COMMUNICATION AS A CORE COMPETENCY:

FACTORS INFLUENCING HEALTH SCIENCE STUDENTS' ATTITUDES TOWARD DEVELOPING COMMUNICATION AS A CORE GRADUATE COMPETENCY

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DECLARATION

I certify that the work in this thesis entitled "Communication as a core competency: Factors influencing health science students' attitudes toward developing communication as a core graduate competency" has not previously been submitted for a degree nor has it been submitted as part of the requirements for a degree to any other university or institution other than the University of KwaZulu-Natal.

I also certify that this thesis is an original piece of research and that it has been written by me. Any help and assistance that I have received in my research work and the preparation of the thesis itself has been appropriately acknowledged.

In addition, I certify that all information sources and literature used are indicated in the thesis.

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Sheena Naidoo (Student No: 209506234)

26 July 2016.

DEDICATION

To my late grandfather Mr P. Juggernath,
for teaching me that it is not what you have in life
but what you choose to make of it.
Thank you for your inspiration and guidance.

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PRESENTATIONS

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ACRONYMS

CanMEDS	:	Canadian Medical Education Directives for Specialists
CHS	:	College of Health Sciences
CST	:	Communication Skills training
CBE	:	Competency Based Education
HPCSA	:	Health Professions Council of South Africa
HP	:	Health Professionals'
HSS	:	Health Science Students'
SRT	:	Social Representations Theory
UKZN	:	University of KwaZulu-Natal

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ABSTRACT

Communication is increasingly being recognized both nationally and internationally as a core graduate competency in the training of health professionals (HP). Initiated by the Canadian Medical Association as the now well-known CanMEDS; graduate competency frameworks represent a defining trend in medical training. This study concentrates on communication as a core competency. The aim of the study was to investigate factors influencing health science students' (HSS) attitudes toward communication skills training (CST). Objectives of the study were to investigate the influence of 1) demographic factors of level of training, language and gender, 2) perceptions about training, 3) levels of social anxiety and 4) cultural orientation on HSS attitudes toward CST.

Students' from eight different health professional training programmes within the College of Health Sciences (CHS) at a South African university were surveyed using the Communication Skills Attitude Scale (CSAS); Liebowitz Social Anxiety Scale (LSAS) and the Individualism-Collectivism scale (INDCOL). Qualitative questions aimed at understanding students' subjective views on learning communication were included in the questionnaire. Quantitative findings indicated that formal training, language and gender were each predictive of negative attitudes toward CST. Social anxiety was found to be associated to but not predictive of negative attitudes toward CST. Cultural orientation was found to be associated to and predictive of both positive and negative attitudes toward CST. Qualitative findings indicated that while students' were able to identify the importance of learning communication, they could not clearly specify what training in communication entailed.

The factors influencing HSS attitudes toward CST were understood according to Social Representations Theory (SRT) which explains how CST is framed according to students' cultural and normative criteria until they emerge with either positive or negative positions towards it. The findings of this study have implications for the teaching and learning of communication, for curriculum review and development, and for furthering research in the area of communication skills among HP.

CHAPTER 1

INTRODUCTION

BACKGROUND

A call for practitioner accountability. Never before has it been such a high risk to be a health professional (Frank, 2005). HP today are faced with increasing challenges in providing adequate services to patients, with failure to do so having repercussions to their credibility as competent practitioners. People seek out HP in times of great vulnerability and need. Patients' expectations of interactions with HP are likely to include feeling understood, alleviation from distress and leaving with a sense of enhanced understanding of their health situation. However, such basic and yet fundamental expectations are not always met, resulting in patient dissatisfaction.

A rise in healthcare user advocacy and empowerment (Bedlington, 2015; Roland, 2014) has led to an increase in patients' awareness of their rights as healthcare users and they are now much more able to identify poor healthcare service. On the other hand, practitioners continue to witness significant changes in the demographic, epidemiological, socioeconomic and technological environment (Frank & Snell, 2015; Frenk, Chen, & Bhutta, 2010) and these increasingly complex demands all serve to complicate the successful outcome of the patient-practitioner encounter.

It is this rise in public demand for practitioner accountability together with the acknowledgement of challenges experienced by HP in meeting patients' needs, that has been the primary driving force behind the paradigm shift toward competency based education (CBE) in HSS training (Carraccio, Wolfsthal, Englander, Ferentz, & Martin, 2002; Englander et al., 2013; Frank, 2005; Frenk et al., 2010) with the aim of producing HP that are better equipped at facing such challenges.

A move towards competency based education. In 1910 Abraham Flexner proposed a model of medical education that echoed a predominantly biomedical approach which focused on informative learning that aimed at producing expertise. The

Flexarian model prevailed for most of the 20th century however Flexner himself later recognized that the medical curriculum has given too much precedence to biological and scientific aspects of medicine over its social and humanistic aspects (Cooke, Irby, Sullivan, & Ludmere, 2006). The limitations of a predominantly biomedical approach to health education is increasingly being recognized as practitioner's who display poor team-work, focus on technical rather than contextual understandings of their patients and engage in episodic rather than continuous care (Bleakley, 2014; Frenk et al., 2010) are insufficiently meeting the needs of their work environment. For these reasons, curricula needs to be adapted toward a transformative rather than an informative learning process in which practitioners become equipped to identify and adjust to challenges while continually learning and adapting their competencies (World Health Organization, 2013).

Internationally, strides have been taken to develop core competency frameworks to guide CBE for medical students'. The most notable of these efforts being the Outcome Project of the Accreditation Council for Graduate Medical Education (ACGME) and the American Board of Medical Specialties (ABMS) in the United States of America (Swing, 2007), the Canadian Medical Education Directives for Specialists (CanMEDS) framework of the Royal College of Physicians and Surgeons of Canada (Frank & Snell, 2015), the Scottish Doctor Project in Scotland (Scottish deans' Medical curriculum group, 2007) and the framework for Undergraduate Medical Education in the Netherlands (Laan, Leunissen, & van Herwaarden, 2010). Whereas other health science disciplines such as nursing have been adopting CBE approaches in the training of their students' for decades (American association of colleges of Nursing, 1986, 1996, 2006, 2008, 2011), other health science fields such as dentistry are newer to the paradigm shift toward CBE (Rouse, 2012).

In South Africa, a workshop was held by the Health Professions Council of South Africa (HPCSA) subcommittee for undergraduate education and training in 2011. Representatives from medicine, dentistry and clinical associates were in attendance. The delegation submitted a recommendation to the board to adopt the CanMEDS core competency framework (Frank, 2005) in the future training of all medical, dentistry and

clinical associate students'. The College of Health Sciences (CHS) within the University of KwaZulu-Natal (UKZN) has made significant attempts to align all health science students' (HSS) education with the needs of the health system.

An initiative was undertaken by the UKZN CHS in 2014 to provide holistic student support, curriculum review and academic staff development with the overall aim of producing graduates that are socially accountable and competent. One of the outcomes of that initiative has been the adoption of the CanMEDS framework into the training of not only medical and dental students' but all HSS. There are currently only two universities within South Africa, Stellenbosch University (Van Schalkwyk, Louw, & Du Ploy, 2014) and UKZN (College of Health Sciences, 2014) which are known to have adapted the CanMEDS framework into the training of all undergraduate health science programmes.This framework outlines seven roles as core competencies; that of health- care professional, communicator, collaborator, manager, health advocate, scholar and professional (Frank, 2005). Of relevance to this study is the role of communicator as a core competency.

Communication as a core competency. Scholars have experienced significant challenges in reaching consensus on a concise definition of communication, owing to the complexities and blurred boundaries that this concept presents. Hargie and Dickson (2004) extract the following two central themes from the plethora of definitions available. This is that communication entails a striving toward understanding others as well as being understood (intersubjectivity), and that it involves a change in thoughts, feelings and behaviour when a message is received (impact). Regarding health communication specifically, Berry (2007) states that it entails the same aspects of human communication but with a focus on health related outcomes and factors that influence them.

The reason that the role of health professional as communicator is being emphasised as a core graduate competency, is because the consequences of poor communication and benefits of efficient communication for both patient and practitioner are increasingly being recognized. One of the primary reasons behind this recognition is

the increase in practitioner malpractice claims as patients become more aware of their rights, and subsequently the decrease in availability of malpractice insurance (Huntington & Kuhn, 2003; Kejawa, 2011; Malherbe, 2012). As early back as the 1990s, studies found that individual practitioner claims were not predicted by patient characteristics, illness complexity or even physician technical skills but rather by the practitioner's inability to communicate effectively, establish and maintain rapport (Entman, 1994; Hickson, Clayton, & Entman, 1994; Sloan, 1993). Research has indicated that good practitioner communication skills improve the overall patient-practitioner relationship, whereas poor communication skills decrease the strength and quality of the relationship (Wright et al., 2006).

Optimal patient-practitioner communication has also been found to have a favourable impact on the behaviour of patients, specifically with regards to improved adherence (Huntington & Kuhn, 2003; Schneider, Kaplan, & Greenfield, 2004; Zolnierek & Di Matteo, 2009). This is important as poor adherence is a significant problem in the healthcare context, spiralling into substantial cost for both healthcare provider and receiver (Shukla, Yadav, & Kastury, 2010). Research early on has shown that practitioners' attitudes toward their clients, their ability to elicit and respect patients' concerns, to provide appropriate information and demonstrate empathy, are all key determinants of good patient adherence (DiMatteo, 1994; Safran & Taira, 1998). Training practitioners to be effective communicators can thus be seen as a cost effective and preventative measure against non-adherence (Cegala & Marinelli, 2000; Jackson, Chamberlin, & Kroenke, 2001). This is important as adherence has a subsequent effect on health related outcomes. Research has indicated that while good patient-practitioner communication is associated with improved health related outcomes (Stewart et al., 2003), poor practitioner communication can lead to patients having an inaccurate understanding of their illness, which may subsequently lead to them making decisions based on unrealistic assumptions (Back & Baile, 2003).

Communication skills training in South Africa. Universities within South Africa are recognizing the importance of CST; however the implementation of formal training remains largely inconsistent. At the University of Limpopo (MEDUNSA)

undergraduate medical students' are introduced to procedural and communication skills separately, the focus is on history taking skills for the first three years and then broadens to include communication skills in the third year (Treadwell, 2015). At the University of Pretoria, the undergraduate medical and dental curriculum was reformed in 1997 to pay more attention to "soft skills" such as efficient communication to aid doctor patient relationships (Bergh et al., 2006; Kruger, Blitz-Lindeque, Pickworth, Munro, & Lotriet, 2005). At Stellenbosch University, the "Simulation in scenario" model is used to teach fourth, fifth and sixth year undergraduate HSS medical knowledge, teamwork and communication skills (Van Schalkwyk et al., 2014).

At UKZN, formal communication skills training has been implemented in the medical programme since 2010 in accordance with the CanMEDS framework. While the UKZN CHS adopted the CanMEDS framework for permission to use in all health science programmes in 2014 (College of Health Sciences, 2014), this has yet to be formally implemented. Nevertheless, all other health science programmes have had some form of informal CST, as their respective programmes have included aspects of communication skills training in teaching and assessment (Matthews & Naidu, in press).

RATIONALE FOR THE STUDY/PROBLEM STATEMENT

The present study forms a component of a larger study being conducted on "developing communication as a core graduate competency in Health Science Professionals education" (Matthews & Naidu, in press) which is part of an initiative by the UKZN CHS to develop graduate competencies in the training of HP. The findings of this study will thus contribute to the review and development of curricular in communication skills training (CST), within UKZN.

The focus of the present study is on HSS attitudes toward learning communication skills. This is deemed significant because while attitudes do not necessarily determine behaviour they can be considered a contributory factor towards behaviour and behavioural intentions (Chaiklan, 2011). Furthermore, explanations for disparities in communication between patients and practitioners have rarely been

provided as most studies have not investigated predictor variables in relation to communication skills (Schouten & Meeuwesen, 2006). Predictor variables are important as they provide an indication of causation and assist in understanding how attitudes toward CST are shaped. Potential predictor variables that will be investigated in the present study are participants demographic factors, CST received, levels of social anxiety and cultural orientation.

In terms of the influence of demographic variables on attitudes toward CST, female students' have been found to have more positive attitudes toward CST than male students' (Wright et al., 2006), younger students' have been found to have more positive attitudes than older students', and students' with a first language other than English have been found to have more negative attitudes toward CST (Rees & Sheard, 2002). The present study hypothesises that it will yield similar results.

An investigation into the influence of formal/informal CST participants already received, was necessary to determine the baseline of their exposure. It is hypothesised that those who have received formal CST will have more positive attitudes toward CST than those who received informal CST. A qualitative exploration of HSS perceptions of CST, its importance and relevance was also deemed to be necessary as the extent to which students' perceive CST as important, has been highlighted as an influential factor on their attitudes toward CST (De Villiers & Van Heusden, 2007).

As communication fundamentally involves social interaction which may be anxiety provoking to some students', social anxiety was investigated as a factor influencing HSS attitudes toward CST. Furthermore, HP have been shown to have an increased vulnerability to anxiety (Gundersen, 2012). Similar to patterns in the general population anxiety disorders are remarkably common amongst HP and even more so amongst students' (Reghurum & Mathias, 2014). The present study hypothesises that students' with significant levels of social anxiety will have negative attitudes toward learning communication skills and that students' anxiety will be related more to performance than social interaction anxiety.

Another core feature of student interaction with both peers in an educational setting and later on patients in a healthcare setting, is the evident diversity among participants. It was thus decided that cultural orientation would be investigated as a factor influencing HSS attitudes toward CST. According to Hofstede (1980) cultures can be understood along the dimensions of individualism and collectivism. People from individualist cultures tend to view the self as independent whereas people from collectivist cultures tend to view the self as interdependent.

The two dimensions of cultural orientation have been further defined by (Triandis, 1995) along vertical and horizontal sub-dimensions. Individuals who are more oriented toward horizontal individualism and collectivism tend to view others as similar and equal to the self while individuals who are more oriented towards vertical individualism and collectivism tend to view others as different and unequal to the self. Due to the apparent differences in approach towards relationships, the present study hypothesised that HSS with horizontal individualism and collectivism would have more positive attitudes toward CST, and that HSS with vertical individualism and collectivism would have more negative attitudes toward CST.

AIM AND OBJECTIVES

The aim was to investigate the factors influencing HSS attitudes toward learning communication. The objectives were to investigate the influence of:

1. Demographic factors (level of formal/informal training, language and gender),
2. Perceptions about existing training,
3. Levels of social anxiety,
4. Levels of cultural orientation, on HSS attitudes toward learning communication skills.

RESEARCH QUESTIONS

1. How are health science students' attitudes toward communication skills training influenced by training received, first language and gender?
2. What are health science students' views on the relevance of current training in communication skills
3. How are health science students' attitudes toward communication skills training influenced by social anxiety, and how is this moderated by first language and gender?
4. How are health science students' attitudes toward communication skills training influenced by cultural orientation, and how is this moderated by first language and gender?

CHAPTER 2

LITERATURE REVIEW

Attitudes can best be understood from a social psychological perspective which has dominated the field for decades. Understanding attitudes is important, for while they may not necessarily drive behaviour they have certainly been found to influence it. Students' may not become effective communicators based on their attitudes toward CST, but an understanding of their attitudes can provide an indication of how they may engage in the training. Given the importance placed upon attitudes, a review of literature on factors that influence the formation of attitudes is covered. There are undoubtedly many factors influencing attitudes toward learning CST, but students' demographic factors, levels of social anxiety and cultural orientation are considered in relation to the present study.

A SOCIAL PSYCHOLOGICAL PERSPECTIVE OF ATTITUDES

Research into attitudes has been central to social psychology for decades. Research into attitudes attempts to measure individual views and preferences (Potter, 1996). Attitude research was originally pioneered by Gordon Allport who provided the first comprehensive definition of attitudes in 1935 as being "a mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related" (p. 810). Foster (2008) deconstructed the original definition as including the following: a) it is an inner process which cannot be seen and therefore needs to be inferred from what an individual says or does, b) it is learned, c) it is able to inform action in one direction or another, d) it is organized and e) it is evaluative in that it makes judgements in a positive or negative manner.

Despite this holistic view of attitudes, other perspectives have taken a different stance by viewing them as being inherently individualistic and as directly driving behaviour. For example Anvik et al. (2007) defined attitudes as evaluations conducted during which one assigns either good or bad qualities to a topic, individual or

organization. Furthermore, attitudes comprise an affective component (how an individual feels), a cognitive component (how an individual thinks), and a behavioural component (how an individual acts). The definition excludes contextual influences that shape attitudes.

A rise of social constructionism in the 1980s and 1990s led to criticism of the predominant treatment of attitudes as personal possessions, as failing to adequately address the organization of attitudes into clusters and systems, and to acknowledge the evaluations and judgements made in everyday practice which shape attitudes (Wetherell & Maybin, 1996) . However, significant strides were taken by approaches such as social representation theory and discursive psychology to address these shortcomings in the conceptualization of attitudes (Potter, 1996).

One of the most important reasons for research into attitudes has been to develop techniques to change them (Potter, 1996). This has transcended the social and health sciences into business and marketing, as competitors attempt to persuade clients to opt for their products and services. However, this illuminates the main problem in attitude research, for attitudes do not necessarily reflect or direct behaviour. There is often a mismatch between what an individual says when confronted with an attitude survey, and what they do in practice (Potter, 1996). This does not render attitudes unnecessary as they are still considered to be an influencing factor toward behaviour, and skills are based on behaviour (Chaiklan, 2011). Understanding HSS attitudes toward communication skills is thus an important step in understanding the development of their communicative skills as HP.

STUDENTS' ATTITUDES TOWARD COMMUNICATION SKILLS TRAINING

Most researchers have investigated medical student's attitudes toward CST, with few studies investigating other HSS attitudes toward CST. There is variation in the amount and types of CST students' have been exposed to as well as the contexts from which they are trained. In a cross sectional study by Fazel and Aghamolaei (2011), first to seventh year medical undergraduates from an Iranian university in the East who had minimal to no exposure to CST, were found to have more positive than negative

attitudes toward CST. Likewise, a pre- and post-test study by Harlak, Gemalmaz, Gurel, Dereboy, and Ertekin (2008) found that 49 percent of first year medical undergraduates from a university in Turkey had a significant decrease in positive attitudes toward CST by the end of training. Cross sectional studies done by Cleland, Foster, and Moffat (2005) with a sample of first to third year medical undergraduates at a university in Scotland, and by Shapiro, Lancee, and Richards-Bentley (2009) with a sample of first to fourth year medical undergraduates at a university in Canada, found that students' displayed a decrease in positive attitudes and an increase in negative attitudes toward CST as they progressed in their relative medical programmes. Similarly, a pre- and post-test longitudinal study by Rees and Sheard (2003) found that first year medical undergraduates at a university in the United Kingdom, were found to have significantly lower positive attitudes toward CST at the end of the course. These findings thus appear to be consistent across Eastern and Western contexts.

Some researchers have suggested that students' tend to overestimate their communication skills at the start of training and subsequently through self-evaluation during training they begin to acquire a more realistic appraisal of their communication skills which leads to an increase in negative attitudes toward CST (Rees & Sheard, 2003; Shapiro et al., 2009). However, in general it appears that medical training has a negative effect on students' attitudes toward communication skills training. This is because medical education is still greatly entrenched with the predominantly biomedical approach of the Flexnarian model that emphasizes objectivity and technical skills at the expense of such humanistic skills as those required for efficient communication (World Health Organization, 2013). In this way, first year students' whose mind-sets have yet to be entrenched with the biomedical approach taken in medical training, typically have more positive attitudes toward communication skills than students' in later years.

