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Clinical Educators' Expectations and Experiences of Supervising Audiology
Students in South Africa: A Focus on Race and Language

By

Student: Nicola Keeton

Student number: KTNNIC001

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Supervisor: A/Prof. Shajila Singh
Co-Supervisor: A/Prof. Harsha Kathard

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University of Cape Town

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Glossary

Cultural Awareness: With reference to clinical practice cultural awareness is an awareness and/or understanding by a clinician of how a person's culture may inform their values, behaviours, beliefs and basic assumptions of their own and others' cultures (Flemming, 2010). It is a professional skill that forms part of a clinician's life-long learning in order to improve the service they provide to linguistically and culturally diverse clients (Flemming, 2010).

Cultural Competence: Knowledge and skills that allow clinicians to be sensitive to cultural and linguistic differences that may affect the identification, assessment and/or management of disorders in culturally and/or linguistically diverse clients (ASHA, 2004).

Clinical Educators: Clinicians who supervise students and are responsible for the facilitation of learning of clinical competencies on site and are obligated to fulfil the legal requirements and ethical responsibilities stipulated by the national and professional standards for supervision (ASHA, 2008). They provide written and/or verbal feedback and guidance on educational, professional and personal development of the student's experience of providing appropriate client care (Kilminster, Cottrell, Grant & Jolly, 2007).

Educationally disadvantaged University students: are students in South Africa who attended previously Black schools where educational inequality persists and sub-optimal schooling was provided (Burch, Sikakana, Yeld, Seggie, & Schmidt, 2007).

Generic Abilities: A set of ten attributes, characteristics or behaviours identified by May, Morgan, Lemke, Karst, & Stone (1995) that are not overtly part of a profession's core knowledge and technical skills but are required for successful client-clinician interactions. These abilities are: commitment to learning; communication skills; critical thinking; effective use of time and resources; interpersonal skills; problem solving; professionalism; responsibility; stress management and use of constructive feedback.

Mother tongue/first language: The language spoken most proficiently at home otherwise referred to as a 'first language' or 'home language' (Heugh, 2000).

Race: A term used for social purposes to define human populations that look different in terms of their visible physical characteristics and/or that have different ancestral roots (Bhopal, 2004). The race categories as used by Statistics South Africa (2012) are used in this study: Black; Coloured; Indian and White.

Supervision: A process requiring the clinical educator to effectively facilitate the development of clinical competence in students (ASHA, 2008). Supervision consists of a variety of clinical activities specific to the needs, competencies, and expectations of the clinical educator and student in addition to the requirements of the clinical setting (ASHA, 2008).

Abstract

Background: Audiology clinical educators working in a post-apartheid context in South Africa are required to supervise students from diverse race groups and with varying levels of proficiency in the language of learning. Research suggests that clinical educators may be unaware of their expectations of students from specific race groups and with different levels of proficiency in the language of learning, which may have adverse learning implications for these students. Little is known about the expectations and experiences of clinical educators supervising Audiology students from different backgrounds within the South African context.

Purpose: To provide information that might contribute to changes in the curricula of Audiology programmes in South Africa. The findings will inform training programmes and in so doing, optimize the learning of diverse students.

Aim: This dissertation aims to describe clinical educators' expectations and experiences when supervising Audiology students from diverse race groups and with different levels of proficiency in the language of learning within the South African context.

Method: A sequential explanatory mixed methods design using two separate data collection methods was employed. In Phase 1 questionnaires were sent to all identified clinical educators at the five universities in South Africa offering Audiology. The predominantly quantitative questionnaire identified trends and general expectations and experiences of a sample of twenty-three clinical educators nationally who were supervising Audiology students from different race groups and with varying levels of proficiency in the language of learning. Results which emerged from the questionnaires were used as the basis for developing an interview schedule that facilitated an in-depth qualitative exploration of these areas. Semi-structured interviews were conducted with eight information-rich participants and analysed using thematic analysis. Results from the two data collection phases were integrated to provide triangulation.

Results: Five themes emerged from the integrated results: *incongruence*, *congruence*, *challenges*, *coping strategies* and *dilemmas*. The first two described participants' expectations of diverse students. *Incongruence* was developed as the first theme based on the tension between participants' reports that race would not influence their expectations of a student's clinical performance and the fact that Black students were identified as performing poorly in comparison with their peers. Findings suggested that most participants were hesitant to identify race as a possible dynamic impacting student performance. Instead, clinical educators attributed successful performance in a clinical setting to students' proficiency in the language of learning and schooling background. Most of the students with poor proficiency in the language of learning and/or from disadvantaged schooling backgrounds were Black. Black students achieved lower marks than their peers and were identified as having the most weaknesses and the least strengths in terms of their clinical performance

in comparison with students from other race groups. Conversely, *congruence* was evidenced where there was a match between participants' expectations that students from each race group would not perform differently from each other and their students' actual performance. This theme provided the perspective that for some clinical educators, race was not an indicator of clinical performance.

The remaining three themes examined participants' experiences while supervising students. The *challenges* experienced when supervising students where language barriers occurred in clinics as well as the *coping strategies* used to overcome them were described. Although coping strategies were discussed, *dilemmas* became apparent regarding their application in a clinical setting. The finding that participants were using ad hoc coping strategies to manage challenges may call into question the reliability and validity of these measures. Dilemmas were evident where participants had differing opinions regarding the management and assessment of students where language barriers occurred in clinics due to a lack of guidelines to support their practice.

Conclusions: Results from this study suggested that participants were uncomfortable discussing any association between race and clinical performance despite the fact that Black students were predominantly performing poorly in comparison to their peers. In South Africa clinical education occurs within a challenging post-apartheid context and participants were struggling to negotiate the way in which a student's race may influence their expectations for clinical performance.

The lack of uniformity in terms of how to fairly assess students where language barriers existed in clinics suggested the need for guidelines and/or protocols to be implemented by institutions to aid the clinical education process. Findings suggested that while there was a desire to support students who were not proficient in the language of learning and to model appropriate service provision to a previously disadvantaged population, clinical educators were inadequately prepared to do so. This study has uncovered insights that may challenge South African universities to question antiquated practices and engage with a diverse student body in order to create dynamic new strategies for training all students to provide the best possible services to the linguistically diverse population.

The Researcher

Researchers enter the research process with their own set of assumptions, opinions and experiences (Rubin & Rubin, 2005). As a result, personal feelings or biases as well as a researcher's gender, class and ethnicity may have an effect on what information is obtained or in a skewed interpretation of results (Rubin & Rubin, 2005). In an attempt to reduce researcher bias it is important that the researcher reflects on their core beliefs and opinions regarding the phenomena in order to enable bracketing, or suspension of their own perceptions, which may facilitate a more accurate understanding of the phenomenon under investigation (Terre Blanche, Durrheim, & Painter, 2006).

In brief, I am a thirty-two-year-old White, English speaking Audiologist who qualified post-apartheid in 2003 where most of my peers were still white students from similarly relatively privileged socio-economic and schooling backgrounds. My initial work experience was obtained during my community service year at a rural government hospital in Kwa-Zulu Natal. At this hospital I first realised the challenges facing clinicians in South Africa attempting to provide services to first language African speakers. Part of our Audiology course included a year of isiXhosa which did not help me to communicate with my isiZulu clients. Interpreters were few and far between and it became obvious that despite the best intentions of the predominantly White English/Afrikaans health care providers, linguistically diverse clients were not receiving services in their mother tongue. My interest in this topic was already peaked at this stage due to the fact that my studies had not adequately prepared me to provide services in a multi-lingual setting.

I am currently working as an Audiology clinical educator at a university in Cape Town where I have been working since 2009. The student demographics have changed a great deal since I obtained my degree, so that many of the students that I supervise are from different race backgrounds and are culturally and linguistically diverse. Facilitating clinical learning of students from many different backgrounds and providing services to a diverse client base has been both interesting and challenging. I often reflect on sessions where I am supposed to be modelling best practice but feel ill-equipped. I have also felt uncertain when assessing sessions where I have been unfamiliar with the client's language. I began to realise that some of my colleagues were also struggling to tackle the new challenges arising in clinics where a diverse student body was entering Audiology programmes.

My decision to explore this phenomenon stemmed from my own desire for understanding as well as my perception that other clinical educators, involved in the supervision of students from diverse race and language backgrounds, may share my uncertainty of how to best provide support to these students. I, therefore, wanted to know what the experiences and expectations of clinical educators are when supervising Audiology students from diverse race groups and with different levels of proficiency in the language of learning in South Africa.

Overview of the Thesis

This thesis is organised into five chapters. Chapter One will frame the research by providing the introduction; rationale; problem and purpose statements as well as a presentation of the aims. A literature review describing the key areas of inquiry both nationally and internationally is provided to orientate the reader to the topic in Chapter Two. The methodological underpinnings of this study are discussed and a description of the methods used to gather and analyse the data are described in Chapter Three. The results are presented in Chapter Four and are discussed and linked to potential clinical and theoretical implications in Chapter Five.

Chapter One: Introduction

This study provides an analysis of clinical educators supervising in a post-apartheid context where they are required to address the needs of a diverse student population. Little is known about the facilitation of clinical learning of Audiology students from different backgrounds within the South African context. This research report describes the expectations and experiences of clinical educators supervising Audiology students from diverse race groups and with different levels of proficiency in the language of learning in South Africa.

Research Question

What are the expectations and experiences of clinical educators who supervise Audiology students from diverse race groups and with different levels of proficiency in the language of learning in South Africa?

Background

The historical backdrop to clinical education in South Africa. Since the end of apartheid changes have occurred in the health and education sectors which have had an impact on those involved in teaching in Health Sciences programmes including Audiology (Amosun, Hartman, Janse Van Rensburg, Duncan, & Badenhorst, 2012). Since 1994, the South African Department of Higher Education has aimed to eradicate the legacy of a racially segmented society left by apartheid (Council on Higher Education [CHE], 2010). One of the fundamental goals of transformation is the achievement of equity in the Higher Education system (CHE, 2010; Organisation for Economic Co-operation and Development [OECD], 2008; Scott, Yeld, & Hendry, 2007) through admissions to universities based on students' race (Alexander, 2006; London, Ismail, Alperstein, & Baqwa, 2002). Equity transformation policies are grounded in the discourse of social justice which emphasises the necessity to create an equitable society based on democratic values that are rooted in an understanding of a country's historical context (CHE, 2010). Thus, transformation policies aim to ensure that student admissions focus on including persons who were previously excluded in order to create a more diverse and unbiased society (Amosun et al., 2012; CHE, 2010).

The resulting change in the student demographic profile in most university faculties, including Health Sciences, has had wide ranging effects for staff who are required to support an increasingly diverse student population (Amosun et al., 2012). The extent of these changes has, however, varied across the institutions so that while student numbers reflect greater

diversity in terms of race composition, certain race imbalances persist in different institutions and faculties based on their historical context (CHE, 2010). For instance, 'historically Black universities' were not required to increase the ratio of Black students being recruited (CHE, 2009), but the imbalance between the race demographic of predominantly White and Indian staff and the mostly Black student body, prevailed.

Only five universities in South Africa offer Audiology (Swanepoel, 2006) and there has been a steady growth in numbers of Black students into each of the four programmes at what are commonly referred to in the literature (CHE, 2009) as 'historically White' and 'Indian' universities, with the extent of the changes at each institute being variable. Therefore, in South Africa educators are facing the complex learning needs of an increasingly diverse student body (Amosun et al., 2012; Burch, Sikakana, Yeld, Seggie, & Schmidt, 2007) and clinical educators at each of the universities are managing the needs of different populations.

Race imbalance in academic appointments also remains significant at universities (CHE, 2009) as well as within Health Sciences faculties (London et al., 2002). All South African universities are working towards equity in terms of the race, sex and disability composition of their staff in order to eventually bring the profile of staff in line with that of the country's population (CHE, 2010). Since 1994 there has been steady but slow growth in the number of Black academic staff but the number remains low in comparison to that of Indian and White staff, resulting in a disparity between the race profile of staff and that of students (CHE, 2010). Audiology undergraduate profiles in South Africa indicate that the majority of professionals are White (Amosun et al., 2012) leading to a higher number of White Audiology staff nationally. The race and linguistic imbalance between the majority of Health Sciences staff and a progressively diverse student population poses challenges in terms of educator ability to support the complex learning needs of students from backgrounds that differ from their own (CHE, 2010; Guillory, 2000; London et al., 2002).

While changes in the student profile are positive, a higher attrition rate of Black students from South African universities has been documented (CHE, 2009; OECD, 2008) with poorer performance in the health sciences faculties also noted (Burch et al., 2007). Many of the Black students entering university do so from disadvantaged schooling and financial backgrounds (Burch et al., 2007; Sikakana, 2010). Inadequate academic 'preparedness', as a result of a lack of social support and educational disadvantage, has been cited as a key reason why students take longer to graduate or drop out of programmes (Scott et al., 2007; Sennet,

Finchilescu, Gibson, & Strauss, 2003). Many Black South Africans, constituting approximately 94% of the school-going population, continue to be educated in suboptimal circumstances despite government initiatives to provide equal schooling opportunities for all (Burch et al., 2007). These educationally disadvantaged students, representing the majority of matriculants, are often at risk of performing poorly at a university level even though they represent the strongest candidates selected from a large pool of pupils receiving inferior schooling (Burch et al., 2007). Students from disadvantaged schooling backgrounds require additional support from staff to ensure their academic success (Burch et al., 2007). An extensive literature review yielded no articles on the experiences of Audiology clinical educators providing support to educationally disadvantaged Black students in clinical learning contexts.

Additionally, many African language mother tongue speaking Black students face language barriers when they enter into universities which place them at risk for poor academic performance (Bangeni & Kapp, 2007). During the 2001 Census conducted by Statistics South Africa it was found that even though English is recognised as the language of commerce and science, only 8,6% of the population reported it to be their first language (Statistics South Africa, 2004). Despite the fact that the post-apartheid constitution declares South Africa to be multilingual, language continues to be a barrier to access and success in Higher Education (Ministry of Education, 2002; Painter, 2010).

As the first language English speaking population nationally was, and continues to be, relatively small, the Language Policy for Higher Education encouraged universities to develop the nine official African languages as mediums of instruction in tertiary education institutions alongside English and Afrikaans (CHE, 2001). Kamwangamalu (2004) describes a disparity, however, between the country's language policy which promotes multilingualism in South Africa and language practice that primarily advances English in many levels of public life such as at institutions of Higher Education. English and Afrikaans have remained the primary languages of learning at universities and English is the language of learning at all five universities offering Audiology programmes (Swanepoel, 2006).

After 1994, educators at historically White and Indian universities needed to adapt to teaching more students for whom the language of instruction was their second or even third language, while students had to adapt to English and/or Afrikaans language dominated learning environments (CHE, 2010). It therefore followed that as the undergraduate student race profile at a number of universities changed, a further layer of complexity was introduced

to the sphere of clinical teaching - language. Educationally disadvantaged Black students entering institutions of Higher Education are often not adequately proficient in the language of learning (Kamwangamalu, 2002; Aziakpono & Bekker, 2010; Painter, 2010). Many undergraduate students who have an African language as their mother tongue are overwhelmed by the high level of English expected of them at a university level (Bangeni & Kapp, 2007; Ministry of Education, 2002; Painter, 2010). Students with poor proficiency in the language of learning are at risk for poor performance and/or attrition (Painter, 2010).

During clinical placements, students who are not proficient in the language of learning may struggle to understand the theory underpinning clinical practice (Ladyshevsky, 1996). While African language mother tongue speakers may be able to provide services to a linguistically diverse client base, these students may also be at risk of lacking theoretical understanding. Clinical educators in South Africa may struggle to facilitate learning for students whose proficiency in the language of learning is variable. No study could be traced that described the experiences of clinical educators in South Africa when supervising students whose proficiency in the language of learning was poor.

Thus, South African clinical educators are working in an environment where Black students are often unprepared for the high academic level expected of them due to educational disadvantage, and many are not adequately proficient in the language of learning placing them at a disadvantage in comparison to their peers from other race groups. Research has not yet examined clinical educators' expectations or experiences when supervising such diverse groups of students.

The Audiology clinical educator. Clinical education is situated within the context of a Higher Education curriculum which is governed by a regulatory body (Pillay, Kathard, & Samuel, 1997). In South Africa this organisation is the Health Professions Council of South Africa (HPCSA). The HPCSA regulations state that Audiology undergraduate curricula must allow for students to achieve professional competence as per the specified exit level outcomes and current scope of practice guidelines (Government Gazette No. 35350, 2012). During site placements, clinical educators help students to integrate the knowledge, skills and attitudes of the profession learned in academic courses, and apply them to a client in a clinical context to achieve these clinic-specific outcomes (Ernstzen & Bitzer, 2006). Knowledge tests, simulations, clinical observations, multisource feedback opportunities including the provision of feedback on written work, and many other teaching and learning

activities are commonly used to facilitate learning and to assess clinical competencies (ten Cate & Scheele, 2007; San Miguel & Rogan, 2012; Strohschein, Hagler, & May, 2002).

A student's learning experiences are influenced by the attributes of the clinical educator, the student and the client; the teaching and learning opportunities offered at each placement; and the nature of assessments (Ernstzen & Bitzer 2006). In South Africa, clinical educators may either be staff hired by the university specifically to train students or clinical staff who work at a site and agree to supervise students who provide services there.

All clinical educators are responsible for ensuring that each student has a positive learning experience which can be made more difficult at sites where clinical educators have a dual responsibility; essentially as the clinician they are in charge of client care and safety but equal accountability is shouldered for providing appropriate learning opportunities for students (McDonough & Osterbrink, 2005; Ramachandran, 2011). Student education may sometimes have to take a secondary role to client care so that the clinical educator is forced to make decisions regarding the management of the student-client interaction that may affect the learning experience (Ernstzen, Bitzer, & Grimmer-Somers, 2009). McDonough and Osterbrink (2005) suggest that clinical educators are trained clinicians, but they may not have been trained as supervisors so many may be struggling to negotiate the challenges of assuming these dual roles especially where protocols for supervision are not provided (Ramachandran, 2011). Informal correspondence with staff members at the various universities confirmed that institutions offer non-compulsory generic training courses to clinical educators in South Africa. Ernstzen and Bitzer (2006) suggest that in South Africa the lack of guidelines to assist clinical educators in facilitating and assessing clinical learning could result in differences in student learning experiences, a lack of valid and reliable assessments, and varying standards of clinical education. A diverse student profile may result in additional challenges in the sphere of clinical education. More needs to be known about Audiology clinical educators' experiences of teaching and assessment when supervising students from diverse backgrounds in order to understand whether there is a need for universities to provide training and guidelines to enhance student learning experiences.

Clinical educators are required to assess both a student's core clinical knowledge and technical skills and their generic abilities such as interpersonal skills, critical thinking and professionalism (Clouten, Homma, & Shimanda, 2006). Research highlights the fact that clinical educators' attitudes and expectations may affect the way that they facilitate learning and assess students from diverse backgrounds (Black, 2001; Brown, 2001; Chan, 2001;

Clouten et al., 2006; San Miguel & Rogan, 2012). The ability to assess objectively has especially been called into question by international researchers as mark sheets may be open to bias and could be influenced by educators' personal beliefs about which characteristics are representative of a 'good' student (San Miguel & Rogan, 2012). A deeper understanding of South African clinical educators' expectations of students from increasingly diverse backgrounds is needed.

Different expectations for students from diverse race groups may affect the clinical educators' ability to facilitate equal learning opportunities and to provide fair assessment for all students (Clouten et al., 2006). Hadley and Fulcomer (2010) explain that personal experiences create a natural and inherent bias that may result in clinical educators expecting students from each race group to perform in a specific way. Bias may lead clinical educators to desire all students to conform to expectations that may not always be explicit (Hadley & Fulcomer, 2010). Student performance may be negatively affected if they perceive that the clinical educator has lower expectations of them due to bias (Gardner, 2005). If clinical educators are unaware of bias they have towards students from a specific race or language group they may mark these students unfairly and/or neglect to provide the best possible support to those who may require it (Clouten et al., 2006; Gardner, 2005). In South Africa, clinical educators working with Audiology students from race and language backgrounds that differ from their own may have bias towards certain groups of students which could affect how these students are facilitated and assessed. To date, no South African study has yet been done to examine Audiology clinical educators' expectations of students from diverse race and language backgrounds.

The political context in which clinical education occurs. In South Africa, the political context in which clinical educators work may also have an effect on expectations of students from different race groups. It is for this reason that a brief discussion of post-apartheid perspectives on race and racism will now be described.

After apartheid the concept of non-racialism became a societal ideal to work towards in order that South Africans would no longer be classified in terms of their race (Alexander, 2006; Ansell, 2006; Seekings, 2008; Stevens, 2003). South Africa's transition from apartheid towards the ideal of a 'non-racial' democracy demanded the re-negotiation of social identity based on the eradication of past inequalities (Ansell, 2006; Franchi & Swart, 2003). Universities were placed on the frontline in terms of creating a professional community along 'non-racial' lines that would help to shape a new national identity (Walker, 2005). While the

concept of non-racialism is based on a constructive and positive sentiment, its successful integration at all levels of the university context is not guaranteed.

Some authors (Alexander, 2006; Franchi & Swart, 2003; Maré, 2011; Stevens, 2003) suggest that the goal of a non-racial society may be considered to deny the memories of apartheid, allowing agents of racism to distance themselves from on-going social inequalities. It is argued to be unfair to assume that the formerly privileged and the formerly oppressed now operate on a level playing field as a result of efforts made to improve the skills of previously disadvantaged race groups (Stevens, 2003). South Africa has a past that is immersed in racism and authors agree that it is unlikely that the legacy of decades of racial oppression will disintegrate rapidly (Ansel, 2006; Maré, 2011; Stevens, 2003). Additionally, a non-racial society may be difficult to achieve while the concept of race remains tangible as the government utilises race to fulfil goals of redress and equity and compensate for past inequalities which still exist (Ansell, 2006; Maré, 2011; McKinney, 2007). While there are reasons for the perpetual use of race categories, such as for race-based legal requirements, policy formulation, and for census purposes, these processes of race confirmation may play a central role in defining how the population conceptualises race in terms of 'similarity and difference' and perpetuate its continued perceived salience in society (Maré, 2001; McKinney, 2007). This continued use of categorisation by race may allow people to create group boundaries thereby propagating a society organised along racial lines (McKinney, 2007). Although the concept of non-racialism is a notable goal to work towards, the apartheid race categorisation system is ingrained in South African society and for many the memory of past racial oppression may be too recent to embrace the ideal of a 'raceless' society.

Clinical educators are working in a context where race is a challenging topic especially due to the conflicting ideas around the concept of 'race'. McKinney (2007) suggests that South Africans find it difficult to talk about race due to its implicit association with apartheid and possibly to racism. Educators may be concerned that any overt reference to race might be perceived to be socially unacceptable or racist (Bernard, 2011; McKinney, 2007). Walker (2005) describes the political pressure to transform and the social pressure to reduce the salience of race within institutions for Higher Education in South Africa. These pressures may result in challenges for educators trying to address the needs of a multiracial student body especially where Black students from disadvantaged backgrounds may perform poorly in comparison to their peers. South African educators may be hesitant to discuss challenges associated with supervising educationally disadvantaged Black students who are

not proficient in the language of learning due to fears of being perceived as being racist. Research is needed into Audiology clinical educator expectations of students from diverse race groups in order to shed light on possible bias that may be affecting student and clinical educator interactions.

Context of Audiology professional practice. In South Africa the profession developed during apartheid resulting in an unjust practice history shaping clinical services to be race, class, sex and language biased which has resulted in inadequate service provision to the majority of the population (Kathard, 2005). The HPCSA now stipulate in the Audiology scope of practice regulations that audiologists must provide equitable services to linguistically diverse clients (Government Gazette No. 35635, 2012). However, Audiology continues to be a culturally and linguistically underrepresented profession where the majority of professionals are mother tongue English and/or Afrikaans speakers while a substantial proportion of the population are not (Kathard & Pillay, 2013; Swanepoel, 2006). The resulting disparity between health providers and their clients makes the provision of linguistically and culturally appropriate services to much of the population difficult (London et al., 2002; Pascoe & Norman, 2011; Swanepoel, 2006). Audiology programmes in South Africa are required by the HPCSA to train their students to ensure quality service provision to multilingual populations (Government Gazette, 2012) where they may not always be sure what best practice models are.

Research in South Africa has touched on a number of reasons why clinicians may not be confident in their ability to provide services when language barriers occur. In 2008, Wemmer reported that the majority of South African Audiology graduates, who at that time were predominantly White or Indian, were able to provide services independently in English and Afrikaans, while very few were able to do so in any of the country's other official languages. Current training in South Africa educates students to provide services through interpreters (Ramkissoo & Khan, 2003). Authors suggest, however, that provision of Audiology services to linguistically diverse clients at government hospitals does not occur in the client's mother tongue and that interpreters are few and often under-qualified (Pascoe & Norman, 2010; Penn, Mupawose, & Stein, 2009; Wemmer, 2008). In their review of community service speech language pathologists and audiologists, Penn et al. (2009) noted that even where participants had studied an African language as part of their undergraduate programme they were largely unprepared to communicate with the majority of their clients. Penn (2011) suggests that while all Audiology students are required to complete a one-year

course in one of the African languages it is unlikely that they will be empowered to provide services fluently in these languages.

The fact that interpreters are often unavailable, and that the majority of audiologists are not proficient in the many African languages spoken by clients, allows for the question: how are services being provided to linguistically diverse populations? Several studies have proposed that clinicians with the same cultural and language background as their clients may provide the most appropriate care to them (Betancourt, Green, Carrillo, & Ananeh-Firempong, 2003; Splenser, Canlas, Sanders, & Melzer, 2003). An increasing number of mother tongue African language speaking students, gradually being recruited and trained in Audiology programmes, may more effectively communicate with the majority of clients who speak the same language (Wemmer, 2008). Clinical educators are required to supervise students who are providing services in languages that they are unfamiliar with and to guide therapy occurring in languages where no research yet exists to support practice. Additionally, it may not be feasible to suggest that all clients will eventually have access to a professional who speaks their language making it imperative to develop assessment and management strategies to ensure that linguistically diverse clients receive equitable services. At present, there is a lack of literature describing how clinical educators are managing language barriers occurring in clinics.

Clinical educators are supervising students whose proficiency in the language of learning is variable and who are training to provide services to a linguistically diverse client base. As a result of the practice history, these clinicians may have preconceived ideas of what constitutes best practice which may no longer be appropriate in terms of service provision to a multi-cultural and multi-lingual client base (Kathard & Pillay, 2013). It is important to understand what clinical educators' experiences of supervision in this linguistically complex South African arena are in order to ensure optimal learning for all students.

Rationale

South African Higher Education institutions continue to be responsive to the call for redress through the recruitment of a diverse student body (London et al., 2002). An increasing number of students from different race groups and whose proficiency in the language of learning is variable (Bangeni & Kapp, 2007) are, therefore, entering the Health sciences programmes (Burch et al., 2007) including Audiology. Clinical educators in South

Africa are required to supervise students from diverse race groups and with different levels of proficiency in the language of learning.

Studies suggest that clinical educators' biased expectations may unconsciously negatively affect the way that students from diverse backgrounds are managed and assessed (Clouten et al., 2006; Haskins, Rose-St Prix, & Elbaum, 1997) and may result in poorer clinical performance and higher attrition rates for these students (Clouten et al., 2006; Gardner, 2005). South Africa has a history of racial stereotyping and clinical educators are now supervising greater numbers of Black students, many of whom are educationally disadvantaged and/or have poor proficiency in the language of learning. No study has yet been done in South Africa to examine clinical educators' expectations of diverse student groups. It is, therefore, important to investigate whether clinical educators have different expectations of Audiology students from diverse race groups and with different levels of proficiency in the language of learning which may impact student learning experiences. Results may help to facilitate the cultural awareness of clinical educators to improve the quality of supervision for diverse students.

Furthermore, clinical educators in South Africa are required to supervise students with different levels of proficiency in the language of learning with an additional challenge introduced in the form of a linguistically diverse client base requiring services in the absence of trained interpreters. Clinical educators may feel unprepared to assess and manage students who have different levels of proficiency in the language of learning, especially where students are providing services to clients from diverse language backgrounds. Additionally, Audiology practice history, rooted in apartheid, may affect clinical educators' perceptions in terms of what constitutes best practice to a previously disadvantaged client base. There is a paucity of research examining the experiences of clinical educators facilitating learning during clinical placements in South Africa where challenges regarding student diversity exist. Insight into clinical educator experiences may allow for the development of guidelines to contribute to training that optimizes the learning of all students. Effective training of Audiology students from different backgrounds might ultimately help to graduate professionals who will best be able to provide linguistically appropriate health care to the diverse South African population.

Problem Statement

No study has yet been done in South Africa or in the field of Audiology internationally that examines the expectations and experiences of clinical educators supervising students from diverse race and language backgrounds.

Purpose of the Study

To provide information that might contribute to changes in the curricula of Audiology programmes in South Africa. The findings will inform clinical educator training programmes and in so doing, optimize the learning of diverse students.

Aims

Aim 1. To describe clinical educators' expectations of the clinical performance of Audiology students from diverse race groups and with different levels of proficiency in the language of learning within the South African context.

Aim 2. To describe clinical educators' experiences when supervising Audiology students from diverse race groups and with different levels of proficiency in the language of learning within the South African context.

Caveat

A lack of adequate academic 'preparedness' as a result of educational disadvantage has been cited in the South African literature as one of the primary factors that may negatively affect Black students' clinical performance (Burch et al., 2007; Scott et al., 2007). Due to time constraints, the scope of this current study was limited to focus only on clinical educators' expectations and experiences while supervising students from diverse race groups and with different levels of proficiency in the language of learning. Issues pertaining to socio-economic status and to schooling backgrounds of students will not be addressed.

