Exploring ethical sensitivity in the South African context: developing and implementing a measure in the therapeutic sciences

by

Alida Maryna Naudé

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

Doctor of Philosophy in Augmentative and Alternative Communication

in the Centre for Augmentative and Alternative Communication

at the

UNIVERSITY OF PRETORIA

FACULTY OF HUMANITIES

SUPERVISOR: Prof Juan Bornman

February 2015

The financial assistance of the National Research Foundation (NRF) towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at, are those of the author and are not necessarily to be attributed to the NRF.

DECLARATION OF ORIGINALITY

UNIVERSITY OF PRETORIA

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

While academic staff teach you about referencing techniques and how to avoid plagiarism, you too have a responsibility in this regard. If you are at any stage uncertain as to what is required, you should speak to your lecturer before any written work is submitted.

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

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

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

Full names of student: **Alida Maryna Naudé**

Student number: **97016986**

Topic of work: **Exploring ethical sensitivity in the South African context: Developing and implementing a measure in the therapeutic sciences**

Declaration

1. I understand what plagiarism is and am aware of the University's policy in this regard.

2. I declare that this **thesis** (eg essay, report, project, assignment, dissertation, thesis, etc) is my own original work. Where other people's work has been used (either from a printed source, Internet or any other source), this has been properly acknowledged and referenced in accordance with departmental requirements.

3. I have not used work previously produced by another student or any other person to hand in as my own.

4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.

SIGNATURE Naudé

Abstract

An understanding of the client, his/her needs, emotions and circumstances is fundamental to an effective therapeutic relationship. This holistic focus of the relationship and service excellence are, together with ethical sensitivity, important pillars for effective and competent practice. Since there are currently no measures available to evaluate ethical sensitivity in the therapeutic sciences, this study aimed at developing, implementing and evaluating a multidisciplinary measure of ethical sensitivity for healthcare professionals in the therapeutic sciences. The focus was specifically on four professions – audiology, occupational therapy, physiotherapy and speech-language therapy – within the South African context. The study followed a two-phase, sequential mixed-methods research approach. Phase 1, the qualitative exploration of ethical sensitivity, focused on developing a measuring instrument by means of a systematic review of the following: ethical codes of conduct; focus group discussions; individual in-depth interviews; an expert panel review; and public complaints websites. Phase 2, the quantitative stage, focused on implementing and evaluating the measuring instrument. One hundred participants – i.e. final-year students who represented the four professions included in this study – completed the measuring instrument. Participants' overall scores on the Measuring Instrument for Ethical Sensitivity in the Therapeutic sciences (MIEST) were comparable for all four professions, which confirmed the multidisciplinary usability of the instrument. All participants tended to make decisions based on the principle of Beneficence. Participants were particularly sensitive about the impact of the therapist's actions on the individual client (individualistic culture), and sometimes overlooked their duty to the community (collectivistic culture). Overall, participants selected an alternative response for the target principle of Non-Maleficence. The MIEST can be used to

assess the ethical sensitivity of student therapists (and possibly qualified therapists as defined in this study) and describe the stage of their ethical sensitivity development throughout the course of their professional development. The constructed vignettes make the MIEST appropriate for use in problem-based learning programmes. Further research could focus on testing and refining the vignettes and items included in the MIEST to enhance reliability and validity.

Keywords: autonomy, beneficence, decision making, ethical principle, ethical sensitivity, justice, non-maleficence, perspective taking, therapist, therapeutic sciences

Opsomming

'n Begrip van die kliënt, sy/haar behoeftes, emosies en omstandighede vorm die basis van 'n doeltreffende terapeutiese verhouding. Saam met etiese sensitiwiteit vorm hierdie holistiese fokus op die verhouding asook diensuitnemendheid belangrike pilare van doeltreffende en bekwame terapeutiese praktyk. Aangesien daar tans geen meetinstrumente beskikbaar is om etiese sensitiwiteit in die terapeutiese wetenskappe te evalueer nie, is hierdie studie gemik op die ontwikkeling, implementering en evaluering van 'n multidissiplinêre meetinstrument om etiese sensitiwiteit by gesondheidskundiges in die terapeutiese wetenskappe te meet. Die fokus het spesifiek op vier beroepe – oudiologie, arbeidsterapie, fisioterapie en spraak-taalterapie – binne die Suid-Afrikaanse konteks geval. Die studie het twee fases behels en 'n sekwensiële gemengde-metode navorsingsbenadering is gevolg. Fase 1, die kwalitatiewe verkenning van etiese sensitiwiteit, was gerig op die ontwikkeling van 'n meetinstrument deur middel van 'n sistematiese oorsig van die volgende: etiese gedragskodes; fokusgroepbesprekings; individuele diepte-onderhoude; hersiening deur 'n paneel van deskundiges; en openbareklagte-webtuistes. Fase 2, die kwantitatiewe fase, het gefokus op die ingebruikneming en evaluering van die meetinstrument. Altesaam 100 deelnemers – finalejaarstudente wat die vier beroepe in die studie verteenwoordig het – het die meetinstrument voltooi. Deelnemers se totale tellings op die MIEST (*Measuring Instrument for Ethical Sensitivity in the Therapeutic sciences*) was vergelykbaar vir al vier beroepe, en het dus die multidissiplinêre bruikbaarheid van die vraelys bevestig. Al die deelnemers was geneig om besluite te neem op grond van die beginsel van opbouende betrokkenheid (*Beneficence*). Deelnemers was veral sensitief ten opsigte van die impak van die terapeut se optrede op die individuele kliënt (individualistiese

kultuur), en het soms hul plig teenoor die gemeenskap (kollektivistiese kultuur) oor die hoof gesien. Oor die algemeen het deelnemers 'n alternatiewe respons vir die teikenbeginsel van nie-benadelende betrokkenheid (*Non-Maleficence*) geselekteer. Die MIEST kan gebruik word om die etiese sensitiwiteit van studentterapeute (en moontlik gekwalifiseerde terapeute soos in hierdie studie omskryf) te assesseer en hul fase van etiese sensitiwiteitsontwikkeling dwarsdeur die verloop van hul beroepsontwikkeling te beskryf. Die saamgestelde vinjette maak die MIEST toepaslik vir gebruik in probleemgebaseerde leerprogramme. Verdere navorsing sou kon fokus op die toetsing en verdere afronding van die vinjette en items wat by die MIEST ingesluit is ten einde die instrument se betroubaarheid en geldigheid te verhoog.

Sleutelwoorde: besluitneming, etiese beginsel, etiese sensitiwiteit, geregtigheid, nie-benadelende betrokkenheid ('non-maleficence'), opbouende betrokkenheid ('beneficence'), outonomie, perspektiefneming, terapeut, terapeutiese wetenskappe

Acknowledgements

Reflecting on this journey, I am blessed to say that I was never alone. Thank you for the support, encouragement, love and help of everyone who walked beside me.

Foremost, I would like to express my love and gratitude to my Heavenly Father. Thank You for my existence and for everything that I am. Thank You for including me in Your most Holy Will, and thank You for the plans that You have for me. Thank You for all the trials and tests that You have given to me, for You know the best way to help me grow and mature to Your liking. Thank you for Your infinite goodness which is reflected on the perfection of all Your works. Thank You Dear Heavenly Father for being a Loving Father to me.

Secondly, I would like to thank my supervisor, role model, mentor and friend, Prof Juan Bornman, for taking me under her wing and guiding me during this journey of discovery. She has taught me that what we do now echoes in eternity. The miracle of this journey is not that I finished but that I had the courage to start, and with her support rework and restart. I am grateful for the continuous support of my PhD study and research, for her patience, motivation, enthusiasm, and immense knowledge. She is the only one that truly knows the highest and lowest moments of this journey. Her guidance helped me in all the time of research and writing of this thesis, especially when I realised that life does not stand still just because you are busy with your PhD. She kept a sense of humour when I had lost mine and her selfless time and care were sometimes all that kept me going. Thank you for all the life lessons, short stories, jokes and notes. She was the wind from behind when I felt I could not continue and the wind from the front when I got carried away with all the ‘nice to knows’ and ‘I wonder if’s…’ I do not see this as the end of our journey but only the beginning – especially since I am now allowed to enter via the front door! These two words are not enough but she knows my heart – Thank you.

Besides my supervisor, I would like to thank all the postgraduate supervisors and PhD students for their encouragement, insightful comments, stimulating discussions and hard questions. It was not always easy, but it was always a safe place. My

sincere thanks especially go to Ensa Johnson for the special support and encouragement during the 'last days'.

A special thank you to Dr. Brian Wolfowitz who always believed in me and encouraged me to embark on the road of research and discovery. He saw the end of this journey long before I even thought about it. I owe a great part of my professional success to his input and guidance.

Prof Brenda Louw for introducing the field of ethics to me and imparting her passion for ethics and the profession in my heart. It was a great honour and privilege to end my oral defence in discussion with the person who introduced me to the field. Thank you for your encouraging words for the future, and believing in me.

It is a great privilege to thank Isabel Claassen for the language and technical editing that she provided with expert knowledge and skill. Her support during the 'final days' did not go unnoticed.

Prof Liebie Louw and Mrs Joyce Jordaan for their assistance with the statistical analysis of the data.

My boss, Shawn Hardy, for statistical and technical support as well as encouragement along the way.

Amtronix for financial support during the data collection as well as the final preparation for submission of the thesis.

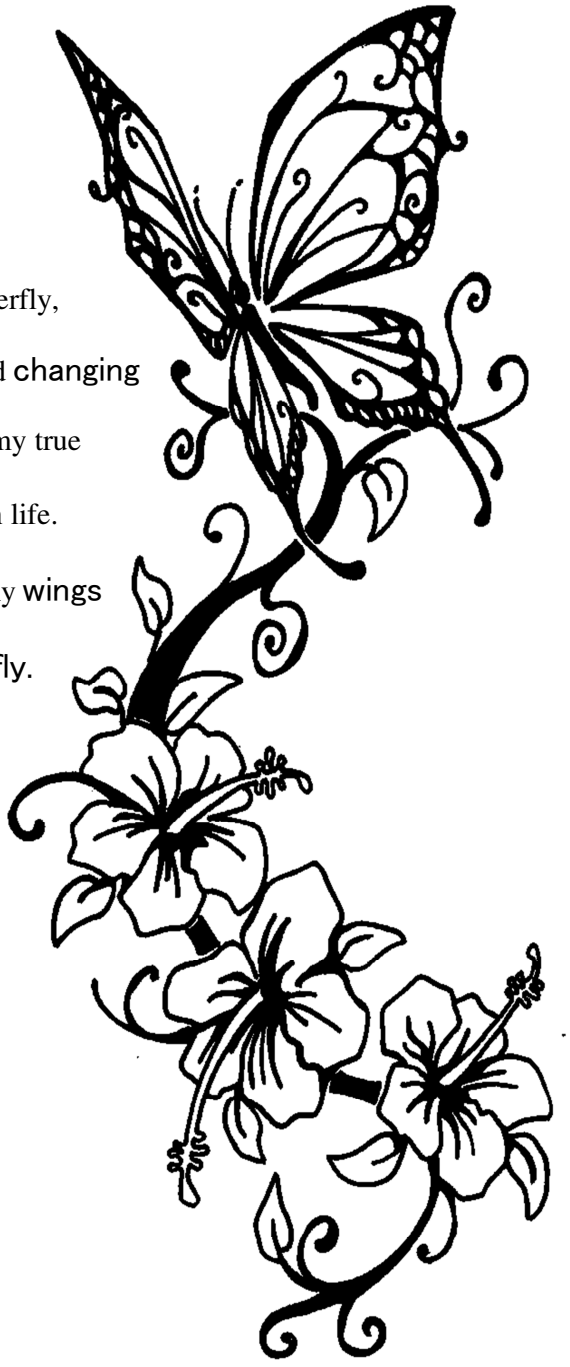
Jeanette Blom, who helped me see beyond black and white to appreciate the grey in life. Thank you for taking me on a journey that I never knew existed.

Dr. Anna-Marie Wium who shares my passion for ethics but also believed in me throughout this journey. A special thank you for sharing your ideas for graphical presentation of mixed methodology.

Thank you to every audiologist who offered encouragement, who sent me messages and cheered me on. Shamim, Ceri, Celeste and Carina, your messages were always spot on and delivered at the right time. You will never know how you have carried me through.

To every single participant, thank you for your time and input. Without you, there would not have been a study. I value each one of you.