While this trend of an increase in negative attitudes as exposure to CST increases appears to dominate, there are studies that yielded different results. For example, cross sectional studies done by Shankar (2013), with first through to fourth year medical undergraduates from a Caribbean Medical School, and by Wright et al. (2006) with a comparative sample of first and fourth year medical undergraduates at a

university in the United States, found that an increase in positive attitudes toward CST as measured at the end of their relative medical programmes. A possible explanation for these findings could be that the students' experiences in CST, for example seeing the benefits of effective patient-practitioner communication in the clinical setting, had a positive influence on their attitudes toward CST (Wright et al., 2006).

Similarly, in a pre- and post-test study, three different experiential CST methods were used on three groups of second year medical students' from a university in Finland, and in all studies students' were found to have an increase in positive attitudes and a decrease in negative attitudes toward CST by the end of their course (Koponen, Pyorala, & Isotalus, 2012). The authors' postulate that this is due to differences in CST as their study incorporated more experiential methods, for example by integrating visits to healthcare centres which facilitated students' realization of the importance of communication skills. In this way the integration of CST in the clinical context may have been more meaningful to students' in their sample. Research has shown that if the CST environment is too idealistic in comparison to the reality of the healthcare context, then students' attitudes toward CST and patient centeredness declines (Bombeke et al., 2011).

This is perhaps the case in the South African context as well, as a study by White, Kruger, and Snyman (2008) found that dental students' positively perceived CST after a course in communication. The authors also emphasized the importance of trust, empathy and active listening in establishing meaningful patient-practitioner relationships. The authors suggest that one of the reasons for students' positive perceptions toward CST after the course, was possibly due to the experiential approach that encouraged reflection of experiences in the learning process.

This study seeks to contribute to the limited research in this area in South Africa by investigating a sample of final year HSS at the UKZN CHS, attitudes toward CST. A consideration of factors that influence HSS attitudes toward CST is deemed significant as it will lend insight into how students' approach training, and ultimately contribute towards curriculum development in CST.

FACTORS INFLUENCING ATTITUDES TOWARD COMMUNICATION SKILLS TRAINING

In addition to investigating students' attitudes toward CST, researchers have also investigated the impact of various factors influencing those attitudes. Demographic factors such as age, gender and language are most investigated, thus these were investigated in the present study. However, other studies have highlighted factors such as students' parental backgrounds (Rees & Sheard, 2002), and students' personality dynamics (Molinuevo & Torrubia, 2013). Student's perceptions of CST are likely to influence their attitudes toward engaging in training, which is why HSS perceptions of the importance of communication skills will be explored. Social anxiety has been identified as prevalent among students' and the present study seeks to investigate its' influence on HSS attitudes toward CST. Lastly, due to the inherent diversity in South Africa, the influence of HSS individualist or collectivist cultural orientation on their attitudes toward CST was assumed to be important.

Demographic correlates of attitudes towards communication skills training. One of the most significant predictors of positive attitudes toward cst was found to be age (rees & sheard, 2002). Younger medical students' were found to have more positive attitudes toward cst than older students'. The authors suggest older students' may have developed their communication skills in a variety of settings outside their academic education, such as through previous employment. As a result they may overestimate their abilities and not value cst as much as younger students' who may have less experience (rees & sheard, 2002). However a study by shankar (2013) found that medical students' between the ages of 25-30 from first to final year of training were all found to have higher positive attitudes and lower negative attitudes toward cst. Such conflicting results suggest that while age may influence students' attitudes toward cst, it is likely joined by many other factors.

Regarding gender, majority of studies investigating medical student's attitudes toward CST in both western countries (Cleland et al., 2005; Koponen et al., 2012; Lumma-Sellenthin, 2012; Rees & Sheard, 2002; Shankar, 2013; Wright et al., 2006) and eastern countries (Fazel & Aghamolaei, 2011; Harlak et al., 2008), have found that

female medical students' have more positive and less negative attitudes toward CST in comparison to male students'. This is perhaps due to differences in learning styles (Loureiro, Severo, Bettencourt, & Ferreira, 2011). In a review of teaching and learning methods for communication, Aspergen (1999) found that male medical students' were slower at learning communication skills than the female students' in their study. In comparison, female medical students' have been found to be more open to information giving, partnership building and demonstrate a greater interest in psycho-social topics (Lumma-Sellenthin, 2012). Furthermore, female students' perceived that their communication skills required improvement whereas male students' were found to overestimate their competence, which was also reflected in the greater number of male students' that failed clinical exams (Rees & Sheard, 2003; Rees, Sheard, & McPherson, 2002).

Language appears to have many implications when it comes to communication. Practitioners need to be able to obtain and interpret information from patients, to understand their presentation and subsequently to explain the problem formulation and management in a manner that results in them leaving with an enhanced understanding of their situation (Hays & Pearse, 1996). This illustrates the importance of language in communication. However, the South African context is filled with linguistic diversity making interactions between student and educator and subsequently patient and practitioner ever more challenging (Diab, Naidu, Gaede, & Prose, 2013). For example, a study by Kruger et al. (2005) found that medical and dental students' at the University of Pretoria experienced great difficulty with both conversing and understanding in a language discordant simulated patient-practitioner scenarios'. Given the significant relationship between language and communication, it is plausible that language may influence students' attitudes toward CST. For example, research has shown that students' with a first language other than English experienced a greater increase in negative attitudes toward CST in comparison to students' with English as their first language (Rees & Sheard, 2002, 2003). It has been suggested that students' with a first language other than English perhaps feel that their needs are not met in the CST, subsequently leading to negative attitudes toward CST (Hays & Pearse, 1996; Rees & Sheard, 2002, 2003).

Students' perceptions of communication skills training. A primary misperception among students' is that communication skills are inherently innate, that one is either born with or without it, and that the ability to communicate cannot be taught (back & baile, 2003; cleland et al., 2005; rees & garrud, 2001). Conversely, white et al. (2008) stresses that the ability to communicate skilfully is rarely a gift that one possesses but rather one that is learned. The danger of misperceptions about cst is that even when students' realise its' importance, they may perceive it as something they already possess, as common sense or instinctively acquired, results in them undermining the relevance of training.

The predominance of a biomedical approach has resulted in "soft skills" such as communication being seen by many as an optional extra rather than a core clinical skill. This is further impaired by the fact that many health science educators have themselves been trained within a predominantly biomedical approach to health education (De Villiers & Van Heusden, 2007) and also not received any formal training in communication skills. In this way, educators may share many of the same misperceptions about communication skills training as their students' or worse, may believe that CST is not required given that they have managed without it. Interestingly, in the study conducted by Matthews and Naidu (in press), most UKZN CHS educators stated that while they were aware of the importance of communication skills as a core competency, they observed that this was not sufficiently conveyed to their students'.

Students' recognition of the importance of communication skills is required in order for training to be effective (Lumma-Sellenthin, 2013). However, the importance of CST has often been under appreciated. For example, research has shown that medical undergraduate students' do not recognize CST as a fully-fledged academic subject (Rees & Garrud, 2001), and that they do not perceive the need to improve communication skills which they feel they already sufficiently possess (Cleland et al., 2005). The extent to which students' feel the need to improve their communication skills has been highlighted as a factor influencing students' attitudes toward CST (De Villiers & Van Heusden, 2007). Indeed, previous studies (Langille, Kaufman, Laidlaw, Sargeant, & Macleod, 2001) have found that medical students' attitudes toward CST are

perhaps a significant indicator of the importance they place upon it. A study by Wright et al. (2006) found that in their sample of final year medical students' at a university in the USA, positive attitudes toward CST were significantly related to perceived importance of communication skills. Certain medical students' saw communication skills as easy and not worth investing time in during undergraduate training. This is possibly because CST was not examined in a manner that is perceived as important to students', such as written exams (Cleland et al., 2005; Rees & Garrud, 2001).

The fact that some studies found that students' do not fully appreciate the necessity of CST, does not imply that they will be averse to it once made aware. For example, a study conducted by Watermeyer (2011) with pharmacists working in South Africa, found that whilst some expressed lack of competence in communication ability, they also reported being unaware about CST available, and expressed a desire to improve their communication skills.

It is also important to consider the role that educators play in informing students' perceptions. Students' experiences with communication skills in their relative programmes are likely to influence their perceptions of issues pertaining to health communication (Humphris & Kaney, 2008). Research has suggested that negative attitudes toward CST are transferred from practicing and experienced HP to students' (Kassebaum & Cutler, 1998). Thus it may be that HSS are socialized into negative attitudes toward CST by medical staff and teachers who are trained biomedically (Cleland et al., 2005). It has been suggested both internationally (Lewin, Skea, Entwistle, Zwarenstein, & Dick, 2001) and in South Africa (De Villiers & Van Heusden, 2007) that educators adopting a patient centered approach in which effective communication plays a primary role, have a greater influence in conveying the importance of patient-practitioner communication. Educators who adopt a patient centered approach in which efficient patient-practitioner communication is essential, are likely to have a greater influence in conveying the importance of CST than those functioning within a biomedical framework (De Villiers & Van Heusden, 2007). Those educators who "practice what they preach", are thus likely to have a greater impact on

students' positive perceptions of CST, especially considering that students' may learn through modelling.

Social anxiety

A clinical psychology perspective. According to the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013), the defining feature of Social Anxiety or Social Phobia is marked by fear/anxiety about one or more social situation during which time an individual is exposed to potential scrutiny by others. Examples of such social situations include social interactions, being observed by others as well as performing in front of others. Other diagnostic features of social anxiety as outlined in the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 2013) are as follows: Individuals with social anxiety fear that they will act in a way that causes them to be negatively evaluated or judged. Social situations tend to always provoke fear/anxiety and these situations are either endured with concurrent fear/anxiety (e.g. out of fear that they may offend others) or they are avoided altogether (e.g. out of fear of rejection). Individuals who only experience anxiety occasionally in social situations would thus not have social anxiety disorder. However, the degree and type of fear (e.g. anticipatory fear, panic attack) may differ across contexts. The fear/anxiety experienced is grossly out of proportion to the actual threat posed by the social situation; nevertheless this fear/anxiety is persistent, lasting for a minimum of 6 months. The duration distinguishes the disorder from transient social fears. The fear/anxiety experienced is not attributable to another mental or medical condition.

There are two forms of social anxiety which can be delineated, general anxiety which relates to all social interactions and performance anxiety which is specific to behaviour carried out in front of others (Laidlaw, 2009). Performance fears are typically most impairing in individuals' professional lives and may manifest in work and academic settings. According to the American Psychiatric Association (2013) social anxiety typically causes clinically significant distress or impairment to individuals, affecting social, occupational and other areas of their lives. It is associated with decreased wellbeing, employment, workplace productivity and quality of life.

Social anxiety in tertiary students'. Students' with high levels of generalized social anxiety have been found to attain lower levels of education. Due to avoidance of social situations and fear of performance they are likely not to enter competitive medical programmes (Katzelnick et al., 2001; Laidlaw, 2009). However, social anxiety is often overlooked and underreported (Kashdan & Herbert, 2001; Muzina & El-Sayegh, 2001) which means that while invisible to many it may be prevalent in tertiary education settings (Russell & Shaw, 2009). It has been suggested by Liebowitz (2003) that people with social anxiety are often unaware of the extent of problems associated with their conditions and precisely how much it affects their lives. This is a concern as studies have shown that adults with social anxiety perform poorly on measures of educational and career attainment in comparison to their peers without social anxiety (Merikangas, Avenevoli, Suddhasatta, Zhang, & Angst, 2002; Stein & Stein, 2008).

Studies have found social anxiety to be prevalent in undergraduate medical populations (Finkelstein, Brownstein, Scott, & Lan, 2007; Loureiro, 2008; Russell & Shaw, 2009). A qualitative study by Russel (2008) suggested that their sample of undergraduate medical students' suffered from performance anxiety with 80 percent of students' reporting that their anxiety was related to fears of speaking up in seminars, lectures and groups. These students' reported using avoidance as a coping mechanism, either by making themselves inconspicuous and sitting in places where they thought they could avoid being asked questions, by rehearsing extensively to avoid appearing foolish, by getting peers to do the talking in exchange for written work or by not attending classes altogether (Russel, 2008).

The mean age of onset for social anxiety has been found to be around 15 years of age (Kashdan & Herbert, 2001) and it is generally accepted that social anxiety is more prevalent in the youth (American Psychiatric Association, 2013). However, contrary to expectations, levels of social anxiety have been found to be higher among older more mature students' in a study by Russell and Shaw (2009). This is likely due to the fact that social anxiety is a chronic unremitting problem that may extend into adulthood (Kashdan & Herbert, 2001). In keeping with this, a study by Tan et al. (2013)

on a sample of medical graduates from Malaysia found that 60.7 percent specifically had significant levels of work related performance anxiety. However this sample had just transitioned into apprenticeship which perhaps explains the performance anxiety as they adjusted to the new demands of the work environment. The presence of social anxiety among the present study's sample of final year HSS is thus a possibility.

Social anxiety and attitudes toward communication skills training. There are many qualities in individuals with social anxiety that may hinder the communication process. Individuals with social anxiety may be less assertive, excessively submissive or even more rarely highly controlling in conversations with others (American Psychiatric Association, 2013). They appear to be shy, withdrawn and closed in conversations however it should not be assumed that all individuals who display shyness are socially anxious. A study by Heiser, Turner, and Beidel (2003) found that 48 percent of college students' can be classified as shy but only 18 percent of those students' can be classified as having social anxiety. In terms of body language, individuals with social anxiety are likely to appear overly rigid, maintain inadequate eye contact and blush which is a hallmark physical response of this disorder (American Psychiatric Association, 2013). Such features may cause the other person in a conversation to feel uncomfortable.

Additionally, individuals who pursue medical degrees typically have conscientious and committed personalities with high expectations of themselves to perform (Riley, 2004) which can promote performance anxiety. Since medical education is primarily scientific in nature, it attracts students' that are more inclined towards and performed better in science based subjects at school. These students' are likely to be more averse to social and humanistic skills such as those encompassing CST. Given these qualities, those with social anxiety tend to focus only on negative aspects of interactive encounters and thus engage in protective measures such as avoidance. However these protective measures may initiate negative behaviours in others which then serve to reinforce individual faulty assumptions that social interaction should be feared, never challenged or corrected (Stein & Stein, 2008; Strahan, 2003).

The teaching of communication skills to medical students' often requires them to perform in front of peers or tutors (Rider & Keefer, 2006; Rodebaugh, Woods, Heimberg, Liebowitz, & Schneier, 2006). While the value of interactive methods in CST has been identified, it may be inherently stressful for students' with social anxiety, especially those methods which expose students' to interaction with strangers and the potential for criticism e.g. patient simulations (Laidlaw, 2009; Rees & Sheard, 2004; Russel, 2008; Russell & Shaw, 2009; Strahan, 2003; van Dulmen, Tromp, Grosfeld, ten Cate, & Bensing, 2007). Studies have indicated that the majority of their samples of undergraduate medical students' experienced anxiety in relation to communication (Radcliffe & Lester, 2003; Russel, 2008; Sayer, Saintonge, Evans, & Wood, 2002). In a study conducted by Loureiro et al. (2011) on a sample of third year undergraduate medical students' from a university in Portugal, positive attitudes toward communication skills were associated with low state anxiety, and negative attitudes were associated with mild trait anxiety.

A qualitative study by Russel (2008) suggests that anxiety related to communication can be performance centred. This appears to be due to a need to appear socially desirable (Loureiro et al., 2011). According to Russel (2008) medical students' find themselves in a competitive environment and thus avoid any signs of weakness so as to appear socially desirable. This was found to be particularly true for male students'. However, the impact of anxiety varied. Some participants stated that it acted as a motivator and in fact improved their performance, while others stated that anxiety was a hindrance to their interactive encounters.

Anxiety in relation to communication has also found to be centred on a fear of social interaction. For example, in a cross sectional sample of first to third year undergraduate medical students' from a university in the UK, Laidlaw (2009) found that 8 percent had significant levels of social anxiety and students' with higher levels of social interaction anxiety had more negative attitudes toward CST. Perhaps this is because individuals with social anxiety are less open to new social situations (Laidlaw, 2009) and tend to underrate their social performance (Strahan, 2003). A fear of social interaction has an inhibitory effect on students' abilities to effectively engage in an

educational setting, which results in their avoidance of speaking out or looking directly at unfamiliar people such as peers and educators (Russell & Shaw, 2009). Unfortunately, students' with social anxiety have been shown to be reluctant to seek help as it conflicts with their need to present a favourable public image and avoid embarrassment (Kashdan & Herbert, 2001).

Social anxiety and demographic factors. Social anxiety appears to be influenced by age and gender. In the United States the age of onset is between eight to fifteen years old with younger adults expressing higher levels of performance social anxiety. However the prevalence rates are reported to decrease with age (American Psychiatric Association, 2013). Additionally prevalence rates are reported to be higher among females in the general population than males (American Psychiatric Association, 2013; Lang & Stein, 2001; Merikangas et al., 2002). In a cross sectional study involving fourth year medical students', Laidlaw (2009) found that females had higher levels of anticipatory social interaction anxiety compared to males and that both had more negative attitudes toward communication skills training. This is perhaps because females are reported to have more social interaction fears than males, particularly with regards to performance situations (American Psychiatric Association, 2013; Turk, Heimberg, & Hope, 2001).

Cultural orientation. A definition of culture has been provided by sugai, o'keeffe, and fallon (2012) as the extent to which a group engages in behaviours that; reflect shared histories, serves to distinguish between groups, and predicts how one will act in specific situations. Culture is a multifaceted concept, difficult to define and even more so to measure. When it comes to culture, speaking of cultural differences is cautioned against as it may lead to stereotypical evaluations of "us" and "them" which poses a danger of viewing one as more superior than the other (howarth, 2011). This study thus understands culture along dimensions of individualism and collectivism rather than by for example, ethnicity or religion.

Individualism and Collectivism. These dimensions represent cultural variability and should be considered as continuous (figure 1).

INDIVIDUALISM	***Vertical Individualism***	***Horizontal Individualism***	***Horizontal Collectivism***	***Vertical Collectivism***	***COLLECTIVISM***

Figure 1: Cultural Continuum[i]

Thus no culture is considered as being purely oriented toward individualism or collectivism; rather any given culture may be seen as being more or less oriented towards individualism or collectivism than another culture. The concepts of individualism and collectivism were originally created by Hofstede (1980). *Individualism* has been described as a social pattern in which people perceive themselves as independent of social groups. In individualist cultures people are primarily driven by their own preferences, needs, rights, and the agreements they have established with others. They place priority on their own personal goals over the goals of others, and analyse the advantages and disadvantages of associating with others. *Collectivism* has been described as a social pattern in which people perceive themselves as part of one or more social groups such as families, colleagues, tribes et cetera. In collectivist cultures people are primarily driven by the norms of and obligations imposed by the social group, and are willing to give priority to the goals of the group over their own.

The following four defining attributes of individualism and collectivism have been outlined by Triandis (2001). Those more oriented toward individualism tend to perceive themselves as distinct and unique whereas those more oriented toward collectivism tend to perceive themselves as a member of a family or group. In relating to others, people from individualist cultures consider what they have to gain from the interaction whereas individuals who are more collectivist consider how the interaction will affect others. In terms of goals, those who are oriented toward individualism strive to succeed whereas those who are oriented toward collectivism aim to collaborate with

[i] Diagram adapted from Neuliep (2012, p. 48)

the group so they can succeed together. The behaviour of people who are more individualist is driven by a sense of entitlement to self-whereas the behaviour of people who are more collectivist is driven by a duty to their group.

Oyserman, Coon, and Kemmelmeier (2002) provide a cultural psychological perspective of individualism and collectivism as basic units of analyses. The core unit of analysis in individualism is that the individual and societies are viewed as existing to promote the wellbeing of individuals. Individuals are seen as separate from others. The core unit of analysis in collectivism is the group, and societies are viewed as existing for individuals to fit in with them. Individuals are seen as inextricably linked to one another. Given these differences in approach to social interaction, one's individualistic or collectivistic disposition may affect how one communicates. In a comprehensive review Oyserman et al. (2002) summarized the behavioural traits associated with individualism and collectivism. Of relevance to communication is that individualists have a high self-esteem, are at ease when interacting with strangers and direct in their communication style whereas collectivists are sensitive to rejection and embarrassment, prefer in-group relationships and tend to have indirect communication styles.