Chapter Two: Literature Review

Overview of the Chapter

Chapter Two provides the reader with a review of the literature relevant to this study. The researcher searched for relevant articles through EBSCO Host as well as on Google Scholar focussing in the areas of clinical education in Medicine and the Health Sciences. Literature was selected to provide the reader with an understanding of both clinical educators' expectations of students from different race and language backgrounds as well as the experiences of clinical educators when supervising students from diverse language groups. Only these areas will be critically reviewed.

Preface. Much of the research in this field has been conducted outside of South Africa. International research may be generalised to South African contexts in so far as the clinical education process has similar components worldwide. Likewise, profession specific researchers (Clouten et al., 2006; Ladyshevsky, 1996) suggest that their findings may be generalised to other Health Sciences disciplines, such as Audiology, due to similarities in the supervisory process across disciplines. However, in making generalisations to the South African context the researcher would caution the reader to consider that the Audiology student population is more diverse in terms of race and language background than in the USA, Britain and Australia (where most of the research occurred).

Literature Review

Clinical educator expectations of diverse students. Higher numbers of minority students have been recruited in the USA (Clouten et al., 2006; Kachingwe, 2003) England (Dogra & Karim, 2005) and Australia (Ladyshevsky, 1996) in order to address the lack of diversity noted in the health professions. In response to the increasingly diverse student body entering Health Sciences programmes, an abundance of research has emerged investigating whether clinical educators have disparate expectations for students from diverse race groups and with different levels of proficiency in the language of learning and the possible effect differences might have on a student's clinical performance (Clouten et al., 2006; Haskins et al., 1997; Read, Archer, & Leathwood, 2003). Researchers (Clouten et al., 2006; Haskins et al., 1997; Woolf, Cave, Greenhalgh, & Dacre, 2008) have suggested that clinical educators are often unaware of the way in which their biased expectations may affect their assessment of students from cultures that differ to that dominant at the institution. Biased expectations,

even where only subtly evidenced by educators, may result in students who are not from the dominant university culture feeling alienated and despondent during their placements especially where students perceive that clinical educators have lower expectations for them (Gardner, 2005; Omeri, Malcolm, Ahern, & Wellington, 2003).

Haskins et al. (1997) conducted a key study to identify whether covert bias was demonstrated by physical therapist supervisors in the USA when evaluating students from diverse race groups. In the study, 83 participants (73 White) were asked to complete a survey assessing a video recording of one of four students from different race categories (Asian, Black, Hispanic and White) on a case presentation which was secretly scripted. The White student was consistently marked more favourably while the Black student received the most negative comments even though students presented the exact same scripted clinical case. The study concluded that clinical educators desired “middle-class social characteristics” from all students and expected minority students to perform differently. Haskins et al. (1997) argued that academically capable minority students may drop out of programmes if they perceive they have been unfairly marked on their clinical performance by a biased supervisor. The study uncovered an interesting insight into educator bias towards ethnic minorities even though it was conducted over a decade ago, had methodological limitations and a similar study has not since been replicated with a larger sample size to check for generalizability.

Clouten et al. (2006) investigated the expectations and perceptions of 192 clinical educators across the USA of the clinical performance of physical therapist students with different ethnic backgrounds. They aimed to investigate the high attrition rates of students from diverse race groups through a survey. Participants had different expectations of the clinical performance of students from different ethnic groups and felt that the majority (Caucasian students) would perform better than students from minority groups. Results suggested that some educators were unaware of bias they had towards students from minority groups as they reported that they had the same expectations for all students but detailed more weaknesses in terms of generic abilities for minority groups. The primary limitation highlighted in this study was that responses to the survey items were based only on clinical educator perceptions and memory of student performance and it is unknown how participants' recollection compared with students' actual behaviour. In spite of limitations, the study provided insight into clinical educators' expectations of students from diverse backgrounds

suggesting that some clinical educators may not be aware of bias towards students from different race groups that may affect the way that these students perform and are assessed. Results from this study further highlight the importance of understanding whether clinical educators are biased in their expectations for students from race groups that differ from their own.

Bias has also been suggested to exist in Health Sciences programmes in the UK. Woolf, et al. (2008) describe the theory of a “stereotype threat,” where members of negatively stereotyped groups under-perform in assessment situations due to high anxiety levels at the prospect of being perceived negatively by educators due to certain stereotypes. In a qualitative study, 25 clinical educators and 23 students from minority and majority groups were interviewed in focus groups and semi-structured interviews to investigate whether it was generally perceived that stereotyping of students occurred in medical schools. Both staff and students responded in a way that suggested they held negative stereotypes regarding minority student groups. Some students reported that they were anxious in clinics as they perceived that clinical educators judged them undesirably based on their culture. The study makes a link between the minority students’ anxiety towards clinical educators (who admitted to having poorer expectations of these students) and the students’ under-performance. The race and sex of interviewers were acknowledged to have potentially affected participants’ desire to answer truthfully and the researchers noted that the results would be difficult to generalise to other contexts. As international research (Clouten et al., 2006; Haskins et al., 1997; Woolf et al., 2008) has suggested that supervisor bias exists with negative consequences for student clinical performance, it is important to ascertain whether South African clinical educators’ expectations are different for students who come from backgrounds that differ from theirs.

In the UK, studies (Wass, Roberts, Hoogenboom, Jones, & Van der Vlueten, 2003; Woolf et al., 2011) have examined whether bias was present in the marking of medical students during their objective structured clinical examinations (OSCEs). In an editorial, Esmail (2011) suggested that previous research in the area of cultural bias during clinical assessments was criticised for lack of generalizability as studies often only reviewed single examinations or a small cohort from a single year. In the same year Woolf et al. (2011) published results from an extensive systematic review of a wide range of smaller studies (22

reports covering 23 742 participants) to ascertain why ethnic minorities were obtaining poorer scores in medical programmes in the UK. A limitation of the investigation was that the studies selected for review were primarily based on data obtained from universities in Nottingham and London as this was where the majority of research on the subject had occurred. However, Esmail (2011) suggested that Woolf et al. (2011) were able to draw valid conclusions from their review due to the high numbers of students included in the analysis. Woolf et al. (2011) reported that examiner biases towards students existed and that poor proficiency in English or having a “non-standard” English accent effected minority students’ ability to achieve higher marks. Confounding variables such as the socioeconomic status of students could not be controlled for. However, Woolf et al. (2011) reported that national data from a much more robust dataset of university marks showed that even when socioeconomic factors were controlled for, minority students still achieved poorer results. Woolf et al. (2011) suggested that further qualitative studies may provide clarification as to why this disparity occurs. Findings suggested that while some minority students may perform poorly as a result of poor proficiency in the language of learning and/or socioeconomic factors, others may be marked poorly due to examiner bias (Woolf et al., 2011). In South Africa issues of proficiency in the language of learning and socioeconomic status are strongly linked to race (Burch et al., 2007) making it important to know the effects of these two variables on the performance of students from different race groups. No South African studies have yet investigated whether clinical educators have different expectations of students from different race groups where race is related to poorer proficiency in the language of learning and/or educational disadvantage.

A South African study examined whether bias was noticed in the marks achieved by final year surgery students in their oral or long case clinical examinations (Stupart, Goldberg, Krige, & Kahn 2008). White students consistently achieved the highest scores and Black students the lowest. The difference in marks according to population group, however, was most obvious in the Multiple Choice Question (MCQ) examination where examiner bias was ruled out as papers were marked by computer. Results did not, therefore, suggest any overt evidence of examiner bias in these exams. Researchers, however, acknowledged that their inability to detect such bias may have been a result of methodological limitations and suggested that qualitative studies may be more effective in revealing a more comprehensive picture of the examination process.

Stupart et al. (2008) acknowledged a link between race and language in South Africa as a possible confounding variable. Results were, therefore, re-analysed including only those students who spoke English as their mother tongue to identify any possible effect the students' proficiency in the language of learning may have had on the results. Although trends of Black students achieving the lowest scores persisted they were less marked. First language English speakers scored significantly higher in each of the examination modalities compared with students who spoke another home language. There was evidence that the differences in performance between students from each of the race groups could at least in part be attributed to differences in their English language proficiency. Linguistic bias, where items may be unnecessarily linguistically complex, contain grammatical errors or wording that lack clarity, was not ruled out in this study. Dooley (2012) argues that linguistic complexity may be unfairly challenging to English second language students. While a number of limitations may have affected the reliability of these results, the study highlighted the fact that proficiency in the language of learning was not the only factor influencing Black students' poorer clinical performance. This study did not provide a clear reason for Black students performing poorly in clinical exams, but suggested that examiner bias and students' educational disadvantage may be influencing factors.

Data from studies in the USA (Clouten et al., 2006; Haskins et al., 1997), Australia (Ladyshevsky, 1996; Lidell & Koritsas, 2004; San Miguel & Rogan, 2012), the UK (Woolf et al., 2011) and South Africa (Stupart et al., 2008) suggested that a student's proficiency in the language of learning had a substantial effect on how clinical educators perceived and marked clinical performance. San Miguel and Rogan (2012) conducted an interpretive qualitative study in Australia to investigate clinical educators' expectations of English second language Nursing students' clinical practice through studying the educators' written feedback comments for ten students. The researchers explained that abilities, such as interpersonal communication and professional demeanour that are assessed are often culturally bound so that what clinical educators consider to be a 'good' performance may not always be shared by the student. When students are unaware of the clinical educator's expectations they may continually achieve lower marks resulting in poor self-confidence which may further negatively affect their performance (Ladyshevsky, 1996; San Miguel & Rogan, 2012). Clinical educators need to reflect and be aware of their expectations for clinical performance in order to make these explicit to all students as this will ensure better outcomes for students

from diverse race and language backgrounds (Ladyshevsky, 1996; San Miguel & Rogan, 2012).

The fact that many clinical educators across disciplines and from different countries were unaware of biased expectations for diverse students' clinical performance suggests that universities need to take responsibility for training staff to be culturally competent. Studies (Clouten et al., 2006; Haskins et al., 1997; Omeri et al., 2003; San Miguel & Rogan, 2012; Woolf et al., 2008) recommended that clinical educators should be given opportunities and training to encourage them to get to know their students as individuals and to be more aware of biased expectations that may influence their actions. Developing culturally competent, reflective educators might ensure appropriate and effective support is provided to students from diverse race groups (Mackay, Harding, Jurlina, Scobie, & Khan, 2011; Pitkäljärvi, Eriksson, & Kekki, 2011; Woolf et al., 2008).

The American Speech-Language and Hearing Association (ASHA) emphasised the importance of cultural competence for clinical educators (Hammond, Mitchell, & Johnson, 2009; Moxley, Mahendra, & Vega-Barachowitz, 2004) and have included it in their document outlining the knowledge and skills needed by therapists providing clinical supervision (ASHA, 2004). ASHA suggests that audiologists should recognise and reflect on their own cultural and linguistic background as well as that of their client and/or student in order to ensure appropriate interactions and to avoid bias (Levy & Crowley, 2012).

Studies (Bagnardi & Perkel, 2005; Gardner, 2005) also suggested that clinical educators may have more realistic expectations of their students if they have knowledge and are aware of barriers facing their students. Research in the USA revealed that some educators had low levels of cultural awareness and therefore were often unable to adequately respond to the needs of diverse students (Gardner, 2005). Bagnardi and Perkel (2005) and Gardner (2005) noted high attrition rates of minority student nurses and examined student and clinical educator perspectives in the USA. Gardner (2005) found that most participants were unable to identify barriers that minority students may have encountered. If educators ignore or remain oblivious to the differences of their minority students they may teach in ways that result in some feeling confused and alienated (Gardner, 2005). Both studies suggested that although dealing with students from different backgrounds can be challenging it is essential that clinical educators become culturally competent so that they may be sensitive to these students' needs.

Studies have emphasised that awareness of possible cultural bias (Clouten et al., 2006; Haskins et al., 1997; Mackay et al., 2011) as well as the ability to identify potential barriers experienced by students from different race groups and with variable levels of proficiency in the language of learning (Gardner, 2005; London et al., 2002) may help educators to provide necessary student support and reduce attrition rates. Research is needed in South Africa to determine what expectations clinical educators have of their students from diverse backgrounds in order to identify possible bias and to ascertain the potential need for educators to improve their cultural awareness and/or competence. Culturally competent clinical educators may provide better learning environments for all Audiology students.

Clinical educators' experiences of supervising diverse students. Research suggests that clinical educators often feel unprepared to meet the challenges facing them when dealing with diverse students (Omeri et al., 2003). Few studies have investigated the experiences of clinical educators when managing and assessing students from diverse backgrounds. Studies (Ladyshevsky, 1997; Stewart & Gonzalez, 2002) predominantly highlighted challenges experienced by clinical educators supervising students when language barriers occurred in the clinical education context. While most of the reviewed studies linked poor language proficiency leading to poorer clinical performance to race and/or culture, the challenging experience for clinical education was the language barrier that was prevalent in students from specific race groups (Ladyshevsky, 1997; Stewart & Gonzalez, 2002). In addition, the literature highlights that the increasingly diverse client base whom clinical educators and students are required to serve, introduces new challenges for the provision of adequate models for best practice service delivery (Penn, 2011; Shaya & Gbarayor, 2006). This review, therefore, will focus on clinical educator experiences when supervising students with different levels of proficiency in the language of learning providing services to clients from different language backgrounds.

Clinical educators are responsible for ensuring that students provide linguistically and culturally appropriate care to clients and academic courses initially provide the theory to students regarding this area (Stockman, Boulton & Robison, 2004; Winter, 2008). Different approaches have been suggested for improving the cultural competence of Health Sciences students, with the desired outcome of improved health care provision to clients from cultural and linguistic backgrounds that differ from that dominant in each country (Shaya & Gbarayor, 2006). In South Africa, Penn (2011) has also suggested that multicultural training should be an integral component of the curriculum in both academic and clinical spheres in

order to prepare students to meet the linguistically diverse needs of the majority of clients. In the USA, ASHA has been encouraging universities to train students to provide linguistically appropriate services to diverse populations since as early as 1985 (Stockman et al., 2004; Winter, 2008). No guidelines were initially provided by the universities as to how clinical educators should assess and manage students when providing services to linguistically diverse clients and research has since suggested that clinical educators continue to feel unprepared to facilitate learning in this area (Stockman, Boulton & Robison, 2008).

Researchers (Hammond et al., 2009; Horton-Ikard & Muñoz, 2010; Stewart & Gonzalez, 2002; Stockman et al., 2004, 2008) predominantly conducted programme reviews of the academic and clinical preparation of Audiology and Speech-Language Pathology students in the USA to deal with culturally and linguistically diverse clients. The reviews have taken the form of questionnaires completed by faculty and Heads of Department at the various institutions and revealed issues regarding the effective development of culturally competent students in clinical environments (Stockman et al., 2008). While the reviews primarily focussed on multicultural course content in the academic programs, researchers also reported on the transfer of the knowledge, skills and attitudes from the academic courses into the student clinics and how clinical educators were facilitating this process (Hammond et al., 2009; Horton-Ikard & Muñoz, 2010; Stockman et al., 2004, 2008). Horton-Ikard and Muñoz (2010) reported that participating clinical educators felt that they themselves lacked the necessary competencies to provide culturally and linguistically appropriate assessment and treatment to clients from diverse backgrounds and so had difficulty teaching these skills to students. Programme administrators reported that clinical educators had limited education regarding cultural competency and had a desire to be trained on how to effectively teach in this area (Kritikos, 2003; Stockman et al., 2004, 2008).

Limitations discussed for these programme reviews were similar. A primary concern was that results predominantly reflected the perceptions of program administrators and not the experiences and opinions of students and clinical educators (Stockman et al., 2008). The studies used survey designs and recommended that multiple measures be used to obtain triangulation in future (Hammond et al., 2009; Stewart & Gonzalez, 2002). While limitations were reported, clinical educators were notably required to facilitate student learning in an area where they did not feel competent suggesting a possible reason that students were not becoming skilled in this area in the USA. The authors suggested that further investigation was necessary to ascertain why content learned in multicultural academic courses was not

translating into attitudes and skills displayed by students in clinical placements (Stewart & Gonzalez, 2002). In South Africa, clinical educators' experiences of helping students to transfer the knowledge, skills and attitudes learned in academic courses to provide appropriate services to linguistically diverse clients are currently unknown.

A study in Canada investigated students' awareness and understanding of social and cultural issues in medicine (Beagan, 2003). The study suggested that when students did not see clinicians modelling linguistically and culturally appropriate practices taught in academic courses, they began to query the value of socially responsive medicine providing a potential answer to the question posed by Stewart and Gonzalez (2002) of why multicultural content was not translated into clinical practice. Park et al. (2005) conducted a similar study in the USA and reported that while academic programmes emphasised the importance of cross-cultural care to patients, students were provided with little formal training to develop their skills in this area and these skills were not modelled by their superiors making them query the importance of cultural competence in medical practice. These studies did not investigate why clinical educators were not modelling these skills but highlighted the importance for clinical educators to understand what constitutes linguistically and culturally appropriate services and to consistently and actively model these skills for their students.

Clinical education allows for alignment between academic content learned and clinical implementation of theory and provides the learning platform for students to put theory into practice in terms of addressing the needs of linguistically diverse clients. Khan, Campbell & Louw (2007) conducted a study in 2002 which showed that while Audiology and Speech-Language Pathology programmes in South Africa alluded to the importance of providing linguistically appropriate services to all clients, very few course descriptors included outcomes making this a priority in clinics. All except one programme in South Africa, which had only offered the course for one year, were included in the study. Most programmes were reportedly teaching students about possible ways of modifying materials for clients who were not proficient in English but it was not clear that students were being trained to provide all services to linguistically diverse clients. While changes in programmes may have occurred since this study was completed, there is still a lack of research to support best practice for client assessment and management where there is a language barrier between the client and clinician even though this is an important curriculum need (Chabon, Brown & Gildersleeve-Neumann, 2010; Pascoe & Norman, 2011) and is required by the HPCSA

(Government Gazette No. 35635, 2012). Where clinical educators do not have guidelines and protocols to follow, they may provide variable models of service provision to students.

Two areas were highlighted in the literature as barriers for the provision of linguistically appropriate services. These challenges have resulted in clinical educators lacking the knowledge and skills required to facilitate student learning when providing services to linguistically diverse clients.

i.) A lack of linguistically appropriate test and therapy material. The lack of linguistically appropriate test and therapy materials is another barrier to the provision of services to linguistically diverse clients (Langdon & Wiig, 2009; Pascoe and Norman, 2011). In an editorial, Wolf (2004) reported that in the USA children from racial and ethnic minorities who are deaf or hard of hearing and who speak languages other than English may be inappropriately diagnosed due to incorrect interpretation of English language-based hearing tests. He further described how decisions about school placement, follow-up diagnostic testing, amplification, and rehabilitation have been inaccurately made without valid speech audiometry and Auditory Processing Disorders results. Audiologists may continue to use inappropriately normed materials and tests when they are not aware of differences in outcomes related to language and culture (Khan et al., 2007; Ramkissoon & Khan, 2003; Wolf, 2004). The research reporting that clinicians were using inappropriate test materials without understanding the potential negative implications suggests that audiologists may remain uncertain about how to provide services to populations where linguistically appropriate test materials do not exist and they cannot speak the client's language.

The most common tests that may negatively affect the management of linguistically diverse clients are the speech-based wordlists used in the audiological diagnostic test battery. Authors in Canada (Marinova-Todd, Siu & Jenstad, 2011), the USA (Pampel, 2008) and South Africa (Ramkissoon & Khan, 2003) discussed the limitations of Audiological test batteries in assessing clients in languages other than English. In South Africa, Panday, Kathard, Pillay and Govender (2007) created a suitable and reliable Speech Reception Threshold (SRT) Zulu wordlist and proposed a methodology for the creation of wordlists for other African languages but Ramkissoon and Khan (2003) offered the opinion that such tests will not always be useful as the majority of South African audiologists are not proficient in African languages, affecting reliability. As appropriate test materials become more readily available for use in the private and government sectors, it is important for clinicians to be

clear on how to use them in a reliable way. Likewise, clinical educators need to be certain of what materials are available and how best to use them in order to provide best models of practice for students they are supervising.

ii.) Accent modifications for presentation of audiological test battery word lists.

Clinical educators in the USA were depicted as being uncertain regarding what constitutes best practice when presenting audiological test battery word lists in a “non-standard’ accent and were therefore managing students in different ways (Stewart & Gonzalez, 2002). Stewart and Gonzalez (2002) noted that students who did not speak English as their first language were often made to practice their ability to present test words in a first language “American English” accent to improve test reliability despite the lack of evidence to support this. Levy and Crowley (2011) suggested that all individuals speak with an accent and that no single standard can be appropriately applied in every clinical interaction. The discrepant opinions regarding whether students should alter their accents or not again highlight the variability in student management when clinical educators use their own discretion to make management decisions. No research is currently available in South Africa to describe whether techniques are being taught to students when presenting word lists in their second language.

The examples (as cited in i. and ii. above) above suggest that clinical educators may find it difficult to manage students when they are not clear about what would constitute best practice in terms of testing African language speakers with or without linguistically appropriate test materials. Where best practice models are lacking there is often a lack of uniformity in the way that clinical educators manage students’ language barriers which may lead to some students being unfairly advantaged or disadvantaged in terms of assessment (Chabon et al., 2010). It is, therefore, important to know what South African clinical educators’ experiences are when they are providing models of clinical practice to students and are unsure of what constitutes best practice when providing services to linguistically diverse clients.

In South Africa, African language speaking students have been recruited into programmes in order to provide services to a multi-lingual client base. Audiology students from diverse linguistic backgrounds are encouraged to provide services in the client’s mother tongue (Penn, 2011). In the USA, clinical educators have noted the challenges of assessing a

clinical session where a student is providing services to a client in a language not spoken by the clinical educator who is supervising (Muñoz, Watson, Yarbrough & Flahive, 2011).

Muñoz et al. (2011) suggested that many educators believe they cannot meet the complex needs of either the client or the student clinician in a situation where they are supervising a session in a language they do not understand. Stewart and Gonzalez (2002) reported that educators were often not prepared to manage and assess these student-client interactions and concluded that guidelines should be created to ensure uniformity in student assessment.

Muñoz et al. (2011) described strategies, such as being in the same room with the student to ask for interpretation where necessary and taking time to role-play feedback with the student before they give audiological test results to the client, but also suggested that guidelines would be helpful to ensure uniformity in student management and assessment. There is a paucity of research in this area, especially in South Africa and studies are required to evaluate current practices to help to create guidelines for clinical educators who are currently negotiating language barriers in clinics without protocols.

A number of examples have been highlighted in the literature of the challenges that arise for clinical educators assessing students' sessions where language barriers exist between the student and client. San Miguel and Rogan (2012) suggested that while clinical educators are required to assess students' clinical communication skills, little is known about what particular areas of performance individual clinical educators focus on when they are supervising and assessing students who are not proficient in a client's language. Further research investigating challenges experienced by clinical educators when supervising in this linguistically complex arena is needed.

Ladyshevsky (1996) investigated the influence of language and culture on clinical education practices in Australia. He noticed that South East Asian students in Australia would achieve adequate academic performance but still experienced difficulty during their clinical blocks. The qualitative action research study used focus groups, individual interviews and field observations in order to explore issues of student performance and cross cultural supervision from the perspective of nine students and 11 clinical educators. A number of challenges were highlighted for students who were providing services to clients in their second language. Students were reported to have difficulties with word selection and tended to use short sentences which resulted in limited rapport being built with their clients as well

as misunderstandings between clients and the student clinician. Ladyshewsky (1996) suggested that clinical educators needed to be culturally competent and take time to understand their students' needs.

Ladyshewsky (1996) additionally reported a few of the challenging experiences highlighted by participants supervising second language English students. Results suggested that clinical educators often required additional time with these students in order to allow them the space needed to express their clinical understanding. Participants reported that it became difficult to ascertain whether an apparent lack of knowledge was due to an actual lack of knowledge or rather to a communication barrier. The study suggested that clinical educators perceived that students sometimes did not understand feedback and so would implement it incorrectly which would hinder their progression in the clinic. Although this study was conducted with a minority student group over a decade ago, the challenges highlighted are ones that resonate in many programmes today (Mackay et al., 2011; San Miguel & Rogan, 2012). The study emphasised that the supervision of students who were not proficient in the language of learning was time-consuming and challenging; signifying the importance of understanding how clinical educators in South Africa are managing this barrier to clinical learning today.

An additional challenge, adding to the amount of time needed for student-support, was also experienced when clinical educators were required to assess the written work of students who were not proficient in the language of learning (San Miguel & Rogan, 2012). San Miguel and Rogan (2012) discussed the importance of student ability to write clear reports in the language of learning, an aspect noted as somewhat neglected in the literature. Clinical educators are required to develop students' report-writing ability as it is an essential skill required to provide appropriate client care and can be problematic for students who are not proficient in the language of learning (San Miguel & Rogan, 2012). San Miguel and Rogan (2012) suggested that further research is needed to investigate and develop potential strategies for supporting and assessing students who are not proficient in the language of learning. In South Africa where second language English students additionally may be educationally disadvantaged, it is essential to understand clinical educator experiences when assessing the report-writing skills of students who are not proficient in the language of learning.

The multilingual nature of the South African population necessitates that programmes emphasise the importance of diversity and provide clinical educators with strategies for effective assessment and management of diverse students providing services to a varied client base. No research has yet been conducted to investigate clinical educators' experiences when supervising Audiology students from diverse race groups and with variable levels of proficiency in the language of learning in South Africa. Research suggests that a clinical educator's background may influence the way that they facilitate the clinical learning process of students. Practice history, tailored towards a White English and Afrikaans speaking population, may also influence decisions clinicians make in terms of managing language barriers occurring between students and clients. A description of experiences during the supervisory process may provide information that would help to develop guidelines for clinical education that might benefit Audiology students from diverse backgrounds.

University of Cape Town

Chapter 3: Design and Methodology

Overview of the Chapter

This chapter orientates the reader to the design selected to answer the research question and address the study aims. A full description of the participants and procedures for each phase is detailed.

Research Design

A mixed methods sequential explanatory design (Plano Clark & Creswell, 2007) was implemented to address the two research aims. A sequential design allowed for two distinct data collection methods to be used in succession: a predominantly quantitative questionnaire followed by qualitative semi-structured interviews (Plano Clark & Creswell, 2007). The explanatory element was selected so that results from the questionnaire would provide a general understanding of the research problem while the successive qualitative phase facilitated elaboration of the data by exploring participants' views in greater depth (Creswell, 2003). When used in combination, the methodologies complement each other and allow for a more robust analysis of the phenomenon, taking advantage of the strengths of each (Greene, Caracelli, & Graham, 1989; Tashakkori & Teddlie, 2003) and enhancing the interpretation of significant findings (Leech & Onwuegbuzie, 2010). Please see Figure 1 for a visual representation of the research process (Ivankova, Creswel, & Stick, 2006). The appropriate mixed methods design was selected by considering the issues of purpose, implementation, priority and integration of the two data collection methods (Bryman, 2006; Ivankova, et al., 2006).

Purpose and implementation. A sequential design allowed for a comprehensive discussion of the research question (Bryman, 2006). The questionnaire was used to obtain a general overview of the experiences and expectations of clinical educators nationally when supervising Audiology students from diverse race and language backgrounds. The qualitative data from interviews conducted in the second phase provided elaboration and clarification of the general responses providing *complementarity* (Bryman, 2006).

While the data collection phases were separate, the predominantly quantitative and qualitative phases were connected in the intermediate stage (between the two phases) when the results collected and analysed in the first phase of the study informed the data collection in the second phase, allowing for *development* (Greene et al, 1989). Questionnaire results were used to guide the *development* of an interview schedule that facilitated an in-depth

exploration of key areas with a few information-rich participants as identified in the initial research phase (Bryman, 2006). The two phases also allowed for *triangulation* of results to improve reliability (Creswell, 2003).

Integration. Integration refers to the stage or stages in the research process where amalgamation of the quantitative and qualitative methods occurs (Creswell, 2003). In this study the results from both phases were initially analysed separately. Results were integrated during the development of themes in the second phase so that themes included data from both phases to create a more robust and meaningful answer to the research question.

The results from the questionnaire primarily addressed the first aim, investigating participants' expectations of student performance. The interview data helped to elaborate on these results. The open-ended questionnaire items gave insight into the second aim investigating clinical educators' experiences when supervising students from diverse race and language groups. The interviews predominantly focussed on describing participants' experiences in more detail. The combination of findings from each phase helped to provide more comprehensive results allowing for elaboration which was the key purpose for using a mixed-methods sequential explanatory design (Creswell, 2003).

