hypothesis, a widely used framework for understanding the effect of contact between members of diverse groups. Allport posits that unfavourable attitudes against segregated groups are influenced by unfamiliarity between groups. He suggests that interpersonal contact among groups and within suitable conditions will reduce prejudice against the marginalised. Other researchers have stressed the importance of intergroup contact in reducing prejudice. In one such study, Shields and Taylor (2014) found that an eight-week contact period between physiotherapy students and PWDs resulted in an improvement of the former's attitude towards the latter.

From the findings, it appears that most participants felt that their social life would improve by addressing peers' misconception of disability. This suggests that although participants acknowledged that impairment interfered in certain aspects of social life, the real barrier to social inclusion was misconception. In other words, they did not attribute disability to their physical characteristics but to ableism—that is, a discriminatory and prejudicial society (Goodley, 2014). This perspective contrasts with studies on friendship, which view impairment as a personal predicament that constitutes a barrier to friendship development (Castrodale & Zingaro, 2015). It is also at variance with the internal attributive behaviour of SWDs in studies by Danes-Staples et al. (2013) and Opie and Southcott (2018). Most SWDs in the former and the only student in the latter blamed themselves (specifically impairment) for the unfavourable behaviour of peers. Ascribing people's behaviour on impairment or any internal characteristics is referred to as internal attribution (Myers, 2010).

It emerged from this study that most participants approached peers, initiated conversation, disclosed disability, and educated them about impairment. By disclosing, participants had accepted the disability identity but did not allow it to define their social lives. They were not "fortunate receivers of friendship from kind, able-bodied friendship givers" (Castrodale & Zingaro, 2015, para. 1) as suggested by some researchers. Rather, they "reached out" through the strategy of disclosure and education to remove perceived prejudice and promote social inclusion. Two types of disability disclosure were evident in the current study. Direct disclosure involved approaching peers, initiating conversation, and disclosing disability through verbal communication. The less common type—indirect disclosure—involved using nonverbal means to reveal disability. The strategies adopted by participants were generally successful in forming meaningful friendships. Proponents of the social model advocate that in a 'disabling' society, PWDs must confront the barriers to their inclusion (French & Swain, 2011). Some of the means of challenging and removing barriers—as noted in this study—appear to include disclosure and education.

Most participants in this study approached and disclosed disability to peers. Alex kept disability a secret since he did not want to draw attention to himself. As a student with unnoticeable VI, the stress of having to convince peers that he is a PWD could be a possible reason for obscuring impairment. Hiding impairment could be emotionally burdensome due to the preoccupation of disguising the disability identity (Davis, 2005). Therefore, it was not unexpected that Alex reported anxiety as a result of hiding his impairment. A reason for nondisclosure mentioned by Alex was that he did not want to bother peers with "what they did not understand". By anticipating that they could be a burden to others, French (2004) notes that some PWDs do not participate in socialisation. The fear that disclosing disability to peers would expose him to unfavourable experiences was also a reason Alex gave for not wanting to appear different. Cechnicki et al. (2011) mention that the frequent exclusion of PWDs could make them anticipate marginalisation from those without impairment, which, in turn, becomes a barrier to social inclusion. However, assuming that all people without disability hold prejudicial views is to reproduce the same form of discriminatory beliefs perpetrated on PWDs (Akamanti, 2004). The fear of actual or anticipated interaction is referred to as communication apprehension (McCroskey, 2015). McCroskey explains that people with high communication apprehension may have low self-esteem and that this could stifle their desire to contact and associate with others.

Gloria and John depended on family and outside TE social networks, respectively, to compensate for the lack of friendship. These external supports in some instances counteracted the effect of negative social experience. For instance, Gloria said that her family was supportive during periods of stress. Family support, including social support, has been found to promote wellbeing by reducing psychological distress and promoting self-esteem (Ioannou, 2019; Symister & Friend, 2003).

Two major perspectives on the appropriate approach to social inclusion were identified in this study. Maria preferred integration with the TE community as the basis for social inclusion. In contrast, some participants envisaged that belonging to a disability "group" would improve the social lives of SVIs. Gloria said that belonging to a disability club would have reduced the loneliness she felt. Her view is supported Dunn and Burcaw (2013) as the authors mention that a disability community promotes solidarity, a sense of friendship, and commonality among members. The identity model also suggests that belonging to a disability community offers PWDs the motivation to challenge disabling barriers (Brewer et al., 2012). As noted in the present study, the inspiration to confront social exclusion was not associated with a disability community or group. The suggestion by John that the TE institution should establish clubs or communities similar to other minority groups is consistent with the minority model of disability. The model asserts that PWDs constitute a minority group that suffers discrimination similar to other groups, such as gender, racial, sexual, and religious minorities (Olkin, 2001). Disability groups appear to limit PWDs to one identity—that is, the "disability identity". PWDs may have multiple identities, such as religious, ethnic, and gender identities (Goethals, 2015). Hence, portraying PWDs as a single identity may not be a "holistic" representation of their attributes. In terms of friendship, some participants desired to be perceived as holistic individuals and not limited to the disability identity. For instance, Ben perceived that his social experience was good as he indicated that peers "comprehend my disability, but they also understand me as a person". Maria's approach to forming friendship also illustrates the importance of multiple identities in building relationships. In some instances, she depended on other identities, such as marital status, to connect with peers.

5.3 Learning experiences

Through legislation, TE institutions in New Zealand are mandated or required to provide an accessible, equitable, and inclusive learning environment for all students, including SWDs. (Education and Training Act, 2020). Participants' experiences in the present study indicate that the attitude of lecturers and accessibility advisors (in several instances) were a barrier to SVIs' inclusion. This suggests that TE institutions are not fulfilling their obligation of providing a learning environment that recognises and supports the needs of SVIs.

The tendency for lecturers to distance themselves from SVIs' problems by ignoring requests for support or refusing to grant concessions was a barrier articulated by some participants. According to literature, lecturers may be unwilling to offer support because they do not want to be perceived as giving SWDs any undue advantage (Mullins & Preyde, 2013). Also, lecturers may withhold support due to time constraints or busy schedules (Berry & Mellard, 2002), doubting students are PWDs (Moriña, 2017), and the perception that SWDs are lazy and unmotivated (Osborne, 2018). These perceptions could account for a lecturer's advice to Gloria to "follow the system", rigidity in evaluating Diana's assignment, and the disregard of Alex's request for early access to notes. Withholding support may be detrimental to SVIs' academic participation. It seems to hinder self-advocacy as one participant reported not being confident approaching lecturers due to a lecturer's denial of his request for early access to notes. Self-advocacy is the "ability to communicate with others to acquire information and recruit help in meeting personal needs and goals" (Balcazar et al., 1991, p. 31, as cited in Test et al., 2005). SWDs are encouraged to develop self-efficacy since it has been linked to effective transition, adjustment, and retention (Barnett, 2014; Getzel, 2008).

Like SWDs in Hopkins' (2011) study, participants in the present study preferred notes electronically and in advance of the lectures. Some participants reported delays in receiving notes. Such delays may present a challenge as prompt access enables participants to convert materials into a suitable format, making it easier to read and keep pace with lectures. Other disabling practices mentioned by participants included the provision of academic materials in printed form (inaccessible to participants), lecturers speaking in a low and monotonic voice, and the failure of lecturers to read out information on the PowerPoint slides. These examples may suggest that lecturers assumed that all students could learn by sight. It is not uncommon for lecturers to assume that all students in their class are without disability (Svendby, 2021). This assumption may be attributed to the normalisation of specific attributes, such as ability to see contents on a PowerPoint slide or hear what is being spoken by lecturer, with respect to learning (Tinklin & Hall, 1999). Lecturers may also assume that all students are without disability if they have not been advised by AS of the presence of SVIs in advance. Moreover, they may not always be aware of the presence of SVIs in their class because not all students disclose disability. In this sense, lecturers must adopt inclusive practices in the classroom. They must employ teaching strategies that take into account a wide range of learning needs. In doing so, the learning needs of SVIs would “automatically” be addressed, and there may be no need for lecturers to know if an SWD is present.

A potential factor stated by some participants for lecturers’ negative attitudes was the lack of understanding of disability issues. Lecturers’ lack of understanding has been confirmed in other studies to be a barrier to the academic inclusion of SWDs (Matshedisho, 2010; Mutanga & Walker, 2017; Ridell & Weedon, 2006). It is possible that some lecturers did not understand the extent to which VI affects learning. However, support was not forthcoming even though some participants made lecturers aware of the implications of VI and the requirement for learning. Withholding support in the face of “evidence” suggests that factors beyond lack of awareness could have accounted for lecturers’ unsupportive attitudes. John and Gloria were of the view that a lack of prior experience with SWDs may have contributed to the unfavourable attitudes of lecturers. This factor resonates with an observation Tinklin and Hall (1999) made in their study. They observed that lecturers often view requests for support as frivolous unless they have had a direct and personal involvement with a “similar” group of PWDs. Cameron and Nunkosing (2012) also found that lecturers with prior contact with students with dyslexia had positive attitudes towards their inclusion. Regardless of perceived cause, the findings suggest that unfavourable attitudes of lecturers resulted in a sense of frustration and discouragement for some participants.

It was found in this study that the provision of appropriate support facilitated the inclusion of SVIs. For example, although Alex could perform calculations for chemical reactions, he had difficulty using the pipette to transfer chemicals due to vision loss. With appropriate support from laboratory assistants, he was able to participate fully in chemistry laboratory experiments. Alternatively, Alex could have used assistive devices to perform experiments instead of relying on laboratory assistance. For example, the Sci-Voice Talking LabQuest (a text to speech software) could be useful for titration (determining the concentration of chemical substances), measuring temperature and pH (acidity and nonacidity of a solution), and calorimetry (the measurement of heat transfer; Kroes et al., 2016). It may have been more beneficial for Alex to use assistive devices because he would have been able to perform experiments independently. As some academic staff perceive the provision of support as giving SWDs an unfair advantage (Vickerman & Blundell, 2010), conducting experiments independently may help assuage such fears.

In John's opinion, lecturers assisted him because AS (through a course coordinator) informed academic staff about his needs. This is consistent with Moriña et al's (2020) assertion that lecturers are more likely to support SWDs if they are aware of the appropriate adaptation to fulfil SWDs academic needs. Thus, in addition to informing lecturers about the presence of an SVI in the lecture theatre, academic staff should be informed about the requisite support for the SVI's inclusion. John's account also indicates that collaboration between lecturers, course coordinators and AS could promote partnership that ensures the fulfilment of SVIs' academic needs. Further, the collaboration shows that inclusion was seen in John's TE institution as a shared responsibility and not exclusively for AS.

This study examined the support provided by AS through accessibility advisors. Accessibility advisors are generally the first point of contact for TE SWDs who require support. The accessibility advisors in this study mentioned that they provide support, mainly with note-taking and examinations. The notetakers' role, according to accessibility advisors, is to write notes for students with difficulty taking notes as a result of loss of sight. Thus, note-taking support enhances learning opportunities for SVIs. However, considering that many learners in the student population have difficulty with effective note-taking (van der Meer, 2012), offering support to a limited group of students may be discriminatory. To foster inclusion, support, such as training students in effective note-taking strategies as suggested by Schmidt (2019), may be provided for students who do not require notetakers.

Participants' accounts indicate that note-taker's notes were often of little benefit. Some of the challenges associated with the note-taking support included lack of relevant and detailed information, and incoherent, indecipherable, and unclear writing styles. The opinions of participants are consistent with a participant's view in Hayden et al.'s (2008) study, who stated that notetakers' notes are as "foreign as a textbook, only less legible" (p. 82). From Diana's account, the poor quality of notes was related to notetakers' limited knowledge in specific courses. Offering note-taking opportunities for students on a group basis, as mentioned by Gloria, could also be a possible cause for the poor quality of notes. As SWDs have unique learning needs, providing the same copy of notes may not fulfil their diverse learning requirements.

Hayden et al. (2008) also argue that the practice of notetakers writing notes for SWDs inhibits learning by restricting learners' classroom participation. Considering the limitations of note-taking support, it may be appropriate for SVIs to move away from the traditional method of note-taking via the notetaker. This view appears to resonate with Hayden et al.'s (2011) assertion that SVIs must be encouraged to take their "own" notes through the use of technology. Maria did not utilise the note-taking support; rather, she used the computer to write notes. Bohay et al. (2011) state that writing notes for oneself improves retention and leads to a positive learning experience.

Recognising the importance of examination support to academic success of SWDs, the National Post-Secondary Education Disability Network Incorporated published the Guidelines and Procedures for the Provision of Alternative Arrangement in Tests and Examinations to Students with Disability/Impairment (ACHIEVE, 2016). The guidelines offer standardised methods for determining and instituting examination support in New Zealand's TE institutions. Accessibility advisors indicated that the ACHIEVE (2016) document guides the provision of examination support in their institution. However, on examining participants' experiences, it was found that the provision of support was, in some instances, inconsistent with these guidelines. For instance, ACHIEVE (2016) recommends that the reader–writer (RW) for a particular examination must be familiar with the subject. The guidelines state that “it is desirable that the reader/writer has some knowledge of the subject of the test or examination” (ACHIEVE, 2016, p. 25). Contrary to this recommendation, some participants were provided with RWs who were not familiar with the subject of the examination. As participants noted, a ramification of using “unknowledgeable” RWs was poor performance in examinations. Another barrier identified by two participants was RWs’ lack of fluency in English and Māori. Language skills are emphasised by ACHIEVE (2016), mentioning that, “the reader/writer should have proficient literacy skills…” (p. 25). RWs’ lack of fluency may be associated with unfamiliarity with the subject of examination. For example, articulation of certain words would be constrained if a RW is unfamiliar with the terminology of a particular subject. The uncertainty of some RWs about their role—whether to read or write—during examinations was reported as a barrier by Ben. The line between the role of a reader (person who reads out the questions) or writer (person who writes answers) and RWs (person who reads and writes) appears to be blurred and could be the reason for the confusion. Effective communication between AS and RWs may provide clarity on the latter’s role. In the context of providing support, SWDs are dependent on RWs concerning reading and writing during examinations. According to Bunbury (2019), the medical model reinforces PWDs’ dependency and decreases individual autonomy. The use of technological devices by some participants implies that participants are moving away from dependency on RWs and taking control of their education. Utilisation of assistive technology in examinations is recommended in the ACHIEVE (2016) document. Despite ACHIEVE’s (2016) recommendation, accessibility advisors viewed the use of technology unfavourably and, hence, were reluctant to allow Diana to use a computer for examinations. Accessibility advisors’ attitudes give credence to participants’ perception that the staff of AS lack requisite knowledge about issues related to TE SVIs’ inclusion.

According to the ACHIEVE (2016) guidelines, the conventional period for extra time is ten minutes for every hour of examination, but the document states that in exceptional cases the period may be prolonged. Consistent with the guidelines, the accessibility advisors confirmed that they allow for 10 minutes (standard) of extra time, which could be varied in extraordinary situations. A survey of 28 institutions in New Zealand found that all the institutions provide extra time support (Bell, 2015). This study by Bell (2015) also found that the majority (43.5%) of the institutions allocated a standard extra time of ten minutes per hour. In the present study, some SVIs mentioned that they were unimpressed with the period allocated for extra time as they deemed it inadequate. In particular, Gloria reported that the extra time support provided for most of her degree was insufficient to complete examinations. However, when it was extended in the last semester, she had enough time to complete the examination and, as a result, her grades improved significantly. The standard extra time may not be beneficial as it is applicable to all SWDs according to an accessibility advisor in Bell’s (2015) study. The participant argued that since the effect of impairment varies among SWDs, it would be prudent to allocate extra time on an individual basis. It appears that ACHIEVE’s (2016) guidelines consider the individual needs of SWDs as it provides opportunity for the extension of the standard time. Two participants’ accounts suggest that the use of additional time was associated with stigma. It was the view of Diana and Gloria that they were perceived to be lazy by peers because of frequent use of additional time (extension) for assignments. In her defence, Diana said that it takes three times longer to read and complete assignments as compared to her peers. Her argument concurs with Goode’s (2007) assertion that impairment constraints (effect of impairment) prolong the time devoted to learning.

Information technology (IT) has become an important tool for accessing learning materials, and for teaching and learning. The screen reader or text-to-speech software was the most common type of assistive technology utilised for learning in this study. Participants' experiences with the use of assistive technology highlighted some barriers. The lack of effective use of technological "tools" by lecturers was a barrier to information accessibility. Some lecturers' neglect of their institution's specifications for uploading notes, and the inaccessible format of PowerPoint slides and of PDF documents, among others, hindered access to academic materials. The challenges associated with assessing PDF files are consistent with the experiences of some participants in Fitchen et al.'s (2009) study. They reported that scanned PDF files and those with tables, figures, and many annotations may not be readable by the screen reader. These researchers argued that providing materials in an accessible PDF file or alternative format, such as Word, could address the problem. Lecturers' ineffective use of information technology could be due to a lack of appropriate IT skills for fostering SVIs academic inclusion. Lack of training or prior experience in the use of technology for SVIs' learning may lead to the ineffective utilisation of such technologies.