Last but certainly not least, I would like to thank my family. My brother, sister-in-law, father, stepmother, mother and stepfather for their encouragement, prayers and spending additional special time with the children. The three men in my life, Michael, Justin and Dylan, your humour and love are the main ingredients of any success in my life. Thank you for allowing me, with patience and support, to start and finish this journey.



Like a butterfly,

I am growing and changing

and finding my true

colours in life.

I am finding my wings

so I can fly.

Table of Contents

List of Tables

List of Figures

Chapter 1
Orientation

"You, the reader, whoever you are, are not a complete novice in ethics. You understand the meaning of 'good' and 'bad', 'right' and 'wrong', and you know that some actions are right while others are wrong and that some things are good while others are bad. These aspects are precisely what ethics as a subject of systematic study deals with" – Ewing (1995, p. 1)

1.1 INTRODUCTION

This chapter provides an orientation to the research. It presents background information, the purpose of the research, definitions of terms used within the context of the study, an explanation of the abbreviations used and, finally, an outline of each of the chapters in the study.

1.2 PROBLEM STATEMENT AND BACKGROUND

The life of the contemporary healthcare professional is lived among a set of infinities that are related to increasing accountability demands, resource challenges, global horizons of standards and developing techniques, shifting knowledge and changing client relationships. It is generally accepted that the flexible, uncertain and fast-paced nature of the work-life of healthcare professionals poses considerable challenges to his/her acting in a professionally responsible manner. The challenges to be faced are complex, contextually unique and frequently give rise to competing and conflicting struggles regarding values and ethical stances. Individual professionals have to rely on their own ability to reflect critically and make immediate ethically responsible decisions. Professional ethics holds admirable ideals in tension with everyday professional workplace realities and how professionals navigate such turbulent situations or dissolve ethical dilemmas.

The decision-making process involves ethical sensitivity, ethical judgment, and ethical choice (Wittmer, 2005). Most discussions of ethical decision-making

frameworks maintain that ethical sensitivity is the starting point in the process of ethical decision making and comes before the step of ethical reasoning. What is ethical sensitivity and what does it entail? Ethical sensitivity can be understood as the relative capacity to recognise the ethical dimensions within an ethical situation. However, clarification of what constitutes an ethical (decision-making) situation receives limited attention in the current published research literature. By most accounts, an ethical situation involves choice and will have a significant impact on the welfare of other people. Ethical situations are also defined by the ethical principles and guidelines of the profession, and the situation could be thought of as ethical to the extent that these principles and guidelines are relevant and deserve consideration in a particular situation. For the purposes of this study, an ethical situation is involved with choice and has the potential for significant impact on other people. Ethical dimensions are those norms, standards and principles that *provide the basic guidelines for determining how conflicts in human interests are to be settled and for optimizing mutual benefit of people living together in groups* (Rest, 1986, p. 1). While perceiving or recognising the ethical dimensions of situations, one might assign relatively little importance to it (and in this sense be ethically insensitive). Unless the ethical aspects of a situation are perceived or recognised, it is hard to address any ethical problem, for without the initial recognition, no ethical problem exists. While ethical sensitivity is conceived as a critical factor in ethical decision making, and can be operationalised because of an established and agreed-upon ethic of a profession, the construct of ethical sensitivity has not yet received dedicated and focused attention in studies that examine and discuss the level of ethical reasoning or ethical conduct in the therapeutic sciences. Furthermore, no related empirical studies have been conducted that attempt to measure ethical sensitivity either. The difficulty of measuring ethical sensitivity may be one of the major contributing obstacles that have prevented research in this area.

In the light of these facts, the purpose of this study is to design and test a measure of ethical sensitivity in a context of decision making in the therapeutic sciences. Another objective is to study students in different programmes related to the therapeutic sciences (audiology, physiotherapy, occupational therapy and speech-language therapy) in order to examine possible sector differences in response to therapeutic challenges. This research aims to provide a single measure that may be

used to describe ethical sensitivity among therapists in the therapeutic sciences, as well as among student-therapists throughout their undergraduate training.

In conclusion, measuring ethical sensitivity may, as part of professional reality, reveal some vulnerability that should be celebrated rather than denied. The researcher recognises vulnerability as necessary for professional growth and for a more holistic consideration of the complexities of professional life and work. The central thesis of this research study is that ethical sensitivity relates to being interested in the transformation of 'the ways things are' into more just and healthy relations, structures and ways of thinking, and being led to increased levels of professionalism and responsible conduct.

1.3 DEFINITION OF TERMS

The following frequently used terms need some clarification within the context of the study:

Autonomy:	Refers to a client's right to make his/her own decisions as well as the professional's responsibility to disclose all information that a client needs to make a decision, not to tell lies about care and treatment, and, when asked questions, to answer those truthfully. It includes the client's right to privacy and confidentiality (Cherow, 1994).
Beneficence:	Actively bringing about positive actions or interventions by promoting individual well-being as well as group welfare through kindness and empathy with the clients best interest in mind (Pera, 2010).
Communication (effective verbal and non-verbal):	Implies that a person can adapt to various contexts of communication as well as cultural context and apply specific skills such as listening, speaking, writing and non-verbal communication.

Controlling social bias:	Involves understanding, recognising and dynamically opposing preconceived judgments towards people because of personal characteristics or group membership e.g. disability, sexuality, race, etc. (Coulehan, 2005).
Diversity (perceiving and responding to):	Understanding how cultural groups differ and how differences can lead to conflict and misunderstanding and how to get along with differences (Vines & Napier, 1992).
Emotional expression (understanding):	Identify and respond appropriately to the emotional cues from others (Gunderman, 2011).
Ethical sensitivity:	Ethical sensitivity may be defined as a therapists' ability to recognize that an ethical problem exists. It includes the ability to identify the client and situational needs as well as the ability to anticipate moral consequences of actions (Weaver, 2007).
Therapeutic sciences	Group of healthcare professionals including audiologists, occupational therapists, physiotherapists and speech-language therapists.
Interpreting ethics in a situation:	The ability to generate numerous interpretations of a situation and considering alternatives for dealing with it (Narvaez & Endicott, 2009).
Justice:	Refers to what society's expectations are of what is fair and right. It corresponds to the virtue of benevolence (goodwill), of avoiding doing harm and fairness. Concerned with the equitable allocation of resources (Rawls, 1999).
Non-maleficence:	Duty of care to actively prevent harm as well as the risk of harm (Pera, 2010).
Perspective taking:	Refers to our ability to perceive someone else's thoughts, feelings, and motivations. Our ability to empathise with someone else and see things from their perspective (Ruby & Decety, 2003).

Relating to others:	To competently and skilfully support clients by showing concern for them while understanding what is important to them by assessing their emotions, motivations, desires and intentions (Narvaez & Endicott, 2009).
Therapeutic sciences:	A field of study reflecting what the World Health Organization has identified as a new paradigm for understanding and studying disability. The emphasis is on understanding the consequences of health conditions for the person, rather than the health condition itself. It is an interdisciplinary term that involves a variety of professions. The following four professions are specific to this study, namely audiology, occupational therapy, physiotherapy and speech- language therapy (WHO, 2001).

1.4 ABBREVIATIONS

AAC	Augmentative and Alternative Communication
ASHA	American Speech-Language–Hearing Association
ANOVA	Analysis of variance
AUD	Audiology/Audiologist
CPD	Continued profession development
DEST	Dental Ethical Sensitivity Test
EEC	Ethics Education Continuum
EIM	Evidence in Motion
EP	Ethical principle
ESS	Ethical sensitivity skill
EST	Ethical Sensitivity Test
HIV/AIDS	Human immunodeficiency virus/Acquired immunodeficiency syndrome
HOD	Head of Department
HPCSA	Health Professions Council of South Africa
ICF	International Classification of Functioning, Disability and Health
ICU	Intensive care unit

ENT	Ear, nose and throat specialist
MBTI	Myers-Briggs Type Indicator
MIEST	Measuring instrument for ethical sensitivity in the therapeutic sciences
NICU	Neonatal intensive care unit
OT	Occupational therapy/therapist
OTASA	Occupational Therapy Association of South Africa
PBL	Problem based learning
PT	Physiotherapy/Physiotherapist
REST	Racial Ethical Sensitivity Test
SAAA	South African Association for Audiologists
SAALED	South African Association for Learning and Educational Difficulties
SAISI	South African Institute for Sensory Integration
SAS	Statistical Analysis Software
SASLHA	South African Speech-Language-Hearing Association
SASP	South African Society of Physiotherapy
SLT	Speech-language therapy/therapist
TB	Tuberculosis
TBI	Traumatic brain injury
TESS	Test for Ethical Sensitivity in Science
TESSE	Test for Ethical Sensitivity in Science and Engineering
UCT	University of Cape Town
UNISA	University of South Africa
UP	University of Pretoria
WHO	World Health Organisation
WITS	University of the Witwatersrand

1.5 CHAPTER OUTLINES

The research is presented in seven chapters. **Chapter 1** includes the problem statement and an orientation to the motivation for the study, the definitions of terms used within the framework of the research, as well as the abbreviations. It concludes with an outline of the chapters in the study.

The conceptual framework for the study is provided in **Chapter 2**. It commences with a discussion related to the concept of ethics, its specific importance for the therapeutic sciences, the process of ethical decision making and components of ethical action. This is followed by a discussion on the importance of ethical sensitivity as well as the different principles and skills that form part of this construct. The relevance of ethical sensitivity in the ethics training of professionals is highlighted and followed by an analysis of the measurement of ethical sensitivity. An overview of empirical research into ethical sensitivity is presented and used to emphasise the importance of a Measuring Instrument for Ethical Sensitivity in the Therapeutic sciences (MIEST).

The methodology used for Phase 1 of the research study is described in **Chapter 3** and includes a description of the sampling and development process that was followed during the qualitative stage of the research. The discussion starts with a presentation of aims, sub-aims, philosophical underpinning and research design. This is followed by a discussion of the systematic review and process to summarise the professional ethical codes. The chapter continues with a description of the process involved for data collection during focus groups, individual interviews and public views. The results obtained from Phase 1 are presented to show how the preliminary MIEST was developed.

The methodology adopted during the execution of Phase 2 of the research (the quantitative phase) is presented in **Chapter 4**. The discussion starts with a presentation and evaluation of the pilot study, followed by the main study. The final version of the MIEST that was used during data collection is also presented and discussed.

Chapter 5 provides an overview of the results obtained. This chapter commences with a presentation of the inter-rater reliability results and focuses next on reporting the findings in relation to the aims of the study.

The data in presented in Chapter 5 is interpreted and discussed in **Chapter 6**. Inferences regarding the ethical sensitivity scores on the MIEST are formulated and presented in relation to contributing factors that have an impact on the outcome of the research.

In **Chapter 7** the conclusions and a critical evaluation of the study are presented, followed by a discussion of the clinical implications and recommendations for future research.

The appendices contain important information for understanding the data collection and analysis procedures, and thus for the replication of the study.

1.6 SUMMARY

This first chapter has provided the rationale for the study by describing the background information that led to its development, as well as the purpose of the study. It has included a definition of terms used within the context of the research, together with an explanation of the abbreviations used. Finally, an outline has been provided of the different chapters.

Chapter 2
Literature Review

*To educate a person in mind and not in morals **and ethics*** [own emphasis added] *is to educate a menace to society* – Theodore Roosevelt (n.d.)

2.1 INTRODUCTION

In this chapter, the reader is guided through the relevant literature to provide insight into the problem statement and rationale for the study. The specific aspects that are discussed include the background to the study, the rationale, a definition of the concept of ethical sensitivity, current methods for measuring ethical sensitivity, as well as implications thereof for the study. The chapter starts with a review of professional ethics, more specifically ethics in the therapeutic sciences. This is followed by a discussion of the process of ethical decision making and specific skills related to the process. The chapter continues with a discussion of the first component related to ethical action, namely ethical sensitivity, including definition, key characteristics, ethical sensitivity skills, as well as training and available assessment options. The need for an ethical sensitivity measure in the therapeutic sciences is then discussed. Finally, studies investigating ethical sensitivity in a variety of professions are described. The chapter concludes with a summary.