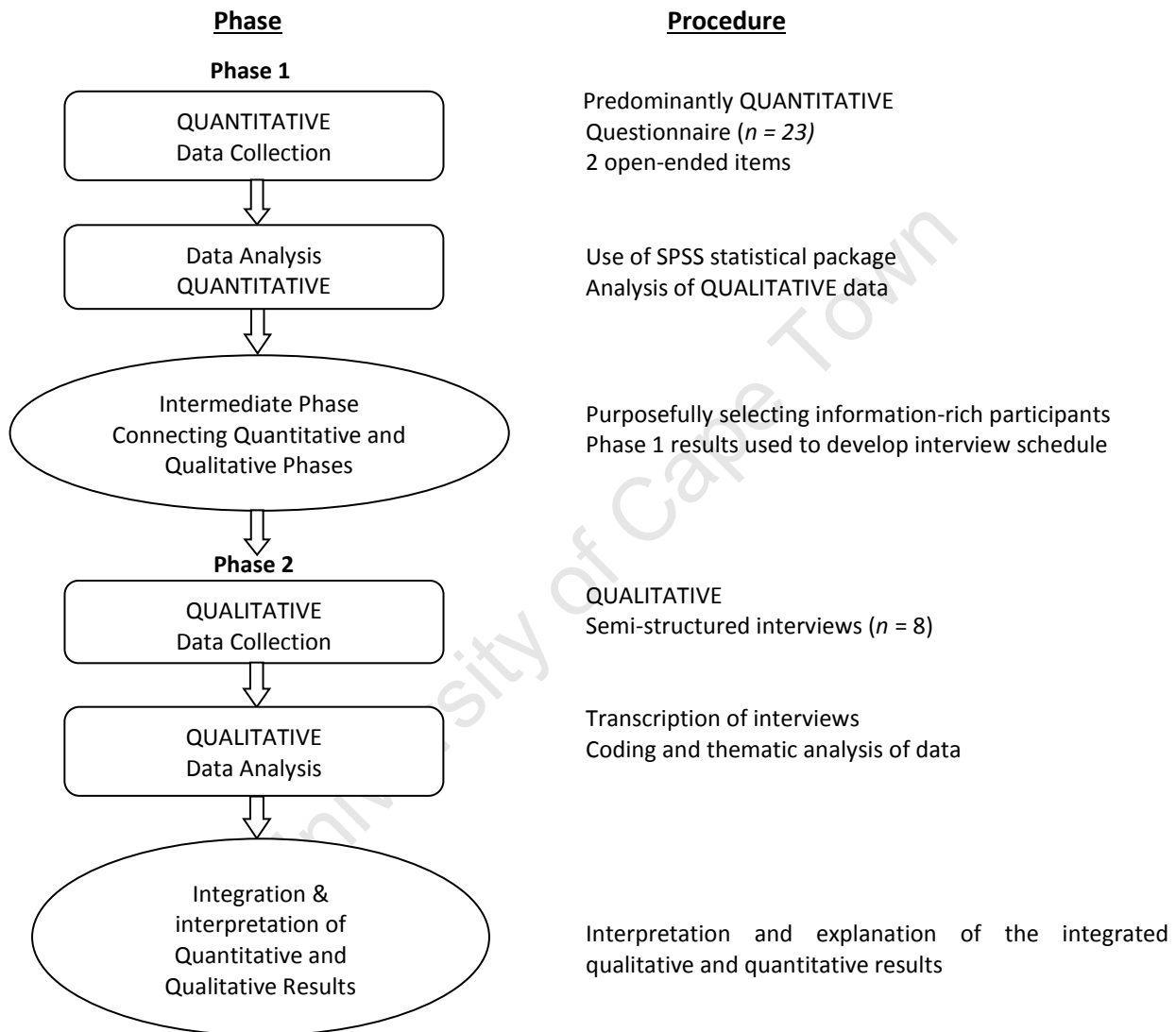
Priority. More weight or attention may be given to either the quantitative or qualitative phases throughout the data collection and analysis process (Creswell, 2003). In this study, priority was given to the qualitative data collection and analysis phase in order to comprehensively answer the research question. Sequential explanatory designs typically give priority to the quantitative approach because the data collection comes first in the sequence (Ivankova, et al., 2006). The goal of the qualitative phase was to explore, expand on and interpret the results obtained in the first phase. Priority was given to this phase as it gave a more comprehensive insight into both aims and a more in-depth understanding of responses obtained from the questionnaire. In prioritising the second phase, results were presented in themes in a manner commensurate with qualitative presentation.

Strengths and weaknesses. Advantages of using the sequential explanatory mixed methods design include the straightforward implementation and analysis of the clear, separate stages (Tashakkori & Teddlie, 2003), and the ability to explore quantitative results in more detail (Onwuegbuzie & Johnson, 2006). This approach, however, is not always easy to execute due to the length of time it may take for data collection and analysis to be completed for both phases (Creswell, 2003). The researcher also has to be comfortable with the different

procedures used in both qualitative and quantitative methodologies in order for the study to be of a high standard (Plano Clark & Creswell, 2007). The novice researcher required close guidance from supervisors in order to effectively execute both methodologies in a limited time period.

Figure 1:

Visual Model for Mixed-Methods Sequential Explanatory Design



Orientation to the Chapter

In order to describe the design aspects for each of the two phases, the following sections of the methodology will be discussed separately for the first and then the second phase: Participants; data collection; procedure; analysis; reliability and validity/credibility and trustworthiness. Legitimation and ethical considerations will then be discussed for both phases together as these sections apply equally to each.

Phase 1

Participants

Inclusion criteria. In order to be included in this study, participants needed to meet the following criteria:

- Clinical Educators who were currently involved in the clinical education and assessment of Audiology students from diverse race and/or language groups.
- Had at least one year of experience in Clinical Education.
- Supervised a minimum of one clinical session per week for a year.
- Were qualified with a minimum of a bachelor's degree in Audiology or in Audiology and Speech Language Therapy.

Sampling. Complete collection sampling was used in an attempt to sample the entire population of Audiology clinical educators meeting the inclusion criteria (Teddlie & Tashakkori, 2009). Complete collection sampling involves the recruitment of all members of a group of interest who meet a specified criterion (Teddlie & Tashakkori, 2009). With a potentially small group, such as Audiology clinical educators in South Africa, it was feasible to survey the entire population thereby improving the external validity of the study (Engel & Schutt, 2005) and reducing the potential for sampling bias (Cottrell & McKenzie, 2005).

Sample size. A total of thirty-five clinical educators were identified as a sampling frame at the five institutions offering Audiology. Twenty-three participants participated in the study yielding a 66% response rate. The sample size was acceptable for the purpose of this study as a response rate of 60% to 70% is suggested to be appropriate for surveys (Sivo, Saunders, Chang, & Jiang, 2006).

Recruitment procedure. Participant recruitment commenced as follows:

- Permission to include clinical educators was sought and received via email from the Heads of Department at each of the five universities offering Audiology programmes. A letter of permission (Please see Appendix A) included in the email clearly explained the nature of the proposed research and selection criteria. The email also requested permission to obtain clinical marks and/or mark sheets from participants and the details for key informants with whom the researcher could liaise in order to obtain contact details for potential participants.

- An email outlining the inclusion criteria for the study was sent to key informants at each institution. The informants responded with a list of names and contact details of potential participants.
- Information letters (Please see Appendix B) were emailed to all identified clinical educators explaining the research purpose and requesting voluntary participation in the study.
- Participants who responded that they did not want to participate were sent an email thanking them for their response.

Participant description. See Table 1 for a description of participant demographics.

Table 1

Participant Demographics

GENDER	<u>Male</u>	<u>Female</u>			
	n = 1	n = 22			
AGE (Years)	<u>20-29</u>	<u>30-39</u>	<u>40+</u>		
	n= 7	n= 12	n= 4		
RACE	<u>Black</u>	<u>Indian</u>	<u>Coloured</u>	<u>White</u>	
	n = 3	n = 1	n = 5	n = 14	
MOTHER TONGUE	<u>English</u>	<u>Afrikaans</u>	<u>Setswana</u>	<u>Sesotho</u>	<u>isiZulu</u>
	n = 11	n = 9	n = 1	n = 1	n = 1
YEARS OF TEACHING EXPERIENCE	<u><3</u>	<u>4 to 6</u>	<u>7 to 9</u>	<u>10+</u>	
	n = 12	n = 4	n = 2	n = 5	
TRAINING IN CLINICAL TEACHING	<u>Yes</u>	<u>No</u>			
	n = 9	n = 14			
EMPLOYER	<u>University</u>	<u>Clinical Site</u>			
	n = 14	n = 9			

Instrumentation

Questionnaire. A questionnaire was used as it was deemed easy to administer via email and allowed for the same questions to be asked of each participant in the same way (Terre Blanche & Durrheim, 1999). The instrument used in this study was based on a questionnaire developed in the USA by Clouten et al. (2006) to ascertain clinical educators' expectations and perceptions of the clinical performance of Physiotherapy students (Appendix C).

The questionnaire was made up of two parts, presented as Appendix D and E, predominantly composed of a number of closed-ended questions which are quicker to answer and easier to analyse (Neuman, 2000). The questionnaire was created to: describe the

demographic profile of Audiology clinical educators in South Africa as well as the student population they are supervising; and to compare their expectations for clinical performance (Part 1) with the actual performance of students from diverse race and language backgrounds (Part 2). These are described below.

Part 1 (Appendix D)

Section 1 – Participant demographic information

This section of the questionnaire was structured to acquire demographic information from participants. An item was included to request information regarding participants' additional training in clinical teaching.

Section 2 – Student profile

Items were designed to obtain demographic information regarding the students with whom participants worked. Items requested the average clinic mark range of students from each race group and language proficiency category supervised during 2010.

Section 3 – Expectations of student performance

This section was structured to ascertain participants' expectations of the clinical performance of students from diverse race backgrounds and with different levels of proficiency in the language of learning.

Section 4 – Generic abilities

A checklist of generic abilities was designed to establish participants' perceptions of strengths or weaknesses consistently demonstrated by students from each race group.

Two open-ended questions were encompassed to obtain information on challenging and rewarding experiences when supervising students from diverse race backgrounds and with different levels of proficiency in the language of learning. The items were included to provide insights into participants' experiences in their own words.

Part 2 (Appendix E)

Section 5 – Student performance

The fifth section was adapted to acquire information regarding students' actual performance as demonstrated by clinic marks.

Modifications and additions. Modifications and additions to the Clouten et al. (2006) questionnaire obtained more details to provide a complete picture of the phenomenon

(Patton, 2002). Please see Appendix F for additional details of changes made to the original tool. The following key modifications and additions were made:

- Race categories were modified to include the four predominant race groups as described by the South African Statistical Association (2009): 1) Black; 2) Coloured; 3) Indian; 4) White.
- Questions were included to obtain information on students' proficiency in the language of learning using the Foreign Service Institute (2008) Interagency Language Roundtable Scale (Appendix D). Three levels of proficiency viz. advanced professional, general professional and limited working proficiency, were selected to best describe the level most common to Audiology students in South Africa.
- Additional participant demographic information was requested to obtain a more comprehensive description of the clinical educator profile (See Appendix D, E and F).
- Items obtained information regarding strengths in addition to weaknesses in terms of generic abilities attributed to students from specific race groups.

Validity. Polit and Beck (2004) describe validity as the degree to which an instrument measures the construct it is supposed to. The survey used in this study was adapted from a tool which had been validated for use in the USA (Clouten et al., 2006) to measure a similar construct facilitating a high level of internal validity (Polit & Beck, 2004).

Different types of validity may be considered when modifying a questionnaire (Polit & Beck, 2004). *Content validity* refers to the extent to which a measure accurately embodies all spheres of the construct under study (Neuman, 2000). Assessing the representativeness and relevance of test items in relation to the construct will help to ensure the content validity of an instrument (Groth-Marnat, 2009). A thorough literature review of the study area helped the researcher to modify the original survey to include items that were demonstrative of all facets of the research construct and new items were carefully selected to comprehensively represent the area under study to provide content validity (Groth-Marnat, 2009). The Generic Abilities Assessment (May et al., 1995) was chosen by Clouten et al. (2006) as the basis for their questionnaire as it had been judged to be a valid tool to assess professional attributes essential to clinical performance (Jette & Portney, 2003; May et al., 1995). Please refer to the table included in the survey (Appendix 1) for a complete definition of these skills. The questionnaire was adapted from a previously validated tool thereby increasing the likelihood of items being inclusive of all important areas of the research question and improving content validity.

Face validity refers to whether the instrument items are judged to be measuring the appropriate construct by participants (Polit & Beck, 2004). Initial drafts of the questionnaire were reviewed by the researcher's supervisors and revised versions were then reviewed by two clinical educators so that face validity was achieved. The questionnaire was pilot tested so that face and content validity was achieved (Neuman, 2000).

Reliability. Reliability refers to the dependability that a research instrument will consistently measure the target attribute (Polit & Beck, 2004; Terre Blanche & Durrheim, 1999). Neuman (2000) suggests that reliability can be improved through revision and pilot tests which were completed in order to ensure that consistent responses were obtained.

The questionnaire was pilot tested and modified before use in the study. In order to reduce measurement error, a parallel-forms test was completed where a single colleague's responses to two different versions of all questionnaire items were compared (Engel & Schutt, 2005). The same answer was obtained for both versions of each question before items were accepted as being reliable (Engel & Schutt, 2005) and the colleague helped to decide which of each item was the simplest to understand. Uncomplicated language was used to reduce random error where participants may have consistently misunderstood an item and so have answered incorrectly, thereby increasing the reliability of the questionnaire (Polit & Beck, 2004). The research instrument administered electronically allowed for all participants to be provided with the same questionnaire items, thus enabling improved reliability of the questionnaire (Terre Blanche et al., 2006).

Data Collection

- Participants were asked in an email to read through the information letter carefully before completing the questionnaire and were informed that completing and returning the questionnaire would be accepted as informed consent (Pulliam Phillips & Stawarski, 2008). Participants were informed of their right to ask questions and to withdraw from the study at any stage as well as of any potential risks or benefits (Terre Blanche et al., 2006). Complete confidentiality and anonymity of participants and the institution was assured (Polit & Beck, 2004).
- The researcher sent a follow-up email with Part 2 of the questionnaire (Appendix E) immediately on receiving Part 1 from each participant. Permission to gain access to clinical mark sheets was received from only one participating institution so participants were advised to review students' records before providing an average of the marks

assigned by educators to their students in clinics during 2010. The email requested a convenient time and date for a telephonic interview if clarity on any items was needed. The educator was thanked once the second part was received.

Pilot Study

A pilot study was conducted to review the research process (Terre Blanche et al., 2006) and to assess the adequacy of the proposed methods, instruments and procedures (Polit & Beck, 2008). A structured approach was used to systematically check the clarity of the questions and instructions, to ensure that no items were perceived as offensive, and to verify the efficacy of the administration and management of data (Terre Blanche et al., 2006). The researcher evaluated the appropriateness of questions in terms of the information they elicited during the pilot study.

The pilot study implemented the procedures as outlined in the original study protocol which proposed that telephonic interviews be completed by participants. The questionnaire was successfully completed telephonically with three Speech Language Pathology and two Physiotherapy clinical educators. Clinical educators working in Health Sciences generally report similar experiences with student diversity allowing them to be considered appropriate pilot participants. The researcher verbally asked pilot participants a series of evaluative questions immediately after the completion of each questionnaire and written notes were made to summarise their responses (Terre Blanche et al., 2006).

Initial contact with potential educators via email was simple and posed no logistical complications. Pilot participants, however, commented that telephonic interviews were time-consuming and often disruptive to their daily schedule. They also commented that it would be easier to honestly and comprehensively answer the open-ended questions in writing. It was suggested that completion of the questionnaire would be simpler via email. Email would also be a more cost and time-effective way of obtaining the data (Denscombe, 2003). The main study protocol replaced telephonic interviews with an emailed questionnaire.

Participants commented that the questionnaire was simple to follow but that it was quite lengthy and items required a lot of thought. A general comment from participants was that although the questions about race may have been considered to be sensitive in nature they were easy to answer honestly and were unambiguous. The participant responses provided a good, broad view of the research question. Details of additional questionnaire modifications made after the pilot study can be found in Appendix F.

Data Analysis

The data was captured in an excel spread sheet and analysed in consultation with a statistician using the Statistical Package for the Social Sciences (SPSS, 2010). Only those statistical measures able to provide significant findings with small samples were selected to describe associations within this study (Alreck & Settle, 2004). The alpha level selected for this study was $p < 0.05$.

Biographical information of the educators and students were reported as percentages and raw scores (Terre Blanche et al., 2006). All percentages reported in the results are accompanied by raw scores as Denscombe (2003) suggests that the presentation of percentages without specifying actual numbers involved in questionnaires using a sample of less than 30 participants can be deceptive to the reader. Nominal data were analysed using descriptive statistics and reported in terms of frequency distribution and measures of variation (Terre Blanche & Durrheim, 1999). Two participants did not fill in the second part of the questionnaire as they were reportedly too busy and not all questionnaires were complete, resulting in missing data. Missing responses were taken into account by the SPSS software which omits missing values when analysing the data (SPSS, 2010).

A nonparametric binominal test was used to analyse the difference between the expected and reported estimations of clinical performance of students from diverse race groups and those with different levels of proficiency in the language of learning for all yes/no items (Appendix D and E). The Fisher's exact test was conducted on the small data set with significance set at $p = 0.05$ (Watson, Atkinson, & Egerton, 2006).

The sample was not randomly selected and that it was fairly small made certain parametric calculations less powerful in their ability to ascertain relationships between variables (Tomkins, 2006). Authors (Hunter & May, 1995; McDonald, 2009; Tomkins, 2006) suggest the use of both parametric and non-parametric tests to validate findings where the researcher is unsure which to use. Non-parametric procedures were, therefore, used to validate the parametric findings and vice-versa.

The ratio data obtained regarding the mark range expected of and the marks actually obtained by students from diverse race and language groups was split into the minimum and the maximum marks for each group. A Wilcoxon Signed rank test was conducted to evaluate whether there was a significant difference between expected marks and those achieved in clinics by students for each of the race and language groups. The Wilcoxon Signed rank test

is suggested to be more powerful than a t-test when used with a small sample where the distribution is non-normal or cannot be assumed to be normal (Bridge & Sawilowsky, 1999; Tomkins 2006). A paired-sample t-test was performed to verify these results (SPSS, 2010).

A one-way between-groups analysis of variance (ANOVA) was conducted to explore whether there was a significant difference between the expected and actual marks allocated to students from different race groups and with different levels of proficiency in the language of learning. The ANOVA test was selected as the literature suggests that it is more powerful and easier to understand than the Kruskal-Wallis test and that it should be used unless the data are severely non-normal (McDonald, 2009). A Kruskal-Wallis non-parametric test was used to verify these results (Tomkins, 2006).

Responses to the open-ended question were analysed using the thematic analysis method as outlined by Terre Blanche, et al. (2006) and will be explained in the qualitative data analysis section of phase two to avoid repetition.

Validity

The external validity of a research design can be described as the degree to which the research findings may be generalised to similar contexts or samples (Terre Blanche et al., 2006) and might be achieved through the use of appropriate sampling methods that ensure representativeness and minimise confounding variables (Polit & Beck, 2008). Random sampling methods were not adhered to in this study yielding a low external validity. It should be noted, however, that results from this questionnaire will not be used to make direct generalisations as the population is constantly changing and perceptions and expectations are not static (Terre Blanche et al., 2006).

A low response rate introduces the possibility of non-response bias which may also reduce the survey's external validity especially if inferences are based on a small study population (Pulliam Phillips & Stawarski, 2008). In order to maximize participant responses the questionnaire was sent via email to be filled out at a convenient time and was kept as simple as possible (Pulliam Phillips & Stawarski, 2008). The use of email to send and receive the questionnaire may have caused a threat to external validity as the resulting lack of participant anonymity may have affected their desire to answer truthfully due to the potentially sensitive nature of the study, especially where the participants were colleagues of the researcher (Terre Blanche et al., 2006).

Internal validity speaks to the coherence of the research design (Terre Blanche et al., 2006). Triangulation of data through the use of mixed methods allowed for greater internal validity to be achieved (Hussein, 2009).

Phase 2

Participants

Inclusion criteria. Information rich candidates who had participated in Phase One of this study and volunteered to be included in the interviews were selected.

Sampling. Purposeful criterion referenced sampling was used to select clinical educators who had experience with the phenomenon under investigation (Polit & Beck, 2004). The criterion in this study was participants' experience with student diversity. The researcher selected the most informative individuals in order to achieve data saturation and adequately answer the research question (Polit & Beck, 2004). Participants who represented the greatest variety of opinions were chosen for the second phase.

A maximum variation sampling strategy was used in order to achieve representativeness or comparability (Teddlie & Yu, 2007). Polit and Beck (2004) suggest that participants with specific differences but who have shared a common experience should be selected in order for the researcher to explore all aspects of a phenomenon under investigation comprehensively to increase the richness of data collected. Diversity was obtained in this study through the selection of clinical educators working for the university as well as those working at clinical sites as they both share the experience of clinical teaching but in different contexts. Racially diverse participants were selected as far as possible in order to gain access to varying perspectives.

Sample size. The sample size in this study was based on a minimum sampling strategy (Patton, 2002). The sampling frame consisted of 23 clinical educators. Four to ten participants are adequate for semi-structured interviews in order to maximise interpretative validity and transferability (Onwuegbuzie & Collins, 2007; Polit & Beck, 2004). Data saturation and informational redundancy was achieved with eight participants who were selected from a sampling frame of twelve information rich participants who met the criteria and had volunteered for Phase Two (Onwuegbuzie & Collins, 2007; Polit & Beck, 2004).

Participant description. All participants selected for the interviews were female. One participant was Black, two were Coloured and five were White. Four were permanent

university employees and four were educators working at clinical sites with Audiology students.

Recruitment procedure.

- An information letter (Appendix G) requesting participation was sent via email to potential participants identified from the questionnaire.
- Telephonic contact was made once consent was obtained in order to schedule interviews at a convenient time and place (Terre Blanche & Durrheim, 1999).

Instrumentation

Equipment. Two Olympus VN5500 Digital voice recorders were used to record all interviews.

Semi-structured interviews. Semi-structured interviews were selected as the data collection method as it allowed the researcher the freedom to explore unanticipated issues that emerged during the discussions through the use of open-ended probing questions not on the interview schedule (Patton, 2002). One-on-one meetings provided a safe, non-threatening environment that encouraged participants to honestly share their views and opinions (Terre Blanche & Durrheim, 1999). The use of semi-structured interviews had the advantage of face-to-face interactions with individuals, facilitating immediate follow-up or clarification of responses (Terre Blanche et al., 2006).

Interview schedule. The interview schedule, as outlined by Patton (2002), allowed for essentially the same information to be covered systematically with each participant and for logical gaps in the results to be anticipated (Patton, 2002). Please see Appendix H for an example of the interview schedule, comprising seven open-ended questions that were designed to address the research aims (Creswell, 2003). The schedule contains questions regarding expectations for clinical performance based on a students' race and language proficiency level. Questions also address participant experiences in terms of teaching, managing and assessing students from diverse races and levels of language proficiency. Open-ended questions allowed the participant the freedom of self-expression which resulted in unanticipated responses allowing for a comprehensive understanding of the research question (Neuman, 2000).

Data Collection

- Informed consent was obtained in writing from all participants at the interview. The information and consent letter (Appendix G) included information regarding:

- the aim of the research;
 - the participant's right to ask questions;
 - the assurance of anonymity and confidentiality;
 - the right to voluntary participation; and
 - the right to withdraw from participating at any time without penalty.
- Interviews were conducted in the participants' offices and were recorded using two digital voice recorders.
 - The researcher began with an introduction explaining her interest in the topic and her role as a researcher in order to initiate the building of a trusting relationship with each interviewee (Rubin & Rubin, 2005).
 - The interviewer used the interview schedule to conduct the interview but allowed the conversation to remain flexible through the use of probe questions (Neuman, 2000).
 - A few potential probe questions were designed in advance to help the novice researcher to gain desired information from participants (Patton, 2002) and to elicit comprehensive answers (Terre Blanche et al., 2006). The use of additional probes enabled the researcher to request detail and to clarify emerging themes that may not have been anticipated (Rubin & Rubin, 2005).
 - Methodical data management was completed. The researcher labelled all audio files anonymously and kept data organised and accessible (Polit & Beck, 2004).
 - Data transcription began as soon as possible after the interviews. Notes were kept to record developing ideas regarding the phenomenon under study and to highlight areas needing clarification as suggested by Terre Blanche et al. (2006). Certain details of the interview, such as slight pauses, interruptions and repetitive wording were later excluded from the transcript as it was felt they were irrelevant to the final analysis (Denscombe, 2003). A concise summary was then created for each interview, detailing participant responses around key points addressing the research question and any key themes that were identified (Rubin & Rubin, 2005). Each taped interview and transcription was labelled with a participant number to ensure confidentiality.
 - "Member checks" were conducted by emailing the transcripts to participants and asking them to remark on the accuracy of the transcribed data and to expand on or clarify issues that arose during data collection (Lincoln & Guba, 1985; Polit & Beck, 2004). Comments made by participants ensured that their experiences were accurately

portrayed and helped to validate findings (Sharts-Hopko, 2002; Denscombe, 2003).

All participants responded that no changes to the transcribed data were necessary.

Pilot Interview

One pilot interview was completed to assess the ease of use of the interview schedule, to establish if modifications to the schedule were necessary, and to familiarise the researcher with the interview, transcription and analysis process (Patton, 2002). The proposed interview schedule was used to conduct a 45 minute interview with a Speech and Language Therapy clinical educator who had participated in the pilot of the questionnaire.

Preliminary data analysis highlighted the necessity for the novice researcher to improve her interviewing skills, through researching different approaches and completing three trial interviews, so that more in-depth information could be obtained through the use of appropriate probing questions (Patton, 2002). The researcher conducted the interview with three Physiotherapy colleagues in order to practice the execution of the interview schedule and her ability to ask appropriate probe questions. Participants from the trial interviews provided more detailed responses and the researcher gained confidence and experience which allowed for successful interviews to be conducted during the main study.

Data Analysis

The analysis method as outlined by Terre Blanche et al. (2006) was adapted to analyse the interview data combined with the data from the questionnaire. Elements from Colaizzi's seven steps for data analysis as described by Sanders (2003) were incorporated to analyse the data in a more depth. The following steps were completed:

- *Step 1: Familiarisation and immersion.* Analysis began during the data collection as ideas and theories began to emerge. Each interview was analysed separately. The researcher became immersed in the transcribed data and field notes which were re-read a number of times to ensure that no detail was lost as may occur if an interview is only transcribed at a later time.
- *Step 2: Coding.* Different sections of data, such as a sentence, phrase, word or paragraph directly related to the research question, known as *significant statements*, were identified and extracted from the transcripts. These *significant statements* were all related to particular concepts or aspects of each participant's experience with student diversity and were selected to highlight a variety of perspectives.

- *Step 3: Inducing themes.* Themes and categories from the coded data were developed in an attempt to make sense of the results. Meaning was thereby defined for each of the significant statements. The researcher segmented the significant statements into labelled, meaningful divisions. Three themes became evident when analysing data related to the primary aim and described the *challenges*, *coping strategies* and *dilemmas*, detailed by participants, of their experiences when supervising students with different levels of proficiency in the language of learning.

Two themes emerged which addressed the secondary aim. *Incongruence* was evident as most participants believed that they had the same expectations of students from all race groups, but results suggested poorer expectations for Black students. Conversely, *congruence* was demonstrated by a participant who had the same expectation for students from all race groups, which was confirmed in her description of experiences with racially diverse students.

- *Step 4: Elaboration.* Preliminary themes were then explored more closely. Various ways in which the coded data related to each other and differed were investigated. Integration between the quantitative and qualitative data occurred during this stage. The researcher continued to explore all possible relationships between the information through steps two and three until it was felt that all possibilities had been exhausted. Data was eventually separated into five final themes: *incongruence*; *congruence*; *challenges*; *coping strategies* and *dilemmas*.
- *Step 5: Interpretation and checking.* A description of the phenomenon under investigation followed, which entailed integrating the themes and quoted statements from the participants. The interpretation of results was written up once analysis had been completed and data saturation had been achieved. A number of re-checks were done by the researcher to ensure that a clear and complete summary was provided. The most important information was presented in a logical manner (Rubin & Rubin, 2005).

Trustworthiness

Measures of validity and reliability pertaining to quantitative research are not seen to be useful when assessing data collection and analysis in qualitative approaches (Polit & Beck, 2004). Researchers need to ensure that information obtained from qualitative measures accurately reflect the truth (Polit & Beck, 2004). Trustworthiness describes the idea that the research is plausible, credible and therefore defensible in these studies (Patton, 2002) and can

be evaluated by examining the applicability, consistency and neutrality of the findings (Lincoln & Guba, 1985). Four criteria were considered in an attempt to improve the trustworthiness of the findings and are discussed below.

Credibility. *Credibility* is described as the confidence in the truth of the data and its interpretation and is established through the use of a believable and rigorous research process (Polit & Beck, 2004). The factual accuracy of the account reported by the researcher must be demonstrated to ensure credibility of the findings (Polit & Beck, 2004). All information was, therefore, recorded clearly by two digital voice recorders providing a duplicate copy of each interview to work from in case one of the pieces of equipment malfunctioned, thereby improving *referential adequacy* and increasing *credibility* (Lincoln & Guba, 1985). The careful recording and management of data outlined in the procedure also helped to improve the study's trustworthiness (Polit & Beck, 2004).

The participants' meaning with regard to the topic being studied was accurately portrayed (Sharts-Hopko, 2002). Field notes were made to record aspects of the participants' speech, such as stress and pitch which were essential to the understanding of the interview, and to ensure accurate interpretation (Polit & Beck, 2004). "Member checks" completed after initial themes were generated allowed the participants to remark on the accuracy of the research findings and interpretation (Shenton, 2004). Six of the eight participants took part in the member checks and reported that they had been represented accurately. The other two participants responded that they regrettably did not have time to respond but trusted the researcher to present a reliable description of their reports. Verbatim quotations are presented in the results section below to allow the reader to gain an accurate understanding of the participants' comments, thereby adding credibility to the interpretations (Polit & Beck, 2004).

Credibility of data analysis was achieved by allowing for peer review of the interpretations (Onwuegbuzie & Johnson, 2006). Seven independent coders, consisting of four post-graduate Speech-Language Pathology and Audiology students and three of their supervisors, interpreted segments of data comprising of direct quotations from the interviews. The independent coders provided similar interpretations to that of the researcher.

Confirmability. *Confirmability* refers to the objectivity or neutrality of the data (Polit & Beck, 2004). The researcher made an attempt to bracket, and to constantly reflect on, her own beliefs and attitudes and was aware of her potential effect on the interview and interpretation of information in order to ensure the confirmability of the study (Polit & Beck,

2004). *Peer debriefing* of the interpretation of quotes also enhanced *confirmability*. Two colleagues, both with PhD's in Audiology, provided peer debriefing. Both were outside the context of the research but had a general understanding of the nature of the study reviewed and agreed with all perceptions, insights, and interpretations, thereby increasing objectivity (Lincoln & Guba, 1985).