Another barrier to information accessibility, according to participants, was the inherent difficulty with the use of technological devices. Participants stated that the inherent properties of the screen reader made its use strenuous and time consuming. Their experiences reflect Craven and Brophy's (2003) claim that the use of assistive technology by SVIs prolongs the completion of academic tasks. As technology advances, it is expected that the inherent difficulties with assistive technology will be ameliorated. However, at present, offering SVIs additional time to complete academic tasks may be the appropriate means of compensating for the inherent difficulties associated with the use of assistive technology. The unavailability of academic materials in an accessible format was also identified as a barrier to information accessibility according to the findings. Jane, an official of BLVNZ, spoke about the dearth of published books in accessible format that are available to persons with visual impairment (PVIs). Her claim that less than 10% of books are in a format accessible by PVIs is supported by the World Blind Union (n.d.). The scarcity of accessible materials, also known as the "golden book famine" by advocates, is mainly due to copyright restrictions (World International Property Organisation [WIPO], 2016). The Marrakesh Treaty was envisioned to make published materials accessible to PVIs by eliminating difficulties with copyright, replication, and inefficiency (WIPO, 2018). The Copyright (Marrakesh Treaty Implementation) Amendment Act (2019) of New Zealand became effective in January, 2020. With the coming into force of the legislation, it is expected that more published materials would be made accessible to PVIs, including TE SVIs.

5.4 Conclusion

This chapter comprises the interpretation, relevance, and possible explanations of the findings of the study as well as discussion of the data in relation to existing literature. There were similarities between the present study and studies in the general student population. For instance, career consideration was the main factor influencing enrolment decisions in this study and studies by Balloo et al. (2017), Kaye and Bates (2017), and Krutii and Fursov (2007). Further, unrealistic expectations about TE were reported in the current study and in Crisp et al.'s (2009) and Scutter's (2011) studies. McPhail's (2015) observation that prior exposure to the TE system promotes students' realistic expectation was also confirmed in the present study. These examples suggest that there is a "single" student experience and, therefore, making TE inclusive for SWDs may be beneficial to students without disability. It could be argued that addressing the barriers identified in this study would inadvertently benefit SWDs. For instance, provision of PowerPoint slides prior to lectures, well-prepared slides, reading out information on slides during lectures, speaking more clearly and avoiding speaking in a monotonic and low voice, and providing materials in electronic formats are good teaching strategies that would benefit all students. Further, creating awareness about disability issues in TE will improve students' understanding of disability and also enhance the formation of friendships between SWDs and peers without disability. This finding also implies that institutional support for SWDs must be student rather than disability centred. TE must focus on modifying the institutional system and environment to be usable by all students.

The study found many barriers and enablers to the TE participation of participants. However, it seems there were more barriers as compared to assistance. In the transition period, poor choice of course, unrealistic and unmet (realistic) expectations, retroactive support, inappropriate support, problems of the physical environment, and absence of AS were identified as barriers. Contacting participants prior to enrolment and experiences of disability in the critical period were identified as enablers in this period. Misconceptions of disability, effect of impairment, isolation, and lack of friends were also recognised as barriers whereas disclosure and education and connecting with peers, and psychosocial and practical support from peers enhanced the social inclusion of participants. With regards to the learning environment, many barriers were identified, and these impediments can be grouped into three categories: unfavourable lecturer attitudes, difficulty with note-taking and examinations, and information technology issues. The enablers to academic inclusion were support with laboratory experiments and preferential learning support. These results suggest that there is a gap between inclusive policy and practice in New Zealand's TE system. It also indicates that the initiatives taken to support SWDs have been unsuccessful in achieving an equitable and inclusive system of TE.

CHAPTER 6

CONCLUSION

This study delved into three main areas of students with visual impairments' (SVIs) experiences: transition, social, and academic. This chapter commences with a discussion of three important issues arising from the findings. First, participants' pre-enrolment experiences are discussed. The pre-enrolment period is an important aspect of students with disabilities' (SWDs) transition but is rarely discussed in literature, according to Reed (2015). Participants' views about this period suggest that tertiary education (TE) institutions must play an active role in enhancing students' career prospects and supporting better enrolment decisions. Second, participants' perspectives on inclusion and disability are considered. Their views on these issues provide insight into how an inclusive TE system could be achieved. Lastly, this section discusses the models of disability in relation to how they apply to the findings and implications on SVIs' inclusion. This chapter also presents the limitations of the study and offers recommendations resulting from the study.

6.1 Reflection on key findings

Among the reasons for pursuing TE, studying for a specific career was the most important reason for enrolling. It was found that participants also selected courses that matched their career ambitions. Compared to peers without disability, SWDs are less likely to obtain employment after TE (Erickson et al., 2012). Consequently, it could be argued that participants' preference for a course that guarantees a route to a career as much as possible is a good decision. Due to the difficulty in obtaining employment, SVIs' career prospects need to be maximised by TE institutions. Institutions could collaborate with industry to offer work placement programmes and mentorship initiatives for SWDs in general.

For some participants, it emerged that the appropriateness of studying a specific programme was influenced by their perception of disability. Such students chose courses that are perceived to be non-sight-based (do not require involvement of sight). The possible reasons for choosing such courses (as discussed) are past educational experience and social persuasion. Gloria's experience shows that the perception of disability could be a barrier to selecting a course SVIs are interested in and, consequently, could lead to withdrawal decisions. Further, her account suggests that the perception of disability can exclude SVIs from a variety of courses. She said that "I chose physiotherapy because I believed that was the only clinical course I could pursue as a visually impaired person". This perception appears to be supported by the findings of a study among non-TE SWDs in New Zealand, which found that "thirty percent of disabled people aged 16 to 64 who would like to study in the future thought they would be limited in the types of courses they could do due to a condition or health problem" (Earle, 2019, p. 31). Considering that the perception of disability seems to be excluding SWDs from a variety of courses, it is suggested that high school and TE institutions support students in course selection. Prospective SVIs should be made aware of the availability of support to pursue perceived sight-based courses in TE. It is also important for high schools to make perceived sight-based courses, such as mathematics, science, and physics, accessible and attractive to SVIs as this would enhance students' interest and make them feel competent in pursuing such courses.

Participants viewed disability as caused primarily by social barriers rather than a deficit in sensory function. This understanding of disability is useful for achieving inclusion as it focusses on changing the TE environment and system rather than the student (Oliver & Barnes, 2010). Influenced by a social understanding of disability, the two accessibility advisors in this study mentioned that Disability Services in their institution was renamed Accessibility Services (AS). Although this could be considered laudable, the term "services"—as explained in the Discussion chapter—is consistent with the medical model of disability. Another concern is that removing the term "disability" may not be viewed favourably by SWDs, who consider disability as an important part of human diversity. Therefore, a more appropriate designation could be Accessibility and Diversity Centre or Office. This designation is likely to be accepted by students who are uncomfortable with the term disability and with those who view disability as part of diversity.

Further, the term "accessibility and diversity" may not be a familiar designation as compared to "disability". Providing information about the centre on the homepage of websites of TE institutions is a possible means of raising awareness. I have noticed that most TE institutions in New Zealand do not have information or images of SWDs on their homepage. Such information exists elsewhere on the institutions' websites. However, other minority groups, such as Māori and Pasifika, are featured on the homepage of some institutions. Boyer et al. (2006) also found that the homepages of TE institutions in the United States had images of Latinos and African Americans but no images of persons with disability (PWDs). The homepage is useful for creating awareness because it is the first web page that is noticed by users. SWDs are an important part of student diversity, and, like other minority groups, they should be given the appropriate prominence.

A cursory look at the websites of universities in Europe provides evidence that some institutions have established equality units or departments to provide support to students from minority groups or those at risk of marginalisation. These groups of students include learners from low socioeconomic backgrounds, SWDs, sexual minorities, mature students, and ethnic and religious minorities. The formation of equality units is commendable since it recognises disability as part of student diversity. This initiative is likely to be supported by SWDs since PWDs tend to consider people from other minority groups as allies because they share common negative experiences. John's response during the focus group confirms this notion, stating, "I went to places like queer space, and I met a few people there and that was really pleasing". The intersectionality of identities may also justify the establishment of a centre that offers support to students of different minority groups. SWDs may belong to other "oppressed" minority groups or have multiple identities. For instance, an SWD may come from a low socioeconomic background. Receiving support for issues related to disability and potential economic disadvantage from a single office means that the process of support provision would be simple and efficient.

Although broadening the scope of support provision to include other students may be commendable, I question the notion that it should be limited to students at risk of marginalisation. As Maria said, "my only concern is that when we start to have groups of minorities…, then we may forfeit the essence of inclusion". Consistent with the concept of inclusive education—or equal opportunities for all students—a recommendation from this study is that AS or equality units should be transformed into multipurpose centres that are welcoming of students of all identities (SWDs and those without disabilities as well as students from majority and minority groups). In other words, there should be one centre for the provision of student support. Making the AS or equality unit accessible to all students would make disability a student issue rather than an individual problem or group issue. I argue that when disability is primarily viewed as a student issue, it is likely to encourage a "campus-wide" effort to remove barriers that prevent SWDs from full participation in TE.

Participants' views on inclusion offer some useful insights into the concept. As noted in this study, the term "inclusion" may be understood differently by different individuals. Inclusion was perceived by some participants as providing equal opportunities for all students within the TE system. It was also viewed as the elimination of barriers to SWDs' participation in TE. The latter definition seems narrow. It is also inconsistent with the standard view of inclusion, which involves the full participation of all students (Armstrong et al., 2010). This narrow concept of inclusion may be relevant. It suggests that TE institutions should place particular importance on the inclusion of students who are more prone to exclusion. This research confirms the need to prioritise the inclusion of students who are at risk of exclusion as the study shows that such students continue to face barriers to TE participation. These barriers are associated with transitional, social, and academic experiences.

There was disagreement among participants about how inclusion could be achieved, according to the findings. For instance, most participants preferred disclosure and educating peers about disability as the strategy for making friends. This strategy was opposed vehemently by Maria. She claimed that visual impairment (VI) was obvious, and, therefore, there was no need to "showcase" it. Integration with the TE community and the formation of a disability community were also competing approaches to inclusion. Gloria was of the opinion that disability clubs would assuage the loneliness felt by SWDs as students were more likely to make friends among themselves. Maria argued that the formation of disability clubs could portray SWDs as being disinterested in integrating with the TE community and therefore may have a counterproductive effect on inclusion. An important conclusion to draw from these arguments is that SVIs should first and foremost be seen as students. Like all students, they have varying preferences, including differences in the approach to inclusion. They may have different concepts about disability—the conservative social model or moderate social model. Some may want people to know about their impairment and educate them on disability issues. Others would want to keep impairment as a secret. Some may be appalled by the institutional barriers they face, such as Alex's frustration about difficulty with information accessibility whereas others may be unperturbed. Some SVIs may prefer note-taking support while others may prefer a guide. Some would like to join disability clubs whereas others would prefer to join nondisability clubs. Thus, among SVIs, they should respect each other's preferences. More essentially, accessibility advisors and other TE staff should not make assumptions about the appropriate support an SVI needs. They are different individuals with varying needs and preferences, and, therefore, what works for one SVI may be ineffective for other SVIs. In essence, their choices should be given prominence by accessibility advisors in the provision of support. This suggestion is particularly important because, in some instances, participants' requests for specific support were disregarded.

As the social model of disability was developed by people with disabilities (PWDs), it offers a better explanation of their lived experiences (Longmore, 2003). Bailey (2004) notes that the concept "has powerful resonance with disabled people's lived experience" (p. 5). Social modelists urge researchers to examine the social processes or mechanisms that exclude PWDs (Campbell & Oliver, 2013). Power relations in institutional practices and decision-making seems to be the main mechanism hindering SVIs from full participation in TE in this study.

In the medical model, it is the duty of professionals to identify impairment and associated restrictions and take appropriate measures to enhance the situation of the PWD (Humpage, 2007). This portrays the PWD as deserving of help and a passive beneficiary of benevolent gestures from others. This relationship tends to place PWDs in a vulnerable position with helping professionals, limits collaboration, and usually silences PWDs' voices in decision-making (Matysiak, 1998). There is evidence of these power relations in this study. For example, Maria's request for specific support was disallowed by accessibility advisors. Some participants also felt that lecturers ignored their requests for support. Alex gave up trying to obtain support after a lecturer declined his request for early access to notes. He said "her response did not give me the confidence to approach the other lecturers". Participants dealt with issues of power relations differently. For instance, accessibility advisors persuaded Maria to use a reader–writer (RW) for her law exams, but she insisted on typing the essays by herself. She said, "finally, they told me that they could write the answers for me. I replied that it was impossible". In other instances, participants resorted to alternatives when they felt that advisors were failing to listen to them. Maria relied on friends for navigation when her request for a guide was declined. Alex used his laptop when his several requests for the removal of security settings on campus computers were unheeded. SVIs are "authorities" regarding their own lives, and their preferences must be given the needed attention. Article 4, clause 3 of the Convention on the Right of Persons with Disability (CRPD, 2006) states that, "in the development and implementation of legislation and policies to implement the present Convention, and in other decision-making processes concerning issues relating to persons with disabilities, States Parties shall closely consult with and actively involve persons with disabilities…"

Oliver (2009) argues that exclusion disempowers PWDs and renders them less powerful as compared to persons without disability. Proponents of the social model claim that the social environment restricts and thereby excludes PWDs from full and active participation in society (Palmer & Harvey, 2012). Consistent with the social model, the findings in the present study show that there were barriers in the TE environment that prevented SVIs from participating effectively in TE. These barriers include, among others, unfulfillment of realistic expectations, delays in the provision of support, disorganised physical environment, unfavourable lecturer attitudes, and inexperienced reader-writers. The medical model disempowers PWDs by restricting them from full societal participation through disabling barriers. In the same manner, the social model claims that PWDs could be empowered by the modification of the environment (inclusive setting) and confrontation of the barriers to inclusion (French & Swain, 2011; Oliver & Barnes, 2010). SVIs in this study confronted disabling barriers in several ways. For instance, confronted with social isolation, participants began to achieve social inclusion through self-disclosure and educating peers about disability. Some participants like Alex dealt with academic barriers by "speaking up" and disclosing barriers to TE staff. However, it was noticed that participants' strategies for overcoming barriers did not always lead to inclusion. This gives credence to the notion that inclusion should be led by the institution rather than the student. Inclusion requires a commitment from TE institutions to restructure the environment to accommodate the student (Ainscow et al., 2012).

6.2 Limitations

This study has avoided some of the methodological limitations associated with studies about TE experiences of SWDs. For instance, as a form of triangulation, this study has utilised more than one method of data collection. This is in contrast to some studies (for example, Holloway, 2001; Van Hees et al., 2015), which utilised interviews as the only method for collecting data. Further, a limitation of some studies appears to be the inclusion of the opinions of only SWDs (for example, Lourens, 2015; Phillips & Tibble, 2014). In this study, the perspectives of key proponents of inclusion—accessibility advisors and an official of Blind Low Vision New Zealand (BLVNZ)—were included. Involving the views of the stakeholders has allowed for further insights into participants' lived experiences.

One of the SVIs who contacted me initially did not return the participant consent form, which was taken as an indication that she chose not to participate in the study. The potential participant did not provide reasons for her decision. It is possible that she was not comfortable with the participatory nature of the study. Most of the PWDs Kitchin (2001) approached declined to take part in participatory research. PWDs were reluctant to become involved in the research because of the number of hours involved in the study, low levels of confidence, and lack of familiarity with the researcher.

Another limitation of this study is the exclusion of the perspectives of lecturers and students without disability. The attitudes of these populations towards inclusion were discussed through the perspectives of SVIs. This allowed for speculation on some issues. For instance, some participants hypothesised about the reasons why lecturers refused to provide support for SVIs. This study suggests that the attitudes of academic staff and peers without disability has an impact on SVIs' inclusion. Consequently, future studies should explore the perspectives of these groups in order to derive a broader understanding of inclusion in TE.

Oliver (2002) argues that the kind of research that will echo the true experiences of persons with disability must be participatory, emancipatory, and empowering. Therefore, at the outset, my intention was to utilise emancipatory research, an approach that embodies the principles outlined by Oliver (2002). However, due to ideological, practical, and ethical constraints—as explained in the Research Methodology chapter—I was unable to adopt an emancipatory methodology. I opted for participatory research (PR). Participatory research is similar to emancipatory research except that PR allows for varying degrees of participation in the research process (Probst et al., 2003; Zarb, 1992).

6.3 Recommendations

This research points to the need for effective transition planning to avoid negative TE experiences, such as early TE leaving. In essence, supporting SVIs to make better course choices must be a priority of transition planners in high school. The "matching" programme appears to be an appropriate transition model. The matching system is a compulsory aspect of the application process for degree courses in the Netherlands (Dutch Ministry of Education, 2013, as cited in van Herpen et al., 2017). In this programme, applicants are requested to discuss their choice for a specific course either in person or through a questionnaire. Subsequently, applicants receive a report detailing the suitability—or otherwise—of a preferred course to their academic needs. In the event of a mismatch, students are advised not to enrol in the specific programme. According to van Herpen et al. (2017), this policy is premised on the notion that supporting students in decision-making enhances retention.

Another recommendation is that transition programmes for SVIs should be included by TE institutions before they enrol. Considering that timeliness of provision of support is important to TE study, this programme should include meeting SVIs, educating them about available support, and providing support before they enrol. This is likely to facilitate students' adjustment to TE (Connor, 2012). In the transition programme, prospective SVIs must be provided with accurate information that would enable them to recognise the difference between high school and TE. Such information would be important in dealing with the issue of unrealistic expectations. Ultimately, accurate information and awareness of the TE system would enable SVIs to adjust to the norms of TE education. Transition programmes for SVIs could also be modelled on the Summer Bridge Programs. The Summer Bridge Program in the United States is a transition programme for prospective students that often lasts between two and four weeks (Sablan, 2014). It consists of an extensive orientation to campus life, advice on academic issues, and the equipping of students with skills needed to succeed in TE (Clearinghouse, 2016).