2.2 PROFESSIONAL ETHICS

Kushner (2001) asserts that the perception of self rests on two basic, universal human needs, namely the perception of self firstly as a good person and secondly as successful and important. Every human being possesses both good and bad tendencies and since society does not always celebrate virtuous behaviour, these two basic needs are often in conflict with each other. The attempt to satisfy the two needs can lead to inconsistency between how individuals want to act (intent) and their actual behaviour. This same conflict is seen in the therapeutic sciences. The challenge is to find a balance between the goal to succeed in business and the

desire to maximise the well-being of clients by providing them with effective products and services.

Society trusts therapists to provide expert services and commit themselves to acting in the best interest of their clients. Those therapists who consistently act in ways consistent with their stated high ethical standards are described as having integrity and are more likely to be trusted by their clients (Pera, 2011). To maintain public trust is essential for the future of the therapeutic sciences (occupational therapy, physiotherapy, speech-language therapy and audiology). A strong sense of ethical responsibility is required to develop this fiduciary relationship with clients and therapists' behaviour must adhere to the ethical principles and rules that they have publicly agreed to follow.

There are many factors that affect ethical behaviour. One such factor is an intensified specialisation of knowledge. Growing specialist expertise tends to rely on evidence-based knowledge and results in more professionals, including those in the therapeutic sciences, defining themselves by their marketable knowledge and skills (Grimen, 2009). While expert knowledge is useful in order to solve specified problems or undertake distinct tasks, it could be at the expense of ethical responsibilities if professionals do not look beyond the immediate consequences of their actions (Johnson, 1972). Another factor that influences ethical behaviour is a heightened emphasis on accountability and the importance thereof in the age of client autonomy, empowerment and protection of their rights. Cost-effective, safe, timely and socially responsible are the watchwords of accountable, outcomes-based twenty-first century service delivery. Professional behavioural changes that are necessary to accommodate these performance standards are noted in the interventional specialties such as the therapeutic sciences, because an emphasis on efficient practices is associated not only with outcome accountability, but also with advanced technology available to therapists (Emanuel & Emanuel, 1996). The 'accountability movement' requires that professionals adhere to and be held accountable against prescriptive policy standards of quality with a focus on transparency of judgements and actions. Although it is the opinion of the researcher that accountability is a necessary element of ethical practice, there is a risk that too great a focus on performativity, efficiency, flexibility and transparency will reduce

accountability to a set of technical and managerial requirements. This will be at the expense of professional responsibility in which relationship, attention and appropriate timing of assessment and intervention are central.

The focus on public transparency of professional practice has placed therapists under an ethical spotlight, bringing about an increased awareness of ethical dilemmas and the need for moral behaviour (Pera, 2011). In the busy day-to-day activities associated with professional life, reflection on daily conduct is needed to obtain greater clarity regarding ethical decisions, professional duties, potential pitfalls, as well as insight into alternative ways in which ethical dilemmas can be solved. Increased awareness of ethical issues as well as critical thinking will facilitate effective decision making, emphasising the importance of reflection in professional practice (Hamill, 2006). The words of Socrates, “the unexamined life is not worth living”, apply to the therapeutic sciences in the sense that reflection, alert observation and critical thinking are needed to increase awareness of ethical issues. Examining or reflecting on professional behaviour facilitates the process of evaluating the impact (positive and negative) on the quality of life of both clients and the wider community. It allows therapists to examine their everyday behaviour and experiences, so that it becomes easier to distinguish between ethical and unethical actions.

The concept of ethics, also known as moral philosophy, dates back to Aristotle and ancient Greece. A distinction can be made between ethics and morals by referring to the origins of each word (Day, 2003; Horner, 2003). ‘Ethics’ has its roots in the Greek term *ethos,* which refers to ‘custom’ or ‘character’. Morality, on the other hand, stems from the Latin term *moris,* which refers to ‘conduct’ or ‘way of life’. From this perspective, morality refers to the actions that are taken on the basis of specific, culturally transmitted standards of right and wrong (Williams, 2009). In practical usage, the word ‘morals’ usually applies to principles of right and wrong in personal behaviour. Morals are considered to be abstract, subjective and often based on personal or religious convictions. In contrast, ethics is the study (systematic reflection on and analysis) of general principles of human decision making and of right and wrong behaviour. At a more fundamental level, ethics is a method by which values are categorised and pursued (Landauer & Rowlands, 2001). It is about finding the balance between self-interest and group responsibility, and applies to both

professional and business practices. Ethics are considered to be more practical than morals and regarded as shared principles that promote fairness.

From the perspectives presented, it is clear that ethics and morals are closely related. Both involve decisions about right and wrong. As a result, many professionals from different disciplines and fields of study use these terms interchangeably. Ethics is, however, considered to be more important than morality in creating a functioning society. If we all put only ourselves and those we love first, our societies cannot be prosperous, safe or kind. This implies that it is not possible to act morally without being ethical. Consequently, in the current study ethics is not used as a synonym for morality but as a concept that incorporates the principles of human morality and various ways of understanding and examining moral life (Steinbauer, 2000).

2.3 ETHICS IN THE THERAPEUTIC SCIENCES

Ethics involves a concern for someone other than yourself and your own self-interest (Bartels, 1967). Therefore, ethics lies at the heart of being a therapist (Seedhouse, 1998). Professionals in the therapeutic sciences focus on interventions that form part of a journey in which they accompany others on the road to maximising quality of life. Therapists profess to care about their clients, and caring is inescapably ethical (Pera, 2011). Caring supports therapists' identity within a context where values are constantly challenged (Duquette & Cara, 2000). A universal definition of caring does not exist for the therapeutic sciences. In the nursing science, caring is defined as a nurturing way of relating to another, while feeling a personal sense of commitment and responsibility (Swanson-Kauffman, 1988). In principle, caring is about building inner capacity through faith and hope in order for clients and their family to endure challenging times and to find meaning in the management process (Roscigno & Swanson, 2011). This is in line with ethical principles such as beneficence, non-maleficence and justice, which focus on practising in the best interest of clients (Irwin, Pannbacker, Powell, & Vekovius, 2007).

Ethics is a valuable tool in the hand of the therapist who needs to decide on a course of action in terms of prevention, assessment, intervention and management

(Seedhouse, 1998). Because the practice of therapeutic sciences is so intimately concerned with the personal vulnerabilities and quality of life of the client, it is subject to both legal and ethical restrictions, all of which have been designed to protect clients' interests. Although in many respects intertwined, there are three distinct sources of legal and ethical principles that inform professional behaviour in South Africa, namely the Constitution of the country (including all the statutes and regulations stemming from it that embody its principles), case law, as well as the Health Professions Council of South Africa (HPCSA) (mandated to set and maintain professional standards). These ethical and legal principles compel therapists to behave competently and ethically. It is, however, still important to recognise that therapeutic approaches are not universal programmes that are simply adjusted for so-called diverse groups. Each client has his/her own cultural identity as well as challenges that influence the management process. So, despite well-formulated legal and ethical restrictions, problem solving is still at the centre of professional practice and closely linked with ethical decision making (Jonassen, 2000). Problem solving is regarded as the most important cognitive activity for professionals, including therapists, and without ethics to guide the process, professional actions would be random and reduce the effectiveness of the client management process (Jonassen, 2000).

Over the past decade, ethics in the therapeutic sciences have been influenced by a paradigm shift from the medical model of service delivery to a biopsychosocial model. In contrast to the medical model, the biopsychosocial model recognises that psychological and social factors influence a client's perceptions and actions (Smit, 2002). This model respects client autonomy and emphasises the importance of a therapist's ability to recognise not only how physiological factors influence the client's perceptions, expectations and behaviour, but also how psychological, social and environmental factors affect the way in which a client perceives his/her ability to function as a member of society (WHO, 2001). Therapeutic approaches should therefore be adapted in accordance with the values and needs of clients from various socioeconomic, ethnic, racial and religious backgrounds and of a range of gender and sexual identities (Kottler, 2010). This is not always easy, since ethical issues embedded in the therapeutic sciences often result in a conflict between the ethical principle of autonomy and beneficence (Lützén & Nordin, 1993).

This paradigm shift to a biopsychosocial (Rest, 1986) model also allowed for a framework to be developed to describe and organise information on client functioning and disability. The International Classification of Functioning, Disability and Health (ICF) is a multipurpose classification framework designed to serve professionals from various disciplines by providing a standard language and a conceptual basis for the definition and measurement of health and disability (WHO, 2001). This framework, which crosses the boundaries of individual professions while highlighting commonalities or shared focus, allows for the use of a shared language during multidisciplinary collaboration. The researcher refers to the significance of the ICF throughout the rest of the text.

The HPCSA has acknowledged the importance of ethics by publishing ethical rules, regulations and guidelines for best practice to direct the practice of healthcare professionals such as those represented by the therapeutic sciences. The HPCSA policy regarding continued professional development specifies ethics as the only section where professionals require dedicated credit points (HPCSA, 2008; 2011).

Continued professional development ethical instruction currently focuses on ethical reasoning and emphasises ethical decision making. Ethical reasoning is a skill that should be practised, as it is required to make ethically sound decisions (Nichols, 2011). A focus on developing ethical reasoning and problem-solving skills creates opportunities for healthcare professionals to find solutions to ethical scenarios, thereby developing their ability to make ethically sound decisions (Sims, 2011).

2.4 ETHICAL DECISION MAKING

Ethical dilemmas and the decision-making skills involved in solving these dilemmas are multifaceted and wide-ranging in complexity (Nichols, 2011). Decisions concerning the type of treatment, resource distribution, informed consent, whistle blowing, confidentiality and commercialisation are part of the daily practice of healthcare professionals. Professional decisions are influenced by intrinsic factors such as personal beliefs, moral values and professional experience, as well as

extrinsic factors such as laws and regulations, the outcomes of previous decisions, and client as well as family preferences (Irwin et al., 2007).

Ethical decision making in the therapeutic sciences is usually based on normative ethical systems and can generally be divided into three categories: deontological, teleological and virtue ethics. The first two theories focus entirely on the actions that a person performs. When actions are judged as morally right, based upon how well they conform to specified duties, they are referred to as deontological ethical theory. Existing ethical decision-making frameworks for professionals in the therapeutic sciences rely mainly upon deontological approaches where decisions are based on the therapist's duty to abide by principles formulated in the professional code of ethics. Ethical conduct is measured according to the acceptable standard, which is a pre-established agreement as part of the therapist's right to practise (Agarwal & Malloy, 2002). In contrast, when actions are judged as ethically right, based upon their consequences, they are referred to as teleological or consequentialist ethical theory. This view fits in a descriptive framework that enables therapists to understand and apply the ethical decision-making process more effectively.

While these two theories ask of therapists to answer the question 'What should I do?', the third theory poses an entirely different question, namely 'What sort of person should I be?' Virtue-based ethical theory does not judge actions as right or wrong, but rather the character of the person performing the actions. The person, in turn, makes moral decisions based upon the specific actions that would make a good person. The focus in virtue-based ethical theory is on helping individuals develop good character traits such as kindness and generosity. Virtue ethics, expressed in Aristotle's Nichomachean Ethics, has since its revival in the twentieth century been developed in three main directions, namely eudaimonism, agent-based theories, and the ethics of care (Agarwal & Malloy, 2002). The latter branch of virtue ethics, namely the ethics of care, does not (like deontological theory) aim primarily to identify universal principles that can be applied to ethical situations. Virtue ethics applied to the ethics of care opposes the idea that ethics should focus solely on ethical principles such as justice and autonomy. It argues that traits such as caring and nurturing should be considered. The purpose of this argument is not to suggest that deontological approaches should be excluded, but rather advocates for the inclusion

and functional awareness of other dimensions of ethics. An approach that includes both deontological and teleological views, informed by virtue ethics, will allow for a more complex and ethically oriented means of decision making.

The ethical behaviour of therapists, or the lack thereof, influences client's lives on a daily basis (Asenjo & More, 2009). To make justifiable decisions, therapists must have a strong ethical orientation, which will be influenced by their level of moral development, level of professional competence, acquaintance with ethical principles and rules, as well as their general moral disposition and virtue (Coulehan, 2005). Ethical theories as well as principles contained in the professional code of conduct facilitate the process of identifying and defining problems. They help the therapists to think systematically, encourage them to view issues from many different angles, and provide decision-making guidelines (Johnson, 2007). Combining insights from different perspectives presented in ethical theories might result in better solutions to ethical dilemmas. At the very least, it will encourage greater confidence in the choices therapists make.