According to Singelis, Triandis, Bhawuk, and Gelfand (1995) there are different kinds of individualism and collectivism which can be understood according to horizontal and vertical dimensions that have been categorized into the following four combinations. Firstly there is *horizontal individualism* in which the self is understood as independent and the same as others. While the self is valued as autonomous it is considered to be more or less equal in status to others. Second is *vertical individualism* in which the self is understood as independent and different to others. Here the autonomous self is also valued but is considered to be different and unequal in status to others. Third, there is *horizontal collectivism* in which the self is understood as interdependent and the same as the self of others. The self is considered to be a member of a group in which members are similar to one another, there is thus a sense of social cohesion and oneness with members of the group. Fourth, there is *vertical collectivism* in which the self is perceived as interdependent and different to others. The self is considered to be an integral part of the group but members are viewed as different from

one another with some having more or less status as others. Here, emphasis is placed on serving and sacrificing for the benefit of the group by performing one's duty. Thus the horizontal dimension views the self as the same and the vertical dimension views the self as different.

Extensions of cultural orientation: Power distance and priming. A vast amount of research has been conducted by psychologists, anthropologists, sociologists and communication researchers alike which has extended the understanding of dimensions of cultural variation (Neuliep, 2015). Cultural context is possibly the most influential factor on communication, as it provides a framework within which one is conditioned on how to think, feel, act and interact (Neuliep, 2015). It is becoming increasingly evident that interpersonal communication is dependent upon the cultural context in which it occurs (Neuliep, 2015).

Recent research by Oyserman (2015) has involved the notion of priming which suggests that since they are rooted in social structures and relationships, cultural mindsets such as individualism and collectivism are accessible in everyday situations, and the mindset an individual chooses to adopt for any given situation depends on specific contextual cues. In line with this, Neuliep (2015) has outlined contextual cues such as the physical location of the interaction (e.g. the classroom), sociorelational cues (e.g. the relationship between student and educator), and perceptual cues (e.g. an individual's attitudes, cognitions and motivations). Individualist and collectivist orientations activate relevant knowledge about the social and physical world (Oyserman & Lee, 2008). When cognitive resources come to the fore and individualism is cued, the focus becomes separating the self from others. Conversely, when collectivism is cued, the focus becomes connecting and integrating the self with others. Of great importance is that these two types of cultural orientations should not be regarded as opposites, nor should individuals be considered as purely one or the other (Neuliep, 2015). Most people carry tendencies of both, however it is usually one that tends to dominate the other (Triandis, 2001). Individualism and collectivism may thus co-exist within an individual and one may be triggered more than the other, depending on the given social

context and social relations (Green, Deschamps, & Paez, 2005). For example, the same individual may be more collectivistic at home, and more individualistic at college.

The issue of inequality exists at some level in virtually all cultures (Neuliep, 2015). In terms of inequality Hofstede (1980) spoke of power distance which is defined as the extent to which less powerful members accept and expect the unequal distribution of power. Power distances can be seen in families, institutions, organisations and/or countries. Hofstede (1980) categorized individualist cultures as having small power distances and collectivist cultures as having large power distances. Individualist cultures with small power distances emphasise that inequalities among individuals should be minimized and there should be interdependence between the less and more powerful. In an educational setting, students' would acknowledge that educators' have more power but would not regard their power as absolute, they would be active members of the class and challenge the educator as deemed necessary. Conversely, in collectivist cultures with large power distances inequalities are expected and desired. Individuals that are less powerful are expected to be dependent upon those that are more powerful. In an educational setting students' would regard educators as they would their parents, with absolute power, and would treat them with honour, respect and obedience in return.

Cultural orientation and attitudes toward communication skills training.

The exchanges that take place when people communicate is a deeply cultural process in terms of how they converse, and how they interpret actions in patterned ways (Tracy, 2002). In this way, individuals from the same culture will be able to easily access the nuances characteristic of communicative behaviour in their culture. Conversely, the opposite holds true for individuals from different cultures. Indeed, even attitudes appear to differ along the dimensions of between individualism and collectivism. According to Triandis (1995) those who are oriented toward collectivism favour attitudes which reflect sociability, interdependence and family integrity whereas the attitudes of those who are oriented toward individualism are geared toward self-reliance, hedonism, competition and emotional detachment from in-groups. If culture affects an individual's perception and description of the world, it thereby also affects what we mean and how we communicate what we mean (Bond & Leung, 2009; Horner, 2011). Thus,

communication in turn differs between people from individualist and collectivist cultures.

According to Schouten and Meeuwesen (2006), the rules for communication as well as actual communication behaviour differs in individualist and collectivist oriented cultures. Individuals who are orientated towards collectivism are less assertive and direct in conversations in comparison to individualistically orientated individuals (Holtgraves, 1997; Zane, Sue, Hu, & Kwon, 1991). Additionally, people from collectivist cultures have been found to pay more attention to situational and paralinguistic cues whereas people from individualist cultures tend to neglect these cues and focus more on the content of the messages being conveyed (Nisbett, 2003; Triandis & Trafimow, 2001).

Communication in collectivist cultures emphasize context, the expression of concern and avoidance devaluation of others, whereas individualist communication emphasizes content and clarity (Triandis, 1995). Collectivists tend to use notions of duty and obligation to persuade others, while individualists use arguments that point to unfavourable circumstances (such as threats) to persuade others in communication (Gudykunst & San Antonio, 1993). If attitudes differ between individualists and collectivists and communication differs between the two as well, then it is likely that HSS attitudes toward CST are likely to differ, depending on their cultural orientation

Interactions between individualist and collectivist oriented cultures who do not share the same grounds for communication have been defined as intercultural communication, and interaction within either of the two who share the same grounds for communication have been defined as intracultural communication (Matsumoto, Leroux, & Yoo, 2005). One of the unique aspects of intercultural communication is uncertainty and ambiguity concerning the ground rules for the interactive encounter (Gudykunst & Nishida, 2001). Another unique aspect of intercultural communication has been said to be the inevitability of conflict and misunderstandings in interactive encounters as there is a high possibility that the behaviours of one do not conform to the other, which possibly results in negative interpretations of transgressions against one's value system

(Matsumoto et al., 2005). Anticipation of aspects such as uncertainty, ambiguity, conflict and misunderstandings inherent in intercultural communication may lead HSS to have negative attitudes toward communication.

The complexities of culture and diversity of the modern world makes the training of HSS in alignment with the needs of the healthcare system ever more challenging. According to Diab et al. (2013), staff and students' at UKZN are diverse in terms of language, ethnicity and socio-cultural backgrounds which predictably makes teaching and learning challenging. Furthermore educators are required to prepare students' to service patients that also come from diverse backgrounds. These challenges to interaction in the healthcare context can be aided through the development of communication skills among HSS (Diab et al., 2013).

Cultural orientation and demographic factors. Certain characteristics of individual lives such as age, education and occupation, have found to be associated with cultural orientation. As people age, they establish more social relations, become more embedded in society and have an increased understanding of others in context (Triandis, 1995). Research has shown that people tend to become more oriented towards collectivism as they age (Gudykunst & San Antonio, 1993). Education appears to affect cultural orientation as well as it generally leads to greater exposure to cultural diversity. Research has shown that the more traditionally educated a person is, for example through exposure to Sunday school or Madressa, the more collectivist that person becomes (Triandis & Singelis, 1998). Occupations have been shown to influence cultural orientation as it requires one to either work in solitude or in teams. Triandis (1995) explains that the more teamwork one engages in, the more attention they pay to the needs of others and thus the more they move toward collectivism.

Research into linguistic relativity, at times referred to as the Sapir-Whorf hypothesis, has postulated that language influences aspects of cognition, but is by no means determinative of it (Kurcz, 2000). According to Cass et al. (2002) differing modes of discourse, values and beliefs about health and illness lead to problems in intercultural patient-practitioner communication. In a South African study De Villiers

and Van Heusden (2007) identified that language and cultural differences need to be addressed in CST. The majority of healthcare interactions in South Africa take place across cultural and linguistic boundaries. Some healthcare sites have been found to have about 5 percent of doctors that are able to converse and conduct interaction in the same language as majority of their patients (Penn, 2007; Schwartz, 2004).

CONCLUSION

Attitudes have been shown to be best understood via a social psychological approach in which they are viewed as influencing, but not driving behaviour. Many factors may contribute to students' positive or negative attitudes toward CST. However the present study has focused in on demographic factors (age, language and gender), social anxiety and cultural orientation which have been outlined in the literature as factors influencing interpersonal interaction. Students' perceptions and misperceptions about the training itself has also been outlined as an important factor influencing attitudes toward learning communication. An understanding of how attitudes toward CST are shaped has ramifications for furthering research into this area and well as curricular development.

CHAPTER 3

THEORETICAL FRAMEWORK

Various theories were considered for use in the present study. These included theories of communication (Berry, 2007; Hargie & Dickson, 2004) and learning theories (Illeris, 2009). However these theories mostly explored how communication is learnt, whereas this study required a theory that explores how attitudes toward learning communication are shaped. Attitude research has predominantly been investigated within the field of social psychology and thus theories within this field were considered. Additionally, the key constructs being investigated in this study, that of cultural orientation and social anxiety, fundamentally concern social aspects of interaction. Theories of social psychology can be found across all major levels of analyses i.e. the biological, cognitive, motivational/affective, interpersonal and cultural/group levels of analyses. Theories at the cultural or group level are concerned with the study of how thoughts, feelings and subsequently behaviour are influenced by the actual, implied or imagined presence of others. It is within this scope that Social Representation theory (SRT) most suitably addresses how internal dynamics such as those encompassing attitudes, are influenced by social factors such as cultural orientation and social anxiety and group perceptions as is the case in the current study.

SOCIAL REPRESENTATION THEORY

The concept of *collective* representations was introduced by Emile Durkheim in 1898. It fell into disuse for 50 years until it was renewed by Serge Moscovici in the 1960s and subsequently underwent metamorphosis into Social Representation theory (SRT). The two fundamental changes are outlined by Rateau, Moliner, Guimelli, and Abric (2011) as follows: Firstly, representations became reconsidered not as the product of society as a whole but of social groups who build society. Secondly, communication became the focal process through which social representations emerged and were transmitted.

There is no one definition of social representations, which has resulted in differences in definitions used by advocates of the theory. This is perhaps because Moscovici's definitions of social representations have altered in his work across the decades (Moscovici, 1973, 1988, 2000). Nevertheless, amidst these varying definitions the key features of social representations are that they are systems or networks of values, ideas and practices that serve two core functions. Firstly is to enable individuals to orientate themselves in the material and social world and to master it. Secondly is to facilitate communication among members of a social group by providing them with a code for social exchange.

There are three main perspectives of SRT; the Sociogenetic model which has been primarily extended by Moscovici (2000), the Structural model (Abric, 2001) and the Sociodynamic model (Clemence, 2001). Of relevance to the present study is the Sociogenetic model which provides a holistic view of the way in which social representations are shaped whereas the other two models each focus on only one of the two processes of discourse (anchoring and objectification) of the Sociogenetic model.

Moscovici's primary intention when developing SRT was to propose a description of the sociogenesis and development of social representations (Rateau et al., 2011). The emergence of a social representation always coincides with the emergence of a new *social object* which is an unprecedented situation, unknown phenomena or unusual event. This unfamiliarity leads to a process of *discourse* which refers to the communication that occurs between individuals and is maintained by broader structures such as political views and the media (Wagner et al., 1999). In SRT discourse occurs through two overarching processes of anchoring and objectification.

The stage of objectification saturates a new idea or social object that is unfamiliar with the individual's existing knowledge base/reality and in so doing transforms the social object into the very essence of that reality (Moscovici, 2000). This process occurs through a variety of simultaneous processes. Firstly, an individual is faced with the *dispersion of information*. Given the new nature of the event/phenomenon, the assumption is that known information about it is limited,

incomplete or widely spread throughout different social groups involved with its emergence. Secondly, the level of uncertainty generated by the presence of an unfamiliar phenomenon leads to a process entitled the *inference pressure phenomenon*. During this process, the uncertainty leads to the arousal of concern and worry which in turn motivates the individual to engage in intense cognitive activity in order to grasp, understand, control and even defend against the uncertainty. Thirdly, through a process called *selective construction* different characteristics are taken out of context and sorted according to cultural and normative criteria. Fourth, is the formation of a *figurative core* which is a coherent visualization that reproduces the object into a concrete and selective manner.

This stage involves the anchoring of the new social object in order to reduce it into ordinary categories and thus familiarize it (Moscovici, 2000). Through a process called the *focalization phenomenon*, the information, beliefs, hypotheses or speculations that are shared among group members lead to the emergence of majority positions in social groups which are facilitated by the fact that individuals selectively deal with information, focusing on aspects that meet the expectations and orientation of the group. The interpretation of the social object extends to anything that remotely concerns it and will be integrated in different ways, depending on the social group.

SOCIAL REPRESENTATION THEORY AND COMMUNICATION

Communication has a central role in SRT. The way in which we view and represent ourselves i.e. our identities, the content and manner with which we communicate with and about others, all serve to demonstrate how identity, culture and representations are essential components of the social psychological process of communication (Howarth, 2011). Social representations are created by individuals in order to understand various phenomena in their social reality and it is through communicating these social representations with others that their value systems, ideas and practices are converted into social reality - both for themselves and for others (Howarth, 2011). Primary communication (e.g. daily debates and conversations) and secondary communication (e.g. mass communications, scientific debates) encourage both stability and containment or resistance and change in knowledge creation (Hall,

1997). The transformation of knowledge occurs across different social groups according to the interests and concerns of the group (Duveen, 2008). The same can be said for individuals within the social group who reorganise, deduce new meaning and represent knowledge in a manner that is consistent with the development of the self (Howarth, 2006).

SOCIAL REPRESENTATIONS AND ATTITUDES

Traditionally attitudes have been considered as more of an individualistic concept whereas social representations, as the name infers, is more of a socio-cultural concept. However theorists have been investigating the relation of social representations to attitudes (Bidjari, 2011; Fraser, 1994; Gaskell, 2001) and the possibility of bridging the gap between attitudes and social representations has been suggested. The view is that in order to express an attitude toward an object one needs to first have a representation of it (Rateau et al., 2011). Social representations can thus be seen as providing a basis upon which attitudes are formed.

THE POLITICS OF SOCIAL REPRESENTATIONS

Social representations may be hegemonic i.e. politically or culturally dominated. This is reflected in its two overarching processes. The media plays a significant role in the construction, distribution and discussion of representations and images at their foundation (Hall, 1997). This occurs through communicative exchanges across social, political, scientific and religious communities, across cinema, literature and theatre (Moscovici, 2001).Through the process of objectification, these images become constitutive elements of social and ideological reality rather than simply elements of thought (Howarth, 2011). The implication of this ideological construction is that the media's role in the production of social representations may favour the interests of some over others and in so doing sustain systems of inequality and power (Howarth, 2011)

Additionally, the process of anchoring has too often been narrowly interpreted as only being an individual psychological process (Howarth, 2006), however it is simultaneously a profoundly ideological process. As the unfamiliar is made familiar in

the process of anchoring, representations are modified. For example, an analysis by Augoustinos and Riggs (2007) illustrated how through everyday conversation contemporary representations of culture are anchored in the category of old and discredited social Darwinist notions of biological hierarchy which present aboriginal cultures as primitive and white cultures as modern and advanced.

Considering the influence of these social dynamics on the very processes of objectification and anchoring, it is important to consider how their interplay may influence the production of HSS social representations of CST. This is important as it is during the sociogenesis of communication that social representations are most ideological, pervading social institutions, political debates et cetera (Howarth, 2011). It is also where we are able to view the prioritization of different practices and values over others. This reflects how the prevailing biomedical approach to health professional education is prioritized over the incorporation of humanistic approaches, fortunately this is gradually changing.

APPLICATION OF SOCIAL REPRESENTATION THEORY TO STUDY

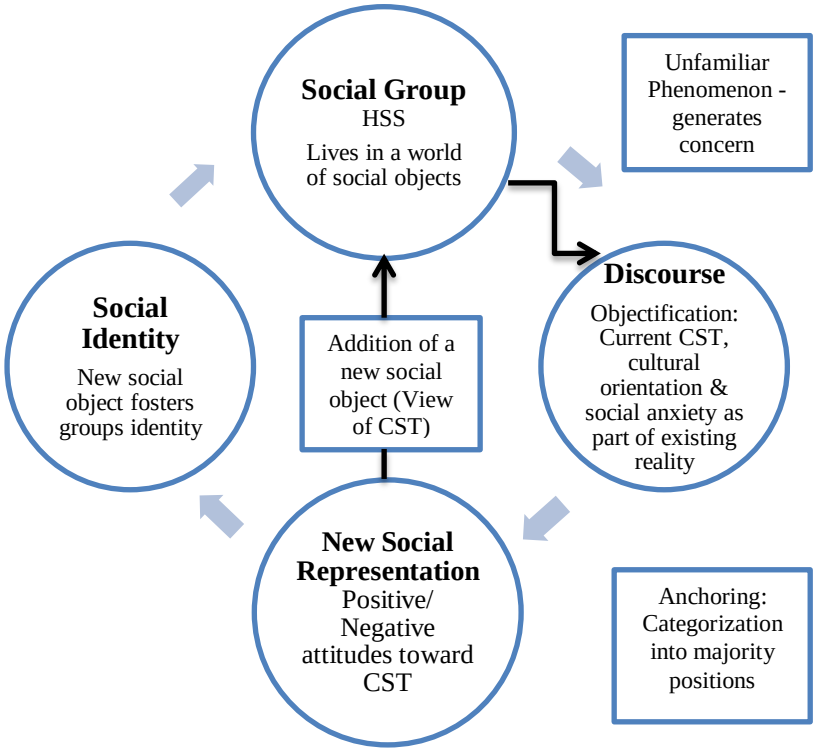

Figure 2: Sociogenesis of attitudes toward communication skills training[ii]

Social groups are groups of people who exist in a world of *social objects* i.e. a variety of continually existing and emerging phenomena (Howarth, 2006). Starting from the top of Figure 2 and proceeding to the right, the social group represented is HSS who exist in a world of many other existing and emerging social representations such as that of health and illness. It can be understood that the new social object that HSS are faced with is CST which is a relatively new addition to their respective professional programmes. The training of UKZN HSS traditionally follows a biomedical approach with limited coverage of more social science oriented courses such as CST. HSS may thus perceive CST as unusual and unfamiliar owing to its deviation from their norm.

This unfamiliarity is likely to instigate communication among individuals which is maintained by broader social influences such as politics and the media (*discourse*). HSS are likely to engage in discourse about CST with fellow students' within their

[ii] Diagram adapted from Wagner et al. (1999, p.96)

social group as well as with educators and other experienced practitioners. In addition to this, their views are likely to also be influenced by the biomedical approach to education within which they operate.

The social object is then saturated with the individual's existing knowledge and reality through a process of *objectification* (Rateau et al., 2011). Information is usually limited, incomplete or widely spread (*dispersion of information*). Since there are inconsistencies in how communication is taught across departments together with a variety of perceptions and misperceptions of communication by both peers and educators, HSS are seemingly faced with information that is widely disperse. This uncertainty generates concern (*inference pressure phenomenon*), which is likely to be more so for students' with performance anxiety that may perceive an ambiguous new course such as CST as anxiety provoking. Provided that such anxiety is not inhibiting, this concern may motivate individuals to regain a sense of control and decrease the uncertainty surrounding the new social object by making sense of, and trying to understand it. This is achieved by understanding the phenomenon according to individual cultural and normative criteria (*selective construction*). Communication essentially involves interpersonal interaction and thus HSS may access cultural and normative criteria for social interaction based on their individualist of collectivist cultural orientation. A concrete and selective understanding is thus shaped (*figurative core*). In this way, HSS have decreased the level of anxiety surrounding CST by forming a basic understanding of it.