The provision of support to SVIs by AS in this study was limited to academic needs. As academic issues are not the only factors for inclusion, it would not be advisable to prioritise academic needs over other aspects. Thus, it is recommended that provision of support transcends academic activities. For instance, social skills training and organising social activities may enhance the social experience of SVIs. It is also essential that institutions create awareness about disability as the study found that peers' adequate knowledge about disability issues led to SVIs' inclusion. Awareness campaigns could be integrated in institutional activities, such as orientation and induction. Moreover, infusing disability studies into academic programmes or making disability studies a compulsory course could enhance students' understanding of disability and eliminate misconceptions.

A consensus among participants was that accessibility advisors did not have the requisite knowledge about the needs and supports for SVIs. Therefore, it is imperative to offer in-service training for accessibility advisors to enable them to provide appropriate support. Alternatively, the institution could enlist professionals, such as assistive technology specialists, in the accessibility services team. Further, lecturers must be informed about the needs and support required for the SVIs attending lectures. They should also be provided with training on disability issues since the evidence suggests that training increases their awareness and leads to positive attitudes towards SWDs (Davis et al., 2013; Murray et al., 2014). Through sensitisation, it is expected that accessibility advisors and lecturers would be equipped to remove barriers to SVIs' inclusion.

Students with visual impairment must be encouraged to use assistive technology for academic activities. This study found assistive technology would be useful for note-taking, examinations, and laboratory experiments. For instance, most of the participants in this study relied on notetakers for note-taking in class. In view of the challenges with note-taking support, SVIs must be encouraged to use computers to write notes by themselves. The process of writing notes in the students' own words enhances the retention of information (Bohay et al., 2011). SVIs should also utilise assistive technology for examinations. By using these devices, they would avoid the challenges associated with the RW support. This proposition appears to be supported by Gloria. As she was reflecting on her experience with the RW support, she said, "I probably should have used computers much earlier in my university career, but I didn't". The emergence of COVID-19 (SARS-CoV-2) gives credence to the use of assistive technology for academic activities. Teaching and learning appear to be moving from in person to remote or online due to the pandemic. The "changing dynamics" of learning may render the note-taking and RW support unimportant. It is also suggested that SVIs use assistive technology for laboratory experiments instead of laboratory assistants. This would make them independent when conducting experiments.

TE institutions must take a proactive rather than a reactive approach towards the inclusion of SVIs. Proactivity means that institutions must incorporate inclusive practices in all aspects of the TE system. This appears to be the most effective strategy towards inclusion as these practices would "automatically" lead to the elimination of many barriers. For instance, by adopting inclusive practices, such as reading out words on the slides and providing learning materials electronically and in advance of lectures, it may not be necessary for lecturers to know if an SVI is in attendance. Contacting prospective SVIs prior to enrolling and arranging support in advance is another example of proactivity.

There were also inconsistencies found between national policies and the provision of support by accessibility advisors. This may justify the need for TE institutions to conduct accessibility or inclusion audits. The inclusive audit could be a yearly programme that evaluates institutional guidelines, policies, and practices to ensure that TE institutions are providing equal opportunities for SWDs. The findings of this audit may lead to the development of plans of action to promote good practices in aspects of TE that are not inclusive. It is important that SWDs are consulted in the audit and participate in the development of the action plans. Looking at the websites of TE institutions of New Zealand shows that few institutions have an accessibility action plan.

This study also emphasises the importance of considering the needs of SVIs when designing the physical environment. For example, based on participants' accounts, more elevators must be provided; stairs should have tactile tiles on them; classroom numbers should be displayed in large font size and contrasting colours; and objects, such as chairs and tables, in buildings must be arranged properly.

6.4 Concluding thoughts

From the late 1990s to date, New Zealand has introduced legislation, policies, and strategies aimed at transforming the educational system into an inclusive model. The importance of such legislation and policies in achieving an inclusive education system cannot be denied. It must be noted, however, that legislation and policy alone are not sufficient for achieving an inclusive educational system. According to Barnes (2007), a comprehensive strategy of reviewing inclusive education practices is extremely important. In New Zealand, few studies have been conducted to ascertain whether the TE system guarantees equal opportunities for SWDs. This paucity offered the impetus for this research. The study has raised awareness about the nature of barriers experienced by SVIs. This is an important aspect of participants' experiences as it reinforces the notion that challenges remain in the realisation of an inclusive system. On this basis, the findings of the study reinforce the need for TE institutions to adapt inclusive practices and effectively implement inclusive policies.

References

ACHIEVE. (2016). *Guidelines and procedures for the provision of alternative arrangements in tests and examinations to students with disability/impairment.* https://ako.ac.nz/knowledge-centre/alternative-assessment-arrangements/guidelines-and-procedures-for-alternative-assessment-arrangements/

ACHIEVE, & Tertiary Education Commission. (2021). *Kia Ōrite Toolkit for achieving equity: A New Zealand code of practice to achieve an inclusive and equitable tertiary education environment for disabled learners.* https://www.achieve.org.nz/assets/Kia-Orite-Toolkit-Section-1-A-NZ-code-of-practice-Final.pdf

Achieve. (2004). *Kia Ōrite achieving equity: New Zealand code of practice for an inclusive tertiary education environment for students with impairments.* Tertiary Education Commission and Ministry of Education. http://www2.eit.ac.nz/library/Documents/Kia%20Orite%20CODE%20OF%20PRACTICE.pdf

Adams, K. S., & Proctor, B. E. (2010). Adaptation to college for students with and without disabilities: Group differences and predictors. *Journal of Postsecondary Education and Disability, 22*(3), 166-184. https://files.eric.ed.gov/fulltext/EJ906691.pdf

Aiden, H. S., & McCarthy, A. (2014). *Current attitudes towards disabled people.* https://research-information.bris.ac.uk/en/publications/current-attitudes-towards-disabled-people

Ainscow, M. (2005). Developing inclusive education systems: What are the levers for change? *Journal of Educational Change*, *6*(2), 109–124. https://doi.org/10.1007/s10833-005-1298-4

Ainscow, M. (2020). Promoting inclusion and equity in education: Lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, *6*(1), 7–16. https://doi.org/10.1080/20020317.2020.1729587

Ainscow, M., Dyson, A., Goldrick, S., & West, M. (2012). *Developing equitable education Systems*. Routledge. https://doi.org/10.4324/9780203818077

Akamanti, J. (2004). Back of the bus? I just want on the bus. *SWS Network News*, *21*, 13-16.

Aldakhil, A. (2007). *Exploring inclusion, disability and the label of intellectual disability: saudi teachers' experiences and perspectives* [Doctoral Dissertation, University of Sheffield]. White Rose eTheses Online. https://etheses.whiterose.ac.uk/18174/

Ali, T., & Watkins, S. (1998). *1968, Marching in the Streets*. Free Press.

Allport, G. W. (1954). *The nature of prejudice.* Addison-Wesley.

Altman, B. (2001). Disability definitions, models, classification schemes, and applications. In G. L. Albredht, K. D. Seelman, & M. Bury (Eds.), *Handbook of disability studies* (pp. 97 – 122*).* Sage http://doi.org/10.4135/9781412976251.n4

Armstrong, A. C., Armstrong, D., & Spandagou, I. (2010). *Inclusive education: International policy & practice*. Sage. http://doi.org/10.4135/9781446221990.n2

Arndt, S. A., Konrad, M., & Test, D. W. (2006). Effects of the self-directed IEP on student participation in planning meetings. *Remedial and Special Education, 27*(4), 194-207. https://doi.org/10.1177/07419325060270040101

Association on Higher Education and Disability. (2019). *AHEAD launches report on the number of students with disabilities in higher education.* https://www.ahead.ie/part-rates-launch-2017-18

Ayling, R., & Mewse, A. J. (2009). Evaluating internet interviews with gay men. *Qualitative Health Research*, *19*(4), 566-576. https://doi.org/10.1177/1049732309332121

Bacon, A. M., & Bennett, S. (2013). Dyslexia in higher education: The decision to study art. *European Journal of Special Needs Education*, *28*(1), 19-32. https://doi.org/10.1080/08856257.2012.742748

Bagnoli, A., & Clark, A. (2010) Focus groups with young people: A participatory approach to research planning. *Journal of Youth Studies*, *13*(1), 101-119. https://doi.org/10.1080/13676260903173504

Baier, A. (2004). Demoralisation, trust, and the virtues. In C. Calhoun (Ed.), *Setting the moral compass: Essays by women philosophers* (pp. 176–190). Oxford University Press.

Bailey, K. (2004). Learning more from the social model: Linking experience, participation and knowledge production. In C. Barnes & G. Mercer (Eds.), *Implementing the social model of disability: Theory and research* (pp. 138–156). The Disability Press. https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/Barnes-implementing-the-social-model-chapter-9.pdf

Balloo, K., Pauli, R., & Worrell, M. (2017). Undergraduates' personal circumstances, expectations and reasons for attending university. *Studies in Higher Education (Dorchester-on-Thames)*, *42*(8), 1373–1384. https://doi.org/10.1080/03075079.2015.1099623

Barnes, C. & Mercer, G. (1997) Breaking the mould? An introduction to doing disability research. In C. Barnes, & G. Mercer (Eds.), *Doing disability research* (pp. 1-14). Disability Press. https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/Barnes-Chapter-1.pdf

Barnes, C. (2002). "Emancipatory disability research": Project or process? *Journal of Research in Special Educational Needs*, *2*(1). https://doi.org/10.1111/j.1471-3802.2002.00157.x

Barnes, C. (2003a). Rehabilitation for disabled people: A ‘sick’joke?. *Scandinavian Journal of Disability Research*, *5*(1), 7-23. https://doi.org/10.1080/15017410309512609

Barnes, C. (2003b). What a difference a decade makes: Reflections on doing emancipatory disability research. *Disability & Society*, *18* (1), 3-17. https://doi.org/10.1080/713662197

Barnes, C. (2007). Disability, higher education and the inclusive society. *British Journal of Sociology of Education*, *28*(1), 135–145. https://doi.org/10.1080/01425690600996832

Barnes, C. (2009). An ethical agenda in disability research: Rhetoric or reality? In D. M. Mertens & P. E. Ginsberg (Eds). *The handbook of social research* (pp. 1–20). Sage. https://doi.org/10.4135/9781483348971.n29

Barnes, C. (2019). Understanding the social model of disability: Past, present and future. In N. Watson & S. Vehmas (Eds.), *Routledge handbook of disability studies* (2nd ed., pp. 14–31). Routledge. https://doi.org/10.4324/9780203144114-8

Barnes, C., & Mercer, G. (2010). *Exploring Disability* (2nd ed.). Palgrave.

Barnes, C., & Oliver, M. (1993). *Disability: A sociological phenomenon ignored by sociologists*. University of Leeds. https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/Barnes-soc-phenomenon.pdf

Barnes, C., & Sheldon, A. (2007). Emancipatory disability research and special educational needs. In L. Florian (Ed.), *The Sage handbook of special education* (pp. 233-246). Sage. http://doi.org/10.4135/9781848607989.n18

Barnes, C., and Mercer, G. (2003) *Disability*. The Polity Press.

Barnett, L. A. (2014). *Evaluation of relationship between self-advocacy skills and college freshman first semester grade point average for students with disabilities*. [Doctoral Thesis, University of Montana]. ScholarWorks. https://scholarworks.umt.edu/etd/10762/

Barton, L. (2008). Disability, physical education and sport: Some critical observations and questions. In H. Fitzgerald (Ed.), *Disability and youth sport* (pp. 39–50). Routledge. https://doi.org/10.4324/9780203889732

Basel, A., & Hamilton, C. (2019). Listening to the voices of students with autism spectrum disorder – “When you are at school, you have to behave in a certain way”. *Kairaranga*, *20*(1), 16 – 23. https://files.eric.ed.gov/fulltext/EJ1240171.pdf

Beauchamp-Pryor, K. (2012). Visual impairment and disability: A dual approach towards equality and inclusion in UK policy and provision. In N. Watson, A. Roulstone, & C. Thomas (Eds.), *Routledge handbook of disability studies* (pp. 177-192). Routledge. https://doi.org/10.4324/9780203144114-21

Beauchamp-Pryor, K. (2013). *Disabled students in Welsh higher education: A framework for equality and inclusion*. Springer Science & Business Media. https://doi.org/10.1007/978-94-6209-344-7

Bell, M. G. (2015). *National Survey of Alternative Assessment Arrangements Policy and Practice in Tertiary Education with Reference to International Policy and Literature: A Research Report*. ACHIEVE: The National Post-Secondary Education Disability Network Incorporated. https://ako.ac.nz/assets/Knowledge-centre/RHPF-s1411-alternative-assessment-arrangements/RESEARCH-REPORT-National-Survey-of-Alternative-Assessment-Arrangements-Policy-and-Practice.pdf

Berger, R. J. (2016). Disability and life history research: An autoethnography of qualitative inquiry. *International Review of Qualitative Research*, *9*(4), 472–488. https://doi.org/10.1525/irqr.2016.9.4.472

Bergold, J., & Thomas, S. (2012). Participatory research methods: A methodological approach in motion. *Historical Social Research*, 37(4 (142)) 191-222.

Bernard, H. R. (2013). *Social research methods: Qualitative and quantitative approaches* (2nd ed.). Sage.

Berry, G., & Mellard, D. (2002). *Current status on accommodating students with disabilities in selected community and technical colleges (fall 1999-spring 2001).* University of Kansas. https://files.eric.ed.gov/fulltext/ED470385.pdf

Biernat, M. (2003). Toward a broader view of social stereotyping. *American Psychologist*, *58*(12), 1019. https://doi.org/10.1037/0003-066X.58.12.1019

Blake, J. J., Lund, E. M., Zhou, Q., Kwok, O., & Benz, M. R. (2012). National prevalence rates of bully victimization among students with disabilities in the United States. *School Psychology Quarterly*, *27*(4), 210–222. https://doi.org/10.1037/spq0000008

Bohay, M., Blakely, D. P., Tamplin, A. K., & Radvansky, G. A. (2011). Note taking, review, memory, and comprehension. *The American Journal of Psychology*, *124*(1), 63-73. https://doi.org/10.5406/amerjpsyc.124.1.0063

Bolt, S. E., Decker, D. M., Lloyd, M., & Morlock, L. (2011). Students' perceptions of accommodations in high school and college. *Career Development for Exceptional Individuals*, *34*(3), 165–175. https://doi.org/10.1177/0885728811415098

Bos, J. (2020). *Research Ethics for Students in the Social Sciences*. Springer.

Boyer, L., Brunner, B. R., Charles, T., & Coleman, P. (2006). Managing impressions in a virtual environment: Is ethnic diversity a self-presentation strategy for colleges and universities?. *Journal of Computer-Mediated Communication*, *12*(1), 136-154. https://dx.doi.org/10.1111/j.1083-6101.2006.00318.x

Branfield, F. (1998). What Are you doing here? “Non-disabled” people and the disability movement: A response to Robert F. Drake. *Disability & Society*, *13*(1), 143–144. https://doi.org/10.1080/09687599826966

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology,* (Vol. 2, pp. 57–71). American Psychological Association. https://doi.org/10.1037/13620-004

Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners*. Sage.

Braun, V., Clarke, V. & Weate, P. (2016). Using thematic analysis in sport and exercise research. In B. Smith & A. C. Sparkes (Eds.), *Routledge handbook of qualitative research in sport and exercise* (pp. 191-205). Routledge.

Brewer, E., Brueggemann, B., Hetrick, N., & Yergeau, M. (2012). Introduction, background, and history. In B. Brueggemann (Ed.), *Arts and Humanities* (pp. 1–62). Sage.

Brittain, I. (2004). Perceptions of Disability and their impact upon involvement in sport for people with disabilities at all levels. *Journal of Sport and Social Issues*, *28*(4), 429–452. https://doi.org/10.1177/0193723504268729

Bryman, A. (2008). *Social Research Methods* (3rd ed.). Oxford University Press

Bryman, A., & Bell, E. (2011). *Business Research Methods* (3rd ed.). Oxford University Press.

Building Act. (2004). https://www.legislation.govt.nz/act/public/2004/0072/latest/DLM306036.html

Bunbury, S. (2019). Unconscious bias and the medical model: How the social model may hold the key to transformative thinking about disability discrimination. *International Journal of Discrimination and the Law*, *19*(1), 26-47. https://doi.org/10.1177/1358229118820742

Busteed, B., & Auter, Z. (2018, February 13). Career-relevant education linked to student well-being. *Gallup*. https://news.gallup.com/opinion/gallup/226934/career-relevant-education-linked-student.aspx

Cameron, H., & Nunkoosing, K. (2012). Lecturer perspectives on dyslexia and dyslexic students within one faculty at one university in England. *Teaching in Higher Education*, *17*(3), 341-352. https://doi.org/10.1080/13562517.2011.641002

Campbell, J., & Oliver, M. (2013). *Disability politics: Understanding our past, changing our future*. Routledge.