Several published conceptual training models have been proposed for understanding and facilitating the process of ethical decision making (Butterfield, Trevino, & Weaver, 2000; Chabon & Morris, 2004; Gabard & Martin, 2003; Harman, 2001; Jones, 1991; Kilmas, 2001; Purtilo, 1999; Rest, 1986; Trevino, Weaver, Gibson, & Toffler, 1999; Weinstein, 2001). The main objective of these ethical decision-making models is to determine right from wrong in situations where no legislation or professional code of conduct provides clear guidance for therapists. The models are based on ethical principles and contain frameworks that can be applied to specific situations by indicating causes and effects of different behaviour. Although the models propose different steps in the process of ethical decision making, they share a similar underlying pedagogy in that decision-making skills can be enhanced through teaching. The models also address an important question regarding whether the therapist considers a situation as an ethical dilemma or not. They focus on the skill to analyse and clearly define a situation in order to identify its relevant ethical dimensions.

It should be acknowledged that therapists are not equally competent in all the aspects of ethical decision making that are required to successfully identify the needs of clients and attend wisely and compassionately to them. If a framework for ethical decision making is only used as a tool to solve a problem, without understanding the problem on a deep level, it can lead to decisions that are not appropriate for the particular situation. The challenge is, however, that a framework for ethical decision making assumes that therapists understand that the specific framework is based on a theory of ethics and that it applies to similar decision-making problems, despite the multiple variables (Nichols, 2011). The ethical decision-making process should be guided by an awareness of all possibilities to help the therapist to balance different values in terms of their importance for that specific situation (Hundert, 2003). Recognition and interpretation of ethical aspects are not only dependent on intellectual ability, but also on situational clues, personal characteristics and emotional responses (Rest, 1986). Ethical theory only provides a framework for ethical decision making when it is combined with the information that therapists gather from the situation (Nichols, 2011). The importance of the information that is gathered by the therapist stresses the value of a certain sensitivity for recognising the ethical dimensions of a situation. The more skilled the therapist is in terms of ethical sensitivity, the easier it will be to use a framework for ethical decision making. Enhancing ethical sensitivity together with ethical reasoning will assist the therapist to understand the problem more accurately, which will have a positive impact on the decision-making process.

Lyndon Johnson, a former US president, explained the intricate complexity of ethical decision making as: “It’s not doing what is right that’s hard for a President. It’s knowing what is right” (Califano, 1991, p. 124). Ethical decision making is not a linear process, and a framework for ethical decision making can only address certain elements of a situation. It cannot address the root of the problem or give guidance in terms of the bigger picture (Kaplan, 1964).

Taking the complexity of ethical decision making into account, moral psychologist James Rest developed a Four-Component Model of ethical action by asking the question: “What must happen psychologically in order for moral behaviour to take place?” In answering this question, he concluded that ethical action is the product of

four psychological sub-processes namely moral sensitivity, moral judgement, moral motivation and moral character (Rest, 1994).These processes are highly interdependent, meaning that all the processes must be successfully completed before ethical behaviour takes place. To facilitate a more comprehensive understanding of ethical decision making and behaviour, the four sub-processes are presented as component parts of ethical action (Figure 2.1). The figure attempts to show that one component is not superior to the next as the blocks are of equal size, even though moral sensitivity represents the first objective building block in the ethical decision-making process. In literature, moral sensitivity is also referred to as ethical sensitivity (Clarkeburn, 2002).

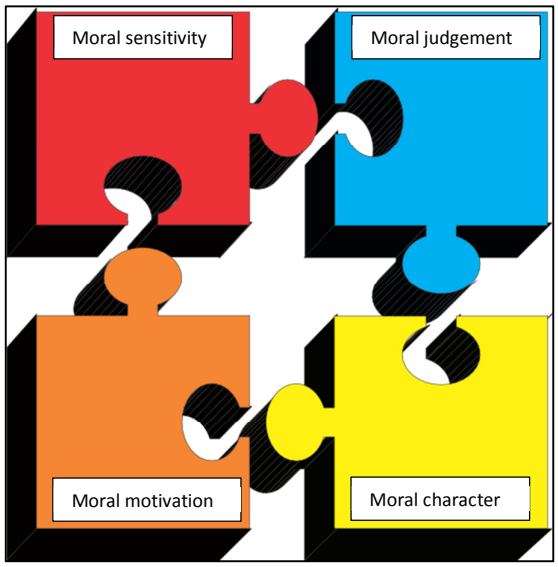


Figure 2.1: Components of ethical action (Rest, 1986)

In order to implement ethical action, therapists must know what ethical behaviour looks like (moral sensitivity), be able to evaluate the situation through careful weighing of evidence based on his/her line of moral reasoning (moral judgement), and then prioritise possible actions (moral motivation) as well as persevere until the action is completed (moral character). It is also important for therapists to know themselves, what they believe in and what they value (Nichols, 2011). The accurate identification of the ethical dilemma affects all the steps that follow. If the problem is inaccurately defined, every step in the decision-making process will be based on an incorrect starting point. The same holds true for all the components of ethical action.

For example, the therapist may not be able to identify that an ethical dilemma exists and make a bad judgement, or he/she may not know how to act or follow up on a situation and give up in frustration.

After reviewing previously suggested ethical decision-making models, Wittmer (2005) generated a general behavioural model for ethical decision making. The model consists of seven components (Figure 2.2) that explain that ethical decision making is the function of ethical decision processes, influenced by both individual and environmental factors as well as by the ethical situation. Such a model can assist therapists to make logical sense of the relationships between variables and influences that have been demonstrated to be relevant to the ethical challenges they encounter. Wittmer's model (2005) is aligned with the paradigm shift in the therapeutic sciences to the biopsychosocial model on which the ICF rests, as it takes the social context in which the client lives into account.

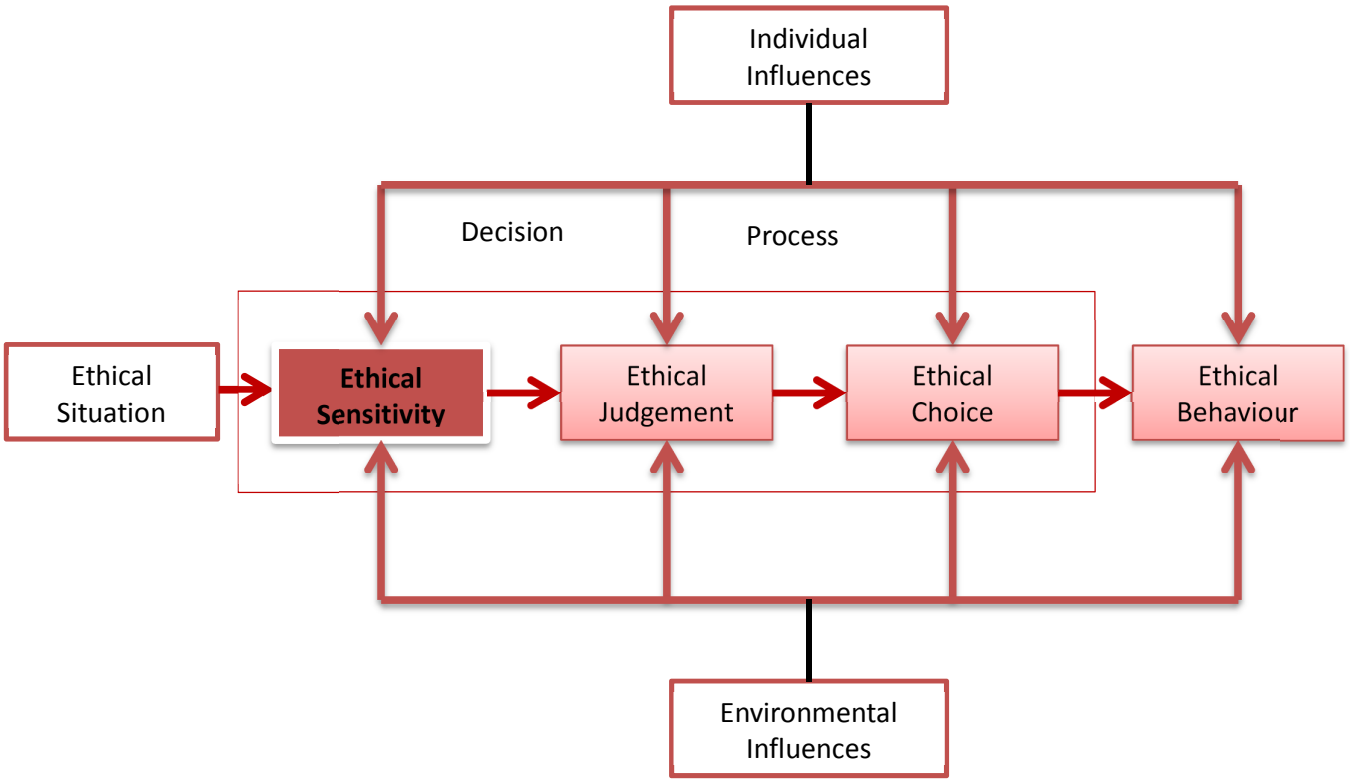


Figure 2.2: General behavioural model for ethical decision making (Wittmer, 2005)

The processes of Rest's Four-Component Model (Figure 2.1) are placed at the centre of the general behavioural model, such that ethical decisions are a product (in part) of sensitivity and perception of the ethical issues and of the reasoning used to arrive at some conclusion about what to do in specific situations. This model provides for the influence of various individual and environmental factors that may guide the decision processes in professional therapeutic settings, by implication, aligning itself with the ICF. The model begins with the focus of this study, namely ethical sensitivity to ethical issues in the situation.

2.5 ETHICAL SENSITIVITY

Ethical sensitivity may be defined as a therapist's ability to recognise that an ethical problem exists (Rest, 1983). It includes the ability to identify both the client and situational needs. The key characteristics of ethical sensitivity are moral perception, affectivity and dividing loyalties (Table 2.1).

Table 2.1: Essential attributes of ethical sensitivity (Weaver, Morse, & Mitcham, 2008)

KEY CHARACTERISTICS OF ETHICAL SENSITIVITY	ANALYTICAL QUESTIONS TO EXPLORE THE CONCEPT OF ETHICAL SENSITIVITY
MORAL PERCEPTION	
Notice a problem (sensibilities)	What kinds of problems are relevant to me, my family, my community, my profession?
State the situation (critical thinking)	What is the problem? How did the problem come about? How much time is there to make a decision? How does my community identify the problem? How does my religion or culture affect my perceptions?
AFFECTIVITY	
State the interested parties (critical thinking)	Who are the people who will be affected by this decision? Who should be consulted in this decision? Who has faced this problem before? Where can I get advice?
Weigh the possible outcomes (creative thinking)	What are the possible consequences to the involved parties? What are the possible reactions of these interested parties? What are the potential benefits related to different potential actions? Who else might be affected? How will my choice affect others now as well as in future?
DIVIDING LOYALTIES	
List all possible options (creative thinking)	How could the problem be solved? What are the choices I have for solving the problem? How would others in the profession solve the problem? What are the options my profession would allow? Should I consider other options?

In short, moral perception is the ability to identify client and situational needs (Rest, 1983). Affectivity is a relational component based on the therapist putting herself/himself in the place of clients in order to identify and weigh comparable reactions. Dividing loyalties is about an awareness of moral and ethical principles, their significance in the context, and each stakeholder's needs and interests, and it involves using sources of knowledge (e.g. expert opinions, policies and professional conduct codes) to solicit breadth and depth about an issue (Weaver, 2007). These attributes enable therapists to recognise, understand, and evaluate ethical elements in clinical practice.

The ability to recognise the moral side of a situation as well as the ability to anticipate moral consequences of actions is referred to as moral imagination (Callahan & Bok, 1980). Without moral imagination it is impossible to engage in discussions on ethical problems. The recognition of ethical issues relates to an ability for conceptual and logical analysis. Recognition of ethical issues is closely linked with moral imagination and is often referred to as moral imagination put into action. Recognition of ethical issues includes an attempt to analyse what has been seen in order to recognise the value of moral features in a specific situation. This includes the ability to distinguish between emotional responses to situations and consideration of realities in respect of whether they are moral or professional. Ethical sensitivity is a combination of these two abilities, namely moral imagination and recognition of ethical issues (Callahan & Bok, 1980). This is not a passive process but an active scanning of the environment (Holm, 1997). Ethical sensitivity explained in connection to moral imagination and recognition of ethical issues is an important skill and the difficulties in interpreting a situation as moral and in understanding the implications of moral actions should not be underestimated.