Dependability. *Dependability* refers to the stability of data over time allowing for the research process to be easily followed (Polit & Beck, 2004). To ensure that all parts of the research were reported accurately an *audit trail* was kept and will be made available to all parties who may request it (Sharts-Hopko, 2002). Raw data in all forms including the transcriptions; field notes and summaries; findings; the proposal; and instrument development information have been stored and are available to anyone wanting to review these. The Methodology section of this thesis provides a detailed description of design decisions as well as the data collection and data analysis process.

Transferability. *Transferability* refers to the ability to apply the findings of this study to similar contexts (Polit & Beck, 2004). Generalizability was not a specific goal in this study as is common in much qualitative research, which is more concerned with individual experiences potentially contributing to understanding the human condition (Sharts-Hopko, 2002). The participants' experiences were described in detail using “thick descriptions” to ensure transferability (Onwuegbuzie & Collins, 2007). The context of the study was also made clear in the theoretical framework allowing the reader to gain insight into clinical educators' experiences of supervising Audiology students from diverse race and language backgrounds, allowing them to apply these findings to similar educational contexts.

Phase 1 and 2

Legitimation

The problem of legitimation refers to the difficulty in obtaining findings that are credible, trustworthy, dependable, transferable, and/or confirmable within a mixed methods study (Onwuegbuzie & Johnson, 2006). These challenges may be exacerbated in mixed methods research because both the quantitative and qualitative components have their own issues of validity and credibility (Onwuegbuzie & Johnson, 2006). Onwuegbuzie and Johnson (2006) developed a typology of nine legitimation types to be used in conjunction with traditional qualitative and quantitative strategies for validation. Table two provides a

summary of the types of legitimation used in this study, the rationale for addressing each type and how they were addressed in the study.

Table 2

Types of Legitimation

Type	Rationale	How it was addressed
Sequential legitimation	The study was sequential in nature.	The interviews intended to obtain a more in-depth understanding of issues arising from the questionnaire and participants were not asked to review their previous responses before the interviews. It was, therefore, unlikely that participants would answer interview questions differently as a result of their previous responses.
Weakness minimization legitimation	The design needed to allow for strong meta-inferences that would not be affected by the use of both quantitative and qualitative methods.	The researcher carefully planned the design, considering the implementation, priority and integration, to play to the strengths of both the quantitative and qualitative phases thereby ensuring that the meta-inference would be strong.
Inside-outside legitimation	The use of two different methodologies may have resulted in an inaccurate portrayal of the insider's view and/or the observer's view occurring during the separate data analysis phases and/or the integration process.	The researcher's supervisors guided the integration process and reviewed the integrated interpretations to ensure accurate meta-inferences.
Multiple validities legitimation	Data analysis occurred separately for both the quantitative and qualitative phase.	The relevant quantitative validities and qualitative "validities" or issues of trustworthiness were addressed separately in the study. In addition, the relevant mixed legitimation types were addressed during integration of the results to allow for strong meta-inferences to be depicted

Ethical Considerations

The researcher has a moral and professional obligation to be ethical (Neuman, 2000). Ethical approval was obtained from the University of Cape Town's Faculty of Health Sciences Research Ethics Committee prior to commencement of the study. The research adhered to ethical principles as outlined in the World Medical Association Declaration of Helsinki (Declaration of Helsinki, 2008). Principles pertaining to this study are discussed below.

Autonomy. *Autonomy* emphasises respect for participants and the right of individuals to make their own independent decisions without coercion or influence (Terre Blanche et al., 2006). In order to address this principle, informed consent was obtained from all participants to ensure they understood the nature and purpose of the study, that participation was voluntary and that they had the right to withdraw at any time (Terre Blanche & Durrheim, 1999). Each individual was informed of their right to ask questions throughout the study, to obtain and comment on a copy of results and to have their privacy respected (Creswell, 2003).

Confidentiality. Participants' names were not recorded on the transcriptions or on the questionnaire in order to ensure confidentiality (Terre Blanche & Durrheim, 1999). All quotes from interviews are anonymous in order to maintain confidentiality (Terre Blanche & Durrheim, 1999).

Non-maleficence. *Non-maleficence* requires that the researcher ensures that no social, emotional or physical harm come to any participant (Terre Blanche et al., 2006). No physical discomfort would result from the research and questions were not of a deeply personal nature, but the research question may have been viewed as sensitive in nature. Participants in both phases were, therefore, reminded of their right not to answer questions. The potentially sensitive nature of the study and the small population also lent itself to the possibility of colleagues, and even students, identifying one another in publications, which could have caused distress. Anonymity of all situations and persons mentioned in interviews was, therefore, paramount. Educators were made aware that questions were designed to target areas around the potential differences in their assessment and teaching of students from diverse race and language backgrounds before each interview.

Beneficence. The principle of *beneficence* requires that the research design is such that it may be of benefit to the participants or to society in general (Terre Blanche et al., 2006). Clinical educators did not benefit directly by participating in the study but the study results will be made available to them at their request. Results might add to the knowledge base in this field and help to increase the cultural awareness of clinical educators in South Africa, thus contributing to clinical training that optimizes the learning of diverse students.

Chapter Four: Findings

Overview of Chapter

This chapter presents findings that describe Audiology clinical educators' expectations and experiences of supervising Audiology students from diverse race groups and with different levels of proficiency in the language of learning within a South African context. Five themes emerged during the integration of the first and second data analysis phases and were used to achieve the two research aims.

Aim 1, describing participants' expectations for students from diverse groups, will be addressed first. Two themes describe the continuum between *incongruence* and *congruence* of participants' expectations for whether a student's race and/or proficiency in the language of learning would influence their clinical performance. *Incongruence* was evident as most participants stated that a student's race would not influence their expectations of a student's clinical performance but described challenges specifically experienced when supervising Black students, suggesting poorer expectations for these students. Conversely, *congruence* was demonstrated by a participant who had the same expectation for students from all race groups which was confirmed in her description of experiences with racially diverse students.

The second aim was addressed through three themes (*challenges; coping strategies; and dilemmas*) which relate to participants' experiences with language barriers in clinics and detail the *challenges* for teaching and assessing; the *coping strategies* used to overcome the challenges; and the *dilemmas* regarding the management of each challenge. All five themes will be presented in this chapter.

Preface

In order to orientate the reader to the context of these results, three key factors that influenced the results obtained and will preface the findings are presented below:

- Due to low student numbers in Audiology clinics, participants may have supervised only one or two students in different race or language proficiency groups, so it is noted that their responses were based on the performance of these few students.
- The fact that race is a sensitive topic resulted in many participants becoming uncomfortable when asked directly about race and may have affected the information provided during interviews.

- Participants from each of the programmes across South Africa described different experiences based on the race and language backgrounds of students they were supervising which differed at each institution. For example, those participants supervising a majority White, English first language speaking student population had different experiences from those supervising a more varied group. Participants' exposure to students from each of the race and language backgrounds influenced their attitudes and understanding of the role that race and language proficiency may play in clinics.

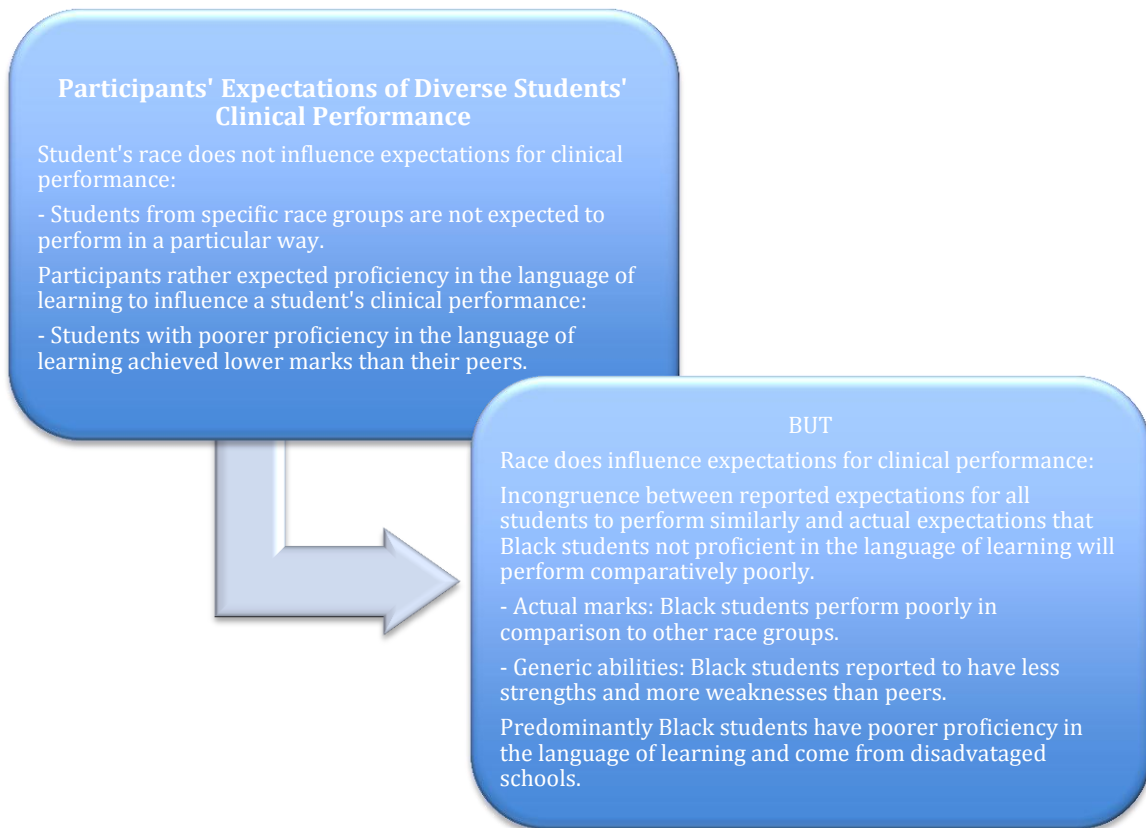
Most participants, however, reported that they supervised a diverse group of students from all race groups (Appendix I). Many of the participants reported that the majority of their students had advanced professional proficiency in English and that less than a third of their students had limited working proficiency in English. All participants noted that they had experience working with students from all language proficiency groups (Appendix I).

Theme: Incongruence



Figure 2

Overview of the Theme: 'Incongruence'



Student race does not influence expectations for clinical performance. Most participants reported that their expectations were the same for all students and that they expected students from all race groups to be able to achieve similar marks. As can be seen in Table 3 there were a few participants who expected Black and Coloured students to achieve lower marks than Indian or White students suggesting that some participants expected students to perform differently based on race. However, there was no significant difference in the minimum, $F(3, 75) = .66, p = .577$, or the maximum, $F(3, 75) = .98, p = .408$, marks expected for students from each of the four race groups (Table 3).

Most participants commented that they expected students from different race groups to perform as individuals.

“I see all the students as the same...I don't think that because a student is a certain race they will perform in a specific way...”

The participants who did expect poorer clinical performance of Black students emphasised that language and quality of schooling rather than race influenced their

expectations for clinical performance. Language proficiency was flagged as the primary indicator of student performance. Participants could comfortably discuss their expectations that students with language barriers do experience difficulties in clinics.

“Those students who struggle with language [of learning] nearly always struggle in their clinics...”

Participants reported that they expected students with a poorer proficiency in the language of learning not to perform as well as their peers. More detailed results can be found in Appendix J and K. A summary of the most important findings are presented.

The expected mark ranges provided by participants for the clinical performance of students with different levels of proficiency in the language of learning were compared (See Table 4). The minimum ($F(2, 57) = 12.95, p = .000$) and maximum ($F(2, 57) = 19.47, p = .000$) marks expected for students with advanced professional proficiency in the language of learning were significantly different from those with limited working proficiency (See Table 4). Participants expected that a student's proficiency in the language of learning would significantly affect their clinical performance.

It was evident from actual student marks that participants' expectations for students with a higher level of proficiency in the language of learning to achieve better marks than those with poorer proficiency were met. There was a significant difference between the minimum, $F(2, 51) = 13.004, p = .000$, and maximum, $F(2, 51) = 35.18, p = .000$ (Table 4), marks achieved by students with different levels of proficiency in the language of learning. Post-hoc comparisons indicated that minimum and maximum marks achieved by students with limited working proficiency were significantly different from those with advanced professional proficiency (Appendix K). Students who were most proficient in the language of learning obtained higher marks in the clinic than those who were least proficient.

The fact that student marks were better for those students who were most proficient in the language of learning confirmed that language proficiency influenced clinical performance. Participants also described challenges experienced by students from lower socio-economic backgrounds who had attended rural schooling and were often underprepared to cope in a tertiary education setting. Thus, most participants emphasised that language and schooling rather than race were key influences of clinical performance.

Table 3

Range of Expected and Actual Marks for Students from Each Race Group

Student Marks	Race of Students	n	Minimum	Maximum	M	SD	95% CI		p
							LL	UL	
Expected Minimum Marks	Black	21	0	65	45.81	14.52	39.2	52.42	0.577
	Coloured	18	0	65	46.39	14.02	39.42	53.36	
	Indian	21	0	71	51.71	15.66	44.59	58.84	
	White	19	0	70	48.16	14.93	40.96	55.35	
Actual Minimum Marks	Black	21	17	63	45.28	55.76	50.52	11.51	*.001
	Coloured	13	43	72	54.19	64.73	59.46	8.72	
	Indian	20	49	75	58.13	64.87	61.5	7.21	
	White	18	44	70	54.54	61.8	58.17	7.3	
Expected Maximum Marks	Black	21	60	100	78.48	11.19	73.38	83.57	0.408
	Coloured	18	60	100	78.33	10.15	73.29	83.38	
	Indian	21	70	100	82	8.89	77.95	86.05	
	White	19	70	100	82.37	8.72	78.17	86.57	
Actual Maximum Marks	Black	21	63	85	69.96	75.95	72.95	6.58	*.001
	Coloured	13	53	73	61.12	68.11	64.62	5.78	
	Indian	20	65	96	69.61	76.79	73.2	7.68	
	White	18	63	87	71.06	77.83	74.44	6.8	

Note: M = mean; CI = confidence interval; LL = lower limit; UL = upper limit

* $p < .05$

Table 4:

Range of Expected and Actual Marks for Students with Different Levels of Proficiency in the Language of Learning

Student Marks	Students' Language Proficiency	n	Minimum	Maximum	M	SD	95% CI		P
							LL	UL	
Expected Minimum Marks	APP	20	50	75	55.51	63.19	59.35	8.2	*.000
	GPP	20	0	65	42.53	55.57	49.05	13.94	
	LWP	20	0	55	34.3	46.2	40.25	12.72	
Actual Minimum Marks	APP	20	50	71	56.95	63.75	60.35	7.26	*.000
	GPP	19	46	71	55.4	61.75	58.58	6.59	
	LWP	15	35	63	44.28	52.79	48.53	7.69	
Expected Maximum Marks	APP	20	70	100	80.95	90.05	85.5	9.72	*.000
	GPP	20	60	100	70.65	81.35	76	11.43	
	LWP	20	40	90	57.76	69.24	63.5	12.26	
Actual Maximum Marks	APP	20	65	96	75.03	82.07	78.55	7.53	*.000
	GPP	19	63	77	67.49	71.35	69.42	4	
	LWP	15	53	75	57.35	64.51	60.93	6.46	

Note: M = mean; CI = confidence interval; LL = lower limit; UL = upper limit; APP = advanced professional proficiency; GPP = general professional proficiency; LWP = limited working proficiency

* $p < .05$

But student race does influence expectations of clinical performance.

Incongruence became evident when most of the participants who stated that a student's race did not influence their expectations for clinical performance provided marks that suggested disparate performance between the race groups and detailed different trends in the clinical performance of students from different race groups. A participant's comment underlined the struggle of having to constantly be cognisant of the possibility of potential bias due to predetermined stereotypes affecting the fairness and reliability of student assessment.

"You need to be quite sensitive and quite cautious when you are marking students from different backgrounds. You don't want your pre-conceived expectations to influence the way that you mark that student. So you have to try to be as objective as you can. You can't say, 'because you are a Black student I am going to give you a three out of six for this procedure.' So my experience in marking these students is that you take it one student, one session at a time and see how they perform in that session."

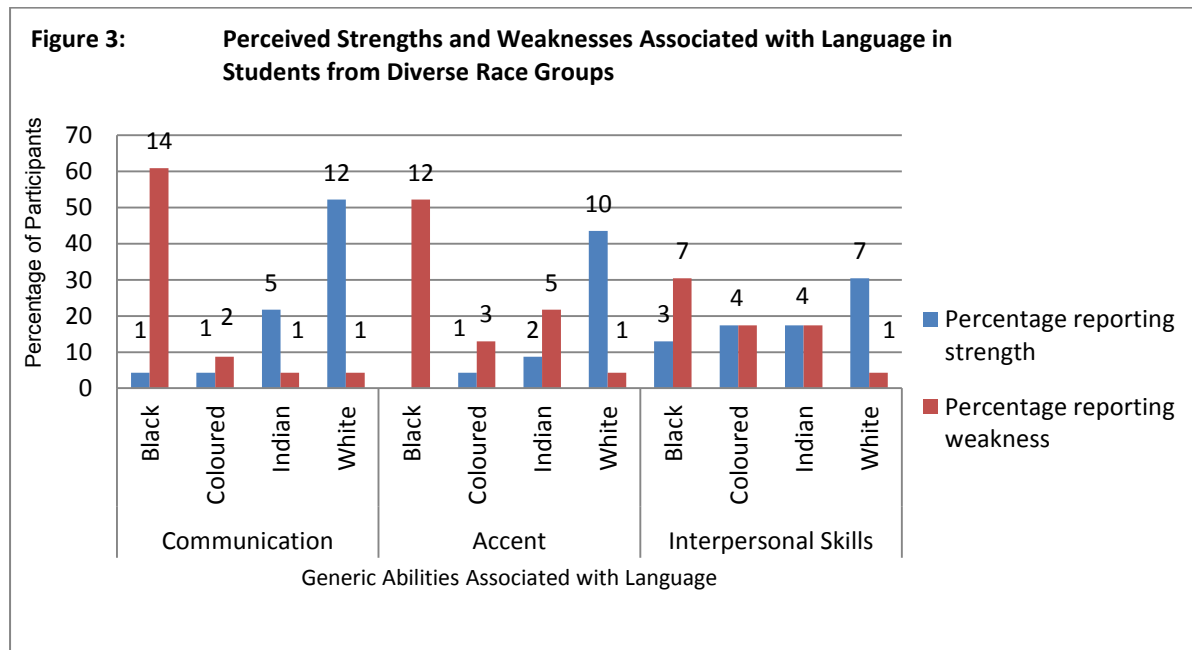
This participant's comment was echoed by others and highlighted the struggle to resist inherent assumptions regarding the potentially poor performance of Black students. The minimum ($F(3, 68) = 5.8, p = .001$) and maximum ($F(3, 68) = 6.17, p = .001$) marks obtained by students from each race group were significantly different from each other suggesting that students from diverse race groups were marked differently from each other (See Table 3). Thus, participants reported that they had the same expectations of students from each race group while the marks revealed that there was a significant difference in the perceived performance of students from each of the race groups (Table 4).

Post-hoc comparisons using Tukey's HSD test indicated that the minimum marks achieved by Black students were significantly lower than those of White, Coloured and Indian students (See Appendix L). The maximum marks achieved by Coloured students were significantly lower than those achieved by Black, Indian and White students. There was no significant difference between the clinical marks achieved by students from any of the other race groups. It was noted, however, that although many Black students had poorer clinical marks, there were some who achieved higher marks equal to those received by Indian and White students (See Table 3).

Likewise, participants reported that they did not expect different clinical performance based on a student's race and yet were able to describe generic ability strengths and weaknesses that they expected from students from each race group. Although no significant differences were evident between the strengths and weaknesses identified for students from

each race group, general trends can be seen in the raw scores presented below. Results for generic abilities were grouped conceptually according to abilities associated with:

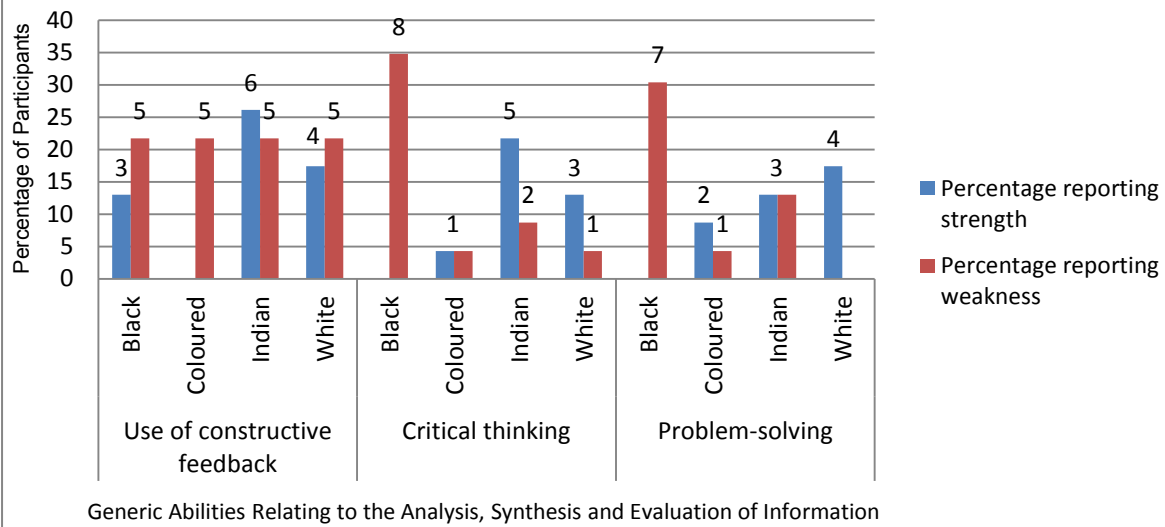
- (i) Language: communication; accent; interpersonal skills (Figure 3).
- (ii) Analysis, synthesis and evaluation of information: critical thinking; problem-solving; use of constructive feedback (Figure 4).
- (iii) Self and site-management: effective use of time and resources; commitment to learning; professionalism; stress management; responsibility (Figure 5).



Note: Number above bar = actual number of participants

As can be seen in Figure 3, the highest number of participants reported that language was a weakness for Black students. Conversely, language was reported by the highest number of participants as a strength consistently demonstrated by White students.

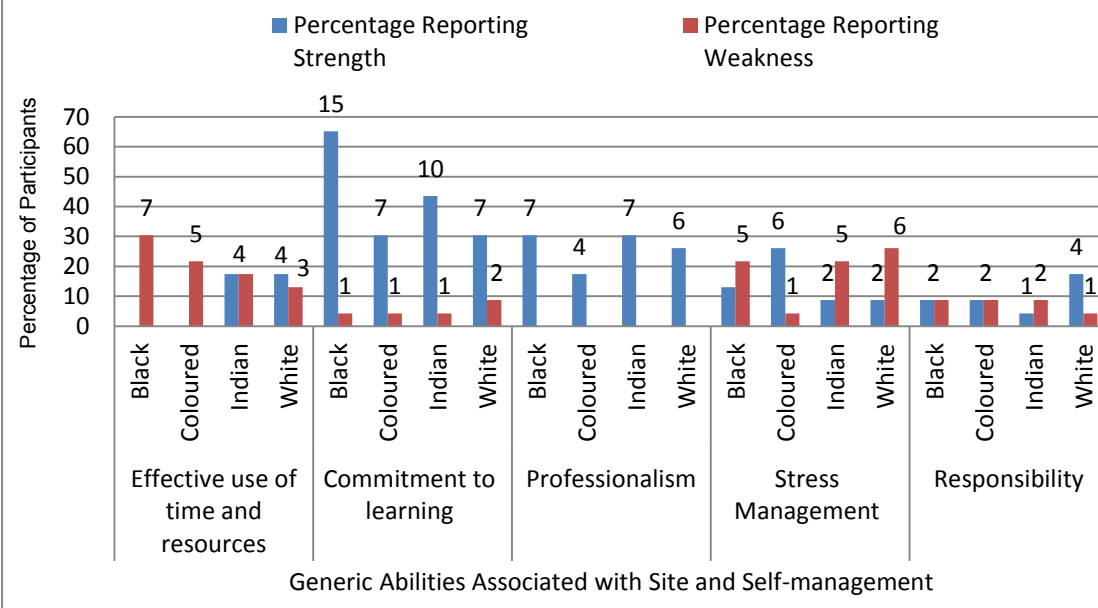
Figure 4: Perceived Strengths and Weaknesses in Analysis, Synthesis and Evaluation of Information Skills in Students from Diverse Race Groups



Note: Number above bar = actual number of participants

Critical thinking and problem solving were reported by the highest number of participants as weaknesses demonstrated by Black students and were not reported by many as a weakness for White students (Figure 4). Use of constructive feedback was not identified to be more or less of a weakness for White or Black students.

Figure 5: Perceived Strengths and Weaknesses in Site and Self-management in Students From Diverse Race Groups



Note: Number above bar = actual number of participants

Figure 5 shows that the largest number of participants identified their Black students as being committed to their learning. Professionalism was not reported as a weakness for any race group.

Despite participants' reports that they had the same expectations for students from all race groups, they were able to report specific strengths and weaknesses for students from each race category. Participants reported the least strengths and most weaknesses for Black students and the most strengths and least weaknesses for White students (See Figures 3 – 5).

A few participants candidly described their expectations for the clinical performance of students from diverse race backgrounds.

“I tend to see that the Coloured students have an average performance. The Indian students sometimes have above average performance. The Black students, maybe average to just below: you do find that there are one or two that are above average. There are common trends but these are not rule-of-thumb. You do see some individuals spark in different categories of performance, but the general trend would be Coloureds average, Whites average or maybe above average, Indians above average, Black maybe average, slightly below and a few slightly above.”

Few participants made direct comments linking poorer clinical performance to their Black students. That is, most participants did not say, “it is Black students who perform poorly in clinics”. Participants, however, detailed challenges specifically experienced when supervising Black students even though these challenges often occurred where language barriers existed or where Black students were unprepared for tertiary education as a result of their schooling.

“...it is mostly the Black students who have the poorest proficiency in English...”

“A lot of our students come from disadvantaged communities and the community schools. Those that come from more the city schools, the same as where our White and Indian students come from, tend to struggle less than what the rest of the Black students struggle with.”

Some participants were aware that many of the challenges they described were predominantly regarding Black students, but explained that clinical performance was related to schooling and not race.

“I wouldn't say that their [all students] academic or clinical performance is necessarily linked to their colour but rather because colour is linked to their past and having had your better education or better exposure to private school... versus only recently being incorporated into White schools or model C schools I find that sometimes that has an impact on their clinical performance.”

In sum, most participants did not report that they expected students to perform differently based on race. However, Black students were identified as having the most weaknesses and achieved lower marks than their peers. Black students often performed poorly due to their lack of proficiency in the language of learning and a disadvantaged schooling background.

Theme: Congruence

While incongruence was demonstrated for most of the participants, one participant reported that she had the same expectations of all her students and in her experience race was not an indicator of clinical performance. She explained that she had supervised students from each of the race categories who were achieving a wide range of clinical marks. When asked to categorise her weaker students, she answered:

“I have everything from a White male, English speaking student who has struggled to a Zimbabwean student so it’s really across the board. I have students from all races who do really well and likewise for those who are really not coping.”

Her experience provided the perspective that race is not a predictor for clinical performance for some clinical educators. This participant emphasized that students from all race groups had unique strengths and weaknesses.

Themes Related to Language: Challenges; Coping Strategies; and Dilemmas

Overview of themes. In the presentation of findings the participants’ *challenges* experienced when supervising students, the *coping strategies* they used to overcome them, and the *dilemmas* which became apparent in terms of the appropriateness and efficacy of coping strategies are detailed. The challenges demonstrated participants’ implicit and continual struggle when trying to provide appropriate support and fair assessment in difficult and complex learning environments.

In discussing their experiences when supervising students from diverse backgrounds, participants emphasised that language barriers in clinics posed the biggest challenge for clinical education. The fact that participants were facing challenges when supervising students with different levels in the language of learning was coupled with the fact that these students needed to be assessed and guided when providing services to a linguistically diverse client population. The findings focussed around three areas where language barriers resulted in challenges in clinics. Challenges for supervision were experienced when students:

1. were not proficient in the language of learning;

2. were not proficient in the client's language;
3. conducted a session in a language the clinical educator did not understand.

1. Students who are not proficient in the language of learning. Challenges were experienced when attempting to provide equivalent support for all students where some were not proficient in the language of learning. It was noted that students who were not proficient in the language of learning required support.

“You do pick when there is a language problem and you handle those students a little bit differently in the way that you speak to them, in the way that you put over the message that you are trying to get to them. So, yes in a small way there is that little bit of taking note of who struggles with the language and who do you need to pay a little bit more attention to in order to get them to get their message out.”

Challenges were mostly experienced during the supervision of Black African language speaking students whose proficiency in the language of learning was poor. The challenges highlight the complexities of attempting to facilitate learning and provide appropriate assessment to all students regardless of race and proficiency in the language of learning. Please see Figure 6 for a representation of the challenges, coping strategies and dilemmas reported in relation to supervision when the student is not proficient in the language of learning.

Challenge a) providing support to aid understanding and expression of understanding. Poorer proficiency in the language of learning was perceived to affect students' initial ability to accurately understand the theory or explanations and to later apply and express theory in clinics, making it difficult for them to cope.