Carey, P. (2013). Representation and student engagement in higher education: A reflection on the views and experiences of course representatives. *Journal of Further and Higher Education*, *37*(1), 71-88. https://doi.org/10.1080/0309877X.2011.644775

Castrodale, M. A., & Zingaro, D. (2015). "You're such a good friend": A woven autoethnographic narrative discussion of disability and friendship in higher education. *Disability Studies Quarterly*, *35*(1). https://doi.org/10.18061/dsq.v35i1.3762

Cawthon, S. W., & Cole, E. V. (2010). Postsecondary students who have a learning disability: Student perspectives on accommodations access and obstacles. *Journal of Postsecondary Education and disability*, *23*(2), 112-128. https://files.eric.ed.gov/fulltext/EJ906696.pdf

Cechnicki, A., Angermeyer, M. C., & Bielańska, A. (2011). Anticipated and experienced stigma among people with schizophrenia: Its nature and correlates. *Social Psychiatry and Psychiatric Epidemiology*, *46*(7), 643-650. https://doi.org/10.1007/s00127-010-0230-2

Centers for Disease Control and Prevention. (2011). *Gateway to health communications and social marketing practice: Blindness and vision impairment.* https://web.archive.org/web/20150429145832/http://www.cdc.gov/healthcommunication/toolstemplates/entertainmented/tips/blindness.html

Chapple, W. A. (1903). *The fertility of the unfit*. Whitcombe & Tombs. https://iiif.wellcomecollection.org/pdf/b18031559

Choudhary, A. A. (2018, August, 27). Candidates with low vision cannot be denied admission to medical courses: Supreme Court. *The Times of India*. https://timesofindia.indiatimes.com/india/candidates-with-low-vision-cannot-be-denied-admission-to-medical-courses-supreme-court/articleshow/65567373.cms

Claiborne, L. B., & Smith, A. (2007). Tertiary education for students with impairments: a code of practice at the beginning of the journey. *The New Zealand Annual Review of Education*, *16*, 73-87. https://ojs.victoria.ac.nz/nzaroe/article/view/1512/1358

Claiborne, L. B., Cornforth, S., Gibson, A., & Smith, A. (2011). Supporting students with impairments in higher education: Social inclusion or cold comfort? *International Journal of Inclusive Education*, *15*(5), 513–527. https://doi.org/10.1080/13603110903131747

Clearinghouse, W. W. (2016). WWC Intervention Report: A summary of findings from a systematic review of the evidence. *Institute of Educational Sciences*, 1-46. https://ies.ed.gov/ncee/wwc/Docs/InterventionReports/wwc_summerbridge_071916.pdf

Coertjens, L., Brahm, T., Trautwein, C., & Lindblom-Ylänne, S. (2017). Students' transition into higher education from an international perspective. *Higher Education*, *73*(3), 357-369. https://doi.org/10.1007/s10734-016-0092-y

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). Routledge.

Collier, R. (2012). Person-first language: what it means to be a "person." *Canadian Medical Association Journal (CMAJ)*, *184*(18), E935–E936. https://doi.org/10.1503/cmaj.109-4322

Cologon, K., & Thomas, C. (2014). Ableism, disablism and the early years. In K. Cologon (Ed.), *Inclusive education in the early years: Right from the start* (pp. 27-48). Oxford University Press.

Connor, D. J. (2012). Helping students with disabilities transition to college: 21 tips for students with LD and/or ADD/ADHD. *Teaching Exceptional Children*, *44*(5), 16-25. https://doi.org/10.1177/004005991204400502

Conrad, P. (2005). The shifting engines of medicalization. *Journal of Health and Social Behavior*, *46*(1), 3–14. https://doi.org/10.1177/002214650504600102

Correa-Torres, S. M., Conroy, P., Rundle-Kahn, A., & Brown-Ogilvie, T. (2018). Experiences of students who are visually impaired receiving services by disabilities support services (DSS) offices in higher education institutions. *Journal of Blindness Innovation and Research*, *8*(2). https://doi.org/10.5241/8-160

Convention on the Rights of Persons with Disabilities. (2006). https://www.un.org/disabilities/documents/convention/convoptprot-e.pdf

Convention on the Rights of the Child. (1989). https://www.ohchr.org/Documents/ProfessionalInterest/crc.pdf

Copyright (Marrakesh Treaty Implementation) Amendment Act. (2019). https://www.legislation.govt.nz/regulation/public/2019/0276/latest/whole.html

Craven, J., & Brophy, P. (2003). *Non-visual access to the digital library (NoVA): The use of the digital library interfaces by blind and visually impaired people*. Manchester Metropolitan University, Centre for Research in Library and Information Management. https://doi.org/10.1108/03074800310488095

Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed). Sage.

Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.

Crisp, G., Palmer, E., Turnbull, D., Nettelbeck, T., Ward, L., LeCouteur, A., Sarris, A., Strelan, P., & Schneider, L. (2009). First year student expectations: Results from a university-wide student survey. *Journal of University Teaching and Learning Practice*, *6*(1), 11-26. https://files.eric.ed.gov/fulltext/EJ867293.pdf

Croker, A. F, & Smith, S. N. (2019). Person-first language: Are we practicing what we preach? *Journal of Multidisciplinary Healthcare, 12*, 125-129. https://doi.org/10.2147/JMDH.S140067

Craven, J., & Brophy, P. (2003). *Non-visual access to the digital library (NoVA): The use of the digital library interfaces by blind and visually impaired people*. Manchester Metropolitan University, Centre for Research in Library and Information Management. https://doi.org/10.1108/03074800310488095

Cupples, M. E., Hart, P. M., Johnston, A., & Jackson, A. J. (2012). Improving healthcare access for people with visual impairment and blindness. *BMJ, 344*. https://doi.org/10.1136/bmj.e542

DaDeppo, L. M. W. (2009). Integration factors related to the academic success and intent to persist of college students with learning disabilities. *Learning Disabilities Research and Practice*, *24*(3), 122-131. https://doi.org/10.1111/j.1540-5826.2009.00286.x

Danes-Staples, E., Lieberman, L., Ratcliff, J., & Rounds, K. (2013). Bullying experiences of individuals with visual impairment: The mitigating role of sport participation. *Journal of Sport Behavior*, *36*(4), 365–386. https://core.ac.uk/download/pdf/233576199.pdf

Danieli, A., & Woodhams, C. (2005). Emancipatory research methodology and disability: A critique. *International Journal of Social Research Methodology*, *8*(4), 281-296. https://doi.org/10.1080/1364557042000232853

Davies, B. (2014). Legitimation in post-critical, post-realist times, or whether legitimation? In A. D. Reid, E. P. Hart & M. A. Peters (Eds.), *A companion to research in education* (pp. 443–450). Springer Netherlands. https://doi.org/10.1007/978-94-007-6809-3_59

Davies, M., Cooper, G., Kettler, R. J., & Elliot, S. N. (2015). Developing social skills of students with additional needs within the context of the Australian curriculum. *Australasian Journal of Special Education*, *39* (1), 37-55. https://doi.org/10.1017/jse.2014.9

Davies, P. L., Schelly, C. L., & Spooner, C. L. (2013). Measuring the effectiveness of universal design for learning intervention in postsecondary education. *Journal of Postsecondary Education and Disability*, *26*(3), 195-220. https://files.eric.ed.gov/fulltext/EJ1026883.pdf

Davis, L. J. (2002). *Bending over backwards: Essays on disability and the body*. New York University Press.

Davis, N. A. (2005). Invisible disability. *Ethics*, *116*(1), 153-213. https://doi.org/10.1086/453151

Degener, T. (2016). A human rights model of disability. In P. Blanck, & E. Flynn (Eds.), *Routledge handbook of disability law and human rights* (pp. 47-66). Routledge.

Denzin, N. K., & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 1–32). Sage.

Dixon, S. (2005). Inclusion-not segregation or integration is where a student with special needs belongs. *Journal of Educational Thought*, *39*(1), 33–53. https://www.jstor.org/stable/23767481

Donnelly, C. E. (2016). Re-visioning negative archetypes of disability and deformity in fantasy: Wicked, maleficent, and game of thrones. *Disability Studies Quarterly*, *36*(4). https://doi.org/10.18061/dsq.v36i4.5313

Drum, C.E. (2009). Models and approaches to disability. In C.E. Drum, G.L. Krahn & Bersani, H. (Eds.), *Disability and public health* (pp. 27-44). American Public Health Association and American Association on Intellectual and Developmental Disabilities.

Dunn, D. S., & Andrews, E. E. (2015). Person-first and identity-first language: Developing psychologists' cultural competence using disability language. *The American Psychologist*, *70* (3), 255–264. https://doi.org/10.1037/a0038636

Dunn, D. S., & Burcaw, S. (2013). Disability identity: Exploring narrative accounts of disability. *Rehabilitation Psychology*, *58*(2), 148–157. https://doi.org/10.1037/a0031691

Dymock, S., & Nicholson, T. (2013). *Dyslexia decoded: What it is, what it isn't, and what you can do about it.* Dunmore. https://ako.ac.nz/assets/Knowledge-centre/ALNACC-Resources/Dyslexia-resources/Dyslexia-Decoded.pdf

Earle, D. (2019). *Disabled people and tertiary education: An analysis of the 2013 disability survey.* Ministry of Education. https://www.educationcounts.govt.nz/data/assets/pdf_file/0011/196292/Disability-and-tertiary-education.pdf

Education Act. (1989). https://www.legislation.govt.nz/act/public/1989/0080/latest/DLM175959.html

Education and Training Act. (2020). https://www.legislation.govt.nz/act/public/2020/0038/latest/LMS170676.html

Education Counts. (2021). *Tertiary participation: Students enrolled at New Zealand's tertiary institutions.* https://www.educationcounts.govt.nz/statistics/tertiary-participation

Edwards, S. D. (2005). *Disability: Definitions, value and identity.* Radcliffe Publishing.

Einfalt, J., & Turley, J. (2013). Partnerships for success: A collaborative support model to enhance the first year student experience. *The International Journal of the First Year in Higher Education*, *4*(1), 73-84. https://doi.org/10.5204/intjfyhe.v4i1.153

Ekelman, B., Bazyk, S., & Bazyk, J. (2013). The relationship between occupational engagement and well-being from the perspective of university students with disabilities. *Journal of Occupational Science*, *20*(3), 236–252. https://doi.org/10.1080/14427591.2012.716360

Ellingson, L. L. (2009). *Engaging crystallization in qualitative research: An introduction*. Sage. https://doi.org//10.4135/9781412991476

Elliot, T., & Wilson, C. (2008). *The perceptions of students with hidden disabilities of their experience during transition to higher education.* Aim Higher East of England Research Project.

Erickson, W., von Schrader, S., Bruyère, S., & Barrington, L. (2012). Annotated data, statistics, tables, and graphs. In S. M. Bruyère, L. Barrington, & G. L. Albrecht (Eds.), *Employment and work* (pp. 263-308). Sage https://doi.org/10.4135/9781452218502.n5

Etmanski, C., & Pant, M. (2007). Teaching participatory research through reflexivity and relationship: Reflections on an international collaborative curriculum project between the Society for Participatory Research in Asia and the University of Victoria. *Action Research (London, England)*, *5*(3), 275–292. https://doi.org/10.1177/1476750307081018

Evans. (2014). "I am not a dyslexic person I"m a person with dyslexia': Identity constructions of dyslexia among students in nurse education. *Journal of Advanced Nursing*, *70*(2), 360–372. https://doi.org/10.1111/jan.12199

Evans, N. J., Broido, E. M., Brown, K. R., Wilke, A. K., & Herriott, T. K. (2017). *Disability in higher education: A social justice approach*. John Wiley & Sons

Ezezika, O. (2014, September, 5). How to engage with participants in field research. *SciDevNet.* https://www.scidev.net/global/practical-guides/engage-participants-field-research/

Farmer, A., Gage, J., Kirk, R., & Edgar, T. (2016). Applying community-based participatory research to create a diabetes prevention documentary with New Zealand Maori. *Progress in Community Health Partnership: Research, Education and Action, 10* (3), 383 – 390. https://doi.org/10.1353/cpr.2016.0045

Fatima, Akhter, M. S., Malik, M., Safder, M., & Nayab, D. (2013). Difficulties encountered by students with visual impairment in inclusive education at higher education level. *Journal of Educational Research*, *16*(1), 62–72. https://www.proquest.com/docview/1928996229?pqorigsite=primo&accountid=17287

Findlay, C. (2015, November, 3). When helping people with disabilities is patronising and rude. *The Sydney Morning Herald*. https://www.smh.com.au/lifestyle/when-helping-people-with-disabilities-is-patronising-and-rude-20151102-gkolz6.html

Finkelstein, V. (2007). The 'social model of disability' and the disability movement. *The Disability Studies Archive UK, 1*, 15. https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/finkelstein-The-Social-Model-of-Disability-and-the-Disability-Movement.pdf

Fisher, M., & Meyer, L. H. (2002). Development and social competence after two years for students enrolled in inclusive and self-contained educational programs. *Research and Practice for Persons with Severe Disabilities*, *27*(3), 165–174. https://doi.org/10.2511/rpsd.27.3.165

Fitchen, C. S., Asuncion, J. V., Barile, M., Ferraro, V., & Wolforth, J. (2009). Accessibility of e-learning and computer and information technologies for students with visual impairments in postsecondary education. *Journal of Visual Impairment & Blindness*, *103*(9), 543–557. https://doi.org/10.1177/0145482X0910300905

Fossey, E., Harvey, C., Mcdermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, *36*(6), 717–732. https://doi.org/10.1046/j.1440-1614.2002.01100.x

Francis, G. L., Regester, A., & Reed, A. S. (2019). Barriers and supports to parent involvement and collaboration during transition to adulthood. *Career Development and Transition for Exceptional Individuals*, *42*(4), 235–245. https://doi.org/10.1177/2165143418813912

Fraser, C. S. (2017). *How New Zealand schools manage the transition of disabled students leaving secondary education. A multiple case study* [Master's Thesis, University of Wellington]. University of Wellington Research Archive http://researcharchive.vuw.ac.nz/bitstream/handle/10063/6992/thesis_access.pdf?sequence=1

Fraser, S., Beeman, I., Southall, K., & Wittich, W. (2019). Stereotyping as a barrier to the social participation of older adults with low vision: A qualitative focus group study. *BMJ open*, *9*(9), e029940 https://doi.org/10.1136/bmjopen-2019-029940

French, S. (2004). Can you see the rainbow: The roots of denial. In J. Swain, S. French, C. Barns, & C. Thomas (Eds.), *Disabling barriers - enabling environments* (2nd ed., pp. 79-86). Sage

French, S., & Swain, J. (1997) Changing disability research: Participatory and emancipatory research with disabled people. *Physiotherapy, 83* (1), 26 - 32. https://doi.org/10.1016/S0031-9406(05)66107-X

French, S., & Swain, J. (2011). *Working with disabled people in policy and practice: A social model.* Palgrave Macmillan.

Frum, D. (2008). *How we got here: The 70's: The decade that brought you modern life (for better or worse)*. Basic Books.

Fuchs, C. (2016). Critical theory. In G. Mazzoleni (Ed.), *The international encyclopedia of political communication* (pp. 1–13). John Wiley and Sons. https://doi.org/10.1002/9781118541555.wbiepc001

Fuller, M., Healey, M., Bradley, A., & Hall, T. (2004). Barriers to learning: A systematic study of the experience of disabled students in one university. *Studies in Higher Education*, *29*(3), 303-318. https://doi.org/10.1080/03075070410001682592

Fuller, M., Healey, M., Bradley, A., & Hall, T. (2005). What are disabled students' experiences of learning at university. *Social Diversity and Difference Conference*. Keele University.

Gaffney, J. M. D. (2012). *The school experiences of a learning disabled student* [Doctoral dissertation, University of Otago]. Otago University Research Archive. http://hdl.handle.net/10523/2492

Gale, T., & Parker, S. (2014). Navigating change: A typology of student transition in higher education. *Studies in Higher Education*, *39*(5), 734-753. https://doi.org/10.1080/03075079.2012.721351

Garver, K. L., & Garver, B. (1991). Eugenics: Past, present, and the future. *American Journal of Human Genetics*, *49*(5), 1109. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1683254/

Getzel, E. E. (2008). Addressing the persistence and retention of students with disabilities in higher education: Incorporating key strategies and supports on campus. *Exceptionality*, *16*(4), 207–219. https://doi.org/10.1080/09362830802412216

Getzel, E. E., & McManus, S. (2005). Expanding support services on campus. In E. E. Getzel & P. Wehman (Eds.), *Going to college: Expanding opportunities for people with disabilities* (pp. 139-154). Paul H. Brookes.

Getzel, E. E., & Thoma, C. A. (2008). Experiences of college students with disabilities and the importance of self-determination in higher education settings. *Career Development for Exceptional Individuals*, *31*(2), 77-84. https://doi.org/10.1177/0885728808317658

Gil, L. A. (2007). Bridging the Transition Gap from High School to College; Preparing Students with Disabilities for a Successful Postsecondary Experience. *Teaching Exceptional Children*, *40*(2), 12–15. https://doi.org/10.1177/004005990704000202

Gladstone, C. (2014). *The search for a good life: Young people with learning disability and the transition from school.* [Doctoral dissertation, University of Canterbury]. UC Research Repository. https://ir.canterbury.ac.nz/handle/10092/9640

Goering. (2015). Rethinking disability: The social model of disability and chronic disease. *Current Reviews in Musculoskeletal Medicine*, 8 (2), 134–138. https://doi.org/10.1007/s12178-015-9273-z

Goethals, T., De Schauwer, E., & Van Hove, G. (2015). Weaving intersectionality into disability studies research: Inclusion, reflexivity and anti-essentialism. *DiGeSt. Journal of Diversity and Gender Studies*, *2* (1-2), 75-94. https://www.jstor.org/stable/pdf/10.11116/jdivegendstud.2.1-2.0075.pdf

Goldfinch, J., & Hughes, M. (2007). Skills, learning styles and success of first-year undergraduates. *Active Learning in Higher Education*, *8*(3), 259-273. https://doi.org/10.1177/1469787407081881

Goode, J. (2007). 'Managing' disability: Early experiences of university students with disabilities. *Disability & Society*, *22*(1), 35-48. https://doi.org/10.1080/09687590601056204

Goodley, D. (2014). *Dis/ability Studies: Theorising disablism and ableism*. Routledge. https://doi.org/10.4324/9780203366974

Goodley, D. (2016). *Disability studies: An interdisciplinary introduction*. Sage.