The skills considered to be related to ethical sensitivity as well as the relation to the Theory of Caring are summarised in Figure 2.3. This figure is contextualised and based on a summary of the work of Crick and Dodge (1994), Ledoux (1996), Narvaez (1996) and Swanson (1991).

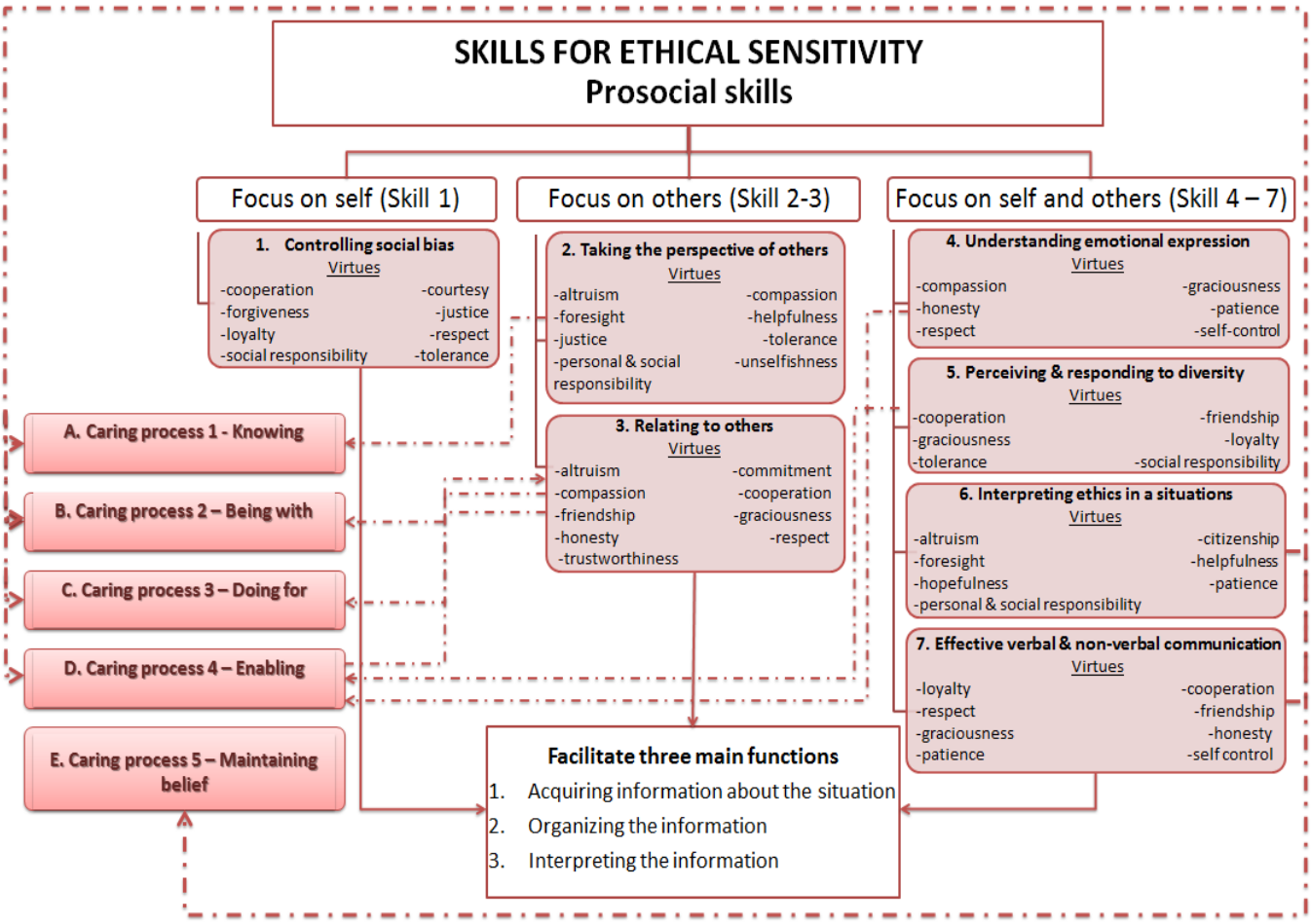


Figure 2.3: Seven ethical sensitivity skills in relation to the Theory of Caring

Because of greater clinical autonomy and higher professional status awarded to the therapeutic sciences in the past two decades, a theoretical framework for the initial stage of the decision-making process will facilitate the process of critical analysis to ethical situations (Sim, 1997). A framework is important in an age of accountability and professional responsibility where therapists can no longer just rely on intuition to guide their actions. Ethical sensitivity skills (Figure 2.3) are important for all facets of the therapeutic process and are in line with the principles of ethics applied to the therapeutic sciences, namely beneficence, non-maleficence, autonomy, justice, truth telling and promise keeping.

The skills within ethical sensitivity facilitate three main functions that include basic cognitive processes that can be taught. The first function is acquiring information

about the ethical situation. This includes processes of perception and inference such as reading and expressing emotions, as well as perspective taking. The second function relates to organising information. This includes processes of critical thinking and reflection such as caring by connecting to others, and working with interpersonal and group differences by controlling social bias. The last function is using or interpreting information and includes processes of divergent thinking and prediction through generating interpretations and options with special consideration for the consequences. The 'information' can represent an observed incident, perceived relationships, currently experienced emotions, background knowledge of events and relationships retrieved from memory, and present attitudes retrieved from memory (Crick & Dodge, 1994; Ledoux, 1996; Narvaez, 1996). These three functions evolve into deeper, emotional skills as the therapist observes role modelling and gains personal reflective experiences.

Ethical sensitivity skills include both skills that form part of personal development as well as skills for getting along with others. Therapists should know themselves and be able to control and guide 'the self' before being able to interact respectfully with others (Narvaez & Endicott, 2009). Each of the specific skills will now be discussed.

Controlling social bias focuses on 'the self' and involves understanding, recognising, and dynamically opposing prejudice. It is important to understand that bias is part of human nature; people react differently to different situations and respond in certain ways to those who appear different (Coulehan, 2005; Narvaez & Endicott, 2009). Social bias is a product of ignorance about other cultures and other people, showing a close link between the two concepts, culture and ethics (Pellegrino, 2004). Culture can be defined as "…that complex whole which includes knowledge, belief, art, morals, law, custom, and any other capabilities and habits acquired by man as a member of society" (Tylor, 1891, p. 1). Cultural values refer to enduring ideals or belief systems to which a person or a society is committed. Culture provides moral beliefs and plays a central role in forming values and standards in ethical reasoning (Vitell, Nwachukwu, & Barnes, 1993). Intercultural as well as intersocial misperceptions may lead to improper action or no action at all. Wrongful

interpretation of situations is often a result of ethnocentrism and lack of communication, but it does not justify unethical action (Donnelly, 2000).
Every culture develops intricate patterns of normative expectations that act as a formal normative framework (or ethics) for decision making (Moody-Adams, 1994; Pellegrino, 2004). The values of therapists in South Africa, for example, are embedded in the values of the South African culture with its emphasis on accountability, equality and caring for the family unit (Klug, 2010). South Africa is known as the 'Rainbow Nation' due to its reflecting diversity in cultures, languages and beliefs (Stock, 2004). It is, however, interesting (and concerning) that social bias against people with disability is higher than gender or racial bias (Employers network for equality and inclusion, 2014). This could be the result of workshops focused on decreasing social bias in respect of gender and race (Quillian, 2006). There are many different and conflicting moral values and principles in contemporary South Africa and these are reflected in the therapeutic science professions. Competing moral values have to be evaluated and criteria should be established for choosing among them without compromising respect for diversity.

It takes conscious effort to rethink personal habits of acting and speaking, but doing this can promote therapeutic services that are in the best interest of the client. Mastering this skill will result in an appropriate **response to diversity.** In the multi-cultural context that is central to the South African context, understanding how cultural groups differ and how differences can lead to conflict and misunderstanding will have a positive impact on the therapist's interpersonal relationship with clients. This is an important skill that allows the therapist to understand culture in its broadest sense, namely as any system of shared values, behaviours and expectations (Vines & Napier, 1992). Culture should therefore be considered when developing assessment or training material related to the area of ethics (Williams et al., 2013). This allows for multicultural living, which includes the ability to shift from using one culture code (e.g. religion) to another culture code (e.g. related to the workplace and associated professional codes of conduct).

In order to **understand emotional expression,** the therapist should be able to identify the needs and feelings of the self as well as others (intrapersonal and interpersonal skills). Emotional expression is observable verbal and nonverbal behaviour that communicates the internal emotional or affective state of a person. It refers to the ability to understand and respond to emotions in daily life (Gunderman, 2011). A therapist who can 'read' emotional cues, can better respond to the needs of the client and avoid misunderstandings that may have serious consequences for the therapist-client relationship.

This also involves **adopting the perspective of others,** in other words being able to consider numerous perceptions of situations. Perspective taking requires extensive practice and experience. This is a very important skill for therapists as it builds empathy and tolerance, and motivates change in order to benefit others (Harrison & Westwood, 2009). The cognitive component of empathy overlaps with the construct of perspective taking (Ruby & Decety, 2003). Perspective taking describes the ability to consciously put oneself into the mind of another individual and imagine what that person is thinking or feeling. It is considered one of the building blocks of morality for people to follow the Golden Rule or ethic of reciprocity, namely "one should treat others as one would like others to treat oneself" (Flew, 1979; Johnson, 2007). The ability to adopt the perspective of another has previously been linked to social competence and social reasoning (Underwood & Moore, 1982).

Perspective-taking skills are rooted in a cognitive skill called 'Theory of Mind'. Theory of Mind is the ability to not only understand that people have different beliefs, motivations, knowledge and moods, but also to understand how that affects their actions and behaviour, as well as our own (Premack & Woodruff, 1978). As with many other factors contributing to social skills deficits, one can be of gifted intelligence and not have effective perspective-taking skills. Understanding how others might feel or react can increase awareness of potential negative outcomes related to specific decisions and makes it easier to predict the likely outcomes of various options (Coulehan, 2005). Perspective taking is recognised in the literature as an invaluable attribute for therapists to possess (Hojat, 2007). It is said to improve

client satisfaction, compliance with treatment, history taking, diagnosis, resource utilisation and the minimisation of litigation against therapists.

It is not only important to consider 'the other', but also to **interpret situations.** Interpreting situations requires creative skills so as to generate numerous interpretations of a situation and considering alternatives for dealing with it. This is considered a critical step in problem solving. As already discussed, the ICF provides a framework for therapists to identify how different factors can affect the client as a member of society.

This goes hand in hand with the skill of **relating to others**. Connecting to others involves increasing the sense of self-concern to include concern for others (Narvaez & Endicott, 2009). A sense of connection to others is more likely to result in actions that reflect care for others. It also involves developing a sense of connectedness to other people/groups. A therapist who feels a sense of connection to his/her client is more likely to make decisions and take actions that reflect care and concern, meet the client's needs and nurture the professional relationship. These therapists are skilled at assessing the emotions, motivation, desires and intentions of those around them. Relating to others implies that one should be able to understand what is important to them and be available to help them achieve their goals, while supporting them competently and skilfully. One should also facilitate their capacity to achieve their goal and sustain faith in their capacity to get through the challenges they are faced with (Swanson, 1991).

The 'focus on others' is in line with the Noddings (1984) philosophical standpoint on caring, wherein caring is described as a willingness to perceive 'the other's' reality as if it were one's own, in other words taking the perspective of others. This is also in line with the Theory of Caring that consists of five categories namely knowing, being with, doing for, enabling, and maintaining belief (Swanson, 1991).

The final skill relates to communication. Communication is vital in ensuring that people can express themselves and make sense of the world around them.

Communicating well implies that a person can adapt to various contexts of communication as well as different cultural contexts. An estimated 60 – 65% of interpersonal communication is conveyed via non-spoken behaviour (for example body language and gestures), with the rest being conveyed orally (Hargie, 2011). Non-verbal communication is a process of generating meaning by using behaviour other than spoken utterances, for example facial expression, body posture, miming and natural gestures (Beukelman & Mirenda, 2013). Rather than thinking of wordless cues as the opposite of or as separate from verbal communication, it is more accurate to view them as operating side by side – as part of the same system. Yet, as part of the same system, they still have important differences, including how the brain processes them. For instance, non-verbal communicational cues are typically governed by the right side of the brain and verbal communication by the left (Andersen, 1999).