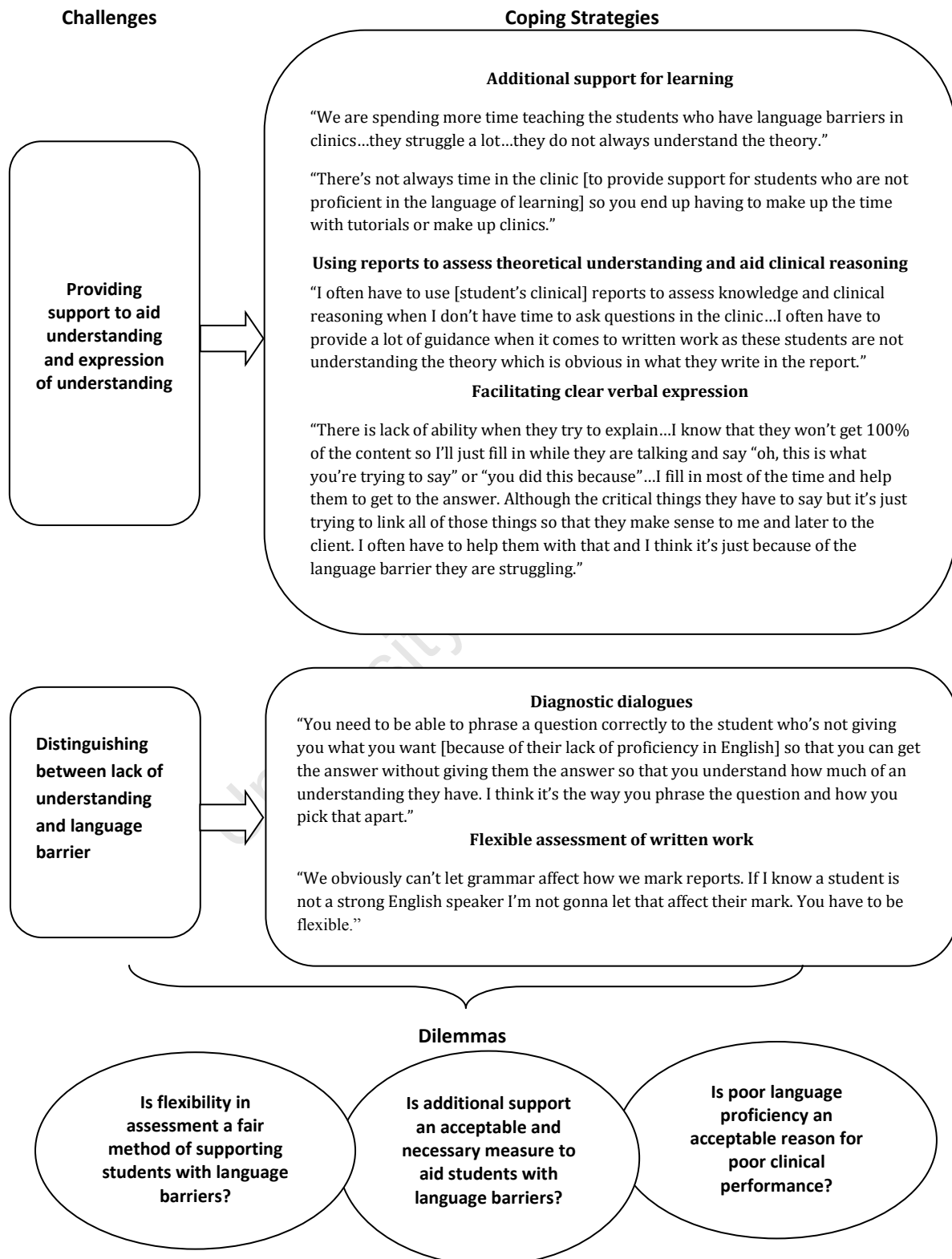
“I think that if you have difficulties with the language that the courses are being taught in, you're at a disadvantage as you might not grasp the concepts as easily or you might misunderstand something so then when you have to try and execute it in a clinic you may do it in the way you understood but perhaps you didn't understand it right in the lecture to start off with.”

Uncertainty was noted regarding the appropriate support of students who did not understand the theory or how to apply it as a result of poor proficiency in English. It was suggested that a course to help clinical educators to develop their skills in facilitating clinical learning of students from diverse backgrounds would be useful.

“...since the university is very active in terms of transformation in terms of the student body...I think it's extremely valuable and extremely important to include a course addressing how to teach students from diverse backgrounds in a clinical setting.”

Figure 6

Challenges, Coping Strategies and Dilemmas Occurring When Students are not Proficient in the Language of Learning



Coping strategies. Participant quotes describing each of the following coping strategies are presented in Figure 6.

- Additional support for learning
- Using reports to assess theoretical understanding and aid clinical reasoning
- Facilitating reasoning and linguistic skills

Challenge b) Distinguishing between lack of understanding and language barrier. Challenges encountered in facilitating clinical education included difficulty distinguishing whether a student's sub-optimal performance was related to a lack of knowledge or to the limited language proficiency. Further, the attempts to make this distinction resulted in feelings of "*frustration*".

"Is this a theory problem? Is it a language problem? Is it an expressive problem?"

Coping strategies. Participant quotes describing each of the following coping strategies are presented in Figure 6.

- Use of diagnostic dialogues to discern between language or knowledge barriers
- Use of reports to assess theoretical understanding and critical thinking
- Facilitating clear verbal expression

Dilemma i) Is poor language proficiency an acceptable reason for poor clinical performance? Empathy for students with language barriers was evidenced through the expectation and acceptance that clinical performance might be affected by the student's level of proficiency in English.

"Obviously language is going to affect your ability in clinics, I mean if I had to do my session in even, say, Afrikaans I would really struggle to do as well as if I was doing it in English"

A contradictory opinion, however, suggested that poorer language proficiency should not be an acceptable reason for poorer clinical performance as sufficient support is available for students to ensure they understand the basic theory when they get to clinics.

"...the students also have access to a lot of books and they get a lot of repetition because they hear it in lectures and they have to observe...so there's a lot of opportunity to clarify something if you didn't understand it so I do think [a language barrier] can have an impact but I don't think a huge impact because books are readily available, there's 30 other girls in the class to ask and they do get multiple learning opportunities...so eventually they should get it."

Dilemma ii) Is additional support an acceptable and necessary measure to aid students with language barriers? The provision of additional support to students with

language barriers was perceived as natural to the clinical education process, in the same way that additional support would be provided to a student with any barriers to learning.

“Having a language problem is just the same as the student who for instance might have trouble with applying theory. You are just going to have to put in the extra time to help them.”

Conversely, extra time and resources spent on assessing and teaching these students was perceived to be unfair to other students. One participant mentioned that her other students felt neglected due to the time she was spending providing additional support to students who were not proficient in the language of learning.

“...the students that are...learning in their own language are the ones that are saying that they are not getting enough attention so because you are so aware that there are other factors that may be affecting clinical performance that you want to help students with, the other students are feeling that they are not getting enough of my time. So I am spending more time with my weaker students who are struggling with English.”

Dilemma iii) Is flexibility in assessment a fair method of supporting students with language barriers? Marking flexibility was predominantly perceived as a necessary and fair method to support students with language barriers.

“I would say that there is a fair amount of flexibility that you need when marking your students who are not fluent in English. I am contradicting myself a little but you do need to be a little more lenient in your marking, so that their difficulty with English doesn't penalise them I suppose. Often that does take more time...”

A different perspective emphasised the importance of being objective and assessing all students equally.

“To actually give the marks – I don't think it would be different to the way that I would mark somebody from my own background...I think it would be unfair if I felt I had to mark a Black [second language English speaking] student more leniently than a student who is White, Coloured or Indian. You definitely don't want to send students out into the working world when they don't know their work. So you need to find that balance. It's not always easy to find – but you need to find it. And obviously they will be carrying your name with them, saying 'so and so supervised me...I try to be objective in my marking so that if you don't understand, you don't get a pass mark. It's quite difficult to do that especially with the language difficulties.”

One participant explained her frustration in attempting to fairly assess reports written by students with poorer English proficiency.

“We are told that when marking the student we should not focus on their grammar but rather on the content or their understanding but sometimes that goes hand in hand because if you do not get the

grammar right, we might not ‘get’ what you are saying, or understand according to the way you’ve said it. It can be unfair because perhaps that’s not the way they would have explained it in their own language. It doesn’t always come across that clearly and concisely, which is what we need to mark them on.”

2. Language barrier between a student and their client. Clinics were described as being “*unique*” in that all students, including those with English as their mother tongue, may struggle with language while providing services to a linguistically diverse client base.

“...in clinics...our White and Indian students struggle a lot...because some of our clients speak English but it’s limited.”

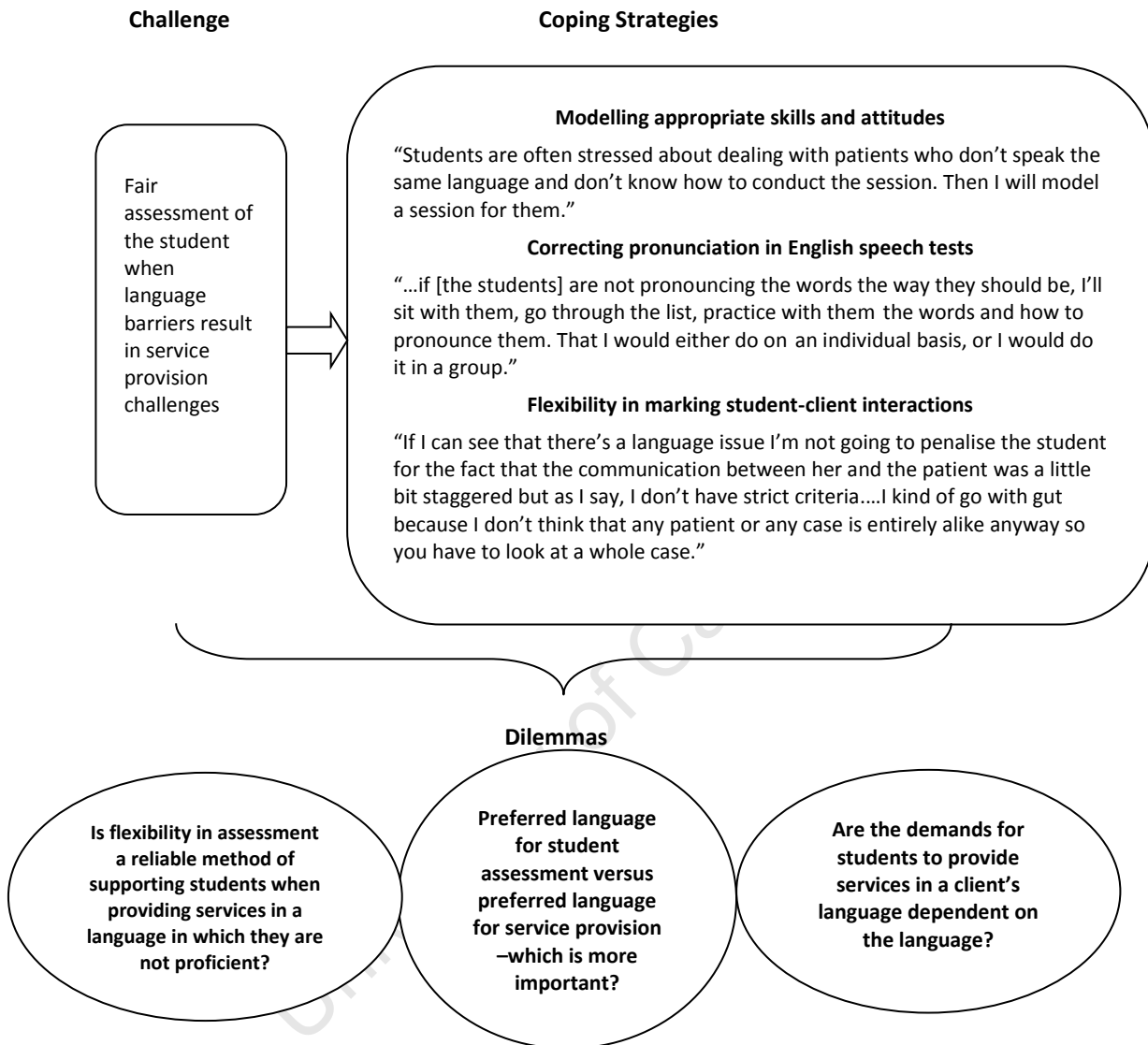
Interpreters were often required in clinics as students and clinicians did not speak their client’s language. Communicating through interpreters was highlighted as, “*an important skill that [the students] need to learn.*” Students who were not proficient in English were not provided with an opportunity to use interpreters as it was the language of learning and proficiency was expected. Interpreters were generally needed if a client spoke in an African language not understood or spoken by the student. However, only one participant reported that interpreters were readily available at sites where clients spoke only African languages. She explained: “...*we would make use of interpreters every single time we interact with the community or individuals.*” Interpreters were reportedly not readily available with one participant explaining that, “...*it is very difficult for us to book official interpreters at the hospital so we do the best we can.*” Student peers were often used as interpreters as a suitable solution to allow for a student to provide appropriate services to a client when he/she did not speak the client’s language.

“It is a good solution where there is no one else to interpret. I would usually do it when I need to mark a student and she does not speak the patient’s language. It becomes important for both students to learn the rules around interpreting and I would generally give a lot of feedback to both of them about how they manage that situation.”

Teaching students to provide linguistically appropriate services to all clients was stressed as being a key outcome for all clinics. A number of common challenges were described for supervising sessions where interpreters were unavailable and students were not proficient in the client’s language, English or otherwise. Opinions regarding how students should manage language barriers in clinics varied, although a few patterns became evident. Participants reported that all students were encouraged to attempt the session in the client’s mother tongue where possible. Predominantly participants described difficulties their Black second language English speakers had when providing services in English.

Figure 7

Challenges, Coping Strategies and Dilemmas Occurring When the Student does not Speak the Client's Language



Challenge: *Fair assessment of the student when language barriers result in service provision challenges.* Challenges for both the student and the educator were highlighted in two areas where the student was providing services in a language that they were not proficient in. The two areas will be discussed below.

- Overall communication and interpersonal skills

Interpersonal skills and overall communication with the client in a language that the student is not proficient in were agreed to reduce the quality of the client-clinician

relationship. A participant described her perceptions of a session conducted in a language the student was not proficient in.

“I think that because [the student spoke English] she came over as very cold and distant...I think it’s because she had to think in a different language. If you can speak in your own language it’s much easier and I think you come over much more warmer and with positive regard.”

Language barriers were perceived to negatively affect a student’s ability to provide feedback to clients.

“They try to limit the feedback so that they don’t have to be in that situation for much longer. So their feedback or their communication with the patient is a bit abrupt...Just give patients the bare necessity of the feedback so that they don’t have to think in Afrikaans further than they have to. It does tend to be a bit limited. And obviously their performance drops.”

The complexities of marking sessions in a language the student was not proficient in without penalising the student for the language barrier were noted.

“...in the end you still have to look at the skill and does the student have the skill in working with that client? I looked at how she interacted with the client and was she able to get the confidence of that child? Was she able to perform the tests even though she had to do it in a different language so that is what I looked at even though it wasn’t her strongest language...What I want to see is, can they reinstruct if they see the client doesn’t understand what they were saying?... are they able to show me that flexibility that we expect of a clinician...even though the language is perhaps an issue?”

- Actual testing in terms of accent and word tests

Black African language speaking students had accents which were sometimes perceived to be difficult for hearing impaired clients to understand potentially resulting in a loss of test reliability.

“The other challenge I have is the pronunciation of the words. Sometimes you find someone with an African or other accent, and their pronunciation of the spondee or their pronunciation of the word-lists are slightly different so it is difficult for the patients to make out what words they are saying and this gets varied on the test results. It is difficult to tell if the patient is repeating the word back incorrectly because they didn’t hear it correctly or whether they could not make out the word because of the student’s accent.”

Coping strategies. Participant quotes describing each of the following coping strategies are presented in Figure 7.

- Modelling appropriate skills and attitudes
- Correcting pronunciation in speech tests
- Flexibility in marking student-client interaction

Dilemma i) Preferred language for student assessment versus preferred language for service provision –which is more important? The desire to teach all students the importance of providing services to their clients in the client’s first language was noted. It was clear, however, that Black students whose first language was not English would generally have to complete sessions with clients of the same language in English if the client was able to communicate in English. Marking was reported to be easier when the session was in a language participants could understand.

“...[I will first] try to have them do [the session] in English so that [the clinical educator] can understand what is happening, provided that the patient understands some English as well.”

Dilemma ii) Are the demands for students to provide services in a client’s language dependent on the language? Participants emphasised that, “...students need to learn the importance of providing services to patients who speak different languages.” It was emphasised that services should always be provided to clients in the language they were most proficient in. Discussions regarding the management of student-client language barriers in clinics, however, suggested that participants had different expectations of the student providing services in the client’s language based on the language. It was suggested to be important for students to have the basic language necessary to communicate with the majority of their clients. Some participants, however, made it clear that they only expected students to have the basic language necessary to communicate with their English and Afrikaans clients.

“...it is my understanding that students should be able to, for the bare minimum, be able to at least instruct a patient in their own language. I think when you are dealing with patients in this kind of setting you need to be able to speak to them in their own language. It’s different if they do speak [an African language], but when they are speaking Afrikaans we need to provide services [in Afrikaans].”

The contradiction was further highlighted by participants who emphasised the importance of providing all clients with services in their mother tongue but explained that interpreters were only used when clients speak an African language not spoken fluently by the student. In describing language barriers experienced by one of her White, English students one participant explained:

“...when [the session is in] English she’s proficient but then next year she is going to struggle when she has to use African languages...so if you train her you have to have a basic idea of the language basics like asking simple questions in your client’s mother tongue, but I think in our profession we’ve always used interpreters.”

The participant's comment highlighted her own lack of clarity regarding the management of language barriers in her clinic as, although she said that students were expected to know the language basics to communicate with clients, she also admitted that interpreters were necessary in sessions where students did not speak the clients' African language.

Dilemma iii) Is flexibility in assessment a necessary and reliable method of supporting students when they are providing services in a language in which they are not proficient? A lack of guidelines resulted in each participant creating their own marking system, which may call into question the reliability and fairness of clinical assessment. All participants made reference to how they “*make allowances*” for language barriers with no apparent uniform protocol. It was suggested that using the mark sheet “*flexibly*” to “*guide*” the marking process allowed participants to assess students conducting a session in a language they were not proficient in more fairly so that students would not be penalised for the language barriers. One participant described how she marked a session where the student had to communicate with a client in a language she was not proficient in:

“It's based predominantly intuitively if I can see that there's a language issue I'm not going to penalise the student for the fact that the communication between her and the patient was a little bit staggered but as I say, I don't have strict criteria but I kind of go with gut on that because I don't think that any patient or any case is entirely alike anyway so you have to look at a whole case when you mark and try not to let language affect your marking...”

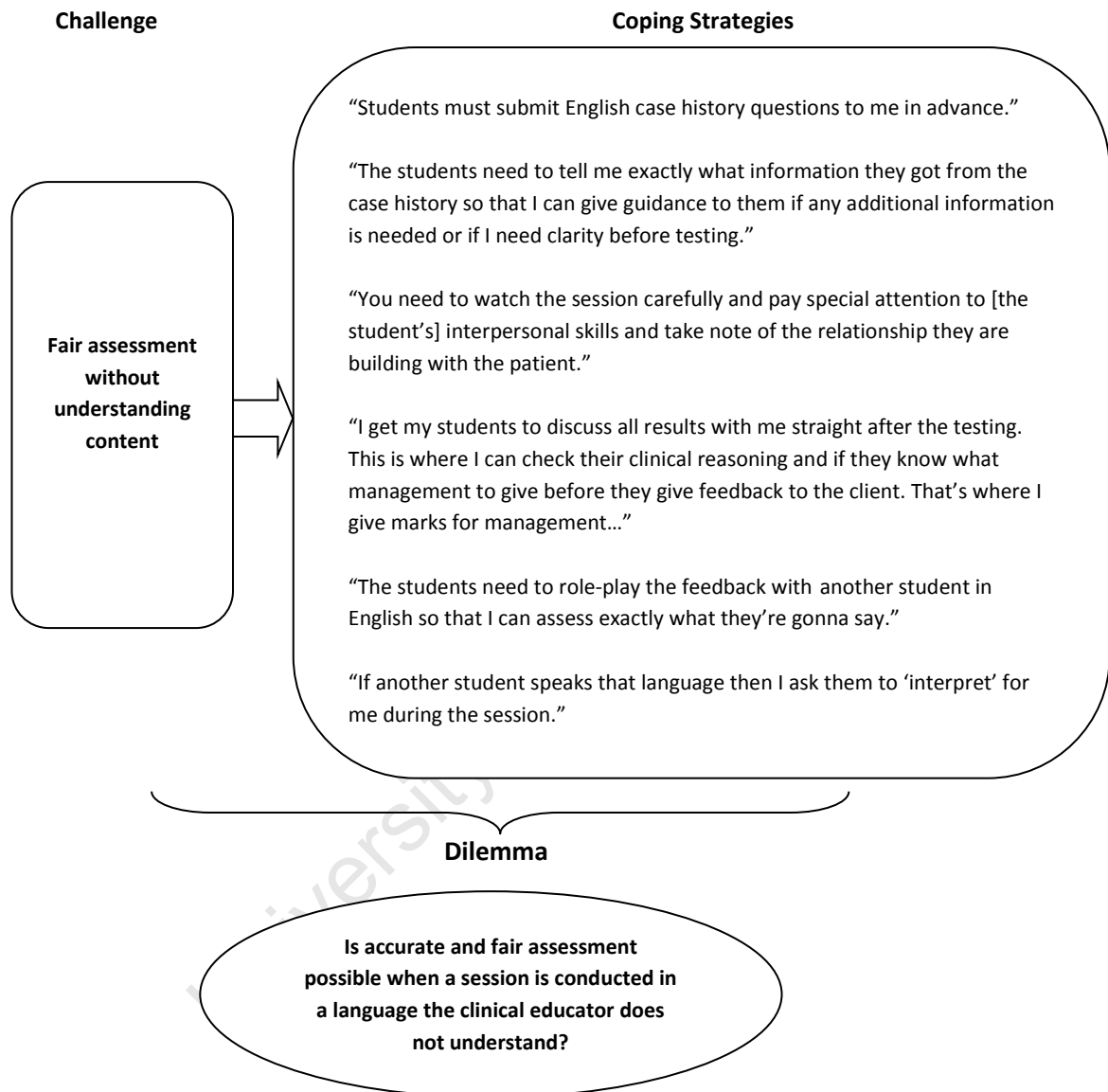
Difficulties were experienced when trying to objectively assess sessions where language barriers existed. Mark sheets were perceived to sometimes be “*not ideal*”. Dissatisfaction was expressed at having to use reports to assess students' integration of results and management decisions:

“You can assess the student's understanding in the written form. Then I would work the marking so that the feedback doesn't carry as much weight. But it does actually because it's what the patient actually needs to understand from what he or she is saying. So it really isn't ideal.”

3. Session in a language the clinical educator does not understand. The supervision of clinical sessions conducted in African languages not understood by the participant was highlighted as a challenging experience. Participants created unique coping strategies (Refer to Figure 8) to manage and assess sessions where session content was not understood.

Figure 8

Challenges, Coping Strategies and Dilemmas Occurring When a Session is in a Language not Understood by the Clinical Educator



Challenge: Fair assessment without understanding content. A number of reservations regarding the assessment of sessions conducted in an unfamiliar language were acknowledged. Most participants agreed that their students generally performed better in sessions where they were able to speak in their mother tongue even though the supervisors were unable to understand the session content.

“There is definitely a difference. They seem to be more comfortable. They seem to be more certain of themselves - a little more assertive. You definitely see the confidence levels rising...It’s almost that

they are more eager to do it in their own language because they are more comfortable...they don't have to struggle to find the correct word, to make sure the grammar is right and that the patient understands the layman's terms of that language. So there definitely is a difference...It is unfortunate that I don't understand the language or that there is not a mutual understanding in that session about what is being said to that patient..."

"The interesting thing is that their whole demeanour changes when they're able to converse with the patient in their own language. It presents challenges as you don't understand necessarily what they're saying but they are more comfortable, more confident and the patient is able to relate to them more easily."

Coping strategies. Participant quotes describing each of the following coping strategies are presented in Figure 8.

- Case history questions to be submitted in English before the session.
- Discussion of case history to happen before clinical testing begins so that additional information may be obtained if necessary.
- Careful observation of interpersonal skills and student-client relationship.
- Discussion of results to check clinical reasoning for management decisions before feedback is given to the client.
- Role-playing feedback with another student in English to assess content.
- Use of other students to "translate" for the participant during the session.
- Use of reports to assess the theoretical knowledge and clinical reasoning.

Dilemma: Is accurate and fair assessment possible when a session is conducted in a language the clinical educator does not understand? Some participants, especially those involved in diagnostic testing clinics, reported that they felt comfortable assessing a session in most of the languages encountered in their clinics as they could mostly guess at the content.

"In some cases during the session it's not that difficult to pick up what it is they are talking about. There are some words that they borrow from English and then I can get an idea of what it is they are talking about especially when they give feedback."

Conversely, misgivings were reported regarding the accuracy of assessment when the clinical educator was unable to understand the content related in a session. There was also a sense of frustration at the difficulty of having to supervise sessions where content was not understood.

“I understand a little bit of for instance, Tswana so I would be able to follow a conversation and the general gist of what a student is doing...but I still don't think you can get an accurate view of their skills if you don't understand or it's not translated back to you...”

“All I'm saying is that it is very difficult to assess when you yourself do not know the language they are speaking or they are unable to speak the language that the patient is speaking because you don't know if they are carrying over the correct information to the patient and that's what makes it difficult. You constantly need to be asking questions that you would not have to ask if the session was being done in a language understood by everyone...It's frustrating...It's easier to assess where no language barriers exist.”

Summary

Participants mostly felt that they had the same expectations for Audiology students from all race groups. Many were able, however, to identify specific strengths and weaknesses they expect for specific groups. A student's proficiency in the language of learning was highlighted as being the primary influence of participants' expectations for clinical performance. It was further evident that Black students, speaking African languages as mother tongue, were perceived to have the most difficulties in clinics. Additional support was predominantly given to these students who were also marked more flexibly. The fact that Black students obtained the lowest marks when compared to their peers from different race groups suggests a link between race and language although a number of other factors such as socio-economic background and schooling may also affect student performance but are not explored in this study.

Participants' experiences when supervising students from diverse backgrounds highlighted the fact that different coping strategies were used to manage language barriers occurring in clinics. Emerging dilemmas regarding the effectiveness of these strategies suggested that participants did not have clear guidelines regarding a) how to provide services to clients in a language they are not proficient in, and b) how to facilitate learning in clinical situations where language barriers exist.

Chapter Five: Discussion and Conclusion

Overview of the Chapter

The findings from this study highlighted some of the complexities experienced by clinical educators facilitating learning within clinical contexts in South Africa. This chapter discusses the results relating to both the research aims. A discussion of aim one describes clinical educators' expectations of the clinical performance of students from diverse backgrounds. The second aim is then addressed through a discussion of participants' experiences when supervising diverse Audiology students. Limitations for the study are noted and implications and recommendations for future research are detailed.

Discussion

Clinical educator expectations of diverse students: Incongruence vs. congruence.

In examining participants' expectations of students from diverse race groups, race was identified to be a challenging topic and one that was named to be "uncomfortable" to discuss. Incongruence was highlighted by continued participant reports that they did not have different expectations of students based on race while simultaneously detailing the many perceived weaknesses of Black students in comparison to Indian and White peers and reporting poorer marks for Black students. The incongruence demonstrated by the majority of participants suggested a hesitancy to discuss their poorer expectations for Black students in clinics. Participants were more comfortable discussing their expectations for clinical performance based on a students' proficiency in the language of learning and/or schooling background even though language and schooling were linked to race.

In examining the findings it is important to again foreground the South African context in which clinical education occurs where apartheid has allowed for a link to remain between race and socio-economic status as well as between race and language (Alexander, 2006; Bangeni & Kapp, 2007; Burch et al., 2007). Many Black school-going South Africans continue to be educated in suboptimal circumstances (Burch et al., 2007) and their proficiency in the language of learning is often poor (Bangeni & Kapp, 2007) so that they are at risk of performing poorly at a university level (Bangeni & Kapp, 2007; Burch et al., 2007). It is, therefore, not surprising that participants perceived that the students who were struggling to cope in clinics were those from disadvantaged schooling backgrounds who had a poor proficiency in the language of learning and that these students were predominantly

Black. However, many participants did not feel comfortable enough to discuss this link or to admit to the resulting differences in the performance of many Black students.

In examining possible reasons for the incongruence evident in the findings it may be noted that discussions about race are known to be challenging (Solomon et al., 2005) making it difficult for many people to feel comfortable in broaching the topic candidly. In light of the perceived sensitivity around race issues, Bernard (2011) proposed an emerging trend where educators worldwide are not sure how to deal with the concept of race and may perceive that to talk about race at all or to confess to noticing another's race is to be a racist. In South Africa where race has historically been a source of inequality and injustice and the favoured discourse is focussed on working towards a non-racial society (Alexander, 2006), participants may have been sensitive to the possibility that linking race to performance might be perceived to be racist. The fact that the majority of participants were not Black and often differed not only in terms of their race but also in terms of their language and culture from many of their Black students may have compounded their sensitivity of being perceived to be racist. The evident struggle with the concept that a student's race might influence expectations for clinical performance perhaps highlights the complex issue of how clinical educators are trying to make sense of what role race does or does not have to play in the arena of clinical education. Findings suggest that clinical educators would like not to have different expectations of students based on race but are challenged by race being a signifier for educational disadvantage and poor proficiency in the language of learning.