Göransson, K., Bengtsson, K., Hansson, S., Klang, N., Lindqvist, G., & Nilholm, C. (2020). Segregated education as a challenge to inclusive processes: A total population study of Swedish teachers' views on education for pupils with intellectual disability. *International Journal of Inclusive Education*, 1-16. https://doi.org/10.1080/13603116.2020.1810789

Greaves, A. (2003). Special Education 2000: Rhetoric or reform? *ACE Papers, 4* (12), 58 – 74.

Hadidi, & Al Khateeb, J. M. (2013). Loneliness among students with blindness and sighted students in Jordan: A brief report. *International Journal of Disability, Development, and Education*, *60*(2), 167–172. https://doi.org/10.1080/1034912X.2012.723949

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

Haegele, J. A., Sato, T., Zhu, X., & Avery, T. (2017). Physical education experiences at residential schools for students who are blind: A phenomenological inquiry. *Journal of Visual Impairment & Blindness*, *111*(2), 135-147. https://doi.org/10.1177/0145482X1711100205

Hahn, H. (1995). The appearance of physical differences: A new agenda for research on politics and disability. *Journal of Health and Human Services Administration*, *17*(4), 391–415. https://www.jstor.org/stable/25780832

Hahn, H. (1997). Advertising the acceptably employable image: Disability and capitalism. In L.J. Davis (Ed.), *The disability studies reader* (pp. 172-186). Routledge.

Hall, L. M., & Belch, H. A. (2000). Setting the context: Reconsidering the principles of full participation and meaningful access for students with disabilities. *New Directions for Student Services*, *2000*(91), 5–17. https://doi.org/10.1002/ss.9101

Hanafin, J., Shevlin, M., Kenny, M., & Mc Neela, E. (2007). Including young people with disabilities: Assessment challenges in higher education. *Higher Education*, *54*(3), 435-448. https://doi.org/10.1145/1414471.1414488

Hassel, S., & Ridout, N. (2018). An investigation of first-year students' and lecturers' expectations of university education. *Frontiers in Psychology*, *8*, 2218. https://doi.org/10.3389/fpsyg.2017.02218

Hayden, D., Colbry, D., Black Jr, J. A., & Panchanathan, S. (2008, October). Note-taker: enabling students who are legally blind to take notes in class. In *Proceedings of the 10th international ACM SIGACCESS conference on Computers and accessibility* (pp. 81-88). https://doi.org/10.1145/1414471.1414488

Hayden, D. S., Astrauskas, M., Yan, Q., Zhou, L., & Black Jr, J. A. (2011, October). Note-taker 3.0: an assistive technology enabling students who are legally blind to take notes in class. In *The proceedings of the 13th international ACM SIGACCESS conference on Computers and accessibility* (pp. 269-270). https://doi.org/10.1145/2049536.2049601

Hedrick, T. E. (1994). The quantitative-qualitative debate: Possibilities for integration. In C. S. Riechardt & S. F. Rallis (Eds.). *New directions for program evaluation* (pp. 45-52). Jossey-Bass https://doi.org/10.1002/ev.1667

Hehir, T., Grindal, T., Freeman, B., Lamoreau, R., Borquaye, Y., & Burke, S. (2016). A summary of the evidence on inclusive education. *Abt Associates*. https://files.eric.ed.gov/fulltext/ED596134.pdf

Henderson, G., & Bryan, W. V. (2004). *Psychosocial aspects of disability*. Charles C. Thomas.

Higher Education Statistics Agency. (n.d.). *Table 15–UK domiciled student enrolments by disability and sex 2014/15 to 2019/20*. https://www.hesa.ac.uk/data-and-analysis/students/table-15

Hill, E. W., & Blasch, B. B. (1980). Concept development. In R.L. Welsh, & B.B. Blasch (Eds.), *Foundations of orientation and mobility* (pp. 265 – 290). American Foundation for the Blind

Hillman, K. (2005). The first-year experience: The transition from secondary school to university and TAFE in Australia. *LSAY Research Reports*, 44. https://research.acer.edu.au/lsay_research/44

Hodges, J. S., & Keller, M. J. (1999). Perceived influences on social integration by students with physical disabilities. *Journal of College Student Development*, *40*(6), 678-86.

Holloway, S. (2001). The experience of higher education from the perspective of disabled students. *Disability & Society*, *16*(4), 597–615. https://doi.org/10.1080/09687590120059568

Hong Kong Blind Union (n.d.). *Research on misconceptions of the visually impaired by the general public*. https://www.hkbu.org.hk/uploads/files/Research_full_report_eng.pdf

Hong, B. S. S. (2015). Qualitative analysis of the barriers college students with disabilities experience in higher education. *Journal of College Student Development*, *56*(3), 209–226. https://doi.org/10.1353/csd.2015.0032

Hopkins, L. (2011). The path of least resistance: A voice-relational analysis of disabled students' experiences of discrimination in English universities. *International Journal of Inclusive Education*, *15*(7), 711-727. https://doi.org/10.1080/13603110903317684

Hornby, G. (2014). Special education today in New Zealand. In A. F. Rotatori, J. P. Bakken, S. Burkhardt, F. E. Obiakor, & U. Sharma (Eds.), *Special education international perspective: Practices across the globe*. Emerald Group Publishing. https://doi.org/10.1108/S0270-401320140000028029

Horwath, J. (2002). Evaluating opportunities for expanded information access: a study of the accessibility of four online databases. *Library Hi Tech*, *20*(2), 199–206. https://doi.org/10.1108/07378830210432561

Hser, Y. I., Huang, D., Chou, C. P., & Anglin, M. D. (2007). Trajectories of heroin addiction: growth mixture modeling results based on a 33-year follow-up study. *Evaluation Review*, *31*(6), 548-563. https://doi.org/10.1177/0193841X07307315

Human Rights Act. (1993). https://www.legislation.govt.nz/act/public/1993/0082/latest/DLM304212.html

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

Idol, L. (1997). Key questions related to building collaborative and inclusive schools. *Journal of Learning Disabilities*, *30*(4), 384–394. https://doi.org/10.1177/002221949703000405

Inter–Agency Commission. (1990). *World conference on education for all: Meeting basic learning needs.* https://bangkok.unesco.org/sites/default/files/assets/ECCE/JomtienDeclaration.pdf

Ioannou, M., Kassianos, A. P., & Symeou, M. (2019). Coping with depressive symptoms in young adults: Perceived social support protects against depressive symptoms only under moderate levels of stress. *Frontiers in Psychology*, *9*, 2780. https://doi.org/10.3389/fpsyg.2018.02780

Jacklin. (2011). To be or not to be "a disabled student" in higher education: The case of a postgraduate "non-declaring" (disabled) student. *Journal of Research in Special Educational Needs*, *11*(2), 99–106. https://doi.org/10.1111/j.1471-3802.2010.01157.x

Jacklin, A., Robinson, C., O'Meara, L., & Harris, A. (2007). *Improving the experiences of disabled students in higher education*. Higher Education Academy. http://cascadeoer2.pbworks.com/w/file/fetch/33757279/jacklin.pdf

Jackson, L. M., Pancer, S. M., Pratt, M. W., & Hunsberger, B. E. (2000). Great expectations: The relation between expectancies and adjustment during the transition to university. *Journal of Applied Social Psychology*, *30*(10), 2100-2125. https://doi.org/10.1111/j.1559-1816.2000.tb02427.x

Jeannis, H., Goldberg, M., Seelman, K., Schmeler, M., & Cooper, R. A. (2020). Barriers and facilitators to students with physical disabilities' participation in academic laboratory spaces. *Disability and Rehabilitation: Assistive Technology*, *15*(2), 225–237. https://doi.org/10.1080/17483107.2018.1559889

Jenson, K. (2018). Discourses of disability and inclusive education. *He Kupu*, *5*(4), 52-59. https://www.hekupu.ac.nz/sites/default/files/2018-11/09%20Jenson.pdf

Johnson, A. (1996). 'It's good to talk': The focus group and the sociological imagination. *The Sociological Review*, *44*(3), 517-538. https://doi.org/10.1111/j.1467-954X.1996.tb00435.x

Johnson, R. B., & Christensen, L. B. (2004). *Educational research: Quantitative, qualitative, and mixed approaches.* Allyn and Bacon. http://dx.doi.org/10.3102/0013189X033007014

Joshi, A., & Ray, S. L. (2020). Facilitators and barriers to education for chiropractic students with visual impairment. *Journal of Chiropractic Education*, *34*(2), 116-124. https://doi.org/10.7899/JCE-18-14

Kaplan, I., & Lewis, I. (2013). *Promoting inclusive teacher education: Policy*. UNESCO http://repositorio.minedu.gob.pe/handle/20.500.12799/1933

Katsiyannis, A., Dalun Zhang, Ryan, J. B., & Jones, J. (2007). High-stakes testing and students with disabilities: Challenges and promises. *Journal of Disability Policy Studies*, *18*(3), 160–167. https://doi.org/10.1177/10442073070180030401

Kaye, L. K., & Bates, E. A. (2017). The impact of higher fees on psychology students' reasons for attending university. *Journal of Further and Higher Education*, *41*(3), 379–392. https://doi.org/10.1080/0309877X.2015.1117597

Kearney, A. (2016). The right to education: What is happening for disabled students in New Zealand?. *Disability Studies Quarterly*, *36*(1). https://doi.org/10.18061/dsq.v36i1.4278

Kemmis, S., & McTaggart, R. (2005). Participatory action research: Communicative action and the public sphere. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (pp. 559–603). Sage

Kendall, L. (2016). Higher education and disability: Exploring student experiences. *Cogent Education*, *3*(1), 1256142. https://doi.org/10.1080/2331186X.2016.1256142

Kennett, D. J., Reed, M. J., & Stuart, A. S. (2013). The impact of reasons for attending university on academic resourcefulness and adjustment. *Active Learning in Higher Education*, *14*(2), 123–133. https://doi.org/10.1177/1469787413481130

Kettler, R. J., Niebling, B. C., Mroch, A. A., Feldman, E. S., Newell, M. L., Elliott, S. N., Kratochwill, T. R., & Bolt, D. M. (2005). Effects of testing accommodations on math and reading scores: An experimental analysis of the performance of students with and without disabilities. *Assessment for Effective Intervention*, *31*(1), 37–48. https://doi.org/10.1177/073724770503100104

Kift, S. (2015). A decade of transition pedagogy: A quantum leap in conceptualising the first-year experience. *HERDSA Review of Higher Education*, *2*(1), 51-86. https://altf.org/wp-content/uploads/2019/03/HERDSARHE2015v02p51-1-1.pdf

Kincheloe, J. L., & McLaren, P. (2011). Rethinking critical theory and qualitative research. In K. Hayes, S. R. Steinberg & K. Tobin (Eds.), *Key works in critical pedagogy* (pp. 285 – 326). Sense Publishers

King, G., Cathers, T., Brown, E., Specht, J. A., Willoughby, C., Polgar, J. M., Mackinnon, E., Smith, L. K., & Havens, L. (2003). Turning points and protective processes in the lives of people with chronic disabilities. *Qualitative Health Research*, *13*(2), 184–206. https://doi.org/10.1177/1049732302239598

King, N. (2004). Using templates in the thematic analysis of text. In C. Cassell & G. Symon (Eds.), *Essential guide to qualitative methods in organizational research* (pp. 257–270). Sage

Kitchin, R. (2000). The researched opinions on research: Disabled people and disability research. *Disability & Society*, *15*(1), 25-47. https://doi.org/10.1080/09687590025757

Kitchin, R. (2001). Using participatory action research approaches in geographical studies of disability: Some reflections. *Disability Studies Quarterly*, *21*(4), 61-69. http://mural.maynoothuniversity.ie/3899/1/RK_Participatory_Action.pdf

Kitzinger, J. (1994). The methodology of focus groups: The importance of interaction between research participants. *Sociology of Health & Illness, 16* (1), 103 – 121. https://doi.org/10.1111/1467-9566.ep11347023

Kong, L., Gao, Z., Xu, N., Shao, S., Ma, H., He, Q., Zhang, D., Xu, H., & Qu, H. (2021). The relation between self-stigma and loneliness in visually impaired college students: Self-acceptance as mediator. *Disability and Health Journal*, *14*(2), 101054–101054. https://doi.org/10.1016/j.dhjo.2020.101054

Krebs, E. (2019). Baccalaureates or burdens? complicating" reasonable accommodations" for American college students with disabilities. *Disability Studies Quarterly*, *39*(3). https://dsq-sds.org/article/view/6557

Kroes, K. C., Lefler, D., Schmitt, A., & Supalo, C. A. (2016). Development of accessible laboratory experiments for students with visual impairments. *Journal of Science*

Education for Students with Disabilities, *19*(1), 61– 67. https://scholarworks.rit.edu/cgi/viewcontent.cgi?article=1062&context=jsesd

Krueger, R. & Casey, M. (2015). *Focus groups: A practical guide for applied research* (5th ed). Sage.

Krutii, I. A., & Fursov, K. S. (2007). Goals and motives for enrolling in an institution of higher learning. *Russian Education and Society*, *49*(3), 35–46. https://doi.org/10.2753/RES1060-9393490303

Kurth, N., & Mellard, D. (2006). Student perceptions of the accommodation process in postsecondary education. *Journal of Postsecondary Education and Disability*, *19*(1), 71-84. https://files.eric.ed.gov/fulltext/EJ844625.pdf

Lent, R. W., Paixao, M. P., Da Silva, J. T., & Leitão, L. M. (2010). Predicting occupational interests and choice aspirations in Portuguese high school students: A test of social cognitive career theory. *Journal of Vocational Behavior*, *76*(2), 244-251. https://doi.org/10.1016/j.jvb.2009.10.001

Levitt, J. M. (2017). Developing a model of disability that focuses on the actions of disabled people. *Disability & Society*, *32*(5), 735–747. https://doi.org/10.1080/09687599.2017.1324764

Liasidou, A. (2012). *Inclusive education, politics and policymaking*. Continuum.

Liasidou, A. (2015). *Inclusive education and the issue of change: Theory, policy and pedagogy*. Springer.

Lightner, K. L., Kipps-Vaughan, D., Schulte, T., & Trice, A. D. (2012). Reasons university students with a learning disability wait to seek disability services. *Journal of Postsecondary Education and Disability*, *25*(2), 145-159. https://files.eric.ed.gov/fulltext/EJ994283.pdf

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry california*. Sage.

Linker, B. (2013). On the borderland of medical and disability history: A survey of the fields. *Bulletin of the History of Medicine*, *87*(4), 499–535. https://doi.org/10.1353/bhm.2013.0074

Linton, S. (2006). Reassigning meaning. In L. J. Davisa (Ed.), *The disability studies reader* (2nd ed, pp. 161-172). Routledge.

Lipka, O., Sarid, M., Aharoni Zorach, I., Bufman, A., Hagag, A. A., & Peretz, H. (2020). Adjustment to higher education: A comparison of students with and without disabilities. *Frontiers in Psychology*, 38(5), 730–754. https://doi.org/10.3389/fpsyg.2020.00923

Lobo, A., & Gurney, L. (2014). What did they expect? Exploring a link between students' expectations, attendance and attrition on English language enhancement courses. *Journal of Further and Higher Education*, *38*(5), 730–754. https://doi.org/10.1080/0309877X.2013.817002

Lombardi, A., Gerdes, H., & Murray, C. (2011). Validating an assessment of individual actions, postsecondary, and social supports of college students with disabilities. *Journal of Student Affairs Research and Practice*, *48*(1), 104–123. https://doi.org/10.2202/1949-6605.6214

Longmore, P. K. (2003). *Why I burned my book and other essays on disability*. Temple University Press.

Longmore, P. K. (2020). The end of the beginning: The disability rights movement in the 1970s. *Journal of Civil and Human Rights*, *6*(2), 81-92. https://doi.org/10.5406/jcivihumarigh.6.2.0081

Lourens, H. (2015). *The lived experiences of higher education for students with a visual impairment: A phenomenological study at two universities in the Western Cape, South Africa*. [Doctoral dissertation, Stellenbosch University]. SUNScholar Research Repository. http://hdl.handle.net/10019.1/96732

Lourens, H., & Swartz, L. (2020). "Every now and then you slip up and then you are in trouble": The responsibility on students with visual impairments to access reasonable accommodations in South Africa. *International Journal of Disability, Development, and Education*, *67*(3), 320–335. https://doi.org/10.1080/1034912X.2019.1587152

Lourens, H., & Swartz, L. (2021). 'Suddenly I was in a self-catering world': South African students with visual impairments reflect on the transition from special schools to higher education. *International Journal of Inclusive Education*, 1-12. https://doi.org/10.1080/13603116.2021.1979668

Lucas, E. (1981). 1981 International year of disabled persons. *Australian Occupational Therapy Journal*, *28*(3), 95-99. https://doi.org/10.1111/j.1440-1630.1981.tb01339.x

Maberley, D. A. L., Hollands, H., Chuo, J., Tam, G., Konkal, J., Roesch, M., Veselinovic, A., Witzigmann, M., & Bassett, K. (2006). The prevalence of low vision and blindness in Canada. *Eye (London)*, *20*(3), 341–346. https://doi.org/10.1038/sj.eye.6701879

MacArthur. (2013). Sustaining friendships, relationships, and rights at school. *International Journal of Inclusive Education*, *17*(8), 793–811. https://doi.org/10.1080/13603116.2011.602526

MacArthur, J., & Kelly, B. (2004). Inclusion from the perspectives of students with disabilities. *SET: Research Information for Teachers*, *2*, 44-48. https://www.nzcer.org.nz/system/files/journals/set/downloads/set2004_2_044_0.pdf

Madriz, E. (2003). Focus groups in feminist research. In N Denzin & Y Lincoln (Eds.), *Collecting and interpreting qualitative materials* (2nd ed., pp. 363–387). Sage.