Communication breakdown is directly related to one of the professions in the therapeutic sciences, namely speech-language therapy. It is therefore expected that speech-language therapists, as a result of a specialised focus on the communication process and expert knowledge in the field of communication, will have superior sensitivity in terms of effective verbal and non-verbal communication. Communication is particularly important in establishing and maintaining the therapist-client relationship and in influencing the client to comply with the management process. Effective communication is related to greater mutual liking, empathy, rapport and trust. This, in turn, is related to client compliance and to more positive outcomes for the client.

It is clear from the discussion above that the ethical sensitivity skills, although discussed separately, directly influence each other. A summary of this interaction is presented in Figure 2.4.

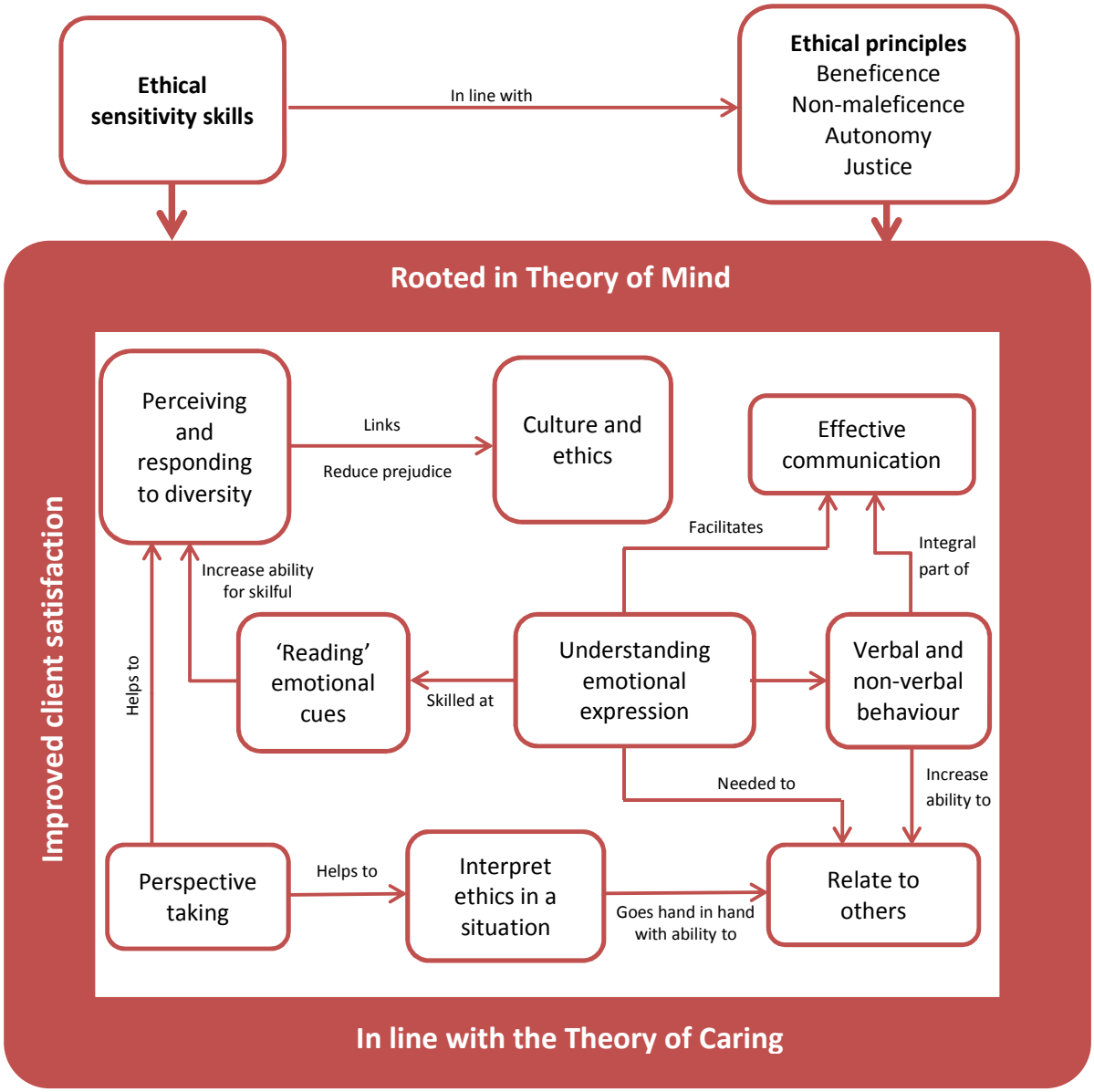


Figure 2.4: The relationship between different ethical sensitivity skills and their position in relation to ethical principles and two relevant theories

2.6 ETHICS TRAINING FOR PROFESSIONALS

The minimum competency of professionals in the therapeutic sciences in the area of ethics and professional practice, as stipulated by the National Qualifications Framework (Coetzee, 2010), includes an ability to identify and address ethical issues based on critical reflection of the suitability of different ethical value systems in specific contexts. Preparing therapists to discern ethical issues in complex work settings is considered a huge endeavour that should not be taken lightly (McNeel,

1994). Therapists are therefore expected to advocate the best interest of their clients with the emphasis on a person-centred community-based approach. This approach places a focus on the life of the family as well as the life of local community at large, since having an impairment does not only affect the individual, but also the surrounding environment as captured in the ICF social view of disability (WHO, 2001). Although this approach will help therapists to practise in the best interest of their clients, what is considered to be in the best interest of the client is multifaceted and can be complex.

Throughout the management process, therapists have to consider sociocultural and economic aspects that are important to the client. Clinical decisions based on these aspects still have to comply with the ethical norms of the profession. A deep sense of ethical awareness will help therapists to make decisions that take into account the perspective of the client as well as the professional code of conduct. Decision making can then be characterised by compassion, commitment, confidence and competence (Pera, 2011).

An important question needs to be addressed, namely: ‘Can ethics be taught?’ There is a significant body of research that challenges the potential for influencing the ethical development of mature professionals as well as students in professional degree programmes. If the focus of teaching ethics is to change a person of ‘bad’ moral character to be ‘good’ or to guarantee the ethical behaviour of a person, these critics may be right. Rest (1982) however, argues that a carefully constructed set of learning experiences can be developed to strengthen the ability to be an ethically responsible professional.

Ethical sensitivity, as a standalone concept, can also be improved. Various studies have demonstrated that ethical sensitivity can be enhanced through education (Bebeau, 1994; Bebeau & Brabeck, 1987; Bebeau, Rest, & Yamoor, 1985). Clearly defined, ethical sensitivity can be used to reinforce and strengthen the ethical mind-set and practice of therapists.

Johnson (2007) discusses guidelines for enhancing ethical sensitivity. He firstly argues that the best way to learn about the potential ethical consequences of

choices, as well as the likely response of others, is through active listening or through participating in role play. Secondly, it is important to challenge current cognitive models and try to visualise other viewpoints (Keim et al., 2008). Thirdly, it is important to discuss problems and decisions by thinking of innovative ways to define and respond to ethical issues. This will provide an ethical framework for discussions of ethical dilemmas with colleagues that will in turn contributre to ethical reasoning abilities as well as continued professional development in the area of ethics (Bebeau, Rest, & Yamoor, 1985).

Another approach to further develop ethical sensitivity is by enhancing prosocial behaviours. The term 'prosocial behaviour' is associated with developing desirable traits or character strengths to build and preserve social relationships (Ahmed, 2007; Anesi, 2008; Biglan & Hinds, 2009; Eisenberg & Mussen, 1989; Michie, 2009; Vollhardt, 2009). Prosocial behaviours are relationship skills that encourage other people to feel positive and engage in interaction. They involve planned actions that display active concern for others and that are intended to benefit the client or society as a whole (Riley, San Juan, Klinkner, & Ramminger, 2008). Prosocial skills facilitate reflective emotional regulation which in turn enhances effective ethical decision making (Stetson, Hurley, & Miller, 2003). The motivating factor for prosocial behaviour has been identified as perspective-taking skills and empathy (Zimbardo, 2008). This explains why empathy and perspective skills are identified as key in the decision making process (Johnson, 2007).

The seven ethical sensitivity skills presented in Figure 2.2 can also be referred to as prosocial skills as identified in the literature (Stetson et al., 2003). Virtues of humanity (virtues involved in relating to another) function to nurture social relationships, thereby promoting personal as well as social integrity. They have also been listed under each of the seven ethical sensitivity or prosocial skills (Narvaez & Endicott, 2009; Peterson & Seligman, 2004). There are numerous factors that can impact positively or negatively on ethical sensitivity (Table 2.2).

Table 2.2: Factors that have an impact on ethical sensitivity

Moral development	Intellect	Locus of control
Nationality	Gender	Religion
Work environment	Work pressure	Professional trends
Academic / professional status	Ethical education	Motivation mechanisms
Personal experiences	Personal goals	Self-concept

As already mentioned, ethical sensitivity is influenced by many factors (Arnold, 1997; Holm, 1997; Luther, DiBattista, & Gautschi, 1997; Rest, 1986; Simga-Mugan, Daly, Onkal, & Kavut, 2005). Despite these factors (Table 2.2), it has been proved that ethical sensitivity can be enhanced through training (Bebeau, 1994). Personal background or characteristics cannot be used as an excuse for poor ethical sensitivity. Research suggests that ethical sensitivity may be situation specific and therefore therapists can be trained by being exposed to more current real-life scenarios. This means that ethical sensitivity training is a continuous process related to development in the therapeutic sciences.

More than ever before, therapists are confronted with complex ethical issues as part of daily practice. These include, but are not limited to disagreements between clients, relatives and therapists over management decisions, truth telling and client confidentiality. Recognising the growing importance of ethical awareness stresses the importance of therapists who should be suitably trained in clinical ethics. This goes beyond the code of ethics for the specific discipline and focuses on clinical problems and practical decision making. Regardless of the objective formulated for a course in ethics (e.g. develop moral character, promote ethical decision-making skills, or encourage the development of ethical therapists), ethical sensitivity is the first step in real-life moral decision making and cannot be ignored (Rest, 1983). Without recognising the ethical aspects of a situation, it is impossible to apply ethical problem solving, for without the initial recognition, no problem exists (Sparks & Merenski, 2000). Educational efforts should be aimed at improving the ethical sensitivity of professionals (both student therapists and practising therapists) with a specific focus on continued professional development. Ethics education is about

recognising the real power of one's ethical sensitivity or instinctive ethical sense and how it influences one's decisions in everyday practice (Tiatorio, 1999).

This dimension of decision making, namely recognising an ethical situation (or potential pitfall) has not received as much attention as specific models of decision making itself. Where ethical sensitivity was researched in healthcare professions, it mostly focused on medical doctors, psychiatrists and nurses. These studies also expressed the need for and importance of multiprofessional ethical sensitivity evaluation tools. While studies in the field of physiotherapy recognise ethical sensitivity, an extensive search did not reveal any studies related to audiology, occupational therapy or speech-language therapy and ethical sensitivity, and has therefore been identified as a theoretical gap in the field of the therapeutic sciences.
.

2.7 MEASURING ETHICAL SENSITIVITY

Table 2.3 lists empirical studies on measuring ethical sensitivity in various fields, including dentistry, business management and science. This table also summarises a number of empirical research studies in the area of ethical sensitivity measures dating from the years 1979-2011. During the literature review, the researcher noted that the literature only started referring to the term moral or ethical sensitivity in 1979 and therefore considered it an appropriate date to start the search. The search revealed evidence of the first ethical sensitivity test in 1984. A methodical search of five databases, Camridge, EbscoHost, JSTOR, Sage and SpringerLink, provided manuscripts detailing thirteen such studies. The parameters used in the search included combinations of the following words in the title and abstract of the articles: ethical/moral sensitivity together with assessment, measures, test, calculation, examination, investigation, research and tool.