Additional possible explanations for incongruence in the findings may also be suggested. The opinion that all students had the same learning opportunities, so that proficiency in the language of learning and schooling background should not impact on a student's clinical performance, could have been the result of a lack of awareness of the influence these factors could have on students' clinical ability (Azer, 2005). Clinical educators may believe that by the time students enter into clinics, they should be adequately and equally prepared despite challenges they may have entered the programme with. This finding is commensurate with the literature which evidenced that clinical educators were often not aware of barriers to learning faced by students (Bagnardi & Perkel, 2005; Gardner, 2005). While these studies examined the experiences of student nurses in America, it may be hypothesised that clinical educators in South Africa who are also clinicians with little teacher training, may also be unaware of barriers to learning and their implications for clinical performance. When clinical educators are unable to identify barriers to learning for each of

their students, they may continue to teach in ways that disadvantage students who are in most need of support (Gardner, 2005).

While findings from international studies are pertinent for the support of minority students, it should be remembered that in South Africa the Black students with variable levels of proficiency in the language of learning from disadvantaged backgrounds are not necessarily the minority at most institutions. Where these Black second language English speaking students are recruited into programmes from educationally disadvantaged backgrounds, it is imperative that clinical educators are aware of these barriers and are prepared to provide necessary support (Burch et al, 2007). Gardner (2005) suggests that educators may not be able to meet the needs of diverse students unless they develop a comprehensive understanding of factors which may affect their learning.

The incongruence evidenced from the data might also be attributed to a lack of awareness of biased expectations for Black second language English speaking students. Studies (Clouten et al., 2006; Haskins et al., 1997) suggested that where clinical educators unswervingly reported that they had the same expectations for students from all race groups despite reporting many weaknesses and consistently lower marks for students from minority groups, that these educators were unaware of their biased expectations for these students. Participants may have supervised a number of students from each race group who had specific barriers to learning which resulted in them performing poorly in comparison to peers from other race groups. Prior experience could then have resulted in a type of bias allowing for their perceptions of individuals from one race group to result in the unconscious and automatic expectation that other students from the same race group would perform similarly (Haider et al., 2011). Participants were able to attribute specific abilities to students from each race group suggesting an expectation based on race (as a proxy for proficiency in the language of learning and educational background) whether the expectation was acknowledged or not.

In exploring how bias played out in this study, international studies (Clouten et al., 2006; Gardner, 2005; Haskins et al., 1997; Woolf et al., 2008) suggested that unconscious bias may result in differences in facilitation of learning and assessment practices with different groups of students. Participants in the current study did not directly acknowledge a difference in the management or assessment of students based on race and reported that they treated all students in the same way. However, most participants described assessment and management strategies they were using so that Black students from disadvantaged

backgrounds who were not proficient in the language of learning would not be unfairly penalised suggesting that these educators have a strong desire to support these students despite the challenges posed during the supervisory process. Most international studies (Clouten et al., 2006; Gardner, 2005; Haider et al., 2011) describe ways in which clinical educator bias negatively affects students who are different from the dominant university culture. The fact that participants reported that they managed and assessed all students similarly while describing the perceived need for modifying their practices when working with disadvantaged students suggests two possibilities; firstly that some may not have been consciously aware of the way their expectations affected the assessment and management of students from different groups and secondly, that they were hesitant to discuss modifications that may have been perceived as being biased.

The fact that *congruence* was a unique perspective evidenced by one participant who admitted to supervising Black students from a wide range of schooling backgrounds (disadvantaged and advantaged) suggests that as more Black first language English speakers from better quality schooling backgrounds were recruited into the Audiology programme, expectations for clinical performance were no longer influenced by race. Bangeni and Kapp (2007) describe the difference in academic performance evidenced by Black students at one university in South Africa depending on the socio-economic, schooling and language backgrounds of these students suggesting that Black students from better quality schooling will perform at the same level as peers from other race groups from similar backgrounds. It may be hypothesised, therefore, that as clinical educators supervise more students from each race group who achieve both high and low clinical marks depending on their level of proficiency in the language of learning and educational background, they may no longer have poorer expectations for their Black students. An increasingly diverse Black student profile may allow clinical educators to have a clearer focus of potential barriers for learning for each student with a move away from race as an identifier for clinical performance.

The promotion of racelessness in South Africa has at its goal the use of characteristics other than race such as language skills and socio-economic background in order to promote redress and to attain a truly non-racial democratic society (Alexander, 2006). The concept of racelessness may gain influence within Health Sciences programmes as the shift in student demographics progresses and more Black students are recruited from many different school and language backgrounds so that clinical educators may no longer associate race with clinical performance. In the interim, it is imperative for clinical educators to become

culturally competent through reflecting on how their experiences with students from diverse backgrounds may affect their expectations of students. Culturally competent professionals may best be able to support the complex learning needs of students from all backgrounds (Clouten et al., 2006; Mackay et al., 2011; Pitkäjärvi et al., 2011; Woolf et al., 2008).

Clinical educator experiences with diverse students: Challenges, coping strategies and dilemmas. In describing their experiences when supervising students from diverse backgrounds, language barriers were identified as the primary challenge in clinics. The fact that the language challenges discussed were mostly related to experiences with Black students is not surprising as these students often have poor proficiency in the language of learning and/or are educationally disadvantaged. International studies examining clinical teaching of minority student groups have likewise documented that one of the key challenges for these students is their poorer proficiency in the language of learning which is most often the language that services are being provided in (Ladyshevsky, 1997; Mackay et al., 2011; Stewart & Gonzalez, 2002). In South Africa, however, the issue of language was identified as a multi-layered challenge for both the clinical educator and the students due to the difficulties associated with service provision to a linguistically diverse client base. Hence, proficiency in the language of learning was not the only challenge that was highlighted in relation to language barriers in clinics.

Challenges. The multitude of challenges for clinical educators in every aspect (management, feedback, assessment, etc.) of supervision in a linguistically complex environment highlights the overall challenging nature of the profession in South Africa. The new challenges arising post-apartheid for training in a profession that is language dominated, are complex. In South Africa, the predominantly White, English or Afrikaans speaking clinical educators are working in a context where there is a necessity to train diverse students to provide linguistically appropriate services to the previously neglected majority population who speak African languages (CHE, 2010). All except one participant were either first language English or Afrikaans speakers and came from a background where apartheid previously encouraged service provision to be provided in those languages (Kathard & Pillay, 2013; Pascoe & Norman, 2011). While clinical educators' backgrounds will frame their perceptions and actions, their emphasis on the importance of teaching all students about providing appropriate services to clients from different language backgrounds suggests that participants had a genuine desire to provide comprehensive services to these clients. As a result of previous experiences and personal understandings of what constitutes best clinical

practice with linguistic diversity, participants may have been struggling to negotiate decisions for student assessment and management of sessions where language barriers occurred between the student and the client.

The question of when to use interpreters may be used as an example of the way in which previous conceptions of best practice are still influencing management decisions for clinical educators. Despite the fact that students in most Audiology programmes were enrolled in a year course in one of the indigenous languages, participants encouraged the use of interpreters (mostly informal) when clients spoke African languages not spoken fluently by the student. Black students were not reported to have access to interpreters when they were not fluent in English and were required to provide services in English. Most participants reported that it was important for all students to have the basic language necessary to communicate with English and Afrikaans clients, thus negating the need for interpreters in these sessions, suggesting that participants were still allowing previous norms for language management to predominate in their clinics. That is, by continuing to place more importance on students' learning to provide therapy in English and Afrikaans clinical educators are perpetuating poorer quality service provision to clients whose mother tongue is an African language (Panday et al., 2007). The use of interpreters can be challenging in different ways but students may still more easily be able to provide comprehensive services through interpreters than those who are required to provide services in a language they are not proficient in (Penn, 2011). The disjuncture evidenced by participants' desire to train students to provide linguistically appropriate services while still encouraging the consistent use of interpreters only where students were not proficient in a client's African language suggests that participants were struggling to negotiate this new linguistically diverse terrain.

Another challenge emerging as a result of entrenched models for the management of language barriers in clinical practice may also be seen to play out in the question of fair and reliable assessment of students when language barriers exist in clinics. The fact that participants were struggling with assessment was not surprising as guidelines are not provided to clinical educators when assessing students who are not proficient in the language of learning, who are providing services to a client in a language they are not fluent in or when they are providing services to clients in a language the clinical educator is not fluent in.

The need to mark clinical sessions more leniently where language barriers occurred between the client and student provides an example of the potential for bias in the assessment of certain students. All students were assessed on at least one session where they were not

fluent in the client's language. The areas where client-student communication was effected due to language barriers were similar to those cited in the literature (Ladyshefsky, 1996; San Miguel & Rogan, 2012). For example, the use of short sentences and inappropriate vocabulary were perceived by the educator, and potentially the client, as a lack of empathy. Black second language English students were depicted to struggle the most which might be due to the fact that clinical educators were more easily able to ascertain the efficacy of the Black student's poorer communication skills in English. English and Afrikaans first language speakers were also predominantly allowed to use informal interpreters when providing services to clients in a language they were not proficient in, placing them at an additional advantage when being assessed. The English language dominance inherent in the Audiology profession is evident in these practices and may affect the assessment of African language speaking students who are recruited into programmes in order to provide services to the majority of the population speaking these languages. Clinical educators may not be aware of the affect their management and assessment strategies may be having on students' clinical performance.

Challenges regarding the assessment of sessions where the clinical educator was not familiar with the language that the students were conducting therapy in were similar to those discussed by Muñoz et al. (2011) and resulted in participants feeling incapable of adequately meeting the needs of either the client or the student where language barriers existed. The primary challenge was that of assessing interactions where the content was not understood. Students achieved higher marks in these sessions as participants' perceived improved non-verbal student-client interaction. While there is an advantage for service provision in a clients' first language, assessment using only non-verbal cues and student reports of the communication may not be reliable. Except for the article written by Muñoz et al. (2011), no literature is currently available discussing the assessment of sessions where content is not understood by the clinical educator and it may be suggested that modified assessment could unfairly advantage or disadvantage students. This study therefore throws light on a new dimension of challenge not reported in the literature.

An additional challenge relating to the historical context of the language dominated practice of Audiology in South Africa was that participants were uncertain of how to provide appropriate services to linguistically diverse clients. The finding that participants were struggling to negotiate language barriers between themselves and a client in their own clinical practice was not unwarranted, but added an additional challenge to clinical education. Little

research is available to support best practice for audiological service provision to African language speaking clients where interpreters are unavailable (Pascoe & Norman, 2011). Both nationally and internationally challenges have been highlighted regarding the provision of linguistically appropriate services in languages other than English (Chabon et al., 2010; Pascoe & Norman, 2011). Two of the primary reported challenges highlighted in the literature were firstly, the dearth of linguistically appropriate diagnostic tools and therapy materials and secondly, the lack of an evidence base to support assessment and management procedures when working with clients from diverse language backgrounds (Chabon et al., 2010; Pascoe & Norman, 2011). The uncertainty regarding best practice models when providing services to linguistically diverse clients, resulted in participants providing students with variable models for service provision to African language speaking clients.

As the focus in Audiology begins to change to allow for the provision of equitable services to a previously disadvantaged, linguistically diverse client base, it becomes imperative for clinicians to question historical practices that may no longer be appropriate in the South African context (Kathard, 2005; Kathard & Pillay, 2013). Audiology training programmes need to change their thinking regarding what constitutes best practice so that appropriate models can be provided to students from all backgrounds.

Coping strategies. In the efforts to support students where language barriers occurred in clinics, ad hoc coping strategies were used to assess and facilitate the learning of all students. For example, standard marking systems were uniquely modified in order to address the challenges related to language barriers occurring in the clinical practice setting. Participants' use of flexible assessment strategies suggests that there are attempts to minimize penalties for performance impacted by language barriers. While it is not surprising that participants were struggling with the task of assessing students in a variety of challenging linguistic contexts, a lack of uniformity in the assessment of sessions where there are language barriers may call into question the reliability and fairness of this assessment.

For instance, the reliability of the participants' lenient assessment of clinical report writing in terms of grammar and coherence for students whose proficiency in the language of learning was poor remains questionable. No research could be found to evaluate the effectiveness and fairness of marking written clinical reports more leniently in terms of grammatical errors. While it could be argued that marking more leniently may unfairly bias marks, it may also be a way for educators to more fairly assess the clinical reasoning abilities of students whose proficiency in the language of learning is poor. It should be noted that

marking systems were initially created for the assessment of a specific student demographic, that is, White, middle class, English speaking. As the institutional demands change in terms of the type of student required to graduate in order to serve a different client population, we begin to question the salience of these mark sheets and intended outcomes.

Another example of ad hoc assessment methods was that of adjusting the weightings on the mark sheets so that language barriers would have less impact on overall performance has not been discussed in the literature. Communication, both non-verbal and verbal, plays a primary role in developing and maintaining a successful clinician-client relationship (Tye-Murray, 2009). It could be argued that removing emphasis from students developing important communication skills through allocating less weight to them when marking may result in the training of clinicians who have not properly developed essential generic abilities in any language. It could also be argued, however, that this is one way of assessing a challenging session that does not penalise the student for not being proficient in that language.

While there is a marked lack of literature examining assessment practices when language barriers occur in clinics, Muñoz et al. (2011) discussed some of the ways that clinical educators might manage a session occurring in a language they were not familiar with. Muñoz et al. (2011) suggested that although supervision where content is not understood can be challenging, the roles and responsibilities of the clinical educator can still be met through considered modifications to the standard management and assessment of students.

Strategies used by participants in the current study for assessing sessions where content was not understood were similar to those suggested by Muñoz et al. (2011). Standard assessment processes were modified which Muñoz et al. (2011) suggested being an essential measure. Approached discussed included the necessity for the educator to be in the therapy room in order to have the opportunity to ask the student for real-time interpretation at various intervals so that immediate adjustments to the student's plans might be made. Debriefing with the student in order to guide clinical reasoning before final feedback to the client as suggested by Muñoz et al. (2011) was also flagged as a strategy. A few novel strategies, such as where possible having another student interpret what was occurring in the session, were introduced in the current study but there was much overlap between the instinctive modifications participants had developed and those strategies advocated in the literature. Thus, most strategies that participants were already using were ones that have recently been promoted

elsewhere suggesting that clinical educators in South Africa are often co-incidentally assessing sessions in a manner commensurate with that suggested in the literature. However, participants were creating strategies independently and managing each situation differently and often were uncertain about the efficacy and reliability of their assessment strategies suggesting the need for discussion of diversity management and assessment to guide the development of protocols for challenging situations.

In all of the examples discussed above, it is evident that participants were modifying their management of students as well as their assessment of sessions by trial and error. It is important for training programmes to begin to think about ways in which assessment may be reconceptualised at a systemic level to support both clinical educators and students. Training and development of new assessments need to be linked specifically to these linguistically challenging scenarios.

Dilemmas. Dilemmas became apparent between the participants' differing perceptions of the efficacy, reliability and fairness of the coping strategies used to manage challenges. The fact that participants were all managing language barriers in clinics in different ways translated into a number of dilemmas for clinical education in South Africa.

A number of dilemmas for clinical education were uncovered through the finding that many participants were unsure of what constituted best practice when providing services to linguistically diverse clients. For instance, differences in opinion arose regarding the presentation of audiological test material and whether to modify or 'Westernise' second language English speaking students' accents for the presentation of word lists. Findings suggested that participants were concerned that clients may be misdiagnosed due to testing conducted by a student who is not proficient in the language the test is conducted in and/or has an unintelligible accent. Studies investigating the modification of accents during speech tests provide various perspectives (Levy & Crowley, 2011; Wilkinson & Payne, 2005). The lack of research may have resulted in the differing perspectives of how best to train in diagnostic testing situations where it was perceived that a student's accent would negatively affect test results. Little has been documented about the effect of an audiologist's mastery of any aspect of spoken language on the quality of service delivery to clinical populations (Wilkinson & Payne, 2005). Levy and Crowley (2011) argue that no standard accent can be appropriately applied in every clinical interaction as deviation is the norm and all individuals speak with an accent. Further research may be helpful to provide protocols that may help clinical educators to feel more confident and to facilitate learning in a uniform way. In South

Africa where clinical educators are working towards changing a profession created during the apartheid era where services were not created for a majority Black first language African speaking population, it may be essential for clinicians to figure out new mechanisms for the provision of culturally and linguistically appropriate client care with the new generation of Black students.

The fact that interpreters were not readily available in clinics uncovered another dilemma regarding ethical decision making in a linguistically complex context. Most participants agreed that where possible services should always be provided in the language the clients were most fluent in, as per the National Health Act (2003) requirements. The quandary as to the importance of the better language for student assessment versus the better language for service provision again highlights the need for protocols to be developed to assist clinical educators in making difficult decisions during clinics. Chabon et al. (2010) emphasised the importance of ethical decision making when providing services to clients who are not proficient in the clinician's language and encourage that strategies that are research-lead are implemented where possible. Muñoz et al. (2011) also discussed the advantages of supervising a student who can provide services to a client in their own language. They proposed that the student may be able to enhance the knowledge and skills of the clinical educator through acting as a cultural-linguistic informant, allowing for culturally sensitive service provision where previously this was unattainable due to language barriers. Clinical educators need to be trained to be aware of and open to potentially mutually beneficial scenarios for service provision and student assessment. It is only through a willingness to change that the Audiology profession may develop and improve to ensure quality service provision is provided to the entire South African population (Kathard, 2005).

Another example of the need for clinical educators to be open to new ways of managing and assessing sessions could be suggested in relation to dilemmas occurring when students were completing a session in a language not understood by the participant. The differing opinions as to the efficacy and reliability of marking sessions occurring in a language that the participant was unfamiliar with were similar to those evident regarding all flexible assessment practices used in sessions where language barriers occurred, and again highlighted the lack of guidelines to manage these sessions. The assessment dilemma highlights the need for discussion and research in this important area to help to develop fair and reliable strategies for assessment where language barriers occur. In this case, Muñoz et al. (2011) additionally suggested that both the educator and the student would need to

develop unique skills over time in order to create effective methods of assessment and management where content is not understood. It was, therefore, recommended that the student and clinical educator meet more frequently to review sessions and to discuss the session logistics in order to facilitate cultural-linguistic brokering for future sessions (Muñoz et al., 2011). The challenge for clinical educators evidenced here is that of creating a transformed practice in order to train students to meet the needs of a diverse client base while simultaneously trying to supervise students from a variety of different backgrounds.

The additional time required by participants to manage many of the challenges they reported, resulted in another dilemma which highlighted the question of, “how much additional support is feasible, appropriate and necessary for students who are not proficient in the language of learning?” The findings of the current study corroborate those found in the literature (Ladyshewsky, 1996; Muñoz et al., 2011) which emphasized the additional time necessary to support students who were not proficient in the language of learning. The fact that there were differing opinions in the current study regarding the appropriateness and feasibility of additional support suggested that while all clinical educators were providing additional support, some did not feel that this was feasible or acceptable. While there can be no question as to whether students who are not proficient in the language of learning require additional clinic time and tutorial support to improve their theoretical understanding of clinical concepts, it may become difficult for clinical educators to find this time in an already busy schedule without penalising other students who also desire their guidance. The differing opinions regarding additional support again suggests a lack of protocols or guidelines being implemented in universities to aid the learning of students with poor proficiency in the language of learning. Programmes may need to allocate additional time for feedback and tutorials outside of the clinic in order to provide the necessary support for these students.

Participants’ experiences with diverse students suggests that at present in South Africa clinical educators are struggling to train professionals who will best be able to provide services within the South African context without any clear answers of how to achieve this. This study highlighted some innovative strategies participants were using to train students in a complex clinical learning environment but their dilemmas suggest that research is still needed both to provide evidence for best practice when providing services to linguistically diverse Audiology clients and to develop guidelines for the supervision of students from different language backgrounds.

Limitations

Participants from each of the programmes across South Africa described different experiences based on the student population they were supervising. It was noted that participants' experiences with diversity influenced their attitudes and understanding of the role that race may play in the clinics. Limited questionnaire participation from 2 of the 5 universities may have resulted in a skewed representation of South African clinical educator's perceptions. The small sample size also suggests that caution should be exercised in generalizing the questionnaire findings. Interview participants were therefore selected to be most representative of the Audiology clinical educator population in order to achieve triangulation and to provide a comprehensive understanding of the different experiences across the country. The overall results, therefore, depict a fairly accurate snapshot of the experiences and expectations of clinical educators at most Audiology training programmes in South Africa. As we go forward with increasingly diverse student bodies – we need to be alert that there will be clinical educators who have little or no experience and they will bring their own understandings to the situation. Hence, it is imperative that clinical educators be provided with support to engage in ways that are constructive and support clinical learning of diverse students.

In phase one, participants were requested to provide mark sheets in order to obtain actual marks achieved by students from different groups. Actual mark sheets providing the researcher with access to marks for students from each race and language group were only available from one of the universities. Thus, actual marks reported in this study were provided by most participants based on their review of mark sheets. Participants were requested to provide marks for students from each race and language proficiency group only after careful review of marks. There is, however, no way to know whether marks provided by participants were an accurate portrayal of their students' performance or simply a guess based on their memory of students' supervised during the given time frame.

While the use of mixed methods allowed for triangulation of data, the limited time for data collection for this Masters' project did not allow for additional interviews to be conducted with a greater number of participants to ensure data saturation. Future qualitative studies may allow for a more comprehensive understanding of a larger number of clinical educators' perceptions with regards to clinical education and diversity.

Study implications

The findings of this study have a number of important implications for future practice. Two areas in Audiology training programmes require review and modifications in order to ensure that students from all backgrounds receive the necessary support to provide effective services to linguistically diverse clients. Firstly, changes need to be made within the curricula to facilitate appropriate learning opportunities and secondly, clinical educators need to be trained.

Curricula. Clinical curricula alignment needs to be regularly evaluated to investigate whether the expected learning outcomes regarding provision of services to linguistically and culturally diverse clients are appropriately aligned with teaching and learning activities as well as assessment measures (Horton-Ikard & Muñoz, 2010). A systematic review of courses to investigate the successful inclusion of multicultural content will allow staff to have open discourse regarding their understanding of the intended learning outcomes regarding diversity in clinics and how educators are expected to teach these skills and attitudes (Stewart & Gonzalez, 2002). Mark sheets should reflect the importance of appropriate service provision to diverse clients in order for programmes to comply with the HPCSA regulations for Audiology curricula. Evaluation of this alignment will help to identify the strengths and weaknesses within the system which will aid programmes to continually improve their ability to train culturally competent clinicians (Horton-Ikard & Muñoz, 2010). It may be suggested that a shared, comprehensive understanding of what is stipulated in the curriculum as well as teaching and learning activities being aligned to learning outcomes will enable clinical educators to more easily facilitate students' acquisition of appropriate knowledge, skills and attitudes.

Staff training. What was most evident from the results was the challenging experiences reported of managing the learning barriers faced by many Black students. Even though participants reported that they had received training, it is evident that they remained unprepared for the challenges of clinical education in a diversity-rich environment. The reported unpreparedness of clinical educators to address issues that predominate when supervising diverse students is not unique to South Africa (Omeri et al., 2003). Most participants reported having relatively little training on clinical teaching and diversity and some commented that it would be useful to have a course to help them to develop their skills in facilitating clinical learning of students from diverse backgrounds. Much of the research completed in the USA has suggested that clinical educators require training to help to prepare

them to provide appropriate support for students from diverse backgrounds (Clouten et al., 2006; Gardner, 2005; Levy & Crowley, 2012).

Research is needed to develop effective training programs specifically targeting the management of challenges experienced by educationally disadvantaged and/or second language English students. Once developed through training, cultural competence will allow educators to recognise each student's unique abilities and barriers to learning so that they may best help students to meet the generally accepted norms for clinical practice (Hadley & Fulcomer, 2010).

A clear understanding of intended learning outcomes may allow clinical educators to make expectations and assessment criteria clear to students. Bagnardi and Perkel (2005) propose that educators be trained to provide students with clear, consistent expectations and explicitly define roles and responsibilities so that students from all backgrounds may more easily have the opportunity to meet expectations. The importance of student support and guidance was additionally highlighted. Annual staff training workshops would provide educators with practical advice regarding the provision of appropriate support for students from diverse backgrounds as well as a forum to discuss any associated clinical challenges.

Recommendations for future research

Many of the challenges depicted by participants in this study are similar to those described in international studies and the implications for educator training and curriculum reform would be relevant worldwide. Results from this study provide a base from which to start further enquiries into the area of clinical education and diversity within other Health Sciences disciplines. It is important for programmes to understand how clinical educators are managing both student and client diversity in their clinics especially in South Africa.

Continued improvement for addressing multicultural issues in training programs relies on frequent evaluation of potential progress (Horton-Ikard & Muñoz, 2010). It is, therefore, imperative that research is completed to assess whether programme efforts toward addressing multicultural issues are successful; to assess staff ability to facilitate learning of multicultural content; and to verify that all students demonstrate the knowledge, skills and attitudes necessary for the provision of culturally competent services (Horton-Ikard & Muñoz, 2010).

This study highlighted the need for realistic protocols to be developed regarding the management of linguistically diverse clients based on both what is considered to be best practice and actual practice occurring consistently in clinics. Clinical services in all spheres

of Audiology need to be improved and assessment and therapy materials developed for linguistically diverse clients (Khan et al. 2007, Pascoe & Norman, 2011). Educators working within these protocols may then feel more confident in developing student skills in the provision of different types of services to linguistically diverse clients. Practical guidelines to help clinical educators to model appropriate skills and attitudes when providing services to linguistically diverse clients to students can only be provided once research to support best practice becomes available.

Conclusion

This study set out to describe clinical educators' expectations and experiences of Audiology students in South Africa. In examining South African clinical educators' expectations of the clinical performance of Audiology students from diverse race and language backgrounds, a number of divergent perspectives emerged. The incongruence evidenced by participants highlights the struggle that clinical educators are facing in negotiating race in a complex historical and political context.

Results suggest that as more Black first language English students enter Audiology programs from schools that better prepare them for tertiary education, the concept of racelessness may begin to be expressed in that race may no longer play a role in identifying at-risk students. Clinical educators will no longer predominantly associate poor performance as a result of a lack of proficiency in the language of learning and educational disadvantage with their Black students. In order for clinical educators to embrace the concept of racelessness it remains essential that forums be created for staff to openly discuss concerns regarding at-risk students in a constructive way so as to avoid covert bias and lack of knowledge of potential learning barriers affecting the way that certain students are marked.

In examining clinical educators' experiences regarding the supervisory process, it was clear that language barriers resulted in the most challenges for clinical education. Clinical educators both nationally and internationally are having to negotiate new territory where guidelines are unclear. Training students who are not proficient in the language of learning can be challenging but in South Africa there are a number of additional complexities such as the fact that the historically English/Afrikaans dominated profession has resulted in pivotal questions to emerge regarding best practice for a linguistically diverse client base. The lack of uniformity in terms of how to fairly assess students where language barriers exist in clinics as well as how to provide appropriate models of service delivery to linguistically diverse

clients suggested the need for guidelines and/or protocols to be implemented. The challenges experienced by clinical educators are not exclusive to South Africa and globally programmes are discussing their struggles to find innovative ways to support students in linguistically complex environments. It is important that the profession begins to explore different solutions for best practice guidelines for service provision to a linguistically diverse client base where interpreters are not often available so that students may be trained more effectively. It is only through questioning previous models for service provision that training programmes will begin to more appropriately support the learning needs of a diverse student group and the service requirements of a culturally and linguistically diverse population.

As Audiology programs begin to train a more demographically representative body of clinicians it becomes increasingly imperative for staff to be culturally competent so that they may be able to provide effective support strategies to address the unique needs of diverse students. Clinical educators should be encouraged to evaluate whether a student's language or schooling background is affecting clinical performance. Identifying actual barriers each student is facing will allow for more effective support to be provided for that student ensuring that culturally competent clinicians from all backgrounds are graduated in order to provide the best possible services to the diverse South African client base.

References

- Alexander, N. (2006, March). *Racial identity, citizenship and nation building in post-apartheid South Africa*. Presentation given at University of Fort Hare, East London Campus, South Africa.
- Alreck, P., & Settle, R. (2004). *The survey research handbook*. New York: Irwin.
- American Speech-Language-Hearing Association. (2004). Knowledge and skills needed by speech-language pathologists and audiologists to provide culturally and linguistically appropriate services. *ASHA Supplement*, 24, 152-158.
- American Speech-Language-Hearing Association. (2008). *Clinical supervision in speech-language pathology* [Position Statement]. Retrieved from www.asha.org/policy
- American Speech-Language-Hearing Association. (2010a). *Code of Ethics* [Ethics]. Retrieved from www.asha.org/policy
- Amosun, S., Hartman, N., Janse van Rensburg, V., Duncan, E., & Badenhorst, E. (2012). Processes in widening access to undergraduate allied health sciences education in South Africa. *African Journal of Health Professions Education*, 4(1), 34-39. doi: 10.7196/AJHPE.138
- Ansell, A. (2006). Casting a blind eye: The ironic consequences of color-blindness in South Africa and the United States. *Critical Sociology*, 32, 333-357.
- Azer, S. (2005). Challenges facing PBL tutors: Twelve tips for successful group facilitation. *Medical Teacher*, 27(8), 676-681. doi: 10.1080/01421590500313001
- Aziakpono, P., & Bekker, I. (2010). The attitudes of isiXhosa-speaking students toward language of learning. *Southern African Linguistics and Applied Language Studies and teaching issues at Rhodes University, South Africa: General trends*, 28(1), 36-60.
- Bagnardi, M., & Perkel, L. (2005). The learning achievement program: fostering student cultural diversity. *Nurse Educator*, 30(1), 17-20.