Mamiseishvili, K., & Koch, L. C. (2011). First-to-second-year persistence of students with disabilities in postsecondary institutions in the United States. *Rehabilitation Counseling Bulletin*, *54* (2), 93-105. https://doi.org/10.1177/0034355210382580

Mastroianni, A. C. (2008). Sustaining public trust: Falling short in the protection of human research participants. *The Hastings Center Report*, *38*(3), 8–9. https://doi.org/10.1353/hcr.0.0012

Matshedisho, K. R. (2010). Experiences of disabled students in South Africa: Extending the thinking behind disability support. *South African Journal of Higher Education*, *24*(5), 730-744. https://journals.co.za/doi/pdf/10.10520/EJC37645

Matysiak, B. (1998). Irreconcilable differences? Breaking down the dichotomies of care. *Canadian Social Work Review*, 15, 25-37. https://www.jstor.org/stable/41669658

Maunder, R. E. (2018). Students' peer relationships and their contribution to university adjustment: The need to belong in the university community. *Journal of Further and Higher Education*, *42*(6), 756-768. https://doi.org/10.1080/0309877X.2017.1311996

Maunder, R. E., Cunliffe, M., Galvin, J., Mjali, S., & Rogers, J. (2013). Listening to student voices: Student researchers exploring undergraduate experiences of university transition. *Higher Education*, *66*(2), 139-152. https://doi.org/10.1007/s10734-012-9595-3

McBroom, L. W. (1997). Making the grade: College students with visual impairments. *Journal of Visual Impairment & Blindness*, *91*(3), 261-270. https://doi.org/10.1177/0145482X9709100312

McCroskey, J. C. (2015). *An introduction to rhetorical communication*. Routledge.

McGuire, J., & Scott, S. (2006). An approach to inclusive college environments: Universal design for instruction. *Learning Disabilities: A Multidisciplinary Journal*, *14*, 21–31. https://www.colorado.edu/odece/sites/default/files/attached-files/rba08-sb4converted_4.pdf

McGuirk, E. (2012). Studying time banking: Exploring participatory action research in Aotearoa New Zealand. *Sites: A Journal of Social Anthropology and Cultural Studies*, *9*(2), 142-171. https://doi.org/10.11157/sites-vol9iss2id207

McIntyre, N. D. (2013). *Tensions, issues and challenges in special education in Aotearoa New Zealand: Stories of mismatch between the policies and the practice* [Doctoral thesis, Massey University]. Massey Research Online. http://hdl.handle.net/10179/4344

McLean, M., & Wills, R. (2008). Education and disability: Exceptions to universal rights. In V. Carpenter, J. Jesson, P. Roberts & M. Stephenson (Eds.), *Nga kaupapa here: Connections and contradictions in education* (pp. 158-167). Cengage Learning.

McLeod, J. D., Meanwell, E., & Hawbaker, A. (2019). The experiences of college students on the autism spectrum: A comparison to their neurotypical peers. *Journal of Autism and Developmental Disorders*, *49*(6), 2320–2336. https://doi.org/10.1007/s10803-019-03910-8

McPhail, R. (2015). Pre-university prepared students: A programme for facilitating the transition from secondary to tertiary education. *Teaching in Higher Education*, *20*(6), 652-665. https://doi.org/10.1080/13562517.2015.1062360

McPhail, R., Fisher, R., & McConachie, J. (2009). *Becoming a successful first year undergraduate: When expectations and reality collide* [Paper presentation]. 12th Pacific Rim First Year in Higher Education conference, Queensland, Australia. https://research-repository.griffith.edu.au/handle/10072/31840

Meekosha, H., & Shuttleworth, R. (2009). What's so "critical" about critical disability studies? *Australian Journal of Human Rights*, *15*(1), 47–75. https://doi.org/10.1080/1323238X.2009.11910861

Melville, C. (2005). Discrimination and health inequalities experienced by disabled people. *Medical Education*, *39*(2), 124–126. https://doi.org/10.1111/j.1365-2929.2004.02061.x

Mercer, G. (2002) Emancipatory disability research. In C. Barnes, M. Oliver & L. Barton (Eds), *Disability studies today* (pp. 228-249). Polity Press.

Mercer, G. (2004). From critique to practice: Emancipatory disability research. In C. Barnes & G. Mercer (Eds), *Implementing the social model of disability: Theory and research* (pp. 118-137). Disability Press. https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/Barnes-implementing-the-social-model-chapter-8.pdf

Merriam, S.B. (1998). *Qualitative research and case study applications in education.* Jossey-bass.

Mikkelsen, B. (1995). *Methods for development work and research: A guide for practitioners*. Sage.

Ministry of Education. (2002). *Tertiary education strategy 2002 – 2007.* http://hdl.voced.edu.au/10707/87468.

Ministry of Education. (2011). *National transition guidelines: Guidelines for transitioning students with additional learning needs.* https://www.education.govt.nz/school/student-support/special-education/national-transition-guidelines-for-students-with-additional-learning-needs/national-transition-guidelines/

Ministry of Education. (2012). *Supports and services for learners with special education needs/disabilities.* http://shapingeducation.govt.nz/wp-content/uploads/2012/09/SpecialEducationOverview.pdf

Ministry of Education. (2020). *Inclusive principle.* https://nzcurriculum.tki.org.nz/Principles/Inclusion-principle

Ministry of Education. (2021a). *Practical information about education for parents and educators: Specialist schools.* https://parents.education.govt.nz/learning-support/primary-school-learning-support/special-schools/

Ministry of Education. (2021b). *Ongoing resourcing scheme.* https://www.education.govt.nz/school/student-support/special-education/ors/

Ministry of Education. (n.d.). *Success for all–Every school, every child* . https://www.education.govt.nz/assets/Documents/School/Inclusive-education/SuccessForAllEnglish.pdf

Ministry of Health. (2001). *New Zealand disability strategy.* https://www.odi.govt.nz/assets/New-Zealand-Disability-Strategy-files/nz-disability-strategy.pdf

Ministry of Justice. (2002). *The non-discrimination standards for government and public sector: Guidelines on how to apply the standards and who is covered.* https://www.justice.govt.nz/assets/Documents/Publications/Non-discrimination-standards-for-government-guidelines.pdf

Ministry of Justice. (2020). *Constitutional issues and human rights issues: UN convention on the rights of the child.* https://www.justice.govt.nz/justice-sector-policy/constitutional-issues-and-human-rights/human-rights/international-human-rights/crc/

Mitchell, D. R., & Mitchell, J. W. (1985). *Out of the shadows: A chronology of significant events in the development of services for exceptional children and young persons in New Zealand, 1850-1983*. Published with the assistance of the Department of Education.

Mitra, S. (2006). The capability approach and disability. *Journal of Disability Policy Studies*, *16*(4), 236–247. https://doi.org/10.1177/10442073060160040501

Miyauchi, H. (2020). A systematic review on inclusive education of students with visual impairment. *Education Sciences*, *10*(11), 346. https://doi.org/10.3390/educsci10110346

Morgan, D. L. (1997). *Focus groups as qualitative research* (2nd ed.). Sage

Morgan, D. L. (2002). Focus group interviewing. In J. Gubrium & J. Holstein (Eds.), *Handbook of interview research: Context and method* (pp. 141-159). Sage

Morgan, R. L., & Riesen, T. (2016). *Promoting successful transition to adulthood for students with disabilities*. Guilford Publications.

Moriña, A. (2017). Inclusive education in higher education: Challenges and opportunities. *European Journal of Special Needs Education*, 32(1), 3-17. https://doi.org/10.1080/08856257.2016.1254964

Moriña, A., & Orozco, I. (2021). Spanish faculty members speak out: Barriers and aids for students with disabilities at university. *Disability & Society*, *36*(2), 159–178. https://doi.org/10.1080/09687599.2020.1723495

Moriña, A., Perera, V. H., & Carballo, R. (2020). Training needs of academics on inclusive education and disability. *SAGE Open*, *10*(3). https://doi.org/10.1177/2158244020962758

Mortimore, T., & Crozier, W. R. (2006). Dyslexia and difficulties with study skills in higher education. *Studies in Higher Education*, *31*(2), 235-251. https://doi.org/10.1080/03075070600572173

Morton, S., Mergler, A., & Boman, P. (2014). Managing the transition: The role of optimism and self-efficacy for first-year Australian university students. *Journal of Psychologists and Counsellors in Schools*, *24*(1), 90-108. https://doi.org/10.1017/jgc.2013.29

Mpofu, E., & Wilson, K. B. (2004). Opportunity structure and transition practices with students with disabilities: The role of family, culture, and community. *Journal of Applied Rehabilitation Counseling*, *35*(2), 9-16. https://doi.org/10.1891/0047-2220.35.2.9

Mullins, L., & Preyde, M. (2013). The lived experience of students with an invisible disability at a Canadian university. *Disability & Society*, *28*(2), 147-160. https://doi.org/10.1080/09687599.2012.752127

Murray, A., & Sotardi, V. (2020). Exploring experiences and academic outcomes of first-year university students with and without perceived disabilities or impairments. *International Journal of Disability, Development and Education*, 1-16. https://doi.org/10.1080/1034912X.2020.1811842

Murray, C., Lombardi, A., Seely, J. R., & Gerdes, H. (2014). Effects of an Intensive Disability-Focused Training Experience on University Faculty Self-Efficacy. *Journal of Postsecondary Education and Disability*, *27*(2), 179-193. https://files.eric.ed.gov/fulltext/EJ1040537.pdf

Murray, P. (2002). *Disabled teenagers' experience of access to inclusive leisure*. Joseph Rowntree Foundation. https://www.jrf.org.uk/report/disabled-teenagers-experiences-access-inclusive-leisure

Mutanga, O., & Walker, M. (2017). Exploration of the academic lives of students with disabilities at South African universities: Lecturers' perspectives. *African Journal of Disability*, *6*(1), 1-9. https://doi.org/10.4102/ajod.v6i0.316

Myers, D. G. (2010). *Social Psychology* (10th ed.). McGraw-Hill.

Nathan, M. J., & Brown, J. M. (2018). An ecological approach to modeling disability. *Bioethics*, *32*(9), 593-601. https://doi.org/10.1111/bioe.12497

Neuman, W. (2014). *Social research methods: Qualitative and quantitative approaches* (7th ed). Pearson

Nevill, A., & Rhodes, C. (2004). Academic and social integration in higher education: A survey of satisfaction and dissatisfaction within a first-year education studies cohort at a new university. *Journal of Further and Higher Education*, *28*(2), 179-193. https://doi.org/10.1080/0309877042000206741

New Zealand Qualification Authority. (n.d.). *Qualifications and standards: Tertiary education.* https://www.nzqa.govt.nz/qualifications-standards/understanding-nzqf/tertiary-education

Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., & Wei, X. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school: A report from the national longitudinal transition study-2 (NLTS2). NCSER 2011-3005*. National Center for Special Education Research. https://files.eric.ed.gov/fulltext/ED524044.pdf

Nicholson, N. (1990), The transition cycle: Causes, outcomes, processes and forms. In S. Fisher & C. L. Cooper (Eds.), *On the move: The psychology of change and transition.* Wiley.

Nicholson, N., & West, M. (1995). Transitions, work histories, and careers. In M. B. Arthur, D. T. Hall & B. S. Lawrence (Eds.), *Handbook of career theory* (pp. 181-201). Cambridge University.

Nuske, A., Rillotta, F., Bellon, M., & Richdale, A. (2019). Transition to higher education for students with autism: A systematic literature review. *Journal of Diversity in Higher Education*, *12*(3), 280. https://doi.org/10.1037/dhe0000108

Office of the Governor–General (2008). *Governor–General receives international disability award.* https://gg.govt.nz/news/governor-general-receives-international-disability-award

Oh-Young, & Filler, J. (2015). A meta-analysis of the effects of placement on academic and social skill outcome measures of students with disabilities. *Research in Developmental Disabilities*, *47*, 80–92. https://doi.org/10.1016/j.ridd.2015.08.014

Oliver, M. (1990). *The politics of disablement*. Macmillan Education.

Oliver, M. (1992). Changing the social relations of research production. *Disability, Handicap and Society*, *7*(2), 101-114. https://doi.org/10.1080/02674649266780141

Oliver, M. (1997). Emancipatory research: realistic goal or impossible dream. In C. Barnes & G. Mercer (Eds.), *Doing disability research*. Disability press.

Oliver, M. (2002, December 3). *Emancipatory research: A vehicle for social transformation or policy development.* [Paper presentation]. Inaugural NDA Disability Research Conference, Dublin, Ireland. https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/Oliver-Mikes-paper.pdf

Oliver, M. (2004). The social model in action: If I had a hammer. In C. Barnes & G. Mercer (Eds.), *Implementing the social model of disability: Theory and research* (pp. 18-13). The Disability Press. https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/Barnes-implementing-the-social-model-chapter-2.pdf

Oliver, M. (2009). *Understanding disability: From theory to practice*. Macmillan International Higher Education.

Oliver, M. (2013). The social model of disability: Thirty years on. *Disability & society*, *28*(7), 1024-1026. https://doi.org/10.1080/09687599.2013.818773

Oliver, M., & Barnes, C. (2010). Disability studies, disabled people and the struggle for inclusion. *British Journal of Sociology of Education*, *31*(5), 547-560.

Oliver, M., & Barnes, C. (2012). *The new politics of disablement*. Macmillan International Higher Education.

Olkin, R. (2001). *What psychotherapists should know about disability*. Guilford Press.

Opie, J. (2018). Educating students with vision impairment today: Consideration of the expanded core curriculum. *British Journal of Visual Impairment*, *36*(1), 75-89. https://doi.org/10.1177/0264619617730861

Opie, J. L., & Southcott, J. (2018). Inclusion for a student with vision impairment: “They accept me, like, as in I am there, but they just won’t talk to me.” *Qualitative Report*, *23*(8), 1889–1904. https://researchmgt.monash.edu/ws/portalfiles/portal/248985911/248985869_oa.pdf

Osborne, T. (2019). Not lazy, not faking: Teaching and learning experiences of university students with disabilities. *Disability & Society*, *34*(2), 228-252. https://doi.org/10.1080/09687599.2018.1515724

Osgood, R. L. (2005). *The history of inclusion in United States*. Gallaudet University Press.

Owens. (2015). Exploring the critiques of the social model of disability: The transformative possibility of Arendt’s notion of power. *Sociology of Health & Illness*, *37*(3), 385–403. https://doi.org/10.1111/1467-9566.12199

Owren, T., & Stenhammer, T. (2013). Neurodiversity: accepting autistic difference: Thomas Owren and Trude Stenhammer explain why a more accepting attitude towards “autistic” needs and behaviour may contribute to better services. *Learning Disability Practice*, *16*(4), 32–37. https://doi.org/10.7748/ldp2013.05.16.4.32.e681

Pacheco, E. (2016). Vision impairment and the transition to university education: The role of ICTs [Doctoral thesis, Victoria University of Wellington]. Research Archive https://hdl.handle.net/10063/5071

Pacheco, E., Yoong, P., & Lips, M. (2021). Transition issues in higher education and digital technologies: The experiences of students with disabilities in New Zealand. *Disability & Society*, *36*(2), 179–201. https://doi.org/10.1080/09687599.2020.1735305

Padilla-Muñoz, A., Rodríguez, V., Castro, S., Reveiz, Y., & Gómez-Restrepo, C. (2013). The performance of students with and without disability on the 11th grade university admission test. *Revista De Salud Pública*, *15*, 138-148. https://www.scielosp.org/article/ssm/content/raw/?resource_ssm_path=/media/assets/rsap/v15n1/v15n1a13.pdf

Palan, R. (2021). "I seriously wanted to opt for science, but they said no": Visual impairment and higher education in India. *Disability & Society*, *36*(2), 202-225. https://doi.org/10.1080/09687599.2020.1739624

Palmer, M., & Harley, D. (2012). Models and measurement in disability: An international review. *Health Policy and Planning*, *27*(5), 357–364. https://doi.org/10.1093/heapol/czr047

Papadaki, M., & Tzvetkova-Arsova, M. (2013). Social attitudes and beliefs of sighted people towards blindness and blind persons. *Specijalna Edukacija I Rehabilitacija*, *12*(4), 481-499. https://doi.org/10.5937/specedreh12-4288

Parker, A., & Tritter, J. (2006). Focus group method and methodology: Current practice and recent debate. *International Journal of Research & Method in Education*, *29*(1), 23-37. https://doi.org/10.1080/01406720500537304

Parsons, T. (1991). *The social system.* Routledge

Patten, M. L., & Newhart, M. (2017). *Understanding research methods: An overview of the essentials* (10th ed.). Routledge. https://doi.org/10.4324/9781315213033

Patton, M. Q. (1999). Enhancing the quality and credibility of qualitative analysis. *Health Services Research*, *34*(5 Pt 2), 1189–1208. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1089059/

Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed). Sage.