Table 2.3: Empirical research on ethical sensitivity: 1984 – 2010

Author	Name of test	Components	Purpose	Summary and critique	Significance for current study
Volker, 1984	Calculation of ethical sensitivity (counselling psychology)	Panel of judges to evaluate subject response	To measure moral sensitivity of professional counsellors	Participants were judged more ethically sensitive when they exhibited greater concern and willingness to act on behalf of a third party. Incorporates both recognition and, at least indirectly, importance.	-A study incorporating more aspects of moral/ethical sensitivity is valuable. -Confirms the value of participants being blind to the purpose of the study.
Bebeau et al., 1985	Dental Ethical Sensitivity Test (DEST)	Four dramas on audiotapes Single ethical issue per tape Interview Judges with scoring scheme	To measure dental students' ability to identify and interpret typical ethical problems arising in practice	Students were asked to imagine themselves in the role of the dentist, assume the place of the dentist on the tape and to carry on the dialogue as they think it would be best to do if they were actually in the situation. Participants were not required to recognise the presence of ethical issues (they were aware of the study's purpose), as this may have led to social desirability bias (Randall, 1991). Rely on the assessor's evaluation of participants' remarks.	-The value of some form of 'deceit' as discussed under ethical issues related to this study is realised to reduce bias. -The importance of more than one rater as well as determining inter-rater reliability is also confirmed. -Students were successfully used as participants to measure ethical sensitivity.
Shaub, 1989	Empirical Examination of the Determinants of Auditor's Ethical Sensitivity	Written case A single case containing three ethical issues	To measure the ethical sensitivity of public accountants	Participants were blind to the study's purpose and the ethical issues were embedded among other issues. Participants read the case and recorded the issues that were important to them. Purely a recognition phenomenon and did not require assigning importance to the ethical issues.	-Confirms the value of participants being blind to the purpose of the study. -Shows the value of including non-related issues as part of the test measure. -Written case is appropriate to measure ethical sensitivity.
Wittmer, 1992	Ethical Sensitivity Test (EST)	Semi-structured survey with actual decision-making exercise Participants assumed a managerial role, making decisions about nine tasks of which one was an ethical case	To measure ethical sensitivity for managerial decision making	Participants were asked to rate the importance of each of twelve items in relation to each other. Validity and generalisability of this measure is questionable since only one case was assessed, raising issues regarding context specificity. The survey may have provided clues to the participants regarding the purpose of the study resulting in unreliable data (Clarkeburn, 2002).	-Participants should be blind to the purpose of the study. -More than one case should be used to allow for generalisation. -Simulations are useful for submerging ethical decisions and manipulating key variables. -Provides empirical grounding for concept of ethical sensitivity. -Education and training heighten ethical sensitivity. - Uses cross-disciplinary approach

Table 2.3: Empirical research on ethical sensitivity (continued)

Author	Name of test	Components	Purpose	Summary and critique	Significance for current study
McNeel, 1994	Non-professional moral sensitivity test	Four recorded dramas containing moral problems frequently confronted by students Coding manuals for scoring	To measure ethical sensitivity in students	College students listened to drama, after which they took on the role of the central character's best friend and spoke into a tape recorder as though they were speaking directly to their friend.	-The value of in-depth interviews to determine current ethical issues encourages the use of focus groups. Indicates how the current study may be implemented as a training programme. -The value of real-life scenarios are highlighted and should be used for the current study. -Confirms that current study should use vignettes that are meaningful to participants.
Lützén, Nordin & Brolin, 1994	Moral sensitivity test	Self-report attitude 7-point Likert-type multi-item questionnaire	To examine interpersonal aspects of moral sensitivity in psychiatric nursing practice	Only some aspects of ethical sensitivity were included. Relevancy of conceptual categories was determined. Ambiguous wording was considered problematic.	-Professionals from different settings should be included. -Items for vignettes should be derived from the literature and clinical experience.
Lind & Rarick, 1997	Cognitive maps assess news viewers' ethical sensitivity	Illustrative analysis of two female television news viewers Transcripts of structured, in-depth interviews using funnel sequence of questions	To investigate viewers' sensitivity to ethical issues contained in local television coverage of a specific case	Participants viewed and discussed three television news stories in an interview that lasted about 90 minutes.	-Provides good examples of the coding of in-depth interviews. -Levels of ethical sensitivity are indicated, which is valuable for the current study. -All four components of ethical sensitivity included provide a good example of how to incorporate different components.
Sparks & Hunt, 1998	Ethical sensitivity in marketing and marketing research	Questionnaires using short marketing research case scenarios – mailed to marketing research practitioners (members of the American Marketing Association)	To explore why some marketing researchers recognise and ascribe importance to the ethical content in their decision situations while others do not	The study evaluated whether ethical sensitivity was purely the ability to recognise ethical issues or whether it required both the recognition of ethical issues and the ascription of importance to them. This study presented many areas for future research, indicating how future research can improve on its methodology.	-Ethical sensitivity is context specific and indicates the relevance of the current study. -The value of including non-ethical information is again visible and should be used in the current study. -Because ethical sensitivity is an antecedent of ethical behaviour, the vignettes should not include scenarios that are drastically inconsistent with regulations and rules for the profession. -The study identified future research and methodology changes that should be incorporated.

Table 2.3: Empirical research on ethical sensitivity (continued)

Author	Name of test	Components	Purpose	Summary and critique	Significance for this study
Brabeck et al., 2000	Racial Ethical Sensitivity Test (REST)	Five scenarios using videos to depict real-life instances of racial and gender intolerance. Number of complex ethical issues per video. In-person semi-structured interview Trained raters	To measure ethical sensitivity to racial and gender intolerance that occurs in schools. Focuses on professional tolerance	Modification of DEST Participants viewed two videotaped scenarios	-Provides a good example of how to identify key ethical concepts related to the profession that should be used during the focus group session. -Cultural competence and ethical sensitivity can be linked. -Professional and personal ethical sensitivity can differ.
Clarkeburn, 2002	Test for ethical sensitivity in science (TESS)	Pen-and-paper measure in response to unstructured story	To evaluate the impact of a short ethics discussion course for university science students	The study uses three unstructured cases to test real ethical sensitivity, and not the importance respondents place on these issues. Responses scored according to the level of recognition of ethical issues in the scenario.	-Practical scoring system that should be reviewed for development of a scoring system.
Sirin, Brabeck, Satiani & Rogers-Serin, 2003	REST-CD	Computerised version of REST 5 videotaped scenarios Each scenario involves multiple ethical issues followed by an interactive 'interview'.	To measure ethical sensitivity to racial and gender intolerance	Participants were recruited to voluntarily participate in an interactive study to assess a measure of professional ethics. Participants had to identify ethical issues presented on CD.	-The value of presenting ethical scenarios in electronic format is realised and will be used for the current study. -Multiple ethical issues can be included in one scenario.
Borenstein, Drake, Kirkman & Swann, 2008	Ethical sensitivity in science and engineering (TESSE)	Set of seven case studies, each stated in a single paragraph	To assess awareness of ethical issues in the field of engineering by means of a discipline-specific test	The results showed some concern with regard to validity and are still in the process of further development.	-The importance of validity is emphasised, validity should be a central theme for the current study. -The current research will also focus on discipline-specific assessment.
Choi & Perry, 2010	Tool to measure ethical sensitivity in public administration	Three cases developed in terms of relationship as short stories Questionnaire	To assess the ethical sensitivity of public servants	The most important limitation relates to participants' not understanding the cases or interpreting them in a different way.	-A pilot study is important to ensure clarity of the vignettes. -Vignettes must be clear and easy to understand.

2.8 NEED FOR AN ETHICAL SENSITIVITY TEST FOR THE THERAPEUTIC SCIENCES

Although the studies mentioned in Table 2.3 provide valuable input in the area of ethical sensitivity, a number of important issues are identified as justification for the development of a measuring instrument for ethical sensitivity specific to the field of the therapeutic sciences.

Firstly, it should be noted that previous test results concluded that moral sensitivity is case dependant (McNeel, 1994). Secondly, research has indicated a need for multidisciplinary perspectives on ethical sensitivity. The development of a measure for ethical sensitivity that uses a consolidated definition and incorporates agreement from the different therapeutic science professions regarding the characteristics, boundaries and consequences of ethical sensitivity will facilitate optimal knowledge development related to care and services provided to clients (Weaver, 2007). The value of a measuring instrument that incorporates ethical issues and necessitates the identification of culturally based expectations has also been discussed. A measuring instrument for ethical sensitivity can help to broaden therapists' understanding of their own as well as other cultural perspectives in order to avoid or minimise misinterpretation of the behaviour of others.

While ethical sensitivity is a critical factor in ethical decision making, no empirical studies have been conducted that attempt to measure ethical sensitivity in the therapeutic science, or explore the factors that may affect ethical awareness. Taking into account this evidence, a measure for ethical sensitivity in the South African context should include specific elements to determine whether professionals in the therapeutic sciences are able to identify ethical issues within this unique context of diversity and cultural standards, as well as in the specific legal and healthcare systems.

2.9 CONCLUSION

Apart from having specialised knowledge or skills, therapists are expected to adhere to a code of conduct that outlines responsibilities and appropriate practices with strict ethical and moral regulations, emphasising what it entails to be a professional (Bebeau, 1994). Professional disciplines rely on the integrity of their members to perform all tasks in the best interest of those they serve, in accordance with expressed moral standards. Professional codes of conduct provide a framework of general rights, duties, values and policies that govern professional practice, even though they have limitations in terms of providing answers to day-to-day moral dilemmas in practice (Clark, 2007). Ethics is the key to release thoughtful therapists who act morally in a purposive fashion as a result of the ability to solve problems through ethical reflection (Seedhouse, 1998). Analysing and defining a situation is a crucial skill that needs to be developed as the first step in the process of ethical decision making and practice. Only once an ethical dilemma or conflict is recognised, can the therapist begin a step-by-step process to initiate the decision-making process (Nichols, 2011). Ethical sensitivity is the empathic interpretation of a situation by determining who is involved, what actions to take, and what possible reactions and outcomes might ensue. The greater therapists' capacity for being attentive to the specific characteristics of their client, the greater will be their understanding and empathy, hence resulting in better client management. Insight into ethical sensitivity will also make therapists aware of their own as well as the client's emotions and other factors that may hinder ethical judgement and decision making. It will also offer some guidance in the ethical decision-making process. Enhanced ethical sensitivity will help therapists to strike a balance between their values, professional code, the rights and obligations of clients, client system and professional bodies. This in turn will help to protect the integrity of these professions.

This chapter addressed many concepts related to ethics in the therapeutic sciences. Figure 2.5 was conceptualised to summarise the intricate relationship between these different models, theories and frameworks frequently used in the therapeutic sciences.

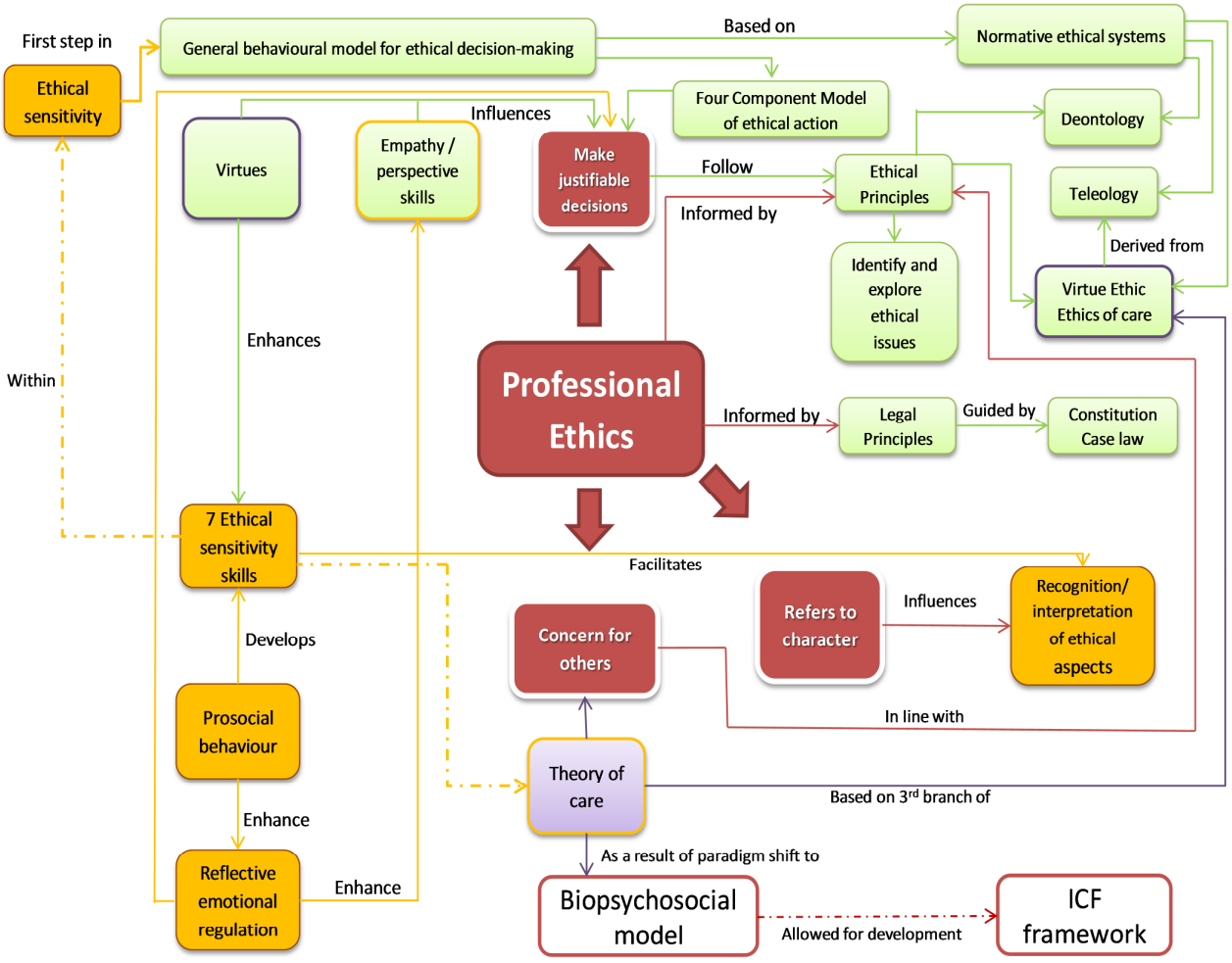


Figure 2.5: Summary of ethical theories and constructs within a specific model and framework for the therapeutic sciences