The new social object is then reduced into categories in order to further familiarize it (*anchoring*). In this way HSS may begin to further categorize their basic understandings of CST. This leads to the emergence of majority positions in social groups (focalization phenomenon). It is perhaps at this stage that HSS begin to form either positive or negative attitudes toward CST. This new representation of CST is then added to the group's social reality.

A significant implication is that their interpretations of CST extend to anything that remotely concerns it. Their attitudes toward CST may thus permeate not only how

they approach and engage in the training itself, but also how they begin to view communication as they discuss it among peers and eventually how they translate those views into practice. However, it is important to note that social representations are not permanent but rather their formation is an iterative process. Thus HSS attitudes toward CST may change as they accommodate new information.

STRENGTHS OF SOCIAL REPRESENTATIONS THEORY

Social representation theory provides a flexible and adaptable conceptual framework that can be used to understand how individuals and groups elaborate, communicate and transform their social reality (Rateau et al., 2011). It has been found to be widely applicable to a variety of social issues. Of relevance to the present study, it is worth noting that SRT has been found to be useful in addressing social questions related to health (Campbell & Jovchelovitch, 2000; Joffe, 2002; Washer & Joffe, 2006). The reality of social representations is that their definition can vary depending on the requirements of the researcher (Rateau et al., 2011). In this way, the emergence of social representations can be studied or their role as regulators of social interaction and communication can be studied. The use of SRT in the present study concentrated on the former as it is aimed at understanding how HSS attitudes toward communication are shaped, rather than the latter which would look at how they actually communicate in an interactive encounter.

Secondly, SRT accounts for the manner in which common sense is formed, structured and combined with the concerns of the people who use them (Rateau et al., 2011). As CST is still in its infancy in UKZN CHS, it remains a relatively unfamiliar phenomenon to students' and SRT can thus provide a way of understanding how such students' apply the common sense of their existing knowledge base to familiarize CST. Thirdly, it has been found to have good methodological diversity and has been found to be equally compatible with both quantitative and qualitative approaches (Rateau et al., 2011). This is ideal as the present study adopts a mixed methods approach. It is for these reasons that SRT was found to be a suitable frame of reference with which to understand the present study.

CRITIQUES OF SOCIAL REPRESENTATIONS THEORY

There have been criticisms about firstly the theoretical ambiguities and secondly the social determinism of SRT, however these could perhaps be revealed as misinterpretations of the theory. While one of the strengths of SRT is its flexibility, it has also been criticized for being too vague and broad (Voelklein & Howarth, 2005). This is highlighted by inconsistencies in the definition of social representations. However Moscovici's intention was to provide a definition that was not too restrictive, with the view that the complexity of social phenomena cannot be reduced to simple propositions (Moscovici & Markova, 2001). Indeed this flexibility has allowed for SRT to be used to understand a variety of phenomena. A second criticism has been that its portrayal is too socially deterministic. However, the processes of discourse are determined by social structures just as much as they are by individual characteristics, as any given social representation is inevitably dependent upon the understanding that the individual arrives at.

Thirdly is the critique of cognitive reductionism with the suggestion that there is an over emphasis on cognitive phenomenon in SRT where the processes of anchoring and objectification can be likened to those of categorization and schemata in information processing (Markova, 2000). There is indeed quite a similarity between these processes. However research has shown that the processes of anchoring and objectification are inherently social, cultural and ideological as much as they are cognitive (Howarth, 2011; Voelklein, 2004; Voelklein & Howarth, 2005) and thus an either/or comparison should perhaps be cautioned against. Regarding these critiques of social determinism and cognitive reduction it is interesting to note that Moscovici (2000) asserted that the formation of social representations are not a singularly cognitive nor a social process alone, but rather a simultaneous process encompassing both.

CONCLUSION

The social psychological theory of social representations was utilized in order to understand interaction of variables within the present study. Social representations and attitudes are no longer being viewed as polar opposite concepts but rather social representations are being viewed as the basis for attitudes. An application of SRT to the

present study will illustrate how the social representation of HSS positive or negative attitudes toward CST is shaped through the processes of discourse and is absorbed into the individual's reality. While certain critiques of SRT can be attributed to misunderstandings of the theory, others should be significantly regarded in the future refinement and extension of the theory.

CHAPTER 4

METHODS

The approach adopted by the present study is outlined, followed by a description of the key characteristics of the study's sample population. Then the data collection instrument will be discussed in relation to considerations of the psychometric properties of its scales. A detailed account of how the data were collected will then be provided as well as a description of how the data were analysed in terms of addressing the aims and objectives of the present study. Finally, the ethical procedures that were followed will be outlined.

RESEARCH DESIGN

This study adopts a pragmatic paradigm which is typically not confined to any one system of philosophy and reality but rather draws liberally from both quantitative and qualitative philosophical approaches (Creswell, 2014). The strengths of each approach add value to the present research study beyond which either could achieve alone. Pragmatism opens the door to a multitude of worldviews, research methods, assumptions, as well as different forms of data collection and analysis.

The most widely discussed research design in relation to pragmatism is that of mixed research (Barnes, 2014) which has been adopted by the present study. Creswell (2009) states that a mixed methods design is more than simply collecting and analysing qualitative and quantitative data. It involves the use of both approaches in tandem so that the overall strength of the study is greater than either approach alone. Thus while this study is predominantly quantitative, it has attempted to integrate qualitative aspects in more than simply the methods, analyses and results, but also in coverage of literature, theory and overall discussion. The quantitative nature of the study provided scientific rigour by allowing for a comprehensive sample, while the qualitative nature of the study provided depth by allowing for individual participant perspectives to still be considered. According to Barnes (2014) a mixed methods approach also has transformative potential. This is in line with the purpose of this research study which sought to

contribute to the development of curricular in the training of UKZN HSS in communication skills.

RESEARCH PARTICIPANTS

The sample population consisted of 396 final year HSS from the CHS in UKZN. The 396 final year HSS were from the following eight departments: physiotherapy (49), pharmacy (102), optometry (29), speech therapy (13), occupational therapy (22), dentistry (35), audiology (23) and medicine (123).

The medical HSS have received CST since 2010 and in 2011 their training was adapted according to the CanMEDS framework as per requirements by the HPCSA for competency based education. The medical HSS have thus been classified as having received formal CST. In 2014 the UKZN CHS decided to adapt the CanMEDS framework into the training of all other health science programmes. These programmes had incorporated aspects of CST into their respective programmes but have yet to formalize training in accordance with the framework. The HSS from the other departments are thus classified as having received informal CST.

Onwuegbuzie and Johnson (2006) express caution by stating that unless the same sample population is involved in the qualitative and quantitative components of the study, the construction of meta-inferences through extracting inferences from the quantitative and qualitative phases, can prove problematic. This problem was avoided as participants for this study completed the quantitative and qualitative components simultaneously. It should also be noted that the HSS in the present study constitute a non-probable convenient sample and since they are not a representative sample, findings cannot be used to generalize to all HSS (Neuman, 2014).

RESEARCH INSTRUMENT

The strategy of inquiry was a concurrent nested design, which is when one method is clearly dominant while the other is used either to answer a different research question or focus on sub-groups within a larger group (Barnes, 2014). The dominant

component of the present study was the quantitative component which involved the use of psychometric instruments to investigate factors influencing HSS attitudes toward learning communication. The qualitative component was used to explore HSS perceptions of communication skills training.

The survey consisted of five self-report questionnaires, each of which measured key variables in the study (Appendix 3). The description, scoring and alpha coefficients for each scale will be provided below. The internal consistency of a scale is important as it refers to the extent to which the scale measures what it is intended to measure and the standard measure of internal consistency is the alpha coefficient (Johns, 2010). According to Schuwirth, Colliver, and Gruppen (2011) an instrument is never valid per se, which is why an instrument validated in one context needs to be revalidated in the context of the study. For this reason alpha coefficients are only provided from the original study and not subsequent studies; this will then be followed by the alpha coefficients found for each scale in the present study. Cronbach alpha coefficients should ideally be 0.70 and above (De Vellis, 2012).

Demographic questionnaire. This section was used to gather key biographical and contextual information regarding the participants that were thought to be relevant to this study based on the literature reviewed. This included determining their gender, previous experience, previous education, language and age.

Communication Skills Attitude Scale – CSAS. The CSAS was created by Rees, Sheard, and Davies (2002) to measure attitudes toward communication skills learning. It was originally developed on a sample of 490 first and second year medical students' at the University of Nottingham in the UK. The CSAS consists of 26 items on communication skills learning, 13 of which are written in the form of positive statements and create the positive attitude scale (PAS), and 13 of which are written in the form of negative statements and create the negative attitude scale (NAS). Each item is answered according to a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The positive attitude scale (PAS) is determined through the summation of scores for items: 4, 5, 7, 9, 10, 12, 14, 16, 18, 21, 23, 25, and the reversed score of item 22. The negative attitude scale (NAS) is determined through the summation of scores for items: 2, 3, 6, 8, 11, 13, 15, 17, 19, 20, 24, 26, and the reversed score of item 1. Both scales range from 13 to 61 with higher scores indicating stronger positive or negative attitudes.

The alpha coefficients for the CSAS in the original study was found to be $\alpha = 0.87$ for PAS and $\alpha = 0.80$ for NAS (Rees, Sheard, & Davies, 2002). Both subscales were 0.80 and above which indicated good internal consistency. In the present study the internal consistency for PAS was found to be $\alpha = 0.83$ and for NAS $\alpha = 0.72$ which indicated adequate internal consistency.

Liebowitz Social Anxiety Scale – LSAS. The LSAS was created by Liebowitz (1987) to assess the degree of anxiety and avoidance in a number of social situations. The original measure was developed as a clinician administered measure, however a self-report measure has since been validated (Baker, Heinrichs, Kim, & Hofmann, 2002; Oakman, Van Ameringen, Mancini, & Farvolden, 2003). The LSAS consists of 24 items each depicting different social situations. The 24 items are answered for both a fear subscale and an avoidance subscale. The fear subscale ratings range from 0 (no fear) to 3 (severe fear). The avoidance subscale ratings range from 0 (never) to 3 (usually).

The LSAS yields seven scores. First, a total score is created by summing all 48 responses. Second, fear ratings are summed to create a Fear subscale. Third, avoidance ratings are summed to create an Avoidance subscale. Additionally, responses to the 11 social-interaction and 13 performance situations are summed separately for fear and avoidance, creating four subscales: social interaction fear, performance fear, social interaction avoidance and performance avoidance.

The alpha values for the LSAS in the original study was found to be $\alpha = 97$ for the total social anxiety scale, $\alpha = 95$ for the fear subscale, $\alpha = 90$ for social interaction fear, $\alpha = 90$ for performance fear, $\alpha = 94$ for the avoidance subscale, $\alpha = 90$ for social

interaction avoidance, and α = 90 for performance avoidance (Liebowitz, 1987). All reflected superior internal consistency values. In the present study the alpha values were found to be α = 0.88 for the total social anxiety scale, α = 0.89 for the fear subscale, α = 0.82 for social interaction fear, α = 0. 80 for performance fear, α = 0.88 for the avoidance subscale, α = 0.80 for social interaction avoidance, α = 0.78 for performance avoidance. The LSAS thus displayed good levels of internal consistency in the context of this study.

Individualism and Collectivism Attitude Scale – INDCOL. The version of the IND-COL used in the present study was created by Singelis et al. (1995). It was originally a pool of 94 items that were reduced through a series of psychometric tests to 32 items, with each eight items measuring four types; vertical collectivism, vertical individualism, horizontal collectivism and horizontal individualism. All items are originally answered on a 9-point Likert scale, ranging from 1= never or definitely no and 9 = always or definitely yes. The four subscale scores are determined through the summation of items for each subscale. Scores range from 8 to 40 with higher scores indicating that individuals are more oriented toward that specific dimension.

The original 9-point scale of the IND-COL has verbal labels on the extreme points at either end of the continuum with only numerical labels in between. Johns (2010) states that full verbal labelling of points are ideal as it enables respondents to deliver higher quality data. A 5-point scale is preferable as it strikes a compromise between offering enough choice and making answering manageable for respondents (Johns, 2010). Likert (1932) himself originally used a 5-point scale and it has since become the norm. For these reasons, the present study adopted a 5-point Likert scale ranging from 1=strongly disagree to 5=strongly agree instead of the original 9-point Likert scale. There is however evidence of a previous research study that also adopted a 5-point Likert scale for the IND-COL (Paquet & Kline, 2009).

The original alpha coefficients for the scale were; Vertical individualism was α = 0.74, horizontal individualism α = 0.67, vertical collectivism α = 0.68, and horizontal collectivism α = 0.74 (Singelis et al., 1995). The alpha reliabilities for the

scale in the present study were; α = 0.65 for individualism, α= 0.68 for horizontal individualism, α = 0.60 for vertical individualism, α = 0.71 for collectivism, α = 0.61 for horizontal collectivism and α = 0.54 for vertical collectivism.

Whilst it is accepted that alpha values are deemed strong when they are 0.70 and above, it is generally known that alpha values between 0.50 and 0.60 are acceptable in cross cultural research (Hui, 1988) such as the present study especially when measuring multidimensional constructs such as individualism and collectivism. It has been acknowledged by Cronbach (1990) himself that the broader the construct the lower the reliability. Singelis et al. (1995) have expressed that the difficulty often encountered with the constructs of individualism and collectivism is that because they are such broad constructs, high alphas have been difficult to obtain. Additionally, the authors acknowledge that since the instrument has been generated in one culture, the same factors may not emerge in other cultures (Singelis et al., 1995), increasing the difficulty with attaining adequate internal consistency for the IND-COL in different contexts.

Semi-structured questionnaire. This section comprised of qualitative questions on developing communication as a core competence in graduate professional training. It comprised of eight open and closed ended questions which aimed at understanding HSS subjective points of view on CST (appendix 3). The same principles of validity and reliability apply for the qualitative section of the questionnaire but in a different way. The use of a semi-structured questionnaire will provide a level of consistency in how observations are made (Neuman, 2014). The core principle of validity, i.e. to be truthful will still be adhered to and an attempt will be made to create a good fit between understandings, ideas and statements about the social world and what is occurring in it.

DATA COLLECTION

The academic heads of the eight health science departments were contacted by the supervisor and the nature of the research study, ethical clearance and gate keeper permission was conveyed via email correspondence. The supervisor then introduced and included the researcher in correspondence with the heads of department who then directed the researcher to department academic coordinators, who in some cases

directed the researcher to class representatives. Through this process, dates and times were scheduled for meeting the final year HSS.

Data were collected during the period of February to April 2016 for all eight departments, except for two subgroups of the internal medicine students' that were done at clinical site placements due to academic and clinical rotations. At each day of data collection, the researcher began by describing the research study, explaining and obtaining ethical consent (Appendix 2) and administering questionnaires to the HSS. In keeping with the *concurrent nested* strategy (Creswell, 2014), quantitative and qualitative data were obtained in one phase as they were both combined into one questionnaire. The questionnaire took approximately 20-30 minutes for students' to complete. As they were collected they were checked by the researcher for missing entries. They were then coded according to questionnaire number and department name.

DATA ANALYSIS

In keeping with a pragmatic paradigm, the present study utilized abduction as it moved from deduction where the quantitative data were analysed, toward induction where the qualitative data were analysed (Barnes, 2014). The quantitative data from the questionnaire were captured on SPSS version 23. The captured data were subsequently double entered by an assistant to ensure accuracy of capturing. Preliminary analyses were then conducted by the researcher to clean the data. Prior to conducting the analyses below, the data were then examined to ensure that all statistical assumptions were met in this data set. The following tests were then conducted:

- Descriptive statistics were conducted to obtain sociodemographic information about participants, information on the normal distribution of scales and the descriptives of the scales themselves.
- Pearson R Correlation analyses were conducted to identify relationships among variables in terms of strength and direction.
- Two MANOVA's were conducted to determine the influence of firstly, differences in training and language and secondly, training and gender, on attitudes toward CST. The sample of HSS was divided into formal (medical HSS) and informal

training (other HSS) based on level of exposure to CST. Additionally, it was decided that only the English and isiZulu languages were comparable in sample sizes. Although the males and female students of this sample were unequal, they were still included in analyses as they were deemed to be reflective of the reality of the student population.

- Two multivariate multiple regression analyses was conducted to determine whether firstly, the four types of cultural orientation, and then the four types of social anxiety predicted attitudes toward CST. The sample of HSS was not split into formal and informal CST categories for these analyses as its predictive power in relation to attitudes towards CST was deemed to have been sufficiently investigated in the above MANOVA's.
- Four separate MANCOVA's were conducted. The first was done to investigate the effects of levels of social anxiety on attitudes toward CST and how they were moderated by language. The second MANCOVA considered the moderation of gender. The third was done to investigate the effects of cultural orientation on attitudes toward CST and how they were moderated by language. The fourth MANCOVA considered the moderation of gender. The sample of HSS was not split into formal and informal CST categories for these analyses as the research questions were concerned with how the aforementioned social factors interacted to affect attitudes toward CST. It was not concerned with how CST received interacted with these social factors to affect attitudes toward CST.

The qualitative data were recorded on *Nvivo10* by the researcher according to the eight open and closed ended questions that were asked. Thematic analysis was then conducted to extrapolate themes that emerged from the data. Each of the individual questions was recorded as eight nodes on Nvivo10. Participant responses were then sorted among the eight nodes. Responses to questions that were deemed to fall under another node were sorted accordingly. The eight overarching themes eventually yielded subthemes. Once the themes and subthemes were identified, they were then reviewed by the researcher. For each theme and subtheme, a percentage was calculated which was reflective of the number of responses for a specific theme or subtheme out of the entire sample who responded. This was done to ensure ease of understanding in the results and

discussion chapters, given that this was an unusually large sample for qualitative findings.

ETHICAL CONSIDERATIONS

The present study forms part of a larger study being conducted on "Developing communication as a core competency in health science professionals' education". As such, ethical clearance for the overall study had already been obtained. However, ethical clearance for the linking of the researcher to the present study was obtained from the Human and Social Science Research Ethics Committee of UKZN (Appendix 1), protocol reference number: HSS/0225/016M (Linked to HSS/0415/015). Gatekeeper permission was obtained from the registrar of the CHS and verbal consent was received from heads of the various health science departments. At the start of data collection with each group, participants were informed of the nature of the study, their rights to confidentiality as well as choice of non-participation. Participation was not assessed to be harmful to participants in any way, however participants were notified that if they felt the need to discuss or query an issue resulting from their participation in the study, that they could contact the researcher via email.

Confidentiality was further explained through the use of the informed consent form which specified to participants that participation was voluntary and that they were free to withdraw from the research at any time and without experiencing any negative or undesirable consequences. The autonomy of participants was ensured as no personal information that could lead to identification of individual participants was recorded onto questionnaires or SPSS. Additionally, no identifying information, such as participant names will be used in the dissemination of research findings and if required pseudonyms would be used. Participants will be able to access results of the research via journal publications. Once collected, the questionnaires were kept safely by the researcher. Thereafter, they will be kept securely by the supervisor in a locked location and only the supervisor and researcher will be privy to access this data. The raw data, including the data stored electronically will be kept for five years by which time it will be shredded and disposed of.

CONCLUSION

A pragmatic design was adopted by this study with a mixed methods approach. Participants consisted of HSS from eight departments within the UKZN CHS. In keeping with a mixed methods approach, the research instrument consisted of both a quantitative and qualitative section. However the dominant component of the questionnaire and the overall study was clearly quantitative. There were three quantitative scales which measured communication skills attitudes, social anxiety and individualist or collectivist cultural orientation. The qualitative component consisted of a self-report open-ended questionnaire. Data were collected during the February to April 2016 period. The quantitative data were analysed via SPSS version 23 and the qualitative data via Nvivo 10. In terms of ethical considerations, gatekeeper permission and ethical clearance for the study was first obtained, confidentiality was explained to participants and informed consent was obtained during data collection and questionnaires were kept in a secure location afterwards.