Peña, E. V. (2014). Marginalization of published scholarship on students with disabilities in higher education journals. *Journal of College Student Development*, *55*(1), 30-40. https://doi.org/10.1353/csd.2014.0006

Perry, S., Cabrera, A., & Vogt, Paul. (1999). Career maturity and college student persistence. *Journal of College Student Retention Research Theory and Practice*, *1*(1), 41-58. https://doi.org/10.2190/13EA-M98P-RCJX-EX8X

Persson, B. (2006). Pathways to inclusion: A guide to staff development. *European Educational Research Journal*, *5*(2), 152–158. https://doi.org/10.2304/eerj.2006.5.2.152

Phasha, N., & Mosia, P. A. (2017). Access to curriculum for students with disabilities at higher education institutions: How does the National University of Lesotho fare?. *African Journal of Disability*, *6*(1), 1-13. https://doi.org/10.4102/ajod.v6i0.257

Phillips, H., & Tibble, K. (2014). Journeys into higher education for Māori students with impairments: Charting the terrain of inclusive higher education in Aotearoa. In C. Tuagala, F. Cram, H. Philips, P. Sauni & H. T. Frierson (Eds.), *Māori and pasifika higher education horizons* (Vol. 15, pp. 253–269). Emerald Group Publishing Limited. https://doi.org/10.1108/S1479-364420140000015023

Phillips, S., & Clarke, A. (2010). *Pathways for disabled students to tertiary education and employment: Case studies from Ireland*. National Office for Equity of Access to Higher Education of the Higher Education Authority. https://www.oecd.org/education/innovation-education/47469308.pdf

Phinney, J. S., Dennis, J., & Osorio, S. (2006). Reasons to attend college among ethnically diverse college students. *Cultural Diversity & Ethnic Minority Psychology*, *12*(2), 347–366. https://doi.org/10.1037/1099-9809.12.2.347

Powell Ed D, D. (2012). A review of inclusive education in New Zealand. *Electronic Journal for Inclusive Education*, *2*(10), 4.

Priestley, M., Waddington, L., & Bessozi, C. (2010). Towards an agenda for disability research in Europe: Learning from disabled people's organisations. *Disability & Society*, *25*(6), 731–746. https://doi.org/10.1080/09687599.2010.505749

Probst, K., Hagmann, J., Fernandez, M., & Ashby, J. A. (2003). *Understanding participatory research in the context of natural resource management: Paradigms, approaches and typologies*. Overseas Development Institute. https://cdn.odi.org/media/documents/5194.pdf

Punch, K. F. (2013). *Introduction to social research: Quantitative and qualitative approaches* (3rd ed). Sage.

Rainey, L., Elsman, E. B. M., van Nispen, R. M. A., van Leeuwen, L. M., & van Rens, G. H. M. B. (2016). Comprehending the impact of low vision on the lives of children and adolescents: A qualitative approach. *Quality of Life Research*, *25*(10), 2633–2643. https://doi.org/10.1007/s11136-016-1292-8

Respondek, Seufert, T., Hamm, J. M., & Nett, U. E. (2020). Linking changes in perceived academic control to university dropout and university grades: A longitudinal approach. *Journal of Educational Psychology*, *112*(5), 987–1002. https://doi.org/10.1037/edu0000388

Reed, M. J., Kennett, D. J., & Emond, M. (2015). The influence of reasons for attending university on university experience: A comparison between students with and without disabilities. *Active Learning in Higher Education, 16* (3), 225-336. https://doi.org/10.1177/1469787415589626

Reed, M., & Curtis, K. (2012). Experiences of students with visual impairments in Canadian higher education. *Journal of Visual Impairment & Blindness*, *106*(7), 414-425. https://doi.org/10.1177/0145482X1210600704

Reindal, S. M. (2008). A social relational model of disability: A theoretical framework for special needs education? *European Journal of Special Needs Education*, *23*(2), 135–146. https://doi.org/10.1080/08856250801947812

Richardson, J. T. E., Roy, A. W. N., Richardson, J. T., & Roy, A. W. (2002). The representation and attainment of students with a visual impairment in higher education. *The British Journal of Visual Impairment*, *20*(1), 37–48. https://doi.org/10.1177/026461960202000107

Richardson, L. & St. Pierre, E. A. (2005). Writing: A method of inquiry. In Denzin, N. K. & Lincoln, Y. S. (Eds.), *Handbook of qualitative research* (3rd ed, pp. 959 – 978). Sage.

Riddell, S., & Weedon, E. (2006). What counts as a reasonable adjustment? Dyslexic students and the concept of fair assessment. *International Studies in Sociology of Education*, *16*(1), 57–73. https://doi.org/10.1080/19620210600804301

Riddell, S., & Weedon, E. S. B. (2013). Managerialism and equalities: Tensions within widening access policy and practice for disabled students in UK universities. In M. Fuller, J. Georgeson, M. Healey, A. Hurst, K. Kelly, S. Riddell, H. Roberts & E. Weedon (Eds.), *Improving disabled students' learning* (pp. 35-51). Routledge. https://doi.org/10.4324/9780203609651

Riddell, S., Tinklin, T., & Wilson, A. (2005). *Disabled students in higher education: Perspectives on widening access and changing policy*. Routledge. https://doi.org/10.4324/9780203087121

Rios, D., Magasi, S., Novak, C., & Harniss, M. (2016). Conducting accessible research: including people with disabilities in public health, epidemiological, and outcomes studies. *American Journal of Public health*, *106*(12), 2137-2144. https://doi.org/10.2105/AJPH.2016.303448

Rioux, M. H. (1994). New research directions and paradigms: Disability is not measles. In M. H. Rioux & M. Bach (Eds.), *Disability is not measles: New research paradigms in disability*, (pp.1-8). Roeher Institute. https://files.eric.ed.gov/fulltext/ED390194.pdf

Rose, D. (2018). Participatory research: Real or imagined. *Social Psychiatry and Psychiatric Epidemiology*, *53*(8), 765-771. https://doi.org/10.1007/s00127-018-1549-3

Rowan, L. (2014). University transition experiences of four students with dyslexia in New Zealand. *Australian Journal of Learning Difficulties*, *19*(2), 129–136. https://doi.org/10.1080/19404158.2014.923478

Sablan. (2014). The challenge of summer bridge programs. *The American Behavioral Scientist (Beverly Hills)*, *58*(8), 1035–1050. https://doi.org/10.1177/0002764213515234

Sachs, D., & Schreuer, N. (2011). Inclusion of students with disabilities in higher education: performance and participation in student's experiences. *Disability Studies Quarterly*, *31*(2). https://doi.org/10.18061/dsq.v31i2.1593

Saldaña, J. (2009). *The coding manual for qualitative researchers.* Sage.

Salzer, M. S., Wick, L. C., & Rogers, J. A. (2008). Familiarity with and use of accommodations and supports among postsecondary students with mental illnesses. *Psychiatric Services*, *59*(4), 370-375. https://ps.psychiatryonline.org/doi/full/10.1176/ps.2008.59.4.370

Sapp, W. (2010). Visual impairment. In P. Peterson, E. Baker, & B. McGaw (Eds.). *International encyclopaedia of education* (3rd ed, pp. 880-885). Elsevier

Sapp, W., & Hatlen, P. (2010). The expanded core curriculum: Where we have been, where we are going, and how we can get there. *Journal of Visual Impairment & Blindness*, *104*(6), 338-348. https://doi.org/10.1177/0145482X1010400604

Schmidt, S. J. (2019). Taking notes: There's a lot more to it than meets the eye. *Journal of Food Science Education*, *18*(3), 54–58. https://doi.org/10.1111/1541-4329.12170

Schriner, K. (2001). Disability and institutional change: A human variation perspective on overcoming oppression. *Journal of Disability Policy Studies*, *12*(2), 100–106. https://doi.org/10.1177/104420730101200207

Scotch, R. K., & Schriner, K. (1997). Disability as human variation: Implications for policy. *The Annals of the American Academy of Political and Social Science*, *549*(1), 148–159. https://doi.org/10.1177/0002716297549001011

Scutter, S., Palmer, E., Luzecky, A., Da Silva, K. B., & Brinkworth, R. (2011). What do commencing undergraduate students expect from first year university?. *International Journal of the First Year in Higher Education*, *2*(1), 8-20. https://doi.org//10.5204/intjfyhe.v2i1.54

Seale, J. K. (2013). *E-learning and disability in higher education: Accessibility research and practice.* Routledge. https://doi.org/10.4324/9780203095942

Seale, J., Georgeson, J., Mamas, C., & Swain, J. (2015). Not the right kind of 'digital capital'? An examination of the complex relationship between disabled students, their technologies and higher education institutions. *Computers & Education*, *82*, 118-128. https://doi.org/10.1016/j.compedu.2014.11.007

Selvaraj. (2016). Inclusive education in New Zealand: Rhetoric and reality. *History of Education Review*, *45*(1), 54–68. https://doi.org/10.1108/HER-04-2014-0029

Shakespeare, T. (2004). Social models of disability and other life strategies. *Scandinavian Journal of Disability Research*, *6*(1), 8-21. https://doi.org/10.1080/15017410409512636

Shakespeare, T. (2013). *Disability rights and wrongs revisited* (2nd ed). Routledge.

Shaw, S. (2006). Legal and policy perspectives on transition assessment and documentation. *Career Development for Exceptional Individuals*, *29*(2), 108-113. https://doi.org/10.1177/08857288060290020201

Shevlin, M., Kenny, M., & Mcneela, E. (2004). Participation in higher education for students with disabilities: An Irish perspective. *Disability & Society*, *19*(1), 15–30. https://doi.org/10.1080/0968759032000155604

Shields, N., & Taylor, N. F. (2014). Contact with young adults with disability led to a positive change in attitudes toward disability among physiotherapy students. *Physiotherapy Canada*, *66*(3), 298-305. https://doi.org/10.3138/ptc.2013-61

Slee, R. (2001). 'Inclusion in Practice': does practice make perfect?. *Educational Review*, *53*(2), 113-123. https://doi.org/10.1080/00131910120055543

Slee, R. (2011). *The irregular school: Exclusion, schooling and inclusive education*. Routledge.

Smart, J. F. (2004). Models of disability: The juxtaposition of biology and social construction. In T. F. Riggar & D. R. Maki (Eds.), *Springer series on rehabilitation: Handbook of rehabilitation counseling* (pp. 25–49). Springer.

Śmiechowska-Petrovskij, E. (2017). The stigmatizing and stereotyping people with blindness. The opposite tendencies. *Forum Pedagogiczne*, *7*(2), 305-326. https://doi.org/10.21697/fp.2017.2.22

Smithson, J. (2000). Using and analyzing focus groups: Limitations and possibilities. *International Journal of Social Research Methodology*, *3*(3), 103-119. https://doi.org/10.1080/136455700405172

Stace, H. (2010). Social justice, the social model and disability policy in Aotearoa New Zealand. *Social Work Now*, *4*, 19-24.

Stevens, C. (2016, January, 14). Human rights battle at York university expected to cause policy shift. *Global News.* https://globalnews.ca/news/2454975/human-rights-battle-at-york-university-expected-to-cause-policy-shift-across-ontario/

Stephenson, M. (2014). Legitimating exclusion: Compulsory education, the standards and the experts. In R. Wills, M. Missy, M. Mclean, M. Stephenson, & R. Slee (Eds.), *Tales from school* (pp. 9-26). Brill Sense. https://doi.org/10.1007/978-94-6209-893-0_3

Stone, E., & Priestley, M. (1996). Pawns, parasites and partners: Disability research and the role of non-disabled researchers. *British Journal of Sociology, 47* (4), 699-716. https://doi.org/10.2307/591081

Svendby, R. (2020). Lecturers' Teaching Experiences with Invisibly Disabled Students in Higher Education: Connecting and Aiming at Inclusion. https://doi.org/10.16993/sjdr.712

Swain, J., & French, S. (2000). Towards an affirmation model of disability. *Disability & society*, *15*(4), 569-582. https://doi.org/10.1080/09687590050058189

Symister, P., & Friend, R. (2003). The influence of social support and problematic support on optimism and depression in chronic illness: A prospective study evaluating self-esteem as a mediator. *Health Psychology, 22* (2), 123-129. https://doi.org/10.1037/0278-6133.22.2.123

Tertiary Education Commission (2018). *'Transition to tertiary life' event: Entering and re-entering tertiary education in New Zealand (Prediscovery report 2018).* https://www.tec.govt.nz/assets/Publications-and-others/Transition-to-Tertiary-Life-Event-Final.pdf

Tertiary Education Commission. (2020). *Disability action plan – purpose and vision* https://www.tec.govt.nz/assets/Publications-and-others/TEC-Disability-Action-Plan-vision-and-purpose.pdf

Tertiary Education Commission. (n.d.). *Infosheet: Education and employment outcomes for disabled people.* https://tec.govt.nz/assets/Forms-templates-and-guides/Disabled-peoples-education-and-employment-outcomes_Info-Sheet-2019.pdf

Test, D. W., Fowler, C. H., Wood, W. M., Brewer, D. M., & Eddy, S. (2005). A conceptual framework of self-advocacy for students with disabilities. *Remedial and Special Education*, *26*(1), 43-54. https://doi.org/10.1177/07419325050260010601

Thomas, G. B., & Hanson, J. (2014). Developing social integration to enhance student retention and success in higher education: The GROW@ BU initiative. *Widening Participation and Lifelong Learning*, *16*(3), 58-70. https://doi.org/10.5456/WPLL.16.3.58

Thompson, Pawson, C., & Evans, B. (2021). Navigating entry into higher education: The transition to independent learning and living. *Journal of Further and Higher Education*, *45*(10), 1398–1410. https://doi.org/10.1080/0309877X.2021.1933400

Tinklin, T., & Hall, J. (1999). Getting round obstacles: Disabled students' experiences in higher education in Scotland. *Studies in Higher education*, *24*(2), 183-194. https://doi.org/10.1080/03075079912331379878

Tinklin, T., Riddell, S., & Wilson, A. (2004). *Disabled students in higher education.* Centre for Educational Sociology.

Titterton, M., & Smart, H. (2008). Can participatory research be a route to empowerment? A case study of a disadvantaged Scottish community. *Community Development Journal*, *43*(1), 52-64. https://doi.org/10.1093/cdj/bsl037

Tobin, M. C., Drager, K. D.., & Richardson, L. F. (2014). A systematic review of social participation for adults with autism spectrum disorders: Support, social functioning, and quality of life. *Research in Autism Spectrum Disorders*, *8*(3), 214–229. https://doi.org/10.1016/j.rasd.2013.12.002

Tracy, S. J. (2010). Qualitative quality: Eight “big-tent” criteria for excellent qualitative research. *Qualitative Inquiry*, *16*(10), 837-851. https://doi.org/10.1177/1077800410383121

Tracy, S. J. (2013). *Qualitative research methods: Collecting evidence, crafting analysis, communicating impact*. John Wiley & Sons.

Tracy, S. J., & Hinrichs, M. M. (2017). Big tent criteria for qualitative quality. *The International Encyclopedia Of Communication Research Methods*, 1-10. https://doi.org/10.1002/9781118901731.iecrm0016

Trammell, J. (2009). Postsecondary students and disability stigma: Development of the postsecondary student survey of disability-related stigma (PSSDS). *Journal of Postsecondary Education and Disability*, *22*(2), 106-116. https://files.eric.ed.gov/fulltext/EJ868135.pdf

Troiano, P. F. (2003). College students and learning disability: Elements of self-style. *Journal of College Student Development*, *44*(3), 404–419. https://doi.org/10.1353/csd.2003.0033

Turner, S., Alborz, A., & Gayle, V. (2008). Predictors of academic attainments of young people with Down’s syndrome. *Journal of Intellectual Disability Research*, *52*(5), 380–392. https://doi.org/10.1111/j.1365-2788.2007.01038.x

United Nation Educational, Scientific and Cultural Organisation., & Ministry of Education and Science of Spain. (1994). *The Salamanca statement and framework for action on special education needs.* https://unesdoc.unesco.org/ark:/48223/pf0000098427

UPIAS. (1976) *Fundamental principles of disability*. Union of the Physically Impaired Against Segregation. https://disability-studies.leeds.ac.uk/wp-content/uploads/sites/40/library/UPIAS-fundamental-principles.pdf

Urquhart, B. A., & Pooley, J. (2007). The transition experience of Australian students to university: The importance of social support. *The Australian Community Psychologist*, *19*(2), 78-91. https://ro.ecu.edu.au/ecuworks/1366/

Van de Werfhorst, H. G., Sullivan, A., & Cheung, S. Y. (2003). Social class, ability and choice of subject in secondary and tertiary education in Britain. *British Educational Research Journal*, *29*(1), 41-62. https://doi.org/10.1080/0141192032000057366

van der Meer, J. (2012). Students’ note-taking challenges in the twenty-first century: Considerations for teachers and academic staff developers. *Teaching in Higher Education*, *17*(1), 13-23. https://doi.org/10.1080/13562517.2011.590974

Van Hees, V., Moyson, T., & Roeyers, H. (2015). Higher education experiences of students with autism spectrum disorder: Challenges, benefits and support needs. *Journal of*

Autism and Developmental Disorders, *45*(6), 1673–1688. https://doi.org/10.1007/s10803-014-2324-2

van Herpen, S. G. A., Meeuwisse, M., Hofman, W. H. A., Severiens, S. E., & Arends, L. R. (2017). Early predictors of first-year academic success at university: Pre-university effort, pre-university self-efficacy, and pre-university reasons for attending university. *Educational Research and Evaluation*, *23*(1-2), 52–72. https://doi.org/10.1080/13803611.2017.1301261

Van Herpen, S. G., Meeuwisse, M., Hofman, W. A., & Severiens, S. E. (2020). A head start in higher education: The effect of a transition intervention on interaction, sense of belonging, and academic performance. *Studies in Higher Education*, *45* (4), 862-877. https://doi.org/10.1080/03075079.2019.1572088

van Rhijn, T., Lero, D. S., & Burke, T. (2016). Why go back to school? Investigating the motivations of student parents to pursue post-secondary education. *New Horizons in Adult Education & Human Resource Development*, *28*(2), 14–26. https://doi.org/10.1002/nha3.20135

Vanclay, F., Baines, J. T., & Taylor, C. N. (2013). Principles for ethical research involving humans: Ethical professional practice in impact assessment Part I. *Impact Assessment and Project Appraisal*, *31*(4), 243-253. https://doi.org/10.1080/14615517.2013.850307

Verbrugge, L. M., & Jette, A. M. (1994). The disablement process. *Social Science & Medicine*, *38*(1), 1-14. https://deepblue.lib.umich.edu/bitstream/handle/2027.42/31841/0000788.pdf?sequence=1

Vickerman, P., & Blundell, M. (2010). Hearing the voices of disabled students in higher education. *Disability & Society*, *25*(1), 21–32. https://doi.org/10.1080/09687590903363290

Vivanti, G. (2020). Ask the editor: What is the most appropriate way to talk about individuals with a diagnosis of autism?. *Journal of Autism and Developmental Disorders*, *50*(2), 691-693. https://doi.org/10.1007/s10803-019-04280-x

Wainapel, S. F. (2015). Unjustified barriers for medical school applicants with physical disabilities. *AMA journal of ethics*, *17*(2), 157-159. https://journalofethics.ama-assn.org/article/unjustified-barriers-medical-school-applicants-physical-disabilities/2015-02

Walmsley, J., & Johnson, K. (2003). *Inclusive research with people with learning disabilities: Past, present and futures*. Jessica Kingsley Publishers.