- Bangeni, B., & Kapp, R. (2007). Shifting language attitudes in a linguistically diverse learning environment in South Africa. *Journal of Multilingual and Multicultural Development*, 28(4), 253-271. doi: 10.2167/jmmd495.0
- Beagan, B. (2003). Teaching social and cultural awareness to Medical students: "It's all very nice to talk about it in theory, but ultimately it makes no difference". *Academic Medicine*, 78(6), 22-27.
- Bernard, E. (2011). Prologue: The riddle of race. *Patterns of prejudice*, 45, 4-14. doi: 10.1080/0031322X.2011.563141
- Betancourt, J., Green, A., Carrillo, J., & Ananeh-Firempong, O. (2003). Defining cultural competence: a practical framework for addressing racial/ethnic disparities in health and health care. *Public Health Report*, 118, 293-302.
- Bhopal, R. (2004). Glossary of terms relating to ethnicity and race: for reflection and debate. *Journal of Epidemiol Community Health*, 58, 441-445.
- Black, R. M. (2001). Comparison of multicultural literature in three health professions: physical therapy, nursing and social work. *Journal of Cultural Diversity*, 8, 3-15.
- Bridge, P., & Sawilowsky, S. (1999). Increasing Physicians' awareness of the impact of statistics on research outcomes: Comparative power of the t-test and Wilcoxon Rank-Sum test in small samples. *Journal of Clinical Epidemiology*, 52, 229-235.
- Brown, G. (2001). Culture and diversity in the nursing classroom: An impact on communication and learning. *Journal of cultural diversity*, 8, 16-20.
- Bryman, A. (2006). Integrating quantitative and qualitative research: How is it done? *Qualitative research*, 6(1), 5-14.
- Burch, V., Sikakana, C., Yeld, N., Seggie, J., & Schmidt, H. (2007). Performance of academically at-risk medical students in a problem-based learning programme: A

preliminary report. *Advances in Health Sciences Education*, 12(3), 345-358. doi:
10.1007/s10459-006-9006-6

Chabon, S., Brown, J. E. & Gildersleeve-Neumann, C. (August 3, 2010). Ethics, equity, and English-language learners: A decision-making framework. *The ASHA Leader*. Retrieved from www.asha.org/Publications/leader/2010/100803/Ethics-Equity-ELL.htm

Chan, D. S. (2001). Combining qualitative and quantitative methods in assessing hospital learning environments. *International journal of nursing studies*, 38, 447-459.

Clouten, N., Homma, M., & Shimanda, R. (2006). Clinical education and cultural diversity in physical therapy: Clinical performance of minority student physical therapists and the expectations of clinical instructors. *Physiotherapy theory and practice*, 22(1), 1-15. doi: 10.1080/09593980500422404

Cottrell, R., & McKenzie, J. (2005). *Health promotion and education research methods: Using the five-chapter thesis/dissertation model*. Sudbury: Jones and Bartlett Publishers.

Creswell, J. W. (2003). *Research design: qualitative, quantitative and mixed methods approaches*. Thousand Oaks: CA Sage.

Declaration of Helsinki: Ethical principles for medical research involving human subjects. (2008). World Medical Association. Retrieved from <http://www.wma.net/en/30publications/10policies/b3/index.html>

Denscombe, M. (2003). *The good research guide (2nd ed)*. New York: Open University press.

Dogra, N., & Karim, K. (2005). Diversity training for psychiatrists. *Advances in Psychiatric Treatment*, 11, 159-167.

- Dooley, K. (2012). Positioning refugee students as intellectual class members. In F. McCarthy & M. Vickers (Eds.), *Refugee and immigrant students: Achieving equity in education* (pp. 3-21). Charlotte, North Carolina: Information Age Publishing.
- Education, C. o. (2001). *Language policy framework for South African Higher Education*. Pretoria: Council on Higher Education.
- Education, C. o. (2009). *Higher Education Monitor 8: The state of Higher Education in South Africa*. Retrieved from www.che.ac.za/documents/d000201/.
- Education, D. o. (1997). *Education White Paper 3: A programme for the transformation of Higher Education*. Pretoria: General Notice 1196 of 1997.
- Education, M. o. (2002). *Language Policy for Higher Education*. Pretoria: Ministry of Education.
- Engel, R., & Schutt, R. (2005). *The practice of research in social work*. Thousand Oaks, California: Sage Publications.
- Erceg-Hurn, D., & Mirosevich, V. (2008). Modern robust statistical methods: An easy way to maximize the accuracy and power of your research. *American Psychologist*, 63(7), 591-601. doi: 10.1037/0003-066X.63.7.591
- Ernstzen, D., Bitzer, E.M. (2006). Students' and clinical teachers' views on effective clinical education in Physiotherapy at Stellenbosch University. (Master's thesis). Retrieved from <http://ir.sun.ac.za/dspace/handle/10019/241>
- Ernstzen, D., Bitzer, E. M., & Grimmer-Somers, K. (2009). Physiotherapy students' and clinical teachers' perceptions of clinical learning opportunities: A case study. *Medical Teacher*, 31(3), 102-115. doi: 10.1080/01421590802512870
- Esmail, A. (2011). Ethnicity and academic performance in the UK. *British Medical Journal*, 342, 557-563. doi: 10.1136/bmj.d709

- Fleming, M. (2010). Rethinking cultural awareness training in the health professions: insights from medical students' attitudes. In R. Muldoon (Ed.), *Rethinking learning in your discipline*. Proceedings of the University Learning and Teaching Futures Colloquium . Armidale, Australia: Teaching and Learning Centre, University of New England.
- Foreign Service Institute. (2008) *Language Proficiency Test for Arabic, Russian, and Spanish*. Retrieved June, 15, 2010, from <http://.acenet.edu/AM/Template.cfm?Section=Learners&Template=/CM/ContentDisplay.cfm&ContentID=26407>
- Franchi, V., & Swart, T. (2003). From apartheid to affirmative action: The use of 'racial' markers in past, present and future articulations of identity among South African students. *International Journal of Intercultural Relations*, 27(2), 209-236.
- Gardner, J. (2005). Barriers influencing the success of racial and ethnic minority students in Nursing programs. *Journal of Transcultural Nursing*, 16(2), 155-162. doi: 10.1177/1043659604273546
- Greene, J., Caracelli, V., & Graham, W. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11(3), 255-274.
- Groth-Marnat, G. (2008). *Handbook of Psychological Assessment (5th Ed.)*. New Jersey: John Wiley and Sons .
- Guillory, B. (2000). Project access: A program to improve service delivery for culturally and linguistically diverse populations with speech, language and hearing disorders. *Teacher Education and Special Education: The Journal of the Teacher Education Division of the Council for Exceptional Children*, 271-279.

- Hadley, A., & Fulcomer, M. (2010, November). Models of instruction used in Speech-Language Pathology graduate programs. *Communication Disorders Quarterly*, pp. 3-12.
- Haider, A., Sexton, J., Sriram, N., Cooper, L., Efron, D., Swoboda, S., . . . Cornwel, E. (2011). Association of Unconscious Race and Social Class Bias With Vignette-Based Clinical Assessments by Medical Students. *JAMA*, *306*(9), 952-951.
- Hammond, C., Mitchell, P., & Johnson, M. (2009). Academic and clinical preparation for cultural and linguistic diversity in speech-language pathology: Program director perspectives. *Contemporary issues in Communication Disorders*, *36*, 63–76. doi: 1092-5171/09/3601-0063
- Haskins, A. R., Rose-St Prix, C., & Elbaum, L. (1997). Covert bias in evaluation of physical therapist students' clinical performance. *Physical Therapy*, *77*, 155-168.
- Health, D. o. (2012). Regulations relating to the undergraduate curricula and professional examinations in Audiology. *Government Gazette* (Vol. 387, No. 35350).
- Health, D. o. (2012). Regulations defining the scope of the profession of Audiology. *Government Gazette* (Vol. 700, No. 35635).
- Heugh, K. (2000). *The case against bilingual and multilingual education in South Africa*. PRAESA Occasional Paper No. 6. Cape Town: PRAESA.
- Horton-Ikard, R., & Muñoz, M. (2010). Multicultural issues in CSD. *Contemporary issues in Communication Science and Disorders*, *37*, 167-173. doi: 1092-5171/10/3702-0167
- Hunter, M., & May, R. (1995). Some myths concerning parametric and nonparametric tests. *Canadian Psychology*, *34*(4), 384-389.
- Hussein, A. (2009). The use of Triangulation in Social Sciences Research: Can qualitative and quantitative methods be combined? *Journal of Comparative Social Work*, 1-10.

- Ivankova, N., Creswell, J., & Stick, S. (2006). Using Mixed-Methods Sequential Explanatory design: From theory to practice. *Field methods*, 18(3). doi: 10.1177/1525822X05282260
- Jette, D., & Portney, L. G. (2003). Construct validation of a model for professional behavior in physical therapist students. *Physical Therapy*, 83, 432-443.
- Kachingwe, A. F. (2003). A grounded theory investigation of diversity and multiculturalism in the physical therapy profession. *Journal of Physical Therapy Education*, 17(1), 5-17.
- Kamwangamalu, N. (2000). Language policy and mother-tongue education in South Africa: The case for a market-oriented approach. *Georgetown University Round Table on Languages and Linguistics*, 119-134.
- Kamwangamalu, N. (2004). The language planning situation in South Africa. In R. Baldauf, & R. Kaplan (Eds.), *Language planning and policy in Africa* (pp. 197–281). Clevedon: Multilingual Matters.
- Kathard, H. (2005). Clinical education in transition: Creating viable futures. *Advances in Speech-Language Pathology*, 7, 149-152. doi: 10.1080/14417040500181270
- Kathard, H., & Pillay, M. (2013). Promoting change through political consciousness: A South African speech-language pathology response to the World Report on Disability. *International Journal of Speech-Language Pathology*, 15(1), 84–89.
doi:10.3109/17549507.2012.757803
- Khan, F., Campbell, N., & Louw, B. (2007). Auditory Processing Disorders: Training of Speech-Language Pathologists and Audiologists within the South African Context. *The South African Journal of Communication Sciences and Disorders*, 54, 17-25.
- Kilminster, S., Cottrell, D., Grant, J., & Jolly, B. (2007). AMEE Guide No. 27: Effective educational and clinical supervision. *Medical Teacher*, 29, 2-19.

- Kritikos, E. (2003). Speech-language pathologists' beliefs about language assessment of bilingual/bicultural individuals. *American Journal of Speech-Language Pathology*, 12, 73-91.
- Ladyshevsky, R. (1996). East meets west: The influence of language and culture in clinical education. *Australian Journal of Physiotherapy*, 48, 287-294.
- Langdon, H., & Wiig, H. (2009). Multicultural issues in test interpretation. *Seminars in Speech and Language*, 30, 261–278.
- Leech, N., & Onwuegbuzie, A. (2010). Guidelines for conducting and reporting mixed research in the field of counseling and beyond. *Journal of counseling & development*, 88, 61-71.
- Levy, E., & Crowley, C. (2011, June). Policies and practices regarding students with accents in Speech-Language Pathology training programs. *Communication Disorders Quarterly*, pp. 10-14. doi: 10.1177/1525740112446851
- Liddell, M., & Koritsas, S. (2004). Effect of medical students' ethnicity on their attitudes towards consultation skills and final year examination performance. *Medical Education*, 38(2), 187-198.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- London, C., Ismail, S., Alperstein, M., & Baqwa, D. (2002). Diversity, learning and curriculum reform in the Health Sciences – institutional challenges for a country in transition. *Perspectives in Education*, 20(3), 21-35.
- Mackay, B., Harding, T., Jurlina, L., Scobie, N., & Khan, R. (2011). Utilising the hand model to promote a culturally safe environment for international nursing students. *Nursing Praxis in New Zealand*, 27(1), 13-24. doi: 10.1016/j.nepr.2011.12.004
- Maré, G. (2001). Race counts in contemporary South Africa: 'An illusion of ordinariness'. *Transformation*, 47, 75-93.

- Maré, G. (2011). 'Broken down by race ...': Questioning social categories in redress policies. *Transformation: Critical perspectives on Southern Africa*, 77, 52-69.
- Marinova-Todd, S., Siu, C., & Jenstad, L. (2011). Speech audiometry on non-native speakers of English. *Canadian Journal of Speech-Language Pathology and Audiology*, 3, 220-227.
- May, W., Morgan, B., Lemke, J., Karst, G., & Stone, H. (1995). Model for ability-based assessment in physical therapy education. *Journal of Physical Therapy Education*, 9(1), 3-6.
- McDonald, J. (2009). *Handbook of Biological Statistics (2nd ed.)*. Baltimore, Maryland: Sparky House Publishing.
- McDonough, J., & Osterbrink, J. (2005). Learning styles: An issue in clinical education. *AANA Journal*, 73, 89-93.
- McKinney, C. (2007). Caught between the 'old' and the 'new'? Talking about 'race' in a post-apartheid university classroom. *Race Ethnicity and Education*, 10(2), 215-231.
- Moxley, A., Mahendra, N., & Vega-Barachowitz, C. (2004). Cultural competence in Health Care. *The ASHA Leader*, 6(7), 20-22.
- Muñoz, M., Watson, J., Yarbrough, L., & Flahive, L. (2011). Monolingual supervision of bilingual student clinicians: Challenges and opportunities. *The ASHA Leader*, 16(5), 26-27.
- Neuman, W. (2000). *Social Research Methods: Qualitative and Quantitative approaches* (4th ed.). Needham Heights, MA: A Pearson Education Company.
- Omeri, A., Malcolm, P., Ahern, M., & Wellington, B. (2003). Meeting the challenges of cultural diversity in the academic setting. *Nurse Education in Practice*, 3(1), 5-22.
- Onwuegbuzie, A. J., & Collins, K. M. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12, 281-316.

- Onwuegbuzie, A., & Johnson, R. (2006). The validity issue in mixed research. *Research in the Schools, 13*(1), 48-63.
- Organisation for Economic Co-operation and Development. (2008). *Review of national policies for education*. Retrieved from www.oecd.org/publishing/corrigena
- Painter, M. (2010). Tongue tied: the politics of language, subjectivity and social psychology in South Africa. (Master's dissertation). Retrieved from <http://umkn-dsp01.unisa.ac.za/handle/10500/3310>
- Pampel, F. (2008). *Towards evidence-based practice in the speech audiometric assessment of linguistic minorities*. (Undergraduate thesis). Retrieved from http://www.swarthmore.edu/SocSci/Linguistics/Theses09/Pampel_Faith.pdf
- Panday, S., Kathard, H., Pillay, M., & Govender, C. (2007). Development of a Zulu speech reception threshold test for Zulu first language speakers in Kwa-Zulu Natal. *The South African Journal of Communication Disorders, 54*, 111-119.
- Park, E., Betancourt, J., Minah, M., Kim, K., Maina, A., Blumenthal, D., & Weissman, S. (2005). Mixed messages: Residents' experiences learning cross-cultural care. *Academic Medicine, 80*(9), 54-59.
- Pascoe, M., & Norman, V. (2011). Contextually relevant resources in speech-language therapy and audiology in South Africa – are there any? *South African Journal of Communication Disorders, 58*, 12-19.
- Patton, M. Q. (2002). *Qualitative Research and Evaluation Methods* (3rd ed.). Newbury Park: California: Sage Publications.
- Penn, C. (2011). Cultural safety and the curriculum: Recommendations for global practice. *ASHA Perspectives on global issues in Communication Sciences and related disorders, 1*(1), 1-34.

- Penn, C., Mupawose, A., & Stein, J. (2009). From pillars to posts: Some reflections on community service six years on. *South African Journal of Communication Disorders*, 56, 8-16.
- Pillay, M., Kathard, H., & Samuel, M. A. (1997). The curriculum of practice: A conceptual framework for speech-language and audiology practice with a black African first language clientele. *South African Journal of Communication Disorders*, 44, 109-117.
- Pitkääjärvi, M., Eriksson, & E., K. P. (2011). Teachers' experiences of English-language-taught degree programs within health care sector of Finnish polytechnics. *Nurse Education Today*, 31(6), 553-557.
- Plano Clark, V., & Creswell, J. (2007). *The Mixed Methods Reader*. Thousand Oaks: Sage Publications.
- Polit, D., & Beck, C. (2004). *Nursing Research: Principles and Methods* (7th ed.). Philadelphia: Lippincott, Williams & Wilkins.
- Pulliam Phillips, P., & Stawarski, C. (2008). *Data collection: Planning for and collecting all types of data*. San Francisco: Pfeiffer.
- Ramachandran, V. (2011). Clinical Education in Audiology: A case of the emperor's new clothes. *Audiology Today*, 18-28.
- Ramkissoon, I., & Khan, F. (2003). Serving multilingual clients with hearing loss: How linguistic diversity affects audiologic management. *ASHA Leader*, 8(3), 10-11, 27.
- Read, B., Archer, L., & Leathwood, C. (2003). Challenging cultures? Student conceptions of 'belonging' and 'isolation' at a post-1992 university. *Studies in Higher Education*, 3, 261-280.
- Rubin, H., & Rubin, I. (2005). *Qualitative interviewing: The art of hearing data*. Thousand Oaks: Sage Publications.

- San Miguel, C., & Rogan, F. (2012). Clinical expectations: What facilitators expect from ESL students on clinical placement. *Nurse Education in Practice*, 12, 115 - 119. doi:10.1016/j.nepr.2011.10.008
- Sanders, C. (2003). Application of Colaizzi's method: Interpretation of an auditable decision trail by a novice researcher. *Contemporary Nurse*, 14(3), 292-302.
- Scott, I., Yeld, N., & Hendry, J. (2007). *Higher Education Monitor 6: A case for improving teaching and learning in South African Higher Education*. Pretoria: The Council on Higher Education.
- Seekings, J. (2008). The continuing salience of race: Discrimination and diversity in South Africa. *Journal of contemporary African studies*, 26(1), 1-25.
- Sennet, J., Finchilescu, G., Gibson, K., & Strauss, R. (2003). Adjustment of Black students at a historically White university. *Educational Psychology*, 23(1), 107-116. doi: 10.1080/0144341022000022988
- Sharts-Hopko, N. (2002). Assessing rigor in qualitative research. *Journal of the association of Nurses in AIDS care*, 13(4), 46-57.
- Shaya, F., & Gbarayor, C. (2006). The case for cultural competence in Health Professions education. *American Journal of Pharmaceutical Education*, 70(6), 124-132.
- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75.
- Sikakana, C. (2010). Supporting student-doctors from under-resourced educational backgrounds: An academic development programme. *Medical Education*, 44, 917-925. doi:10.1111/j.1365-2923.2010.03733.x
- Sivo, S., Saunders, C., Chang, Q., & Jiang, J. (2006). How low should you go? Low response rates and the validity of inference in IS questionnaire research. *Journal of the Association for Information Systems*, 7(6), 351-414.

- Solomon, P., Portelli, J., Daniel, B., & Campbell, A. (2005). The discourse of denial: How white teacher candidates construct race, racism and 'white privilege'. *Race Ethnicity and Education*, 8(2), 147–169.
- Splenser, P., Canlas, H., Sanders, B., & Melzer, B. (2003). Minority recruitment and retention strategies in Physical Therapist education programs. *Journal of Physical Therapy*, 17(1), 18-26.
- Statistics South Africa. (2004). *Census 2001: Census '96 and 2001 compared* (Report No. 03-02-04). Pretoria: Statistics South Africa.
- Statistics South Africa. (2012). *Statistical release (Revised): Census 2011* (Report No. P0301.4). Pretoria: Statistics South Africa.
- Stevens, G. (2003). Academic representations of 'race' and racism in psychology: Knowledge production, historical context and dialectics in transitional South Africa. *International Journal of Intercultural Relations*, 27(2), 189-207.
- Stewart, S., & Gonzalez, F. (2002). Serving a diverse population: The role of the speech-language pathology professional preparation programs. *Journal of Allied Health*, 31, 204 - 216.
- Stockman, I. J., Boulton, J., & Robinson, G. (2004). Multicultural issues in Academic and Clinical Education: A cultural mosaic. *The ASHA Leader*, 20, 6-7.
- Stockman, I., Boulton, J., & Robinson, G. (2008). Multicultural/multilingual instruction in education programs: A survey of perceived faculty practices and outcomes. *American Journal of Speech-Language Pathology*, 17, 241–264. doi: 1058-0360/08/1703-0241
- Stupart, D., Goldberg, P., Krige, J., & Khan, D. (2008). Does examiner bias in undergraduate oral and clinical surgery examinations occur? *South African Medical Journal*, 805-807.

- Strohschein, J., Hagler, P., & May, L. (2002). Assessing the need for change in clinical education practices. *Physical Therapy*, 82, 160–172.
- Swanepoel, D. (2006). Audiology in South Africa. *International Journal of Audiology*, 45, 262-266. doi: 10.1080/14992020500485650
- Tashakkori, A., & Teddlie, C. (2003). *Handbook on mixed methods in the behavioural and social sciences*. Thousand Oaks, CA.: Sage Publications.
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research: Integrating quantitative and qualitative approaches in the social and behavioral sciences*. Thousand Oaks, CA: Sage.
- Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods*, 1(1), 77-100. doi: 10.1177/2345678906292430
- ten Cate, O., & Scheele, F. (2007). Competency-based postgraduate training: Can we bridge the gap between theory and practice? *Academic Medicine*, 82(6), 542-548.
- Terre Blanche, M., & Durrheim, K. (1999). *Research in practice: Applied methods for the social sciences*. Cape Town: University of Cape Town Press.
- Terre Blanche, M., Durrheim, K., & Painter, D. (2006). *Research in Practice: Applied methods for the social sciences* (2nd ed.). Cape Town: University of Cape Town Press.
- Tomkins, C. (2006). An Introduction to Non-parametric statistics for Health Scientists. *University Alberta Health Sciences Journal*, 3, 20-26.
- Tye-Murray, N. (2009). *Foundations of Aural Rehabilitation: Children, adults and their family members* (3rd ed.). Delmar, New York: Cengage Learning.
- Walker, M. (2005). Race is nowhere and race is everywhere: Narratives from black and white South African university students in post-apartheid South Africa. *British Journal of Sociology of Education*, 26(1), 41-54. doi: 10.1080/0142569042000292707

- Wass, V., Roberts, C., Hoogenboom, R., Jones, R., & Van der Vleuten, C. (2003). Effect of ethnicity on performance in a final objective structured clinical examination: Qualitative and quantitative study. *British Medical Journal*, 326, 800-803.
- Watson, R., Atkinson, I., & Egerton, P. (2006). *Successful statistics for Nursing and Healthcare*. New York: Palgrave Macmillan.
- Wemmer, K. (2008). *Educating audiologists in South Africa: internationally recognized specialists or locally relevant generalists? A pilot study investigating the perceived adequacy of undergraduate programmes in South Africa and the need for educational reform*. (Doctoral dissertation). Retrieved from <http://wiredspace.wits.ac.za/handle/10539/4976>
- Wilkinson, B. R., & Payne, K. (2005). Effect of clinician's accent on verbal performance of preschool children. *ECHO: E-journal for black and other ethnic group research and practices in Communication Sciences and Disorders*, 1(2), 11-28.
- Winter, C. (2008). Effect of an undergraduate elective course, Cultural Diversity in Communication, on attitudes and behaviors of Communication Sciences and Disorders students: A pilot study. *Journal of Allied Health*, 37, 255-277.
- Wolf, K. (2004, April 13). Cultural Competence in Audiology. *The ASHA Leader*. Retrieved from <http://www.asha.org/Publications/leader/2004/040413/f040413b2.htm>
- Woolf, K., Cave, J., Greenhalgh, T., & Dacre, J. (2008). Ethnic stereotypes and the underachievement of UK medical students from ethnic minorities: Qualitative study. *British Medical Journal*, 337, 1-7. doi:10.1136/bmj.a1220
- Woolf, K., Potts, H., & McManus, I. (2011). Ethnicity and academic performance in UK trained doctors and medical students: systematic review and meta-analysis. *British Medical Journal*, 342, 1-14. doi:10.1136/bmj.d901



UNIVERSITY OF CAPE TOWN

Department of Health & Rehabilitation Sciences

Division of Communication Sciences & Disorders

Old Main Building · Groote Schuur Hospital · Observatory · 7925

Telephone: +27 21 406-6401

Fax: +27 21 406-6323

Appendix A: Permission for recruitment from Organization

Head of Department: University

Dear Sir/Madam

RE: Permission to Conduct Research Study

I am a Masters student in Audiology at the University of Cape Town, conducting research on the experiences and expectations of clinical educators of the clinical performance of Audiology students from diverse backgrounds. Clinical educators have been identified as playing a key role in helping students to successfully graduate with the clinical skills necessary to become competent professionals. I am writing to you to request your permission to contact all clinical educators working with Audiology students in your program to invite them to participate in this study. Staff employed by your university as well as those who work at the various Audiology clinical training sites and who provide Clinical Education to your students are eligible for participation in the study.

This research study, which has received ethics approval from the Faculty of Health sciences Human Research Ethics Committee, University of Cape Town (ref no. 424/2010), comprises two distinct phases. The first phase entails an initial and a follow-up questionnaire of approximately 25 and 10 minutes respectively.

Participants will be asked about their assessment of students, which will also require them to consult 2009 -2010 mark sheets which they used to record this information. I will not request the names of any student at any time during this study. You are assured that any publication of the results will in no way reveal the identity of the participants or the university.

There are no risks or benefits to participation in this study which is completely voluntary. It is hoped that the results might contribute to clinical training that optimizes the learning of diverse students in Audiology and the findings will be made available on request.

The researcher will be available to discuss any questions arising during the research process. Queries can also be referred to the researcher's supervisor, Dr. Shajila Singh or Prof M. Blockman (UCT Research Ethics Committee, marc.blockman@uct.ac.za).

Please may I ask that you consider my request favourably? If you agree, may I further request the name and contact details of a person/secretary with whom I may liaise to obtain the names of the clinical educators working with your students.

I will be happy to answer any questions you may have with regards to the project. I look forward to hearing from you.

Kind regards,

Nicola Keeton
Researcher/Audiologist
Email: nl.keeton@uct.ac.za
0741544304

A/Prof. S. Singh
Research Supervisor
Email: shajila.singh@uct.ac.za
021-406 6041



UNIVERSITY OF CAPE TOWN

Department of Health & Rehabilitation Sciences

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Telephone: +27 21 406-6401

Fax: +27 21 406-6323

Appendix B: Questionnaire Participant Consent Form

Clinical Educator: University of Cape Town

Dear Sir/Madam

RE: Information on Research study involving Clinical Educators

I am a Masters student in Audiology at the University of Cape Town. My research explores the experiences and expectations of clinical educators of the clinical performance of Audiology students from diverse race and language backgrounds. Clinical educators have been identified as playing a key role in helping students to successfully graduate with the clinical skills necessary to become competent professionals. The study comprises two distinct phases and I am requesting your participation in a questionnaire to be completed via email with all Audiology clinical educators as identified by the Head of Department at your institution. Attached you will find a copy of the questionnaire for your review.

If you agree to participate, you will initially complete a questionnaire via email which should take no more than 20 minutes of your time. This will then be followed up by a second questionnaire that should take no more than 10 minutes to complete via email. Please take time to read all instructions and questions carefully and do not hesitate to ask if you have any questions.

Participation is completely voluntary and you are under no obligation to take part. There are no repercussions in the decision not to participate and you may withdraw at any stage. You have a right to ask questions throughout the study. There are no personal risks involved in this study but it should be mentioned that the questions are designed to obtain information regarding educators' expectations of and attitudes towards students from different language and race backgrounds. This information might be perceived to be sensitive in nature. Every effort will be made ensure complete

confidentiality of responses and that the discussion will in no way reveal the identity of participants or the university. There is no financial benefit for being included in the research but findings will be made available on request. Results might add to the knowledge base in this field and help to increase the cultural awareness of clinical educators in South Africa to contribute to clinical training that optimizes the learning of diverse students. Effective training of Audiology students from different backgrounds might ultimately help to graduate professionals who will best be able to provide patient care to the diverse South African population.

At any point during the research process the researcher will be available to discuss any concerns you may have. Questions can be directed to the researcher (Nicola Keeton – Cell 0741544304), the researcher’s supervisor (Prof. S. Singh - Tel. 021 406 6041) or Prof M. Blockman (UCT Research Ethics Committee, marc.blockman@uct.ac.za).

This research study has received ethical clearance from the Faculty of Health sciences Human Research Ethics Committee, University of Cape Town.

Ethical clearance number: 424/2010

Participation in this study is accepted by the researcher as your **informed consent**. It is important that you understand the contents of this letter and that you know what is expected of you as a study participant and that you have had all your questions answered.

Thank you for considering participation in this study.

Kind regards,

Nicola Keeton
Researcher/Audiologist
Email: nl.keeton@uct.ac.za

A/Prof. S. Singh
Research Supervisor
Email: shajila.singh@uct.ac.za

Appendix C

Survey from Clouten et al. (2006)

Survey of Expectation of Clinical Instructors & Performance of Minority Students

In this survey, minority student refers to those who have cultural background from other than the United States and the rest is considered as majority (Caucasian). The ethnic background for the minority is divided into five groups: 1) Caucasian from outside the United States, 2) African-American, 3) Hispanic, 4) Asian/Pacific Islander and 5) others.

Please check all that apply or fill in the blanks.

Gender:

Female Male

Age:

20-29 30-39 40-49 50-59 >60

Ethnic background:

Caucasian Caucasian from outside the U. S. African-American Hispanic Asian/Pacific Islander Other_____

Years of Experience as Clinical Instructors: _____ years

Highest Degree Earned:

DPT Post-professional Degree Entry-level Master's Baccalaureate Associate Other

Q1. Have you experienced being a clinical instructor for minority student(s)?

Yes How many? (omit Q. 6) No (Omit Q. 2,3, and 7)

Q2. Did you note a difference in performance of "majority" vs. "minority" students?

Yes No

Q3. Ethnic background of the minority students: (Please check all that apply.)

Caucasian from outside of the U.S. African-American Hispanic Asian=Pacific Islander Other

Q4. Do you expect that the majority of students perform better than the minority students?