CHAPTER 5

RESULTS

A detailed account of findings from the various analyses conducted in order to address the research questions are provided. Firstly descriptive statistics were run in order to determine sociodemographic information about participants and descriptive information relevant to the scales used in the present study. The relationships between variables were then investigated using correlational analyses. In keeping with answering the research questions results are divided into three main parts: findings in relation to the influence of training, the influence of cultural orientation and the influence of social anxiety. The first consists of results from two MANOVAs as well as qualitative findings on students' perceptions of CST. The second and third each consist of results from a multivariate regression and two MANCOVAs.

DESCRIPTIVE STATISTICS

Table 1: Socio-demographic information of participants

Characteristics	N	%
Total Participants	396	100%
Departments		
Physiotherapy	49	12.4
Pharmacy	102	25.8
Optometry	29	7.3
Speech Therapy	13	3.3
Occupational Therapy	22	5.6
Dentistry	35	8.8
Audiology	23	5.8
Medicine	123	31.1
Gender		
Males	121	30.6
Females	275	69.4
Age		
17-20	22	5.6
21-24	332	83.8
25-29	37	9.3
30-34	5	1.3
Language		
English	183	46.2
Afrikaans	6	1.5
IsiZulu	162	40.9
Other	45	11.4
Previous Experience		
High School	334	84.3
Other tertiary	39	9.8
Unemployed	10	2.5
Working	13	3.3
Previous Education		
Matric	318	80.3
Undergraduate degree	67	16.9
Professional degree	5	1.3
Postgraduate degree	6	1.5

Table 2: Skewness and Kurtosis values of scales

	Skewness		Kurtosis	
	Statistic	**Std. Error**	**Statistic**	**Std. Error**
Positive attitudes toward CST	-.537	.124	.912	.247
Negative attitudes toward CST	.532	.123	.807	.246
Fear of social interaction	.335	.123	-.321	.245
Fear of performance	.183	.123	-.486	.246
Avoidance of social interaction	.342	.123	-.232	.245
Avoidance of performance	.337	.123	.045	.246
Horizontal individualism	-.177	.123	.027	.245
Vertical individualism	.348	.123	.440	.245
Horizontal collectivism	-.199	.123	.811	.245
Vertical collectivism	.052	.123	.104	.245

Descriptive statistics were conducted to test for the normality of all scales used in the present study. A perfect normal distribution would have skewness and kurtosis values of 0 and thus the closer to 0 they are, the more normal the distribution (Pallant, 2013). Skewness and Kurtosis values which can be found in Table 2 were reviewed and found to all be within acceptable ranges given the nature of the data. The distributions of scores were further reviewed via visual inspection of histograms and boxplots and were also found to be within acceptable ranges. This indicated that the data are relatively normally distributed for all scales.

Table 3: Descriptive statistics for scales

Variable	**N**	**Min.**	**Max.**	**M**	**SD**
Communication skills attitudes					
Positive attitudes	389	21	65	52.58	6.53
Negative attitudes	393	13	54	28.13	6.04
Individualism/Collectivism					
Horizontal individualism	395	17	40	31.33	4.21
Vertical individualism	395	12	40	23.11	4.50
Horizontal collectivism	394	15	40	30.59	3.77
Vertical collectivism	395	15	40	28.62	3.91
Social Anxiety					
Fear of social interaction	395	0	31	12.77	6.69
Fear of performance	393	0	36	15.42	7.21
Avoidance of social interaction	395	0	33	13.00	6.76
Avoidance of performance	391	0	37	14.26	7.22

An inspection of mean scores for the communication skills attitudes scale indicated that the study's sample of HSS had more positive than negative attitudes toward communication skills training. An inspection of mean scores for the individualist/collectivist scale indicated that majority of the study participants were oriented toward horizontal individualism with horizontal collectivism being a close second, followed by vertical collectivism and then vertical individualism. An addition of the mean scores for the four subscales of social anxiety yielded a mean of 55.45, indicating that HSS had an overall mild level of social anxiety. An inspection of the individual means indicated that fear of performance and avoidance of performance was higher than fear of social interaction and avoidance of social interaction.

THE RELATIONSHIPS AMONG VARIABLES

Table 4: Correlations among independent and dependent variables

Variable	**Positive attitudes**	**Negative attitudes**
Language	-.011	.085
Gender	.056	-.152**
Age	.080	-.059
Previous education	-.009	.037
Previous work experience	.027	.062
Horizontal collectivism	.318**	-.198**
Vertical collectivism	.229**	-.021
Horizontal individualism	.231**	-.066
Vertical individualism	-.005	.189**
Fear of social interaction	.005	.157**
Fear of performance	.000	.146**
Avoidance of social interaction	.029	.137**
Avoidance of performance	-.023	.175**

*$p < .05$; **$p < .01$

A Pearson R correlation analysis was conducted to investigate which of the independent variables in the present study were significantly related to attitudes toward CST, and to determine the strength and direction of the relationships (Table 4). The following relationships were of importance with regards to levels of cultural orientation. A medium positive correlation was found between horizontal collectivism and positive attitudes toward CST, indicating that those who were more oriented towards horizontal collectivism had more positive attitudes toward CST. A small negative correlation was

also found between horizontal collectivism and negative attitudes toward CST, indicating that those who were more oriented towards horizontal collectivism also had less negative attitudes toward CST. Small positive correlations were found for vertical collectivism, horizontal individualism and positive attitudes toward CST, indicating that those who were more oriented toward vertical collectivism or horizontal individualism had more positive attitudes toward CST. A small positive correlation was found between vertical individualism and negative attitudes toward CST, indicating that those who were more oriented towards vertical individualism had more negative attitudes toward CST.

The following relationships were of importance with regards to social anxiety. Small positive correlations were found between fear of social interaction, fear of performance, avoidance of social interaction, avoidance of performance and negative attitudes toward CST, indicating that those with higher levels of social anxiety had more negative attitudes toward CST. The only demographic variable that was related to HSS attitudes toward CST was gender, with a small negative correlation between gender and negative attitudes toward CST. This suggests that there are differences in males and females' negative attitudes toward CST; however further analyses will be done to determine what these differences are. Correlational analysis was then conducted to determine whether there were relationships between the demographic and independent variables.

Table 5: Correlations among demographic and independent variables

Variables	**Lang**	**Gender**	**Age**	**Pr. education**	**Pr. work experience**
Horizontal Collectivism	-.104*	.005	.008	.055	.045
Vertical Collectivism	-.026	-.006	-.148**	-.050	-.019
Horizontal Individualism	-.098	.131**	-.097	-.020	.005
Vertical Individualism	.109*	.111*	-.040	.021	.054
Fear of social interaction	.139**	.169**	-.157**	-.088	-.059
Fear of performance	.075	.231**	-.169**	-.088	-.081
Avoidance of social interaction	.204**	.116*	-.168**	.003	-.049
Avoidance of performance	.166**	.100*	-.231**	-.045	-.078

*$p < .05$; **$p < .01$

Significant correlations were found between language, gender, age and levels of cultural orientation and social anxiety (Table 5). Due to this it was decided that language and gender would be considered as moderator variables in subsequent analyses of cultural orientation/social anxiety and attitudes toward communication. Since 84 percent of the HSS were between the ages of twenty one and twenty four, it was decided that age could not be split fairly into groups for analysis and was thus omitted in further analysis. In terms of language, only English and isiZulu were considered as they were comparable sample sizes. Gender was unequal in terms of sample sizes but was still considered in subsequent analyses as this was a realistic reflection of the overall HSS population.

FORMAL/INFORMAL TRAINING, LANGUAGE AND GENDER

In order to investigate the relationships between training, language, gender and attitudes toward CST, two MANOVAs were conducted to determine whether training and language and then training and gender predicted attitudes toward CST. Prior to conducting the MANOVAs preliminary assumption testing was done to check for the normality, linearity, multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. No serious violations were noted.

Table 6: MANOVA 1 results for main and interaction effects of formal/informal training and language on attitudes toward communication skills

	Attitudes toward Communication skills			
	F	**Wilk's Δ**	***p***	**η_p^2**
Formal/Informal Training	(2, 378) = 2.66	.99	.072	.014
Language	(6, 756) = 1.17	.98	.318	.002
Formal/Informal Training-Language	(6, 756) = 2.14*	.97	.047	.017

F = MANOVA result; Wilk's Δ = Wilks Lambda; *p* = significance value, **p* < .05; ***p* < .01; η_p^2 = Partial eta squared.

A MANOVA was conducted to determine whether there were significant differences between the communication attitudes of students' who received formal CST (Medicine) and informal CST (Other HSS) and those who speak different languages. Multivariate test results revealed that training and language were each not statistically

significant predictors of communication attitudes, but that the interaction between the two was significant (Table 6).

The follow-up univariate analyses indicated that the interaction was significant along the positive attitude subscale [F (3, 379) = 3.76, p = .033, η_p^2 = .029]. This interaction suggests that variation in training and language predicts 2.9 percent of positive attitudes toward CST which is a relatively small effect size. An inspection of estimated marginal means descriptive statistics for MANOVA 1 was required to see how this differed.

Table 7: Descriptive statistics for MANOVA 1 of the interaction effects between training and language on positive attitudes toward learning communication

	Training	**Language**	***M***	***SD***
Positive Attitudes toward CST	Formal	English	51.29	8.736
		IsiZulu	54.08	6.202
	Informal	English	53.19	5.822
		IsiZulu	50.91	6.755

An inspection of the mean scores (Table 7) indicated that isiZulu speaking students' who received formal CST had more positive attitudes toward CST than English speaking students' who received formal CST. IsiZulu speaking HSS who received formal CST also had more positive attitudes toward CST than English or isiZulu speaking HSS who had received informal CST. The interaction between language and training is displayed in Figure 3.

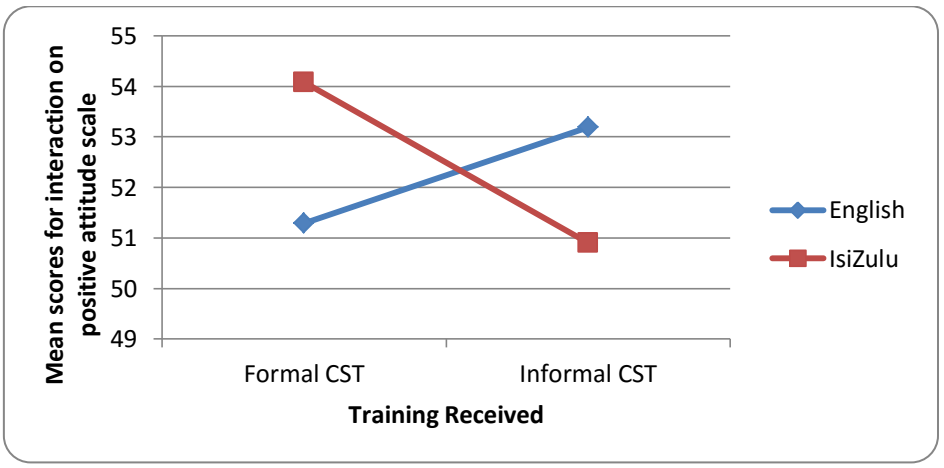

Figure 3: Interaction between language and training on positive attitudes toward communication skills training

Table 8: MANOVA 2 results for main and interaction effects of formal/informal training and gender on attitudes toward learning communication

	Attitudes toward CST			
	F	**Wilk's Δ**	***p***	η_p^2
Formal/Informal Training	(2, 382) = 11.80***	.94	.001	.058
Gender	(2, 382) = 7.26***	.96	.001	.037
Formal/Informal Training-Gender	(2, 373) = 2.44	.99	.088	.013

F = MANCOVA result; Wilk's Δ = Wilks Lambda; *p* = significance value, **p* < .05, ***p* < .01, *p* < 001***; η_p^2 = Partial eta squared.

A second MANOVA was conducted to determine whether there were significant differences between the communication attitudes of males and females, and those who received formal CST (Medicine) and informal CST (Other HSS). The multivariate tests revealed that training and gender were each statistically significant predictors of attitudes toward CST (Table 8). There was no significant interaction between the two in the prediction of attitudes toward CST. Follow-up univariate analyses revealed that differences in training specifically affected negative attitudes toward CST [F (1, 383) = 21.14, $p < .001$, $\eta_p^2 = .052$]. Differences in gender also specifically affected negative attitudes [F (1, 383) = 12.90, $p < .001$, $\eta_p^2 = .033$].This indicated that differences in training predicted 5.2 percent of negative attitudes and differences in gender predict 3.3 percent of negative attitudes toward CST which is a relatively small effect size. An inspection of the estimated marginal mean descriptive statistics for MANOVA 2 was required to see how this differed.

Table 9: Descriptive statistics for MANOVA 2 for the main effects of language and gender on attitudes toward learning communication

	Variables		***M***	***SD***
Negative Attitudes toward CST	Training	Formal	51.29	8.74
		Informal	54.08	6.20
	Gender	Males	53.19	5.82
		Females	50.91	6.76

An inspection of mean scores indicated that HSS who had received formal CST had more negative attitudes toward CST than HSS who received informal CST (Table 9). Males were found to have more negative attitudes toward CST than females.

PERCEPTONS OF COMMUNICATION SKILLS TRAINING RECEIVED

Findings from the qualitative questions in the questionnaire can be found in Table10. Each Percentage is reflective of the number of HSS responses out of 396 that responded. This is done for ease of understanding and to cater for the unusually large sample size for qualitative findings. Percentages cannot be summed together as students' have indicated more than one theme at a time.

Table 10: Summary of themes on perceptions of communication skills training

Main Themes:	Sub-Themes:	N.o. of HSS	% of HSS
Awareness of having received CST*	Aware	349	88%
	Unaware	47	12%
The CST they received*	Patient-Practitioner Communication	291	73%
	Communicating with patient families	6	2%
	Interprofessional Communication	14	4%
	Communicating with communities	19	5%
Methods of CST that were used*	Theoretical	349	88%
	Practical	219	55%
Opinions on best methods for CST	Theoretical	36	9%
	Practical	259	65%
	Observation	27	7%
	Continual practice	86	22%
	Everyday interaction	25	6%
	Incentives	3	1%
Usefulness of training received*	Useful	311	79%
	Not useful	26	7%
	Unsure	13	3%
Importance for HP	Important	371	94%
	Not important	8	2%
	Undecided	2	1%
Profession specific skills that are important	Practitioner Qualities	66	17%
	Non-verbal communication skills	151	38%
	Verbal communication skills	112	28%
	Knowledge of procedure related tasks	78	20%
	Awareness of cultural diversity in patients	14	4%
	Skills to deal with language barriers	30	8%
	Alternate forms of communication with special populations	6	2%
	Developing Rapport	17	4%
	Collaborative decision making	4	1%
	Interprofessional communicative skills	7	2%
Opinions on when CST should commence	Childhood and in school	21	5%
	Before enrolment into health science programmes	4	1%
	At the start of professional training	278	70%
	Before graduating	2	1%
	At the beginning of professional practice	5	1%
	When a need for it arises	1	0.25%

Perceptions of the communication skills training received. Out of the sample of 396 HSS, 88 percent were aware of having received CST while 12 percent were not. Among those who provided further comments the following was deduced. Some were able to identify integrated aspects of CST in their more social science based modules. However among others, there appeared to be some confusion about classifying the training they had received. Some were unsure about whether the training they had received was formal CST or not, while others appeared to perceive language courses as akin to CST.

The HSS stated that they received 4 main types of CST that entailed communicating with patients (73%), families (2%), other professionals (4%) and communities (5%). Training in patient communication was predominant, which students' stated involved at least one or more of the following: a) the procedure of patient-practitioner interactions such as being able to effectively elicit information from patients for diagnostic and management purposes, b) the use of verbal cues such as open and closed ended questions, c) the interpretation of non-verbal communicative behaviour such as patient eye contact, posture, facial expressions and tone of voice, d) the important qualities practitioners should uphold, such as respect for patients and empathising with them, e) languages such as isiZulu, sign language, English, Afrikaans and Arabic.

The methods of training used were theoretical (88%) and practical (55%). Among those who acknowledged receiving theoretical training in communication, this was said to be done through lectures on topics such as breaking bad news, grief, and/or HIV/AIDS counselling as well as the viewing of videos. Some also stated that assessment was carried out either in the form of performing presentations, written assignments and/or exams. Among those who acknowledged receiving practical training in communication, this was said to be done through group work such as simulations of patient interactions, as well as games such as speed dating and puzzles. Some also stated that they engaged in interaction with real patients.

Majority of the HSS (79%) stated that they found the CST they received useful on both a professional and personal level. Professionally, they stated that it provided preparation for the process of interactive encounters with patients through a theoretical understanding of communication as well as alternate ways of communicating with special populations. They felt that they would be better equipped to understand patients as well as to facilitate patient understanding of feedback and/or psychoeducation. They also stated that the CST improved their interprofessional communication skills, specifically on how to avoid conflict and negotiate disagreement. On a personal level, HSS stated that the training they received improved their social skills. Specifically it improved their confidence, encouraged them not to be as shy and subsided their anxiety about communication. Some of them also stated that it increased their insight into personal communicative problem areas. For the 7 percent of HSS who did not find the CST they received useful, they either found it too difficult, unnecessary or anxiety provoking. The remainder 3 percent were unsure about whether it was useful or not.

The HSS perceptions of the best methods for teaching communication skills were as follows: Theoretical methods were suggested by 9 percent of HSS which included the use of lectures, specifically on cultural and religious studies as well as tutorials and assessment. Practical methods were suggested by 65 percent of HSS, and this included patient-practitioner simulations, peer reflection, feedback from educators on simulations and having the opportunity to engage with real patients as well as a diversity of patients. The observation of experienced practitioners engaging with patients was suggested by 7 percent of HSS. Continual practice which included the application of skills learnt to daily interactions was suggested by 22 percent of HSS. Six percent of HSS were of the opinion that communication did not need to be taught formally and that it is something one can achieve through everyday interaction with others. Attempts to make CST interesting by, for example providing incentives, was suggested by 1 percent of HSS.

Perceptions of the importance of communication skills. Of the 396 HSS, 94 percent stated that they perceived CST as being important for all HP. They stated that CST is important because HP lack efficient communication skills and have an ethical

responsibility to provide a good service. They stated that CST would improve HP patient-practitioner communication, interprofessional communication as well as communicative behaviour in all daily interactions. However, 2 percent of the HSS did not perceive CST as important for all HP. One percent found that they were undecided on its importance.

The HSS perceived different communicative skills as being important. Seventeen percent of HSS highlighted practitioner qualities such as authenticity, respect and empathy as being important. For non-verbal communication skills, 38% HSS mentioned that observing patient eye contact, facial expressions and body language were important as well as actively listening and paying attention to patients. For verbal communication skills, 28 percent of HSS suggested that turn-taking, paraphrasing and the use of open and closed ended questions were important. Procedure related skills such as history taking and providing feedback were also identified by 20 percent of HSS as important communication skills. A minority of students' mentioned other skills as being important: 4 percent mentioned an awareness of cultural diversity; 8 percent mentioned skills to deal with language barriers; 2 percent mentioned alternate forms of communicating, example sign language; 4 percent stated interprofessional communication; 1 percent mentioned collaborative decision making and 2 percent mentioned developing rapport as being important.

In terms of when they felt CST should commence, 5 percent stated that it should be during childhood and schooling, 1 percent stated that it should occur before being enrolled into a health science program, 70 percent stated that it should occur when professional training begins, i.e. first year as an undergraduate, 1 percent stated that it should occur before a HSS graduates, 1 percent stated that it should occur at the beginning of professional practice and 0.25 percent stated that it should only occur when the need for it arises.