Ward, L., & Flynn, M. (1994). What matters most: Disability, research and empowerment. In M. H. Rioux & M. Bach (Eds.), *Disability is not measles: New research paradigms in disability* (pp. 29-48). Roeher Institute. https://files.eric.ed.gov/fulltext/ED390194.pdf

Watermeyer, B., & Görgens, T. (2014). Disability and internalized oppression. In E. J. R. David (Ed.), *Internalized oppression: The psychology of marginalized groups* (pp. 253–280). Springer Publishing Company.

Wehmeyer, M. L. (2005). Self-determination and individuals with severe disabilities: Re-examining meanings and misinterpretations. *Research and Practice for Persons with Severe Disabilities, 30*(3), 113–120. https://doi.org/10.2511/rpsd.30.3.113

Weller, S. C., Vickers, B., Bernard, H. R., Blackburn, A. M., Borgatti, S., Gravlee, C. C., & Johnson, J. C. (2018). Open-ended interview questions and saturation. *PLOS ONE*, *13*(6), 1-18`. https://doi.org/10.1371/journal.pone.0198606

Williams, L. (2007). A contemporary tale of participatory action research in Aotearoa/New Zealand: Applying a power-culture lens to support participatory action research as a diverse and evolving practice. *Educational Action Research*, *15*(4), 613–629. https://doi.org/10.1080/09650790701664039

Wingate, U. (2007). A framework for transition: Supporting 'learning to learn' in higher education. *Higher Education Quarterly*, *61*(3), 391-405. https://doi.org/10.1111/j.1468-2273.2007.00361.x

Winzer, M., & Mazurek, K. (2010). Different spaces, different places: An analysis of the inclusive reform for students with disabilities in the United States and Germany. *World Studies in Education*, *11*(2), 49-68. https://doi.org/10.7459/wse/11.2.04

World Blind Union. (n.d.). *Marrakesh treaty: Marrakesh treaty ratification and implementation campaign*. https://worldblindunion.org/programs/marrakesh-treaty/

World Health Organisation. (2002). *Towards a common language for functioning, disability and health*. https://www.who.int/classifications/icf/icfbeginnersguide.pdf

World Intellectual Property Organisation. (2016). *The Marrakesh treaty–Helping to end the global food famine.* https://tind.wipo.int/record/28943

Written, K., Parkes, M., & Ramasubramanian, L. (2000). Participatory environmental health research in Aotearoa/New Zealand: Constraints and opportunities. *Health Education and Behavior, 27* (3), 371 – 384. https://doi.org/10.1177/109019810002700311

Yin, R. K. (2015). *Qualitative research from start to finish* (2nd ed). Guilford publications.

Yorke, M., & Longden, B. (2004). *Retention and student success in higher education.* Society for Research into Higher Education and Open University Press.

Young, P., Glogowska, M., & Lockyer, L. (2007). Conceptions of early leaving: A comparison of the views of teaching staff and students. *Active Learning in Higher Education*, *8*(3), 275-287. https://doi.org/10.1177/1469787407081882

Zarb, G. (1992). On the road to Damascus: First steps towards changing the relations of disability research production. *Disability, Handicap & Society*, *7*(2), 125-138. https://doi.org/10.1080/02674649266780161

Zaretsky, L. (2005). From practice to theory: Inclusive models require inclusive theories. *American Secondary Education*, 65-86. https://www.jstor.org/stable/41064555

Appendices

Appendix 1: Initial correspondence to the Blind Foundation of New Zealand

The Chief Executive,
Blind Foundation of New Zealand.

I am writing to the Blind Foundation of New Zealand for two important reasons. Firstly, to introduce myself and present a brief background of my intended research and secondly, to ask for your assistance with recruiting potential participants for the proposed research.

I am Kwame Otu – Danquah, an Optometrist who has been actively involved in providing rehabilitative services to persons with vision impairment in Ghana. I am currently pursuing a doctoral degree at the University of Waikato and researching the tertiary experiences of students with vision impairment as part of my degree requirement. As you are probably aware, there appears to be a paucity of empirical information regarding the tertiary experiences of students with visual impairment in New Zealand. The aim of the proposed research is therefore to understand the lived experiences of tertiary students with vision impairment, from the students' perspectives. By listening to their voices, we may be able to identify enhancers and opportunities to effective participation and factors that promote their academic and social adjustment. Such information is vital in creating an inclusive system that will enhance the capacity of students to succeed in tertiary education. The research participants in this study will play an active role in the gathering of data and interpretation of data generated about their lived experiences and in effect, participants will be designated as co-researchers. By actively engaging research participants in aspects of the research, this study seeks not only to illuminate the voices of participants but also to emancipate, embolden and empower them through the research process.

As the Blind Foundation of New Zealand is the main disability organisation for persons with vision impairment in this country, I am hoping that you will be able to assist me with finding people who might like to participate in this study. The research participants will include current and graduated tertiary students with visual impairment. The participants will also include an official nominated by the Blind Foundation.

I would be grateful if the Blind Foundation is able to send out the attached invitation letter to its members. The letter provides details about my proposed research and invites them to contact me if they will like to participate. The researcher assures the Blind Foundation that ethical concerns including the protection of participants' identity, confidentiality and the right to withdraw participation will be duly addressed in the research process.

I look forward to working with the Blind Foundation of New Zealand in what I envisage to be valuable research that will set the tone for dialogue to address the challenges students with vision impairment have to surmount in their pursuit of higher education.

Yours Faithfully,

Kwame Out-Danquah.

Appendix 2: Initial email to be sent to potential participants

Dear Member,

The Blind Foundation of New Zealand wishes to inform members of an upcoming research project to be facilitated by an external researcher. The researcher, though not a member of the foundation, has had a close association with persons with vision impairment in Ghana by virtue of his profession as an optometrist. The researcher is currently pursuing a doctoral degree at the University of Waikato and researching tertiary experiences of students with vision impairment as part of the requirement for his degree. The research aims to examine and present a picture of what it is to be a student with vision impairment in higher education. The researcher will use the voices of participants to gain insight into their expectations, struggles, opportunities and adjustment that characterise the journey to achieving the goals of higher education.

The researcher is wanting participants to be co-researchers in this study by working with participants to decide on the things that are most important to them. Current tertiary students and graduates are invited to partake in this study.

We hope that members will avail themselves of the opportunity to participate in research that seeks to improve inclusive practices in tertiary institutions.

Appendix 3: Information letter to focus group participants

I am Kwame Otu – Danquah and a doctoral student at the University of Waikato. I am researching the lived experiences of tertiary students with vision impairment, from the student perspective. Once more, I am contacting you because you responded to my initial email and indicated your willingness to participate in this research. Please take time to read the details of the research that has been explained below.

The study aims to examine and present a picture of what it is to be a student with vision impairment in higher education. It seeks to ascertain the lived experiences of students with vision impairment from their own perspectives. By listening to the students' voices, we will be able to identify the challenges to inclusion and the factors that promote effective participation in tertiary education.

By participating in this research, you will be asked to partake in the following activities:

A. Attend two audio recorded focus group meetings that will each take 2 hours of your time. In the first focus group meeting, you and the researcher will collaborate to develop the final list of focus group questions.

B. Complete a brailled or large printed demographic questionnaire during the first focus group meeting.

C. Check whether focus group transcript is consistent with what was discussed.

D. Participate in an optional training and practice session on data analysis that will be facilitated by the researcher and will last for 1 hour.

E. You and the researcher will collaboratively analyse and make meaning of data generated. The participatory data analysis session will last for 1 hour. (Optional).

This study will have direct and indirect benefits to you and other participants. Understanding the experiences of students from their own voice will provide decision makers in tertiary education with the theoretical and practical basis for making realistic provisions for the successful inclusion of students with vision impairment. Additionally, the collaboratory nature of this research will ensure that the researcher puts aspects of his research knowledge at the disposal of the participants. The research participants will use this knowledge acquired through group interaction, training and practical sessions to gather information about their experiences and subsequently make meaning (interpret) of the information. The participatory nature of this research will ensure the active participation of respondents and their empowerment in the research process.

During group meetings, you will be asked to respect the privacy of other participants and further ensure the confidentiality of discussions. It is the responsibility of the researcher to protect the identity of participants and treat all information collected from participants as confidential. While I will make every effort to maintain anonymity and confidentiality, the nature of the focus group means that this cannot be completely guaranteed. Participants will be identified by numbers in the transcript to protect their identity. Further, tape recordings of focus group discussion will be deleted as soon as transcription is completed. In the event that the research is to be published in a scholarly journal, participants will be identified with pseudonyms.

Participation in this research is completely voluntary. You may decide to opt out at any stage of the research up until the start of data analysis. For focus group participants, they will not be able to review or withdraw any of the data they contribute as a result of the collectively-generated nature of focus group discussion. Participants will also be given a copy of the focus group transcript as a group to clarify or edit aspects of the data that are not consistent with what was discussed.

In this research, you will be invited to be a co-researcher and to co-construct the focus group questions with the researcher. As a co-researcher and as a first step to developing the questions for focus group discussion, I would be grateful if you could write down areas of importance relating to your own tertiary experience that you believe the research should address. The areas could be general or specific. For instance, teaching and learning (academics) is a general theme but information communication technology is a specific area related to academics. You may also want to write down a question that you think could form part of the focus group questions. Your suggestion and or question may be written down on the consent form attached.

Attached to this information letter is a consent form and a self-addressed stamped envelope. You may send the signed consent form to me if you choose to participate. Once I have received your consent form, I will contact you to schedule for a venue and time for the focus group. In the event that you do not submit a duly signed consent form after two weeks, another person with vision impairment who expressed interest in the research and was not selected will be contacted as a replacement. Please do not hesitate to contact me for any clarification, comments or suggestions relating to the research.

Appendix 4: Informed consent for focus group participants

By signing this form, I consent to participate in a study entitled "Tertiary education experiences of students with visual impairment".

1 declare that:

- I have read thoroughly the information letter.
- I have decided to participate in this research on my own volition and have not been coerced into participating.
- I will respect the views and privacy of other participants and ensure the confidentiality of focus group discussions.
- I may decide to opt out at any stage of the research up until data analysis and this will not impact me in any way.
- I understand that I will have the opportunity to check whether information on the interview transcript is consistent with what was discussed and this will be carried out in a group.
- I understand that the information collected will be used in writing the researcher's thesis and may also be used in scholarly publications or presentations.
- I understand that the researcher will endeavour to protect my identity and ensure confidentiality at every stage of the research, however this cannot be completely guaranteed.
- I am being asked to participate in two focus group meetings that will last 240 minutes
- I am being asked to attend a workshop on participatory data analysis that will last for 60 minutes (Optional).

- I am being asked to participate in a collaborative data analysis and interpretation session of 60 minutes duration (Optional).

Name: …………………………………………………..

Signed: ………………………………………………….

Date…………………………………………………………

Address…………………………………………………………………………………………

Email ……………………………………………………….

Telephone ………………………………………………….

AREAS THAT THE RESEARCH SHOULD ADDRESS OR PROPOSED FOCUS GROUP QUESTION

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Appendix 5: Information letter for official of the Blind Foundation of New Zealand

I am Kwame Otu – Danquah and a doctoral student at the University of Waikato. I am researching the lived experiences of tertiary students with vision impairment, from the student perspective. I am contacting you because you have been nominated by the Blind Foundation of New Zealand to participate in this study. The aim of this study is to explore the tertiary experiences of students with vision impairment in New Zealand. By examining their lived experiences, we will be able to identify the barriers and enablers to their inclusion. Such information is vital in creating an inclusive system that will enhance the capacity of students to succeed in tertiary education. Please take time to read further details of the research that has been explained below.

By participating in this research, you are being asked to partake in a1 hour interview with me. The interview will be audio taped and data will be transcribed subsequently. You will be given a copy of the transcript to check whether the information is consistent with what was discussed and make amendments you will like to make. The researcher will endeavor to protect your identity and keep information collected private and also keep data in a secure location. While confidentiality of your identity will be maintained, the researcher cannot guarantee the confidentiality of data collected since it will be reported in the researcher's thesis. Participation in this research is voluntary. Further, you have the option to withdraw from the study at any stage up until the commencement of data analysis.

The Blind Foundation of New Zealand is the main disability organization for persons with vision impairment and is involved in advocacy and campaigns that seek to promote the educational interest of members. It is therefore imperative to contact the Foundation to gain greater insights into the current educational policies and its implication for students with vision impairment. It is equally important to ascertain their perspective on the current educational provision and support tor tertiary students with vision impairment. It is also useful to determine what the foundation considers to be the challenges facing their members at the tertiary level and the ways to improve inclusive practices in tertiary education.

This research seeks to improve inclusive practices in tertiary institutions and it is my hope that you will agree to participate in it. Attached to this information letter is a consent form. You may send the signed consent form to me by email if you choose to participate. Once I have received your consent form, I will contact you to schedule for a venue and time for the interview. In the event that I do not receive a signed consent form after two weeks, another official of the foundation will be contacted as a replacement. Please do not hesitate to contact me for any clarification, comments or suggestion regarding the research.

Appendix 6: Informed consent for official of the Blind Foundation of New Zealand

By signing this form, I consent to participate in a study entitled “Tertiary education experiences of students with visual impairment”.

1 declare that:

- I have read thoroughly the information letter.
- I have decided to participate in this research on my own volition and have not been coerced into participating.
- I may decide to opt out at any stage of the research up until the commencement of data analysis and this will not impact me in any way.
- I understand that every effort will be made to protect my identity and maintain confidentiality during and after the research, but this cannot be completely guaranteed.
- I understand that I will have the opportunity to check whether information on the interview transcript is consistent with what was discussed and make any amendments I would like to make.
- I understand that the information collected will be used in the writing researcher’s thesis and may be used in scholarly publications and presentations.
- I accept to participate in an audio recorded interview session of 1-hour duration.

Name: …………………………………………………..

Signed: ………………………………………………….

Date……………………………………………………

Address……………………………………………………………………………………

…

Email …………………………………………………….

Telephone ………………………………………………….

Appendix 7: Interview Guide for Disability Advisors

PROFILE

1. What is your position title and what does this role involve?
2. What attracted you to this position and have you held a similar position in another organisation?

QUESTIONS

1. How does your institution define disability and how closely does that match your personal perspective?
2. What is the institutional policy regarding the inclusion of students with disability?
3. How does this policy affect the provision of support to student with disability in your institution?
4. What is your knowledge of the revised New Zealand Disability Strategy (2016) and the National Post-Secondary Education Disability Network Incoperated (2003)?
5. To what extent has these national policies influenced the provision of support for students with disability in your institution?
6. How do students with disability become aware of the accessibility centre and how do they access support from the centre?
7. What has been your experience working with students with visual impairment?
8. What do you think are the main challenges faced by students with visual impairment in your institution?
9. To what extent do you consider the support of the institution to be effective in supporting students with visual impairment?
10. In what ways could the provision of support services to students with visual impairment be enhanced?
11. Is there anything you will like to add?

Appendix 8: Interview Guide for Official of Blind Foundation

PROFILE

1. What is your position title and what does the role involve?
2. What attracted you to this position and have you held a similar position in another organisation?

QUESTIONS

1. How does your institution define a person with visual impairment and how closely does that match your personal perspective?
2. What is your knowledge of the New Zealand Disability Strategy of 2001 and the revised edition of 2016?
3. To what extent have these national strategies influenced the tertiary education policies for students with visual impairments?
4. What is your assessment of the educational policies relating to tertiary students with vision impairment in New Zealand?
5. What is your assessment of the level of support and provision for tertiary students with vision impairment in New Zealand?
6. How do students with visual impairment become aware of the blind foundation and how do they access support from the foundation.
7. What has been the experience of the blind foundation working with students with visual impairment?
8. In what ways could the Ministry of Education and the Blind Foundation enhance the provision of support services to students with visual impairment?
9. Is there anything you will like to add?

Appendix 9: Focus group questions

1. How will you describe your transition from high school to tertiary education?

2. What does an inclusive institution mean to you?

3. To what extent do your experiences in higher education match your views on inclusive education?

Possible follow up questions if not covered

- To what extent does the university system and community become a barrier to your inclusion and participation?
- What areas of the university environment and support services do you find most valuable and why do you consider them valuable?

4. How do you approach barriers to your inclusion in higher education?

5. What is your knowledge and assessment of educational policies related to tertiary students with disability?

6. How will your university be made more inclusive?

Possible follow up questions if not covered

- What do you see as the role of the student, lecturers, accessibility officers, university management and Ministry of Education in implementing inclusive education?