Yes No

For Q.5,6, & 7, refer to the attached generic ability form.

Q5. Weaknesses of the majority of students in general:

- | | |
|---|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| () a. Basic English skills | <input type="checkbox"/> Use of Constructive Feedback |
| () b. Accent | <input type="checkbox"/> Problem-Solving |
| () c. Others _____ | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Critical Thinking |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Others _____ |

Q6. Weaknesses of the minority students in general: (if you answered 'No' to Q1, please check item(s) based on your expectation.)

- | | |
|--|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| <input type="checkbox"/> a. Basic English skills | <input type="checkbox"/> Use of Constructive Feedback |
| <input type="checkbox"/> b. Accent | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> c. Others _____ | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Critical Thinking |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Others _____ |

Q7. Weaknesses of the minority students: (Please check all that apply.)

- Caucasian from outside of the U.S.

<input type="checkbox"/> Commitment to Learning	<input type="checkbox"/> Interpersonal Skill
<input type="checkbox"/> Communication Skills	<input type="checkbox"/> Effective Use of Time and Resources
<input type="checkbox"/> a. Basic English skills	<input type="checkbox"/> Use of Constructive Feedback
<input type="checkbox"/> b. Accent	<input type="checkbox"/> Problem-Solving
<input type="checkbox"/> c. Others _____	<input type="checkbox"/> Professionalism
<input type="checkbox"/> Responsibility	<input type="checkbox"/> Critical Thinking
<input type="checkbox"/> Stress Management	<input type="checkbox"/> Others _____

- African-American

<input type="checkbox"/> Commitment to Learning	<input type="checkbox"/> Interpersonal Skill
<input type="checkbox"/> Communication Skills	<input type="checkbox"/> Effective Use of Time and Resources
<input type="checkbox"/> a. Basic English skills	<input type="checkbox"/> Use of Constructive Feedback
<input type="checkbox"/> b. Accent	<input type="checkbox"/> Problem-Solving
<input type="checkbox"/> c. Others _____	<input type="checkbox"/> Professionalism
<input type="checkbox"/> Responsibility	<input type="checkbox"/> Critical Thinking
<input type="checkbox"/> Stress Management	<input type="checkbox"/> Others _____

- Hispanic

<input type="checkbox"/> Commitment to Learning	<input type="checkbox"/> Interpersonal Skill
<input type="checkbox"/> Communication Skills	<input type="checkbox"/> Effective Use of Time and Resources
<input type="checkbox"/> a. Basic English skills	<input type="checkbox"/> Use of Constructive Feedback
<input type="checkbox"/> b. Accent	<input type="checkbox"/> Problem-Solving
<input type="checkbox"/> c. Others _____	<input type="checkbox"/> Professionalism
<input type="checkbox"/> Responsibility	<input type="checkbox"/> Critical Thinking
<input type="checkbox"/> Stress Management	<input type="checkbox"/> Others _____

- Asian/Pacific Islander

<input type="checkbox"/> Commitment to Learning	<input type="checkbox"/> Interpersonal Skill
<input type="checkbox"/> Communication Skills	<input type="checkbox"/> Effective Use of Time and Resources
<input type="checkbox"/> a. Basic English skills	<input type="checkbox"/> Use of Constructive Feedback
<input type="checkbox"/> b. Accent	<input type="checkbox"/> Problem-Solving
<input type="checkbox"/> c. Others _____	<input type="checkbox"/> Professionalism
<input type="checkbox"/> Responsibility	<input type="checkbox"/> Critical Thinking
<input type="checkbox"/> Stress Management	<input type="checkbox"/> Others _____

- Other: _____
- | | |
|---|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Commitment to Learning <input type="checkbox"/> Communication Skills <input type="checkbox"/> a. Basic English skills <input type="checkbox"/> b. Accent <input type="checkbox"/> c. Others _____ <input type="checkbox"/> Responsibility <input type="checkbox"/> Stress Management | <ul style="list-style-type: none"> <input type="checkbox"/> Interpersonal Skill <input type="checkbox"/> Effective Use of Time and Resources <input type="checkbox"/> Use of Constructive Feedback <input type="checkbox"/> Problem-Solving <input type="checkbox"/> Professionalism <input type="checkbox"/> Critical Thinking <input type="checkbox"/> Others _____ |
|---|--|

Please suggest how the minority students could improve their weaknesses if any.

Thank you for taking the time to complete this survey.

University of Cape Town

Appendix D Questionnaire –Part 1

In this questionnaire, the categories for the four population groups as designated by the South African Statistics association (2009) will be utilized.

- 1) Black; 2) Coloured; 3) Indian or Asian; 4) White

For the purpose of this questionnaire it is important that you read through the following definitions so that you completely understand all terminology used.

Definitions:

Mother tongue: The language spoken most proficiently at home otherwise referred to as a first language or home language (Heugh, 2000).

Language of learning: The language of instruction at an institution of learning (Heugh, 2000).

Language proficiency in the language of learning: In this questionnaire you are requested to provide some information regarding student proficiency in the language of learning. The categories listed below have been adapted from the United States of American Interagency Language Roundtable levels (Foreign Service Institute, 2008) and should be used as a guide to help you to provide an estimated description of the students you teach. Please read through the categories below and feel free to ask the researcher if you are unsure. The following categories will be used in the study:

-
- **Advanced professional proficiency**
The speaker is able to use the language fluently and accurately on all levels.
 - **General professional proficiency**
The individual is able to speak the language with sufficient structural accuracy and vocabulary to participate effectively in most formal and informal conversations.
 - **Limited working proficiency**
The speaker can handle limited work requirements, needing help in handling any complications or difficulties and has a speaking vocabulary sufficient to respond simply with some circumlocutions. The speaker is able to produce the most elementary constructions accurately but does not have confident control of the grammar.

(Foreign Service Institute, 2008)

Generic abilities: A set of ten attributes, characteristics or behaviours, listed below, that are not part of a profession's specific core of knowledge and technical skills but are nevertheless required for success in the profession (May, Morgan, Lemke, Karst, & Stone, 1995).

Table 1:	
Generic Ability	Definition
1. Commitment to Learning:	The ability to self-assess, self-correct, and self-direct; to identify needs and sources of learning; and to continually seek new knowledge and understanding.
2. Interpersonal Skills	The ability to interact effectively with patients, families, colleagues, other health care professionals, and the community and to deal effectively with cultural and ethnic diversity issues.
3. Communication Skills	The ability to communicate effectively (i.e., speaking, body language, reading, writing, listening) for varied audiences and purposes.
4. Effective use of time & resources	The ability to obtain the maximum benefit from a minimum investment of time and resources.

- | | |
|---------------------------------|--|
| 5. Use of constructive feedback | The ability to identify sources of and seek out feedback and to effectively use and provide feedback for improving personal interaction. |
| 6. Problem-Solving | The ability to recognize and define problems, analyze data, develop and implement solutions, and evaluate outcomes. |
| 7. Professionalism | The ability to exhibit appropriate professional conduct and to represent the profession effectively. |
| 8. Responsibility | The ability to fulfil commitments and to be accountable for actions and outcomes. |
| 9. Critical Thinking | The ability to question logically; to identify, generate, and evaluate elements of logical argument; to recognize and differentiate facts, assumptions, and hidden assumptions; and to distinguish the relevant from the irrelevant. |
| 10. Stress Management | The ability to identify sources of stress and to develop effective coping behaviours. |

***Developed by the Physical Therapy Program, University of Wisconsin-Madison
May et al Journal of Physical Therapy Education 9-1 Spring 1995*

Instructions:

I am going to ask you some questions. For each section please signify the answer which applies to you or provide a comprehensive answer.

Biographical information:

In this section, you are requested to share some of your biographical information.

1. Sex:

Female Male

2. Age:

20-29 30-39 40-49 50-59 >60

3. Population group:

Black Coloured Indian/Asian White

4. Years of Experience as a Clinical Educator: _____ years

5. Have you attended any additional courses in Clinical Education?

Yes No

6. Your employment status:

6.1. Permanent employee of the University

6.2. An external clinical educator/ supervisor supervising students at a clinical site or school where you are employed as a clinician or therapist

7. Home Language/s: _____

8. Official language/s of learning and teaching at the university where you work: _____

Student profile:

In this section, you are requested to provide some information regarding the diversity of students you have supervised during the past year (2009/2010).

1. As a clinical educator – have you supervised student/s from diverse:

1.1. race backgrounds Yes No

1.2. language backgrounds Yes No

2.1. Please indicate which population groups of students you have supervised. Check all that apply and where possible give an estimate of the percentage (%) of students supervised across different clinics in each category over 2009/2010.

- Black _____ %
 Coloured _____ %
 Indian/Asian _____ %
 White _____ %

2.2 Please indicate the perceived level of language proficiency in the language of learning demonstrated by your students. Please take a moment to read through the rating scale provided above to ensure you are familiar with each of the categories.

Check all that apply and where possible give an estimate of the percentage (%) of students supervised in each category over 2009/2010.

- Advanced professional proficiency _____ %
 General professional proficiency _____ %
 Limited working proficiency _____ %

Expectations of student performance:

In this section, you are requested to provide some information regarding your engagement with students from diverse race and language backgrounds.

Please feel free to comment on your answers.

3.1.1 Do you expect a difference in the clinical performance of students from different race groups?

- Yes No

Comment:

3.1.2 Please provide the range of marks that you would expect students from different race groups to most likely obtain in their clinics:

E.g. 50% - 65%

- Black [-]
Coloured [-]
Indian/Asian [-]
White [-]

3.2.1 Do you expect that a student's proficiency in the language of learning will affect their clinical performance?

- Yes No

Comment:

3.2.2 Please provide the range of marks you would expect students in each of the following categories of proficiency in the language of learning to most likely obtain in their clinics:

- Advanced professional proficiency [-]
General professional proficiency [-]
Limited working proficiency [-]

Generic abilities:

In this section, you are required to provide information regarding your perceptions of generic ability strengths and weaknesses consistently demonstrated by students from different race and language backgrounds. Please refer to the attached generic abilities form when answering questions in this section and mark all that apply.

Please take the time to provide as realistic and accurate information as possible. Indicate all items that apply to students you have supervised over 2009/2010.

1. In terms of generic abilities what do you perceive to be the main weaknesses reflected by Black students:

- | | |
|---|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| <input type="checkbox"/> Accent | <input type="checkbox"/> Use of Constructive Feedback |
| | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Critical Thinking |
| <input type="checkbox"/> Not applicable | <input type="checkbox"/> None of the above |

Comment:

2. In terms of generic abilities what do you perceive to be the main weaknesses reflected by Coloured students:

- | | |
|---|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| <input type="checkbox"/> Accent | <input type="checkbox"/> Use of Constructive Feedback |
| | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Critical Thinking |
| <input type="checkbox"/> Not applicable | <input type="checkbox"/> None of the above |

Comment:

3. In terms of generic abilities what do you perceive to be the main weaknesses reflected by Indian or Asian students:

- | | |
|---|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| <input type="checkbox"/> Accent | <input type="checkbox"/> Use of Constructive Feedback |
| | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Critical Thinking |
| <input type="checkbox"/> Not applicable | <input type="checkbox"/> None of the above |

Comment:

4. In terms of generic abilities what do you perceive to be the main weaknesses reflected by White students:

- | | |
|---|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| <input type="checkbox"/> Accent | <input type="checkbox"/> Use of Constructive Feedback |
| | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Critical Thinking |
| <input type="checkbox"/> Not applicable | <input type="checkbox"/> None of the above |

Comment:

5. In terms of generic abilities what do you perceive to be the main strengths reflected by Black students:

- | | |
|---|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| <input type="checkbox"/> Accent | <input type="checkbox"/> Use of Constructive Feedback |
| | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Critical Thinking |
| <input type="checkbox"/> Not applicable | <input type="checkbox"/> None of the above |

Comment:

6. In terms of generic abilities what do you perceive to be the main strengths reflected by Coloured students:

- | | |
|---|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| <input type="checkbox"/> Accent | <input type="checkbox"/> Use of Constructive Feedback |
| | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Critical Thinking |
| <input type="checkbox"/> Not applicable | <input type="checkbox"/> None of the above |

Comment:

7. In terms of generic abilities what do you perceive to be the main strengths reflected by Indian or Asian students:

- | | |
|---|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| <input type="checkbox"/> Accent | <input type="checkbox"/> Use of Constructive Feedback |
| | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Critical Thinking |

- Not applicable None of the above

Comment:

8. In terms of generic abilities what do you perceive to be the main strengths reflected by White students:

- | | |
|---|--|
| <input type="checkbox"/> Commitment to Learning | <input type="checkbox"/> Interpersonal Skill |
| <input type="checkbox"/> Communication Skills | <input type="checkbox"/> Effective Use of Time and Resources |
| <input type="checkbox"/> Accent | <input type="checkbox"/> Use of Constructive Feedback |
| | <input type="checkbox"/> Problem-Solving |
| <input type="checkbox"/> Responsibility | <input type="checkbox"/> Professionalism |
| <input type="checkbox"/> Stress Management | <input type="checkbox"/> Critical Thinking |

- Not applicable None of the above

Comment:

Please take a few moments to share any challenging experiences you may have had when teaching and assessing students from diverse race and/or language backgrounds.

Please take a few moments to share any rewarding experiences you may have had when teaching and assessing students from diverse race and/or language backgrounds.

Thank you for taking the time to complete this questionnaire.

Appendix E
Questionnaire –Part 2

Student generic abilities and clinical performance:

In this section, you are required to provide and comment on actual clinical marks obtained by students from each population or language group you have supervised over the last year (2009/2010). It would be helpful if copies of student marks or mark sheets could be made available for this study. If this is not possible please take the time to go through as many student results as possible before giving your answer. Please have this information with you during the completion of the questionnaire.

Please take the time to provide as realistic and accurate information as possible. Space is provided for you to comment on any of your answers if you would like to.

1.1 Do you notice any difference in the final clinical marks obtained by students from different race groups?

Yes No Not applicable

Comment:

1.2 Please provide the range of marks which students from the following race groups actually obtained in your clinic/s in 2009/2010:

Black [-]
Coloured [-]
Indian/Asian [-]
White [-]

2.1 Do you notice that a student's proficiency in the language of learning has an effect on their final clinical marks?

Yes No Not applicable

Comment:

2.2. Please provide the range of marks that students in each of the following proficiency categories in the language of learning obtained in their clinic/s in 2009/2010:

Advanced professional proficiency [-]
General professional proficiency [-]
Limited working proficiency [-]

Thank you for taking the time to complete this questionnaire.

Appendix F

Questionnaire Adaptation

Questionnaire adaptation: Certain aspects of the questionnaire were adapted for the South African context and to address limitations noted by Clouten et al. (2006). Modifications and additions were also made to comprehensively answer the research question and to obtain a more complete picture of the phenomenon through probing for more details (Patton, 2002). General adaptations applied throughout the survey are described below while more specific revisions are discussed for each of the four survey sections detailed thereafter.

Modifications. The original study investigated two student groups: the majority being described as White Caucasian and the minority as all other population groups. The instrument was modified to include each of the four predominant race groups as described by the South African Statistics association (2009): 1) Black; 2) Coloured; 3) Indian; 4) White.

Additions. An addition to the Clouten et al. (2006) study needed to be made to more comprehensively investigate the potential effect of a student's language on the perception of their clinical performance. In South Africa a student's proficiency in the language of learning has been identified as a key factor in determining successful learning (Bangeni & Kapp, 2007) and as such has been included in the research aim. A number of items in this questionnaire, therefore, address students' proficiency in the language of learning.

In order to describe a student's proficiency in the language of learning, the Interagency Language Roundtable Scale (Foreign Service Institute, 2008) was adapted. The scale was first developed in 1985 by the U.S. government to effectively inventory foreign office employees' second language ability and has been modified to be used as a Language Proficiency rating for their staff (Foreign Service Institute, 2008). After careful consideration three of the five original levels that best suited the research needs were detailed to guide participants' description of students' spoken language fluency. Please see the table included in the questionnaire in Appendix 1 for a description of each level. The middle three levels were used in this study as they were determined to best characterise the level of proficiency most common to Audiology students in South Africa: advanced professional, general professional and limited working proficiency.

➤ Section 1 – Participant demographic information

Demographic information obtained from participants aided the researcher to describe the study population. Additions to this section included a request for information regarding the participant's employer i.e. either the University or the clinical training site. It has been suggested that individuals from these different groups may have different approaches to facilitating student learning (London

et al., 2002). Participants were also requested to provide information regarding their first language. They were also asked whether they have had any additional training in clinical teaching.

➤ Section 2 – Student profile

This section made provision for recording the demographic information of the students with whom participants worked. Questions were modified to make provision for recording the percentage of students from each race group and language proficiency category supervised during 2010.

➤ Section 3 – Expectations of student performance

Four items were added in this section to describe participants' expectations of the clinical performance of undergraduates: three questions focussed on students from diverse race backgrounds and the next two on those with different levels of proficiency in the language of learning. The following questions were included:

1. Do you expect a difference in the clinical performance of students from diverse [race or language] groups?
2. Please provide the range of marks that you would expect students from different [race or language] groups to most likely obtain in their clinics.

The open-ended question was adapted into two questions. One asks about challenging experiences and the other about positive experiences in teaching and assessing students from diverse race backgrounds and those with different levels of proficiency in the language of learning. The responses provided insights into participants' experiences in their own words.

Pilot study

- Participants commented that in attempting to categorise students in terms of language proficiency they could not accurately distinguish between “functional native” and “advanced professional” proficiency and were unable to successfully place students into one or the other group. The researcher reviewed the categories and noted that the “advanced professional proficiency” category adequately captured the description of a fluent first language speaker for the purpose of the study (Please see the table included in Appendix 1). The category of “functional native proficiency” was, therefore, removed.
- Pilot participants who had not supervised students from specific race or language groups felt that there was no place provided to convey this when completing the generic abilities checklists (See Appendix 1). An additional option of ‘not applicable’ was therefore added below the list of generic abilities.



Department of Health & Rehabilitation Sciences
Divisions of Communication Sciences & Disorders
Old Main Building · Groote Schuur Hospital · Observatory · 7925
Telephone: +27 21 406-6401
Fax: +27 21 406-6323

Appendix G: Interview participant consent form

Clinical Educator: University of Cape Town

Dear Sir/Madam

RE: Consent to participate in Research Study

Thank you for your participation in the initial questionnaire exploring the experiences and expectations of clinical educators of the clinical performance of Audiology students from diverse race and language backgrounds. In reviewing your responses, it became apparent that you have rich experiences and I would like to talk with you about these in greater depth. Would you be willing to extend your participation in this study – which will take the form of a semi-structured interview?

The interview should not take more than 40 minutes of your time, and will be scheduled at your convenience. Responses will be completely confidential and anonymity is assured. Confidentiality of the data will be vigilantly managed, with all quotes being anonymous in the publication. All raw data containing participant details shall be securely stored and destroyed after publication. You may be invited to participate in a second interview if further discussion is required. You will be asked to review a transcription of the interview and make changes if you so wish. You will also be provided with the opportunity to review the interpretation of the data to ensure that you have been accurately represented.

Participation is completely voluntary and you are under no obligation to take part. There are no repercussions in the decision not to participate and you may withdraw at any stage. You have a right to ask questions throughout the study. There are no personal risks involved in this study but it should be mentioned that the questions are designed to obtain information regarding educators' expectations of and attitudes towards students from different language and race backgrounds. This information might be considered to be sensitive in nature. Every effort will be made ensure

complete anonymity. There are no benefits for participating in the study, but the findings will be made available on request. It is hoped that the results may add to our knowledge base and help to optimize the clinical learning of students from diverse backgrounds.

The researcher will be available at any point during the research process to discuss any concerns you may have. Questions can be directed to the researcher (Nicola Keeton – Cell 0741544304), the researcher’s supervisor (Prof. S. Singh - Tel. 021 406 6041) or Prof M. Blockman (UCT Research Ethics Committee, marc.blockman@uct.ac.za).

This research study has received ethical clearance from the Faculty of Health sciences Human Research Ethics Committee, University of Cape Town.

Ethical clearance number: 424/2010

I, _____ have read the information above. I understand what it required of me and I have had all my questions answered. I do not feel that I am forced to take part in this study and I am doing so of out of my own free will. I know that if I wish I can withdraw from the study at any time with no consequences for me.

Signed:

Participant

Date and place

Researcher

Date and place

Appendix H Interview Schedule

As you know from answering the initial questionnaire my research is looking at Clinical Educators' experiences and expectations that arise from working with students from different race and language groups in clinics. Facilitating learning in clinics poses a number of challenges and unique situations for us especially now that the patients our students see are from such diverse cultural and language backgrounds. In this interview I would like you to take time to share your thoughts with me about supervising in this environment.

Firstly, what clinics are you responsible for supervising?

Can you describe an average day in your clinic?

I would like you to answer quite a broad question for me so take your time to think about it.

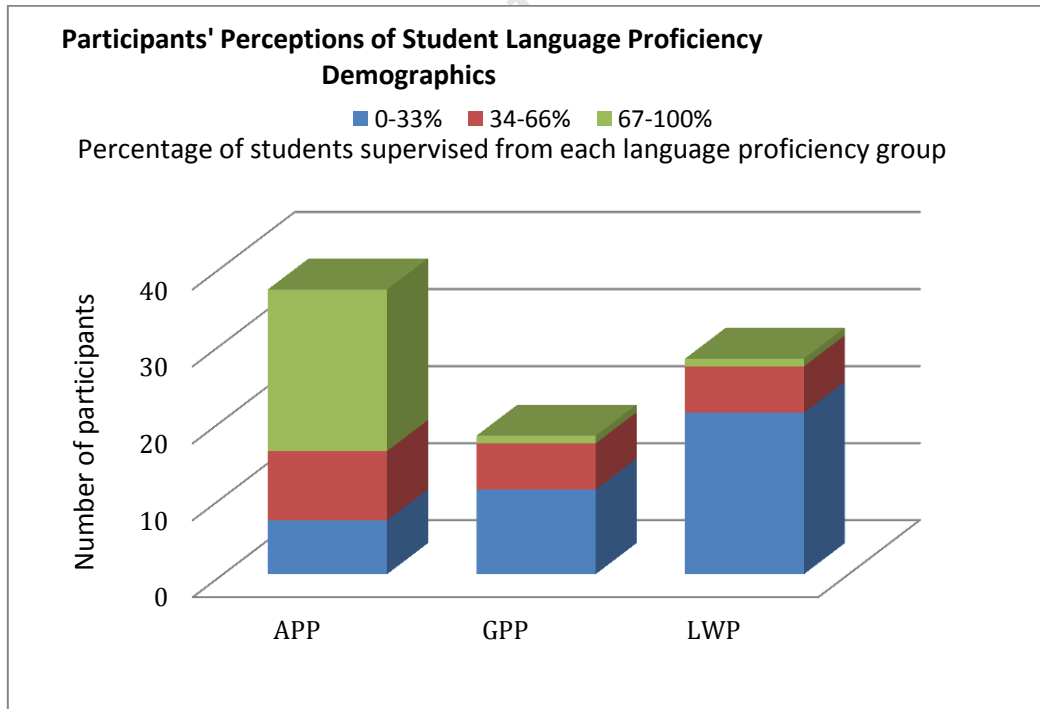
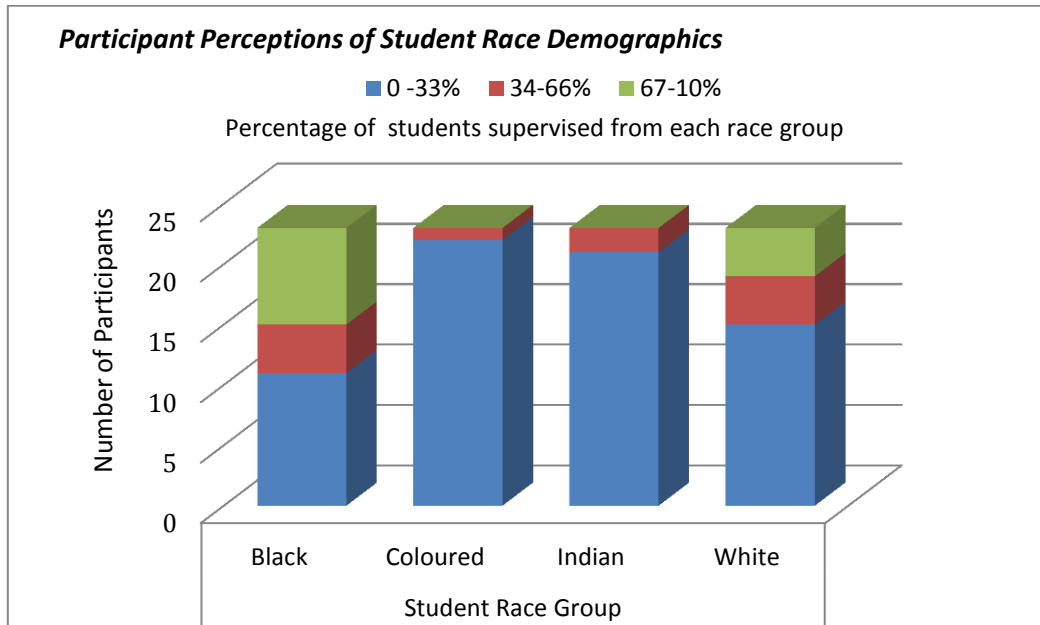
1. Describe some of your general experiences of supervising students from diverse backgrounds within a clinical setting.
 - PROBE:
 - Student backgrounds –what backgrounds do they come from? How does this affect their performance?
 - Specific examples
 - Challenges vs Rewards
2. Tell me about the clinical performance of students from diverse race and/or language groups.
 - PROBE:
 - Trends
 - Contributing factors (Schooling, Language, *Culture (respect, deadlines – WHY?, Funds, and resources)
 - Similarities vs differences
3. Describe how you teach clinical skills to students from diverse race and/or language backgrounds.
 - PROBE:
 - *Do you feel adequately prepared to supervise? In what ways did the supervision course you attended at the university help you to deal with the challenges you experience as a clinical educator -diversity?*
 - Influencing factors
 - Weak students
 - Patient vs student needs
4. Describe your experience in assessing students from diverse backgrounds in a clinical setting.
 - Tell me about challenges and/or rewarding experiences
 - Influencing factors
5. In what ways have your experiences shaped your expectations of the clinical performance of students from diverse race and/or language backgrounds?
 - Influencing factors

Is there anything else you would like to share with me?

Appendix I

Student Demographic Profile

When reading these results it should be highlighted that the information received is based solely on participant perceptions of students they had personally supervised during 2010 and not on actual programme enrolment data.



Note: APP = advanced professional proficiency; GPP = general professional proficiency; LWP = limited working proficiency

Appendix J

Expectations versus Perceptions of Clinical Performance

Participant Expectations versus Perceptions of Student Clinical Performance based on race and language proficiency level

<i>Participant expectations of clinical performance based on students' race versus performance as reflected in marks</i>					
		Performed differently (as reflected by marks)			Fisher's Exact Probability
		Yes	No	Total	<i>p</i> = .080
Expected difference in performance	Yes	7 (33.3%)	2 (9.5%)	9 (42.9%)	
	No	4 (19%)	8 (38.1%)	12 (57.1%)	
	Total	11 (52.4%)	10 (47.6%)	21 (100%)	
<i>Participant expectations of clinical performance based on the students' proficiency in the language of learning versus performance as reflected in marks</i>					
		Performed differently (as reflected by marks)			Fisher's Exact Probability
		Yes	No	Total	<i>p</i> = .202
Expected difference in performance	Yes	14 (66.7%)	4 (19%)	18 (85.7%)	
	No	1 (4.3%)	2 (9.5%)	3 (14.3%)	
	Total	15 (71.4%)	6 (28.6%)	21 (100%)	

Note: **p* < .05

Appendix K

Expected and Actual Marks: Language Proficiency

Expected and Actual Marks for Students with Different Levels of Proficiency in the Language of Learning

Proficiency Category	Min/Max	Category	<i>n</i>	Mean (SD)	<i>p</i> (2 tailed)
Advanced	Minimum	Expected	20	60.35 (7.26)	.859
		Actual	20	60.35 (7.26)	
Professional	Maximum	Expected	20	85.5 (9.72)	* .004
		Actual	20	78.55 (7.53)	
General	Minimum	Expected	19	58.58 (6.59)	* .012
		Actual	19	58.58 (6.59)	
Professional	Maximum	Expected	20	76 (11.43)	* .023
		Actual	19	69.42 (4.0)	
Limited	Minimum	Expected	15	48.53 (7.69)	* .024
		Actual	15	48.53 (7.69)	
Working	Maximum	Expected	20	63.5 (12.26)	.583
		Actual	15	60.93 (6.46)	

Note: **p* < .05

Appendix L

Expected and Actual Marks: Race

Comparison of Expected and Actual Mark Categories for Students from Different Race Groups

Race	Min/Max reported mark	Category	<i>n</i>	Mean (SD)	Significance <i>p</i>
Black	Minimum	Expected	21	45.81 (14.52)	.117
		Actual	21	50.52 (11.52)	
	Maximum	Expected	21	78.48 (11.19)	.185
		Actual	21	71.52 (9.43)	
Coloured	Minimum	Expected	18	46.39 (14.02)	* .007
		Actual	13	59.46 (8.72)	
	Maximum	Expected	18	78.33 (10.15)	* .023
		Actual	13	67.31 (5.69)	
Indian / Asian	Minimum	Expected	21	51.71 (15.66)	* .033
		Actual	20	61.5 (7.2)	
	Maximum	Expected	21	82 (8.89)	* .001
		Actual	20	73.2 (7.68)	
White	Minimum	Expected	19	48.16 (14.93)	* .014
		Actual	18	58.17 (7.3)	
	Maximum	Expected	19	82.37 (8.72)	* .008
		Actual	18	74.44 (6.8)	

*Note: * $p < .05$*