SOCIAL ANXIETY AND ATTITUDES TOWARD LEARNING COMMUNICATION SKILLS

In order to investigate the relationships between levels of social anxiety and attitudes toward CST, a multivariate multiple regression analysis was first conducted to determine the ability of social anxiety to predict HSS attitudes toward CST. Subsequently, two MANCOVAs were then conducted to determine whether firstly language and then gender interacted with levels of social anxiety to predict HSS attitudes toward CST. Prior to running these analyses preliminary assumption testing was first conducted to check for the normality, linearity, multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. No serious violations were noted.

Social anxiety as a predictor of attitudes toward learning communication

Table 11: Multivariate regression 1 results for social anxiety and attitudes toward learning communication

	Positive and Negative attitudes toward CST			
	F	**Wilk's Δ**	***p***	η_p^2
Fear of social interaction	(2, 375) = 1.94	.99	.145	.010
Fear of performance	(2, 375) = .89	1.00	.410	.005
Avoidance of social interaction	(2, 375) = .94	1.00	.393	.005
Avoidance of performance	(2, 375) = 2.47	.99,	.086	.013

F = MANCOVA result; Wilk's Δ = Wilks Lambda; *p* = significance value, **p* < .05, ***p* < .01, ****p* < .001; η_p^2 = Partial eta squared.

A multivariate multiple regression analysis was performed to determine the extent to which fear of social interaction, fear of performance, avoidance of social interaction, and avoidance of performance as indices of social anxiety, predicted both the positive and negative attitude scales. The multivariate test results indicated that these indices of social anxiety were not statistically significant, suggesting that the types of social anxiety are unrelated to attitude toward CST (Table 11).

Social anxiety, language and attitudes toward learning communication

Table 12: MANCOVA 1 results for social anxiety and language on attitudes toward learning communication

	Positive and Negative attitudes toward CST			
	F	**Wilk's Δ**	***p***	η_p^2
Fear of social interaction	(2, 360) = 0.72	1.00	.488	.004
Fear of performance	(2, 360) = .84	1.00	.431	.005
Avoidance of social interaction	(2, 360) = 0.31	1.00	.737	.002
Avoidance of performance	(2, 360) = 0.84	1.00	.920	.000
Language	(6, 720) = 3.23**	.95	.004	.026
Fear of social interaction-Language	(6, 720) = .63	.99	.707	.005
Fear of performance-Language	(6, 720) = .50	.99	.807	.004
Avoidance of social interaction-Language	(6, 720) = .64	.99	.701	.005
Avoidance of performance-Language	(6, 720) = .53	.99	.788	.004

F = MANCOVA result; Wilk's Δ = Wilks Lambda; *p* = significance value, **p* < .05, ***p* < .01, ****p* < .001; η_p^2 = Partial eta squared

The first MANCOVA was conducted to determine whether the relationships between social anxiety and communication attitude were moderated by language. There were no significant interactions between language and any of the four types of social anxiety in its prediction of attitudes toward CST (Table 12). However, language was found to significantly predict attitudes toward CST independently, specifically negative attitudes [F (1, 361) = 5.38, p = .009, η_p^2 = .043]. This indicated that language predicted 4.3 percent of negative attitudes toward communication which is a relatively small effect size.

Table 13: Descriptive statistics from MANCOVA 1 for the main effects of language on negative attitudes toward learning communication

	Variables		***M***	***SD***
Negative Attitudes toward CST	Language	English	27.75	0.44
		isiZulu	29.18	0.48
	Gender	Males	29.58	0.58
		Females	27.30	0.35

An inspection of mean scores indicated that isiZulu speakers had higher negative attitudes toward CST in comparison to English speakers with negative attitudes (Table 13). These results suggest that while language independently predicts negative attitudes toward CST, it is not a moderator of the social anxiety-attitude toward CST relationship.

Social anxiety, gender and attitudes toward learning communication

Table 14: MANCOVA 2 results for social anxiety and gender on attitudes toward learning communication

	Positive and Negative attitudes toward CST			
	F	**Wilk's Δ**	***p***	η_p^2
Fear of social interaction	(2, 370) = .84	1.00	.432	.005
Fear of performance	(2, 370) = .68	1.00	.508	.004
Avoidance of social interaction	(2, 370) = 1.24	.99	.290	.007
Avoidance of performance	(2, 370) = 1.73	.99	.179	.009
Gender	(2, 370) = 5.16**	.97	.006	.027
Fear of social interaction-Gender	(2, 370) = 1.50	.99	.224	.008
Fear of performance-Gender	(2, 370) = .55	1.00	.579	.003
Avoidance of social interaction-Gender	(2, 370) = .50	1.00	.609	.003
Avoidance of performance-Gender	(2, 370) = .09	1.00	.916	.000

F = MANCOVA result; Wilk's Δ = Wilks Lambda; *p* = significance value, **p* < .05; ***p* < .01, ****p* < .001; η_p^2 = Partial eta squared

A second MANCOVA was conducted to determine whether the relationships between types of social anxiety and attitudes toward CST were moderated by gender. There were no significant interactions between gender and any of the four types of social anxiety in its prediction of attitudes toward CST (Table 14). However, gender was found to significantly predict attitudes toward CST independently, specifically negative attitudes [F (1, 371) = 9.74, p = .018, η_p^2 = .026]. This indicates that gender predicted 2.6 percent of negative attitudes which is a relatively small effect size.

Table 15: Descriptive statistics from MANCOVA 2 for the main effects of gender on negative attitudes toward learning communication

	Variables		***M***	***SD***
Negative Attitudes toward CST	Gender	Males	29.58	0.58
		Females	27.30	0.35

An inspection of mean scores indicated that males had more negative attitudes toward CST in comparison to females with negative attitudes toward CST (Table 15). These results suggest that while gender independently predicts negative attitudes toward CST, it is not a moderator of the social anxiety-attitude toward CST relationship.

CULTURAL ORIENTATION AND ATTITUDES TOWARD LEARNING COMMUNICATION

In order to further investigate the relationships between levels of cultural orientation and attitudes toward CST, a multivariate multiple regression analysis was first conducted to determine the ability of cultural orientation to predict HSS attitudes toward CST. Subsequently, two MANCOVAs were conducted to determine whether firstly language and then gender interacted with levels of cultural orientation to predict HSS attitudes toward CST. Prior to running these analyses, preliminary assumption testing was first conducted to check for the normality, linearity, multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, and no serious violations were noted.

Cultural orientation as a predictor of attitudes toward learning communication

Table 16: Multivariate Regression 2 results for cultural orientation and attitudes toward learning communication

	Positive and Negative attitudes toward CST			
	F	**Wilk's Δ**	***p***	**η_p^2**
Horizontal Individualism	(2, 378) = 4.27**	.98	.015	.022
Vertical Individualism	(2, 378) = 8.74***	.96	.001	.044
Horizontal Collectivism	(2, 378) = 10.90***	.95	.001	.055
Vertical Collectivism	(2, 378) = 3.88*	.98	.022	.020

F = MANCOVA result; Wilk's Δ = Wilks Lambda; *p* = significance values: *$p < .05$, **$p < .01$, $p < .001$***; η_p^2 = Partial eta squared.

A second multivariate multiple regression analysis was performed to determine the extent to which horizontal individualism, vertical individualism, horizontal collectivism, and vertical collectivism predicted both the positive and negative attitude scales. The multivariate test results indicated that all four types of cultural orientation significantly predicted either one or both of the attitudes toward communication skills subscales (Table 16).

Table 17: Multivariate Regression 2 results after Bonferroni adjustments

	Positive attitudes			Negative attitudes		
	F	***p***	η_p^2	***F***	***p***	η_p^2
Horizontal Individualism	(1, 379) = 8.31**	.012	.021	(1, 379) = 1.86	.522	.005
Vertical Individualism	(1, 379) = 0.92	1.000	.002	(1, 379) = 14.54***	.001	.037
Horizontal Collectivism	(1, 379) =19.75***	.001	.050	(1, 379) = 14.95***	.001	.038
Vertical Collectivism	(1, 379) = 1.01	.948	.003	(1, 379) = 2.09	.447	.005

F = MANCOVA result; Wilk's Δ = Wilks Lambda; *p* = significance value, **p* < .05, ***p* < .01, ****p* < .001; η_p^2 = Partial eta squared.

Using Bonferroni adjustments to preserve familywise alpha horizontal individualism was found to significantly predict 2.1 percent of positive attitudes, vertical individualism was found to significantly predict 3.7 percent negative attitudes and horizontal collectivism was found to significantly predict 5 percent of positive and 3.8 percent of negative attitudes (Table 17). Vertical collectivism however, did not predict either positive or negative attitudes.

Cultural orientation, language and attitudes toward learning communication

Table 18: MANCOVA 3 results for cultural orientation and language on attitudes toward learning communication

	Positive and Negative attitudes toward CST			
	F	**Wilk's Δ**	***p***	η_p^2
Horizontal Individualism	(2, 363) = 0.84	1.00	.431	.005
Vertical Individualism	(2, 363) = 1.44	.99	.239	.008
Horizontal Collectivism	(2, 363) = 0.79	1.00	.456	.004
Vertical Collectivism	(2, 363) = 0.92	1.00	.399	.005
Language	(6, 726) = 2.08	.97	.054	.017
Horizontal Individualism-Language	(6, 726) = 1.63	.97	.135	.013
Vertical Individualism-Language	(6, 726) = 1.12	.98	.351	.009
Horizontal Collectivism-Language	(6, 726) = .26	1.00	.957	.002
Vertical Collectivism-Language	(6, 726) = .59	.99	.740	.005

F = MANCOVA result; Wilk's Δ = Wilks Lambda; *p* = significance value, **p* < .05, ***p* < .01, ****p* < .001; η_p^2 = Partial eta squared.

The third MANCOVA was conducted to determine whether the relationships between cultural orientation and communication attitude were moderated by language. The multivariate tests results indicated that the four types of cultural orientation did not predict attitudes toward CST and neither did language (Table 18). The interactions between language and horizontal individualism, vertical individualism, horizontal collectivism, and vertical collectivism were each not statistically significant, indicating that language is not a moderator of the cultural orientation-attitudes toward CST relationship.

Cultural orientation, gender and attitudes toward learning communication

Table 19: MANCOVA 4 results for cultural orientation and gender on attitudes toward learning communication

	Positive and Negative attitudes toward CST			
	F	**Wilk's Δ**	***p***	η_p^2
Horizontal Individualism	(2, 373) = 3.94*	.98	.020	.021
Vertical Individualism	(2, 373) = 5.60**	.97	.004	.029
Horizontal Collectivism	(2, 373) = 9.22***	.95	.001	.047
Vertical Collectivism	(2, 373) = 3.47*	.98	.032	.018
Gender	(2, 373) = 1.45	.99	.236	.008
Horizontal Individualism-Gender	(2, 373) = 1.01	1.00	.367	.005
Vertical Individualism-Gender	(2, 373) = .76	1.00	.469	.004
Horizontal Collectivism-Gender	(2, 373) = 2.44	.99	.088	.013
Vertical Collectivism-Gender	(2, 373) = .07	1.00	.937	.000

F = MANCOVA result; Wilk's Δ = Wilks Lambda; *p* = significance value, *$p < .05$, **$p < .01$, ***$p < .001$; η_p^2 = Partial eta squared

A fourth MANCOVA was conducted to determine whether the relationships between cultural orientation and attitudes toward CST were moderated by gender. The multivariate tests results indicated that the four types of cultural orientation predicted attitudes toward CST but gender did not (Table 19). The interactions between gender and horizontal individualism, vertical individualism, horizontal collectivism, and vertical collectivism were not statistically significant, indicating that gender does not moderate the relationship between cultural orientation and communication attitude.

CONCLUSION

Amidst the variety of analyses conducted, the findings can best be understood in relation to how it answers the research questions of the present study. The first question was concerned with understanding how differences in training affect HSS attitudes toward CST and how this is further influenced by language and gender. Quantitative findings revealed that males had more negative attitudes toward CST and those who received formal CST had more negative attitudes toward CST. The interaction of training and language revealed that isiZulu speakers who received formal training had more positive attitudes in comparison to the others with positive attitudes.

The second research question was concerned with exploring students' perceptions of CST and its importance. Qualitative findings revealed that majority of the HSS believed that they had received CST but there appeared to be misperceptions around what CST entailed. Majority of HSS had appeared to have received theoretical training in communication skills in comparison to practical and other types of training. The HSS did identify that more practical methods to CST were required. The importance of CST was also acknowledged by majority of HSS and they found that it was relevant enough that it should commence as early as possible in their training.

The third research question was concerned with understanding how types of social anxiety influenced HSS attitudes toward CST and how this was influenced by language and gender. Findings indicated that fear of social interaction and performance, avoidance of social interaction and performance did not predict attitudes toward CST. Language and gender did not influence the social anxiety-attitudes toward CST relationship but was found to each independently predict negative attitudes toward CST. IsiZulu speakers were found to have higher negative attitudes toward CST than English speakers with negative attitudes. Males were found to have more negative attitudes toward CST in comparison to females with negative attitudes toward CST.

The fourth research question was concerned with understanding how individualist/ collectivist cultural orientation influenced HSS attitudes toward CST and how this was influenced by language and gender. Findings indicated that horizontal

collectivism predicted both positive and negative attitudes, horizontal individualism predicted positive attitudes and vertical individualism predicted negative attitudes. Vertical collectivism was not found to significantly predict attitudes toward CST. Language and gender did not influence the cultural orientation-attitudes toward CST relationship.

In summary, horizontal individualism, horizontal collectivism and the interaction between language and training were each found to significantly predict positive attitudes toward CST. Horizontal collectivism, vertical individualism, isiZulu language and male gender were each found to significantly predict negative attitudes toward CST. Importantly, each of these predictions was found to have a relatively small effect size on attitudes toward CST and thus findings should be considered with caution.

CHAPTER 6

DISCUSSION

This study discussed the influence of four factors on health science students' attitudes toward communication skills training. Firstly, there are demographic factors such as formal or informal training, language and gender. Secondly, HSS perceptions and misperceptions about CST; thirdly, levels of social anxiety and fourthly, levels of cultural orientation. These factors are discussed in relation to findings from previous studies as well as the perspective of social representation theory. Lastly, these findings are discussed in relation to the nature of their implications moving forward.

FORMAL VS. INFORMAL TRAINING, LANGUAGE AND GENDER

Formal/Informal training and attitudes toward communication skills training. The influence of formal/informal CST, language and gender on HSS attitudes to CST was investigated. It was hypothesized that HSS who had received formal CST would have more positive attitudes toward CST. Conversely, findings indicated that those who had received formal training had more negative attitudes toward CST than those who had received informal CST. This is consistent with findings from previous studies (Cleland et al., 2005; Harlak et al., 2008; Rees & Sheard, 2003; Shapiro et al., 2009) and is suggestive of a number of hypotheses at both an individual and contextual level. At an individual level, one might consider that students' negative attitudes at the end of CST may be because students' overestimated their communication skills at the start of training and subsequently through the knowledge gained during training, they began to acquire a more realistic appraisal of their communicative abilities (Rees & Sheard, 2003; Shapiro et al., 2009).

At the contextual level one might consider that these results are reflective of inadequacies in the training itself. Research has shown that if the CST environment is too idealistic in comparison to the reality of the healthcare context then students' attitudes toward CST declines (Bombeke et al., 2011). This can be aided through increased incorporation of exposure to the South African healthcare context and real

patients as part of HSS training. However, at a broader contextual level, consideration needs to be given to the underpinnings of health professional education which itself emphasises a biomedical approach to training that gives precedence to biological and scientific aspects of medicine at the expense of social and humanistic aspects (Cooke, Irby, Sullivan, & Ludmere, 2006), such as those found in CST. HSS may thus perceive CST not to be as important as their science courses, and communication skills not to be as important as the development of their other clinical skills. It is also important to consider that the educators of these students' have themselves been trained from perhaps an even more entrenched biomedical approach. Students' are highly impressionable and their attitudes may be influenced by those of their educators, thus it is possible that students' are modelling their educators' behaviours and views. Both educators and students' mindsets are immersed in a biomedical approach to health education. The move away from a biomedical approach to health education is gradual but emerging. To facilitate this process HP curriculum needs to be adapted toward a transformative rather than an informative learning process in which practitioners become equipped to identify and adjust to challenges while continually learning and adapting their competencies (World Health Organization, 2013).

Language and attitudes toward communication skills training. Language was found to independently predict HSS negative attitudes toward CST. As hypothesized, isiZulu speaking HSS were found to have higher negative attitudes toward CST than English speaking HSS. This finding is consistent with previous research which found that students' with a first language other than English experienced a greater increase in negative attitudes toward CST in comparison to students' with English as their first language (Rees & Sheard, 2002, 2003). In the educational context where the HSS are trained, English is the primary medium of instruction. It is possible that isiZulu speakers have been socialised in this environment to undervalue their home language and expect to interact with English speaking patients. The final year HSS have yet to be fully immersed in the South African healthcare context and come to the realisation that majority of their patients will be non-English speaking. As a result being able to converse in a national language other than English is highly valued in South Africa. Once again, transmission of knowledge about and increased exposure to the

South African healthcare context can perhaps facilitate isiZulu speaker's awareness of the value of their language in practice and serve to build their confidence as future HP. Additionally, predominantly English speaking individuals who do not perceive the need to acquire skills in communication, may come to realise the complexities and challenges that face practitioners' in the healthcare context, e.g. adapting to the use of translators.

Interestingly, language was also found to interact with training to predict positive attitudes towards CST. In this way, those who had received formal CST and were isiZulu speaking were found to have more positive attitudes toward CST. The isiZulu speaking students' who received formal CST are usually bilingual and this together with an awareness of social interaction with patients in the South African healthcare context perhaps, led them to acknowledge the value in their training and have more positive attitudes towards it.

Gender and attitudes toward communication skills training. Gender was found to independently predict HSS negative attitudes toward CST. As hypothesised, findings indicated that male HSS had more negative attitudes toward CST than female HSS with negative attitudes. This is consistent with previous studies which have found that males have more negative attitudes than females toward CST (Cleland et al., 2005; Fazel & Aghamolaei, 2011; Harlak et al., 2008; Koponen et al., 2012; Lumma-Sellenthin, 2012; Rees, Sheard, & Davies, 2002; Shankar, 2013; Wright et al., 2006). Researchers have postulated that this is likely due to differences in learning styles (Loureiro et al., 2011). For example, in a review of teaching and learning methods for communication, Aspergen (1999) found that male medical students' were slower at learning communication skills than the females in their study. Conversely, other researchers have suggested that this could be due to male students' overestimation of their competence (Rees & Sheard, 2003; Rees, Sheard, & McPherson, 2002). This seems more likely given the highly competitive environment which HSS operate within and the need to appear confident in one's abilities, especially when one considers that these are students' who are on the verge of becoming licensed HP. In such a richly biomedical context male students' perhaps perceive "soft skills" such as CST as pale in comparison to science courses and thus do not pay much attention to it, whereas female

students' have been shown to be much more open to new information and demonstrate a greater interest in psycho-social topics (Lumma-Sellenthin, 2012). An awareness of such gender dynamics with regards to CST can assist educators in the way that they approach training students'. In group work for example, educators can make sure that there is a fair mix between males and females so that each can benefit from the other's strengths and learn from their weaknesses. According to social representation theory, these dynamic presentations of language and gender can act as normative criteria which serve to contribute to the way in which students' selectively construct their attitudes toward CST.

PERCEPTIONS OF COMMUNICATION TRAINING RECEIVED, ITS IMPORTANCE AND RELEVANCE

Ambiguity surrounding communication skills training. Qualitative findings revealed a certain ambiguity surrounding CST. While 88 percent of HSS reported being aware of having received CST they appeared to find it difficult to clearly identify the training they had received. Some were unsure about whether the training they had received was formal or not and 12 percent stated being unaware of having received any CST at all. This seems to be a reflection of the variation in CST within UKZN CHS because even though all students' have been exposed to some form of CST, only the medical students' have received formal CST. This is also consistent with findings from Matthews and Naidu (in press) in which faculty of the present study's HSS acknowledged that except for medical students', the other HSS would not be able to identify CST as it had not been clearly defined in their professional training.

With regards to their awareness of the types of CST they have been exposed to, students' mentioned skills regarding communicating with patients, families, other professionals and communities. However, the methods of training used were inconsistent with some receiving purely theoretical and no practical training. A need for more practical training was expressed as 65 percent of HSS perceived practical methods to be the best methods for CST. Furthermore, certain methods of CST training that were highlighted are questionable, with games such as speed dating and puzzles.

Certain profession specific skills that were highlighted as important appear to be confused as being a part of CST, for example learning sign language as an alternate form of communicating. Sign language can be likened to the learning of any other type of language such as isiZulu and whilst being able to converse in more than one type of language is useful in the linguistically diverse context that is South Africa, it is not the same as CST. Indeed, many students' equated language courses with CST. Of interest, certain faculties of HSS had also equated language courses with CST in the study by Matthews and Naidu (in press).

Since the development and implementation of CST within the CHS is still within its infancy, suffice it to say that it is a relatively unfamiliar phenomenon to HSS. From the perspective of social representation theory, it would be this unfamiliarity that instigates discourse among HSS about CST. HSS who have received formal CST perhaps have more information than those who have only received an integration of aspects of CST in their respective programmes. Given the variation in methods being used to teach CST, students' are faced with a dispersion of information. This ambiguity currently surrounding CST at UKZN CHS illustrates a dire need for consolidation of methods and creation of a formalized CST programme across all health science programmes. Students' need to be made fully aware of the skills that they are meant to acquire and master by the end of their training and educators need to know precisely what they are expected to teach.

Importance and relevance of communication skills training. This study also sought to determine HSS perceptions of the overall importance and relevance of CST. Ninety-four percent of HSS stated that they perceived CST as being important for all HP. There was a consensus on majority of the profession specific communication skills highlighted by HSS from the eight departments as being important. Majority of HSS also agreed that CST was important enough that it should begin as early in training as possible. This is significant as the teaching of communication skills rests on the assumption that students' are aware of its importance (Lumma-Sellenthin, 2013). The extent to which students' feel the need to improve their communication skills has been highlighted as a factor influencing students' attitudes toward CST (De Villiers & Van

Heusden, 2007). They are thus more likely to be positive toward CST if they perceive it as important. This is illustrated in a study by Wright et al. (2006) who found that final year medical students' positive attitudes toward CST were significantly related to their perceived importance of communication skills. These results are significant as they lend insight into students' thoughts surrounding CST. Even though there is currently such variation in CST among the health science programmes and subsequent confusion being experienced by students', they are still identifying that there is importance in CST. This illustrates that educators already have "one foot in the door" as students' interests about CST have at least been awakened and can be used constructively.

Only 7 percent of HSS identified experiential methods such as modelling through observation of experienced practitioners' as a best method for teaching CST which is a markedly small percentage of the HSS population. Only a minority of students' identified some significant skills as being important: collaborative decision making was mentioned by 1 percent and developing rapport was mentioned by only 2 percent of HSS. These are all fundamental areas. However their under representation among HSS are likely because CST is still relatively new in the UKZN CHS with the development of programmes still underway, thus students' do not recognise about the importance and value of these aspects as yet.

Conversely, 6 percent of HSS were of the opinion that communication did not need to be taught formally and felt that it is something one could achieve through everyday interaction with others. This could be because they do not perceive CST as a fully-fledged academic subject and believe that they do not need to improve skills which are innate (Cleland et al., 2005; Rees & Garrud, 2001). However, even though some students' do not fully appreciate the value of CST, it does not mean that they will not be open to it once made fully aware of its importance. For example, a South African study conducted by Watermeyer (2011) found that once informed about the benefits of CST many participants expressed a desire to improve their communication skills.

SOCIAL ANXIETY AND ATTITUDES TOWARD COMMUNICATION SKILLS TRAINING

The influence of social anxiety on HSS attitudes toward CST was investigated. It was hypothesised that those with high levels of social anxiety would have more negative attitudes toward learning communication skills. Social anxiety was found to be associated with but not predictive of negative attitudes toward CST, which means that social anxiety was not found to cause negative attitudes. This is understandable given that overall HSS were found to have a mild level of social anxiety. Studies have indicated that students' with high levels of anxiety attain lower levels of education and are thus less likely to enter competitive medical programmes (Katzelnick et al., 2001; Laidlaw, 2009). This may be the case in the UKZN CHS programmes which are all highly competitive to enter.

On the other hand, it could be that due to a need to appear socially desirable, students' under-reported their symptoms. This is plausible given that individuals with social anxiety fear that they will act in ways which causes them to be negatively evaluated or judged, and thus feel the need to present a favorable public image and avoid embarrassment (Kashdan & Herbert, 2001). The competitive environment that HSS find themselves in might also prompt a need to avoid signs of weakness in order to maintain an appearance of social desirability (Loureiro et al., 2011; Russel, 2008). This is also conceivable as studies have found social anxiety to be more prevalent in undergraduate medical populations (Finkelstein et al., 2007; Loureiro, 2008; Russell & Shaw, 2009).

However it is significant to note that fear and avoidance of performance was found to be higher among HSS than fear and avoidance of social interaction. This is consistent with literature which states that performance fears are most likely to manifest in work and academic settings (American Psychiatric Association, 2013). Individuals who decide to pursue medical degrees typically have conscientious and committed personalities with high expectations of themselves to perform (Riley, 2004), which can promote such performance anxiety. Considering that the academic setting that medical students' and other HSS find themselves in is highly competitive (Russel, 2008), it is

conceivable that there is pressure to perform, perhaps especially as final year students' might feel the need to display competence as they will soon be qualified practitioners.

From the perspective of social representations theory, this mild level of performance related anxiety can act as a motivator during the *inference pressure phenomenon* in which it can motivate students' to regain a sense of control and decrease the level of anxiety surrounding CST by making sense of and trying to understand it. Since levels of social anxiety are mild and performance specific it is not necessarily a barrier to effective CST. Educators can express to students' that it is normal and useful to have a healthy level of anxiety which can be used constructively and in fact act as a motivator to improve performance.

CULTURAL ORIENTATION AND ATTITUDES TOWARD COMMUNICATION SKILLS TRAINING

The influence of cultural orientation on HSS attitudes toward CST was investigated. It was hypothesised that HSS with horizontal individualism or collectivism would have positive attitudes toward CST and that HSS with vertical individualism or collectivism would have negative attitudes toward CST. Findings indicated that horizontal individualism was found to be related to and predictive of positive attitudes towards CST. This means that the students' who were more oriented towards horizontal individualism had more positive attitudes toward CST. Significantly, majority of HSS were found to be oriented towards this dimension.

Horizontal individualism. Individuals who are more oriented towards horizontal individualism tend to view the self as independent but also as equal to others (Triandis, 1995). Oyserman et al. (2002) state that people who are more oriented towards individualism are generally known to be at ease when interacting with strangers. It is perhaps due to these perceptions that they do not have negative attitudes toward CST as they are open to communicate with others regardless of whether they are familiar peers or unknown patients, as they perceive themselves as equal to all. People who are oriented towards individualism are also known to evaluate a situation in order to determine what they have to gain out of the interaction (Triandis & Trafimow, 2001).

It is thus possible, that students' oriented towards horizontal individualism have positive attitudes toward CST because they acknowledge its many benefits. In fact, 79 percent of HSS stated that they found CST to be useful in both their professional and personal development. Students' who are more oriented towards this dimension are perhaps the most ideal student population for efficient CST. Their sense of individuality may serve as a motivation to engage in CST so as to gain from its many benefits, and their sense of equality allows for them to be more open to social interaction with a diversity of individuals.

Horizontal collectivism. Horizontal collectivism was found to be related to and predictive of both positive and negative attitudes. Individuals who are more oriented towards this dimension tend to view the self as interdependent and equal to others (Triandis, 1995). They also tend to be less assertive and direct in conversations (Holtgraves, 1997; Zane et al., 1991), thus the HSS in this study possibly have negative attitudes toward CST as an act of avoidance of confrontation with those they feel a great sense of social cohesion towards. In line with this, Oyserman et al. (2002) states that collectivists are sensitive to rejection and embarrassment. Conversely, it is the same sense of social cohesion that could explain why HSS who were more oriented towards horizontal collectivism in this study were also found to have positive attitudes toward CST. Individuals that lean more towards collectivism are driven by a sense of duty towards the group and are willing to give priority to the goals of the group over their own needs (Triandis, 1995). CST is in the process of being a formal requirement for all HSS graduates. Horizontal collectivists who were found to have positive attitudes toward CST may thus be thinking of putting their fears of rejection and embarrassment aside in order to fulfil the requirements of the group, i.e. to complete CST training. These students' require more encouragement and assurance in order to develop confidence in their abilities.

Vertical individualism. Vertical individualism was found to be related to and predictive of negative attitudes toward CST. Individuals who are more oriented towards this dimension tend to view the self as independent but also as different and unequal to others (Triandis, 1995). It is perhaps due to this perception that HSS oriented towards

vertical individualism are reluctant to engage in CST with others who they perceive as unequal to themselves. Individuals who lean toward individualism are known to be self-reliant and have a high self-esteem (Oyserman et al., 2002) which has perhaps led them to overestimate their communication skills (Rees & Sheard, 2003; Shapiro et al., 2009). In comparison to horizontal individualism, HSS who are more oriented toward vertical individualism have perhaps evaluated the situation and found that they have nothing to gain from CST, meaning that they do not perceive its benefits. HSS who are more oriented towards vertical individualism are perhaps a more difficult population for CST. Their sense of inequality could result in an overconfidence of their abilities. More effort is thus required by educators to assist these students' in realising the importance and benefits of CST.

Vertical collectivism. Vertical collectivism was found to be related to but not predictive of positive attitudes towards CST. Vertical collectivists emphasize sacrificing for the benefit of the group by performing their duties (Triandis, 1995). It is perhaps also due to this complacency that they have a tendency toward positive attitudes toward CST. However this can still be used constructively. By engaging students' in CST they can reach the stage where they want to acquire communication skills because they truly perceive its importance and not because an educator tells them it is important.

Power distances. The issue of inequality exists at some level in virtually all cultures and has been shown these "power distances" as defined by Hofstede (1980), echoes across all social interaction, including those in the educational context. Cultures that are more oriented towards individualism have small power distances by emphasizing that inequalities among individuals should be minimized and there should be interdependence between the less and more powerful (Hofstede, 1980). This would present in an educational setting as follows; students' would acknowledge that their educators have more power but would not regard their power as absolute. Rather, they would be active members of the class and challenge their educators if deemed necessary. Students' who are more oriented towards horizontal individualism would make good use of small power distances between themselves and educators as they would challenge educators constructively by perhaps engaging in debate. Students' who

are more oriented toward vertical individualism however may misuse small power distances and challenge educators in a demeaning way in which they try to exert their own knowledge as superior to their educators.

Conversely, cultures that are more oriented towards collectivism have large power distances by emphasizing that inequalities among individuals should be expected and desired, and that the less powerful should be dependent upon the more powerful (Hofstede, 1980). This would present in an educational setting as follows; students' would regard educators as they would their parents, with absolute power, and would treat them with honor, respect and obedience in return. Students' oriented towards horizontal collectivism and especially those more oriented towards vertical collectivism need to be encourages by their educators to assert themselves. As future HP they need to be able to display a level of confidence to their patients so that they can feel safe, knowing that they are in the capable hands of a professional who knows what he or she is doing. According to social representation theory, these dynamic presentations of cultural orientation can act as cultural criteria and contribute to the way in which students' selectively construct their attitudes toward CST.

OVERALL FINDINGS IN RELATION TO SOCIAL REPRESENTATIONS THEORY

In order to express an attitude toward an object one needs to first have a representation of it (Rateau et al., 2011). Social representations can thus be seen as providing a basis upon which attitudes are shaped. In relation to the present study, the interplay between cultural orientation, social anxiety, demographic factors and CST received and HSS perceptions of it, can all be seen as providing the basis within which HSS positive or negative attitudes toward CST are shaped. The emergence of a new social representation always coincides with the emergence of a new social object that is an unprecedented situation, unknown phenomena or unusual event (Rateau et al., 2011). In relation to this study, the new social representation would include HSS views about CST and the unknown phenomenon would be the CST itself, since it is relatively new in the UKZN CHS. The unfamiliarity with CST is reflected in HSS ambiguous responses about the nature of CST at the UKZN CHS. Students' responses reflected that they were

uncertain about exactly what CST is and how it was being taught. This unfamiliarity perhaps led to the process of discourse among HSS which involves two overarching processes of objectification and anchoring.

Objectification involves the saturation of the new social object that is unfamiliar with existing knowledge (Moscovici, 2000). This could have occurred in the following way in relation to the three processes characteristic of objectification. Firstly there is the dispersion of information; given that the phenomena is relatively new there is the assumption that information about it is limited, incomplete or widely spread (Rateau et al., 2011). In the case of this study, the dispersion of information on CST is clearly evident. For medical HSS, information is incomplete as they have been exposed to formal training but this is still a developing area in the UKZN CHS. For the other HSS information about CST is limited as their respective programmes have integrated aspects of CST into their courses. More effort is thus required by the other HSS to make meaning of CST as they have limited information to begin with.

This leads to the second process of objectification which involves the inference pressure phenomenon. This phenomenon occurs when the uncertainty generated by the dispersion of information arouses concern and worry which serves to motivate the individual to engage in intense cognitive activity in order to defend against the uncertainty (Rateau et al., 2011). The HSS operate in a competitive environment and not knowing precisely what one is doing is likely to produce a level of uncertainty and/or anxiety. The mild level of anxiety found in this sample of HSS perhaps motivated students' to make sense of CST in order regain a sense of control and decrease their anxiety about it. The process of making sense of the new social object is done through selective construction. This is where different characteristics are taken out of context and sorted according to cultural and normative criteria. In this way, HSS could have made sense of CST according to cultural criteria which may have involved their respective cultural orientation, and according to normative criteria which could have involved their demographic characteristics of language and gender. As can be expected, there are likely other cultural and normative criteria involved in this process that are not accounted for in relation to the key factors of this study.

According to cultural criteria, HSS oriented towards horizontal individualism appear to have analysed their situation and are determined that they can gain from CST as they perhaps perceive its many benefits. Those HSS who are more oriented towards horizontal collectivism are conflicted; they feel a deep sense of duty and social cohesion towards their group but also fear embarrassment and rejection. These students' can address CST in one of two ways: 1) due to sensitivity toward rejection and embarrassment they are less open to engaging in CST, 2) due to a deep sense of social cohesion and wanting to avoid confrontation with peers they attempt to put their fears aside and engage in CST. Those HSS who are more oriented towards vertical individualism on the other hand, appear to have analysed their situation and determined that they have nothing to gain from CST, perhaps due to an overconfidence of their abilities. Lastly, those HSS who are more oriented towards vertical collectivism tend to be more complacent and are possibly willing to engage in CST as their educators who represent authority figures have instructed them that it is important to do so.

According to normative criteria which contribute to the interplay of selective construction, this study has looked at the influence of language and gender in relation to students' attitudes toward CST. The HSS who are isiZulu speaking may also act in one of two ways; 1) those HSS who are isiZulu speaking may feel that their limitations in speaking English which they have experienced in the education context, may extend to the healthcare context and thus less open to learning more about communicating which is an area they find challenging, 2) those HSS who are isiZulu speaking and have had formal CST realise the importance of being bilingual and are thus more open to engaging in CST. When it comes to male HSS, it is perhaps due to an overestimation of their abilities or a need to appear socially desirable that they are less open to engaging in CST. In comparison, females are more open to new information and psychosocial courses and are thus more open to CST.

Once the social object has been selectively constructed according to these and other cultural and normative criteria, a figurative core is formed which is basically a coherent visualization that reproduces the object into a concrete and selective manner

(Rateau et al., 2011). In this way, HSS may have arrived at a concrete and selective understanding of CST. Representations are then anchored, a process which Moscovici (2000) describes as the reduction of a social object into categories in order to familiarise it. Anchoring occurs through the focalization phenomenon in which the various information, beliefs, hypotheses and speculations that occurred among members of the social group lead to the emergence of majority positions (Rateau et al., 2011). This is where individual HSS are thought to emerge with either positive or negative attitudes toward CST depending on their individual processes of objectification. During the process of anchoring old representations are modified with new representations; in this way contemporary representations of health education which are moving towards the inclusion of humanistic approaches are anchored in predominantly the biomedical approach to health education that has prevailed for over a century.

HSS attitudes toward CST may permeate not only how they approach and engage in the training itself, but also how they begin to view communication as they discuss it among their peers and eventually how they translate those views into their practice. However, it is important to remember that according to SRT, the formation of attitudes is an iterative process and thus not unchangeable. As students' are provided with new information and experiences, their social representations can be modified to accommodate for this. An understanding of attitudes is important as academics will be able to develop CST programmes for the benefit of their students' and provide them with the best possible chances of becoming professionals who are effective communicators.

IMPLICATIONS OF FINDINGS

The findings from this study have implications for the teaching and learning of communication, for curriculum review and development, and for furthering research in the area of communication skills among HP. Firstly, the dynamic framework that is social representations theory can be used by educators as a tool to understand how attitudes toward learning communication are shaped. A greater awareness of students' dynamic presentations can be applied to their training so as to enhance the efficacy of CST. Secondly the findings of this study contribute to the initiative undertaken by the

UKZN CHS, specifically with regards to curriculum review and development. Given the ambiguity surrounding CST and variations in methods currently being used to teach communication skills, the need for a more formalised programme across all health science departments is evident. Thirdly, findings of this study indicated that levels of cultural orientation, formal/informal training, language and gender were predictive of HSS attitudes toward CST. This can contribute to furthering research in the area of communication as predictor variables have rarely been studies in relation to CST.

CONCLUSION

The variation of methods used to teach CST appears to have led to ambiguity surrounding a clear definition of CST for both educators and students'. There appeared to be shortcomings in the training itself which highlighted a need for a more formalized CST programme across all health science departments. The Sociogenetic model of social representations theory has been used to understand how this dispersion of information on CST among the health sciences may have led students' to reach their own assumptions about CST by drawing on their existing normative and cultural criteria. In this way, students' have adopted either positive or negative attitudes towards CST. An awareness of student dynamics in terms of cultural orientation, social anxiety, language and gender can perhaps assist educators in the way that they engage students' in CST. Additionally, this study has identified cultural orientation, language, gender and formal/informal training to be predictive of attitudes toward CST. Cultural orientation has yet to be investigated in previous research as a predictor of attitudes toward CST and this study may serve to further research in this area.

CHAPTER 7

CONCLUSION

The need for competency based education for all HP is increasingly being realised. As such, competency frameworks such as the CanMEDS framework have been created to guide CBE for all HP. The CanMEDS framework has since been formally adopted in the training of all medical, dentistry and clinical associate students' and the UKZN CHS has made attempts to extend this to the training of all HSS. Among the core competencies, the role of health practitioner as a communicator has been highlighted as a core competency. Part of the initiative undertaken by the UKZN CHS includes the review and development of curriculum. In line with this, the present study sought to understand how HSS attitudes toward CST were formed. To do this, it considered the demographic factors of training, language and gender, along with students' views on the training itself, levels of cultural orientation and social anxiety.

This study has yielded practical implications for curriculum review and development of CST. In this study those who received formal CST were found to have more negative attitudes toward CST. This is perhaps reflective of shortcomings in the training itself and a predominantly biomedical approach to health professional education that has prevailed for over a century which emphasizes the importance of scientific courses over more humanistic courses such as CST. Overall a move towards transformative rather than informative learning is required in order to produce HP that are able to identify and adjust to challenges whilst continually learning and adapting their competencies (World Health Organization, 2013). Qualitative findings revealed an ambiguity surrounding CST at UKZN CHS which illustrates a dire need for consolidation of methods and creation of a formalized CST programme for use across all health science programmes. Even though there is currently such variation in CST among the health science programmes and subsequent confusion being experienced by students', findings indicated they are still identifying that there is importance in CST. This illustrates that educators already have "one foot in the door" as students' interests about CST have at least been awakened and can be used constructively. Students' need

to be made fully aware of the skills that they are meant to acquire and master by the end of their training, and educators need to know precisely what they are expected to teach.

This study has also yielded implications for the teaching of CST. If educators are made aware of such dynamics and how they present them in the classroom, they can adjust the manner in which they engage students' in training and enhance the efficacy of the training itself. Findings of this study revealed that language, gender, levels of cultural orientation and social anxiety each influenced HSS attitudes toward CST in different ways. In terms of language, isiZulu speakers were found to have more negative attitudes towards CST than English speakers. Increased exposure to the healthcare context could allow students' to become more aware of the challenges it faces. In this way, English speaking students' can become aware of the need to adapt to patients that are non-English speaking and isiZulu speaking students' can become aware of the benefits of being bilingual. In terms of gender, males were found to have more negative attitudes toward CST than females. An awareness of such gender dynamics with regards to CST can assist educators in the way that they approach training students', for example educators can make a concerted effort to ensure that there is a fair mix between males and females in group work activities so that each can benefit from the other's strengths and learn from their weaknesses.

In terms of cultural orientation, majority of HSS were oriented towards horizontal individualism which was found to be predictive of positive attitudes toward CST. This is perhaps the most ideal student population for efficient CST. Their sense of individuality may serve as a motivation to engage in CST so as to gain from its many benefits, and their sense of equality allows for them to be more open to social interaction with a diversity of individuals. After horizontal individualism, HSS were mostly oriented toward horizontal collectivism which was predictive of both positive and negative attitudes toward CST. Students' who are oriented towards this dimension are conflicted between a sense of social cohesion and sensitivity to rejection and embarrassment. They may have negative attitudes towards CST out of a need to avoid rejection and embarrassment from those they feel a great sense of social cohesion towards. Or it may be this same sense of social cohesion that leads them to have

positive attitudes toward CST as they suppress their fears in order to fulfil the needs of the group which is to meet the training requirements. These students' need more encouragement and assurance in order to develop confidence in their abilities.

Interestingly, the top two orientations among HSS were from the horizontal dimensions. This is promising as it indicates that regardless of whether students' view themselves as independent (horizontal individualism) or interdependent (horizontal collectivism) they share a commonality in viewing others, which shortly will be their patients and colleagues; as equals.

Vertical individualism was found to be predictive of negative attitudes toward CST. Students' who are more oriented towards this dimension are likely to display a sense of inequality and difference to others which could result in overconfidence in their own abilities. More effort is thus required by educators to assist these students' in realising the importance and benefits of CST. Vertical collectivism was found to be associated to but not predictive of positive attitudes toward CST. It is perhaps due to a level of complacency that these students' have a tendency toward positive attitudes toward CST. However this can be used constructively by educators. By engaging students' in CST they can reach the stage where they want to acquire communication skills because they truly perceive its importance and not because an educator tells them it is important.

An extension in the understanding of cultural orientation has been provided by Hofstede (1980) with the idea of power distances which has implications for interactions in the classroom. Individualist orientations have small power distances and collectivist orientations have larger power distances. Students' who are more oriented towards horizontal individualism would make good use of small power distances between themselves and educators as they would challenge educators constructively by engaging in debate. Students' who are more oriented toward vertical individualism however, may misuse small power distances and challenge educators in a demeaning way in which they try to exert their own knowledge as superior to their educators. Students' oriented towards horizontal collectivism - and especially those more oriented

towards vertical collectivism - need to be encouraged by their educators to assert themselves. As future HP they need to have the ability to display a level of confidence to their patients, so that they can feel safe knowing that they are in the capable hands of a professional who knows what he or she is doing.

In terms of social anxiety, HSS were found to have a mild level of performance related anxiety. Educators can express to students' that it is normal and useful to have a healthy level of anxiety which can be used constructively and in fact act as a motivator to improve their performance in CST. Social representations theory provides a dynamic framework from which the formation of HSS attitudes toward CST can be understood. The interplay between language, gender, social anxiety and cultural orientation as seen in this study, can be used to understand how students' selectively construct their representations of CST. HSS attitudes toward CST may permeate not only how they approach and engage in the training itself, but also how they begin to view communication as they discuss it among their peers and eventually how they translate those views into their practice. However, it is important to remember that according to SRT the formation of attitudes is an iterative process and thus not unchangeable. As students' are provided with new information and experiences, their social representations can be modified to accommodate this. An understanding of attitudes is important as academics will be able to develop CST programmes for the benefit of their students' and provide them with the best possible chances of becoming professionals who are efficient communicators.

This study has also yielded implications for furthering research in the area of CST. Horizontal individualism and collectivism were each found to be predictive of positive attitudes toward CST. Horizontal collectivism and vertical individualism were found to be predictive of negative attitudes toward CST along with the demographic factors of level of training, language and gender. Social anxiety was found to be related to but not predictive of negative attitudes toward CST. Predictor variables beyond demographic factors have rarely been researched in relation to attitudes toward CST and thus this study can uniquely contribute to research as it has investigated cultural orientation and types of social anxiety as predictor variables.

LIMITATIONS

There are predominantly methodological limitations in relation to the nature of the sample and the way the research instrument was used. Firstly, this study was conducted within one university, thus while it may have internal value for the planning and teaching of CST at UKZN CHS, results cannot be readily generalised to other HSS and to the teaching and learning contexts of HP education in the country.

Secondly, participants of this study consisted of HSS from eight different departments and only one of those departments (medicine) had received formal CST in line with the CanMEDS framework. The remaining seven departments had also received CST but this was informal as it was not in line with the CanMEDS framework and at varying levels of implementation. The sample was grouped together as a whole for the analyses on cultural orientation and social anxiety as the interaction of training was not being investigated for those relationships on attitudes toward CST. Conceptually these were understood to be social factors that were likely to be minimally or unaffected by CST. However it is acknowledged as a limitation for while this is probable it is unknown for certain. Ultimately, it was not investigated as this study was concerned with

The sample was only split into formal and informal CST for part of the analyses which looked at the effects of training on attitudes toward CST. However it is acknowledged that while this may be reflective of the current status of students' attitudes toward CST in UKZN CHS, the inconsistencies in CST may have influenced findings and should thus be interpreted with caution.

Thirdly, subscale scores for cultural orientation and social anxiety were used in this study rather than their larger scales. For example, instead of looking at the individualism subscale this study looked at the two subscales of individualism, i.e. horizontal and vertical individualism. The nature of subscales is that they have fewer items than the complete scale which may have decreased the predictive power of those scales.

RECOMMENDATIONS

Regarding future research in this area, CST should be viewed as an ongoing learning process and thus an evaluation of training at one point in time should be considered as just that. This sample of HSS attitudes toward CST may change to accommodate new information and experiences. In light of such considerations, future studies should ideally measure changes in attitudes across a longitudinal design in order to assess whether greater experiences influence attitudes toward CST.

Additionally, the present study used a qualitative questionnaire consisting of open-ended questions that were thematically analysed. However, the use of a questionnaire was restrictive in terms of not being able to question students' further. Thus, the use of focus groups in future studies should utilise in-depth questioning and understanding of HSS perceptions of CST. This is deemed significant as perceptions of training have been shown to influence how students' approach and engage with CST.

Regarding the review and development of CST, there are a number of recommendations stemming from findings of the present study. The variation in methods of CST currently being used at UKZN CHS needs to be addressed though the development of a standardised CST programme across all health science programmes in line with guidelines from the CanMEDS framework. Currently, CST at the UKZN CHS appears to be more theoretically based and a move towards the use of more experiential methods is recommended. Additionally, educators could possibly take a more proactive stance at the commencement of CST to influence attitudes in a positive way by, for example, challenging common misperceptions about CST.

Since the UKZN CHS staff have been trained within traditionally biomedical approach and many have not received CST themselves, they may share many of the misperceptions about CST that their students' have. Workshops as part of staff development are recommended to develop more humanistic skills such as those in communication and most importantly to alter some of their misperceptions regarding communication. This is especially important since students' are likely to model their educators' views and behaviour.

At a broader level, replications of this study at other South African universities could provide more definitive recommendations to the HPCSA in order to guide national HSS CST. This is deemed significant given that the consequences of poor communication such as an increase in malpractice claims (Huntington & Kuhn, 2003; Malherbe, 2012) and poor adherence (Shukla et al., 2010); and benefits of efficient communication such as better adherence (Huntington & Kuhn, 2003; Schneider et al., 2004) and improved patient-practitioner relationships (Wright et al., 2006) are increasingly being realised.

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APPENDICES

Appendix 1: Ethical Clearance

Appendix 2: Informed Consent form

Appendix 3: Research Instrument

APPENDIX 1: ETHICAL CLEARANCE

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

10 March 2016

Ms Sheena Naidoo 209506234
School of Applied Human Sciences
Howard College Campus

Dear Ms Naidoo

Protocol reference number: HSS/0225/016M (Linked to HSS/0415/015)
Project title: Communication as a core competency: Factors influencing health sciences student's attitudes toward developing communication as a core graduate competency

FULL APPROVAL-Expedited Application

In response to your application received 24 February 2016, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol with the amendment to study sample has been granted **FULL APPROVAL.**

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment /modification prior to its implementation. In case you have further queries, please quote the above reference number.

PLEASE NOTE: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

I take this opportunity of wishing you everything of the best with your study.

Yours faithfully

.....
Dr Shenuka Singh (Chair)
Humanities & Social Sciences Research Ethics Comittee

/pm

CC Supervisor: Dr Thirusha Naidu & Mr Sachet Valjee
Academic Leader: Dr Jean Steyn
Cc School Administrator: Ms Ayanda Ntuli

Humanities & Social Sciences Research Ethics Committee
Dr Shenuka Singh (Chair)
Westville Campus, Govan Mbeki Building
Postal Address: Private Bag X54001, Durban 4000
Telephone: +27 (0) 31 260 3587/8350/4557 **Facsimile:** +27 (0) 31 260 4609 **Email:** ximbap@ukzn.ac.za / snymanm@ukzn.ac.za / mohunp@ukzn.ac.za
Website: www.ukzn.ac.za

APPENDIX 2: INFORMED CONSENT FORM

INFORMED CONSENT TO PARTICIPATE IN STUDY

Hello, welcome!

We would like to introduce you to a study that is being conducted within, the College of Health Sciences about the teaching and learning of communication skills in health professional's education. The overall study is entitled "**Developing communication as a core competence in health sciences professionals' education"** and one of the components is concerned with "**Factors influencing health sciences students' attitudes to developing communication as a core graduate competency".**

We would learn about how the College of Health Sciences at UKZN is working to developing Communication as a core competency in the training of students' in the professional Health Sciences. You will be required to complete a few questionnaires. Please make sure that you complete your biographical details and complete all questions within the questionnaire.

We do not believe that participation in the study will be harmful to you in anyway. However should you find that you need to discuss or query an issue resulting from your participation in the study you may contact the researchers, Sheena Naidoo at 209506234@stu.ukzn.ac.za, or Thirusha Naidu at naidut10@ukzn.ac.za , or Prof Sabiha Essack at essacks@ukzn.ac.za. The information you provide will be kept in a locked office for a period of 5 years after the end of the project. It will then be destroyed. You are not required to provide any identifying information so your identity will remain confidential. You may chose not to participate in the study or chose to withdraw at any time with no negative consequences to you.

This study has been ethically reviewed and approved by the UKZN Human and Social Sciences Ethics Committee (HSS/0415/015). This office may be contacted at (031) 260-4609 or snymanm@ukzn.ac.za to verify this information and for any questions or concerns you may have in relation to the study.

CONSENT:

I _____have been informed about the study entitled Developing Communication Competence in professional Health Sciences education

I understand the purpose and procedures of the study.

I have been given an opportunity to answer questions about the study and have had answers to my satisfaction.

I declare that my participation in this study is entirely voluntary and that I may withdraw at any time without affecting any of the benefits that I usually am entitled to.

If I have any further questions/concerns or queries related to the study I understand that I may contact the researcher.

If I have any questions or concerns about my rights as a study participant, or if I am concerned about an aspect of the study or the researchers then I may contact:

HUMANITIES & SOCIAL SCIENCES RESEARCH ETHICS ADMINISTRATION
Research Office, Westville Campus
Govan Mbeki Building
Private Bag X54001
Durban
4000
KwaZulu-Natal, SOUTH AFRICA
Tel: 27 31 2604557 - Fax: 27 31 2604609
Email: HSSREC@ukzn.ac.za

Additional consent, where applicable.

I hereby provide consent to participate in the study

_____ _____
Signature of Participant Date

_____ _____
Signature of Witness Date
(Where applicable)

_____ _____
Signature of Translator Date
(Where applicable)

APPENDIX 3: RESEARCH INSTRUMENT

CODE	NUMBER

DEVELOPING COMMUNICATION AS A CORE COMPETENCY IN HEALTH SCIENCES PROFESSIONALS' EDUCATION

Factors influencing health sciences student's attitudes to developing communication as a core graduate competency

1. DEMOGRAPHIC SECTION

Please indicate the answers that apply to you by placing a cross (X) in the relevant box:

Gender	Male	Female					
First Language	English	Afrikaans	isiZulu	Other (Specify)			
Previous experience	High School	Other tertiary	Unemployed	Working			
Previous education	Matric	Undergraduate degree	Professional degree	Postgraduate degree			
Age	<16	17-20	21-24	25-29	30-34	35-39	40+

2. COMMUNICATION SKILLS ATTITUDE SCALE

Please read the following statements about communication skills learning and indicate whether you agree or disagree with all of the statements by indicating the most appropriate response.

1=Strongly Disagree 2=Disagree 3=Neutral 4=Agree 5=Strongly Agree

	1	2	3	4	5
1. In order to be a good doctor I must have good communication skills.					
2. I can't see the point in learning communication skills.					
3. Nobody is going to fail their medical degree for having poor communication skills.					
4. Developing my communication skills is just as important as developing my knowledge of medicine.					
5. Learning communication skills has helped or will help me respect patients.					
6. I haven't got time to learn communication skills.					
7. Learning communication skills is interesting.					
8. I can't be bothered to turn up to sessions on communication skills.					
9. Learning communication skills has helped or will help facilitate my team working skills.					

	1	2	3	4	5
10. Learning communication skills has improved my ability to communicate with patients.					
11. Communication skills teaching states the obvious and then complicates it.					
12. Learning communication skills is fun.					
13. Learning communication skills is too easy.					
14. Learning communications skills has helped or will help me respect my colleagues.					
15. I find it difficult to trust information about communication skills given to me by non-clinical lecturers.					
16. Learning communication skills has helped or will help me recognise patients' rights regarding confidentiality and informed consent.					
17. Communication skills teaching would have a better image if it sounded more like a science subject.					
18. When applying for medicine, I thought it was a really good idea to learn communication skills.					
19. I don't need good communication skills to be a doctor.					
20. I find it hard to admit to having some problems with my communication skills.					
21. I think it's really useful learning communication skills on the medical degree.					
22. My ability to pass exams will get me through medical school rather than my ability to communicate.					
23. Learning communication skills is applicable to learning medicine.					
24. I find it difficult to take communication skills learning seriously.					
25. Learning communication skills is important because my ability to communicate is a lifelong skill.					
26. Communication skills learning should be left to psychology students', not medical students'.					

3. **LIEBOWITZ SOCIAL ANXIETY SCALE**

Please respond to the statements using the following scale:

Fear or Anxiety:	**Avoidance:**
0 = None	0 = Never (0%)
1 = Mild	1 = Occasionally (1—33%)
2 = Moderate	2 = Often (33—67%)
3 = Severe	3 = Usually (67—100%)

	Fear/ Anxiety	Avoidance
1. Telephoning in public. (P)		
2. Participating in small groups. (P)		
3. Eating in public places. (P)		

	Fear/ Anxiety	Avoidance
4. Drinking with others in public places. (P)		
5. Talking to people in authority. (S)		
6. Acting, performing or giving a talk in front of an audience.(P)		
7. Going to a party. (S)		
8. Working while being observed. (P)		
9. Writing while being observed. (P)		
10. Calling someone you don't know very well. (S)		
11. Talking with people you don't know very well. (S)		
12. Meeting strangers. (S)		
13. Urinating in a public bathroom. (P)		
14. Entering a room when others are already seated. (P)		
15. Being the centre of attention. (S)		
16. Speaking up at a meeting. (P)		
17. Taking a test. (P)		
18. Expressing a disagreement or disapproval to people you don't know very well.(S)		
19. Looking at people you don't know very well in the eyes. (S)		
20. Giving a report to a group. (P)		
21. Trying to pick up someone. (P)		
22. Returning goods to a store. (S)		
23. Giving a party. (S)		
24. Resisting a high pressure salesperson. (S)		

4. INDIVIDUALISM AND COLLECTIVISM SCALE

Please respond to the statements using the following scale: Place a checkmark along the following continuum where **1= Strongly Disagree and 5=Strongly Agree.**

	1	2	3	4	5
1. One should live one's life independently of others.					
2. If a relative were in financial difficulty, I would help within my means.					
3. Before taking a major trip, I consult with most members of my family and many friends.					
4. I enjoy being unique and different from others in many ways.					
5. Without competition, it is not possible to have a good society.					
6. Some people emphasize winning; I am not one of them.					
7. Children should be taught to place duty before pleasure.					
8. I like my privacy.					
9. Winning is everything.					
10. It is important to maintain harmony within my group.					

	1	2	3	4	5
11. I would sacrifice an activity that I enjoy very much if my family did not approve of it.					
12. We should keep our aging parents with us at home.					
13. What happens to me is my own doing.					
14. When another person does better than I do, I get tense and aroused.					
15. I like sharing little things with my neighbours.					
16. I usually sacrifice my self-interest for the benefit of my group.					
17. My happiness depends very much on the happiness of those around me.					
18. I am a unique individual.					
19. It annoys me when other people perform better than I do.					
20. The well-being of my co-workers is important to me.					
21. I would do what would please my family even if I detested the activity.					
22. Children should feel honored if their parents receive a distinguished award.					
23. I feel good when I cooperate with others.					
24. Competition is the law of nature.					
25. When I succeed, it is usually because of my abilities.					
26. I hate to disagree with others in my group.					
27. To me, pleasure is spending time with others.					
28. It is important that I do my job better than others.					
29. I prefer to be direct and forthright when I talk to people.					
30. I enjoy working in situations involving competition with others.					
31. I often “do my own thing.”					
32. If a co-worker gets a prize, I would feel proud.					

QUALITATIVE QUESTIONS ON DEVELOPING COMMUNICATION AS A COMPETENCE IN UNDERGRADUATE PROFESSIONAL TRAINING

1. Have you studied communication in your training as a health professional?

   _____
   _____

2. What types of communication training were you exposed to?

   _____
   _____

3. How were you taught communication skills? (Methods used)

   _____
   _____
   _____

4. What do you think are the best methods for learning communication?

   _____
   _____
   _____

5. Did you find the training useful? If so how did the training help?

   _____
   _____
   _____

6. Do you think it is important for health professionals to be specifically trained in communication skills? State your reasons

   _____
   _____
   _____

7. What are the specific communication skills that are important in your profession?

   _____
   _____
   _____

8. When do you think health professionals should start learning communication skills? Give reasons for your answer.

   _____
   _____
   _____