Chapter 3
Research Methodology
Phase 1: Sampling and development

3.1 INTRODUCTION

This chapter explains the methodology adopted for the research project and the outline of Chapter 3 is summarised in Figure 3.1. Although the methodology used in both Phase 1 and Phase 2 is shown, the focus of this chapter is on Phase 1.

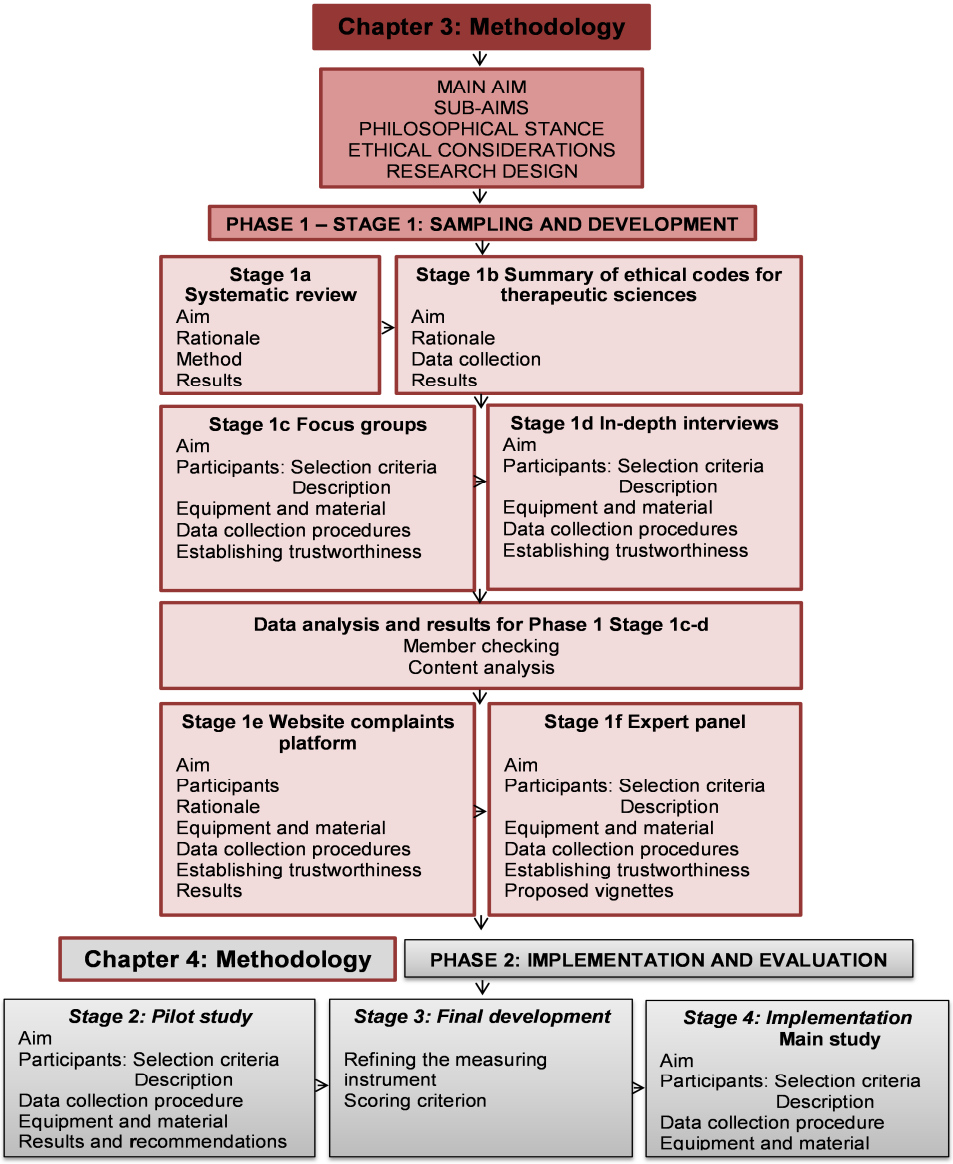


Figure 3.1: Summary of chapter outline

3.2 MAIN AIM

The aim of the study is to develop and implement a multidisciplinary measure of ethical sensitivity for healthcare professionals in the therapeutic sciences[1] within the South African context. This measure is specific to the profession of audiology, occupational therapy, physiotherapy and speech-language therapy. The main aim is realised in the following sub-aims as set out in accordance with the two phases of the research.

3.3 SUB-AIMS

Phase 1: Sampling and Development

- To perform a systematic review of ethics research in the researcher's primary profession (audiology) with a view to obtaining a deeper understanding of the research focus in terms of ethical principles and role of the audiologist, as well as to identify limitations that could assist in formulating relevant questions during the focus group discussions and individual interview.
- To compare the systematic review above with a published systematic review of ethics research in physiotherapy to determine whether there are similarities in the focus on ethics research and principles to encourage the establishment of a single assessment instrument for the therapeutic sciences.
- To determine which of the four principles of biomedical ethics are considered the most relevant to ethical dilemmas in the field of audiology, occupational therapy, physiotherapy and speech-language therapy.
- To determine which ethical sensitivity skills audiologists, occupational therapists, physiotherapists and speech-language therapists identify as important when discussing ethical dilemmas related to their specific field.
- To describe the scenarios that lead most commonly to ethical dilemmas in the field of audiology, occupational therapy, physiotherapy and speech-language therapy.

[1] For the purpose of this study, healthcare professionals in the therapeutic sciences include audiologists, occupational therapists, physiotherapists and speech-language therapists. In the remainder of the text this group of professionals will be referred to as therapists.

- To identify ethical principles and ethical sensitivity skills that are most important to the general public through the use of website complaint forums.
- To develop and refine a multidisciplinary ethical sensitivity measuring instrument.

Phase 2: Implementation and Evaluation

- Refer to Chapter 4 for an outline of the sub-aims for Phase 2.

3.4 PHILOSOPHICAL UNDERPINNING OF THE RESEARCH

The study is grounded in a pragmatic philosophy (Maxcy, 2003). Pragmatism was first introduced into philosophy by Charles Sanders Peirce in 1878 in this article 'How to make our ideas clear". Pragmatism is a distinctive American philosophy (Aune, 1970; Blosch, 2001) that provides a set of theories about data, investigation and analysis that underpins the mixed-methods approach and distinguishes the approach from purely quantitative approaches that are based on a philosophy of (post)positivism and purely qualitative approaches based on a philosophy of interpretivism or constructivism (Johnson & Onwuegbuzie, 2004; Johnson & Onwuegbuzie, 2004; Maxcy, 2003; Rallis & Rossman, 2003). Pragmatism is generally regarded as the philosophical partner for the mixed-methods approach and was used as a basis to allow for the mixing of methods from different paradigms of research so as to adequately answer the research question. In accordance with this philosophy of pragmatism, the methodological approach adopted in this research is motivated and justified by considerations of efficacy and utility in accordance with the aims of this study. Though pragmatism is fairly recent compared to the other philosophical positions, it has positioned itself as a contending paradigm. Recent debates on Powell's (2001, 2002, 2003) pragmatist views and those of essentially positivist scholars Durand (2002) and Arend (2003) on the logical and philosophical foundations of the competitive advantage hypothesis confirm that pragmatism has placed itself in a contending position.

3.5 ETHICAL CONSIDERATIONS

The sudden increase of biomedical and behavioural research towards the end of the twentieth century has introduced scrutiny of the ethical principles by which investigators should be guided (Sininger, Marsh, Walden, & Wilber, 2003). The ethical researcher could be defined as one who is concerned with both the well-being of research participants and future uses of the knowledge gained, and one who accepts personal responsibility for decisions that have a bearing on them. Institutional approval (Appendix A) was obtained prior to conducting the current study to confirm that the study is ethically sound. A number of key phrases describe the system of ethical protections to try and better protect the rights of their research participants. These phrases and their relation to this study are discussed in Table 3.1.

Table 3.1: Ethical considerations for the study

Research ethics pertaining to the research	
The principle of ***voluntary participation*** (McMillan & Schumacher, 2010): • Participants were not pressurised into participating in this study. • During focus group discussions, participants were not forced to respond to specific questions or discussion points. • Student participation during Phase 2 was completely voluntary.	The principle of ***objectivity and professional integrity*** (McMillan & Schumacher, 2010): • The researcher facilitated the focus group discussions**, but did not reveal** personal biases and/or opinions regarding the topic. • The research was conducted in a competent fashion, as an objective, scientific project without bias, utilising a valid research design that includes relevant theory, methods and prior findings.
The principle of ***informed consent*** (Campbell, Vasques, Behnke, & Kinscherff, 2010): • Participants were informed regarding the general nature of the study, as well as about any potential risks involved. The aim and sub-aims of the study were presented to them. • Participants were clearly instructed and understood the researcher's expectations. • Participants had to sign the consent form in order to participate in the study (Appendix B1-B3). • Participants were offered the option to receive a report about the results and conclusions of the research.	The principle of ***veracity****:* (Sininger et al., 2003): • This research project was planned and conducted in such a way as to minimise misleading results. • Data published for this study was not fabricated or falsified in any way. • Adequate information was provided to colleagues to permit methods and findings of this study to be assessed, as well as to alert colleagues regarding the limits of reliability and applicability of data resulting from this study. • Appropriate credit was awarded for the work of others through citations. • Results were reported accurately within the appropriate context.

Research ethics pertaining to the research	

The principle of ***confidentiality*** (Smith, 1995):
• Data is coded to protect the participants' identity.
• Data is stored on a computer package with a secret user password to ensure the security of research records (Neuman, 1997).
• No identifying information will be made available to anyone who is not directly involved in the study.
• A particular ethical issue to consider in this study is the case of focus groups:
  ○ At the outset, the researcher emphasised that each participant's contributions would be shared with the others in the group.
  ○ Participants were encouraged to keep the information shared during the meeting confidential.
	The principle of ***deception*** in research (Campbell et al., 2010):
	• Deception was used during the pilot study to ensure that participants were blind to the purpose of the study, as suggested in the literature related to obtaining reliable research in the area of ethics.
	• Both deception and its purpose were fully explained to the participants after they had completed the measuring instrument. The purpose of the study was explained to them after participation.
	• No pain (emotional or physical) was inflicted on the participants as a result of this deception.
	• The participants were presented with adequate information to be able to make an informed decision regarding participation in the study.

3.6 RESEARCH DESIGN

In line with the pragmatist paradigm discussed above, the mixed-methods approach was used to conduct the current study. Many scholars have linked pragmatism with the successful mixing of methods (Creswell, 2003; Creswell, Plano Clark, Gutmann, & Hanson, 2003; Johnson & Onwuegbuzie, 2004; Petter & Gallivan, 2004; Tashakkori & Teddlie, 1998, 2003). Specifically, this study followed a two-phase, sequential mixed-methods research design (Figure 3.2). This framework is usually applied in new areas of inquiry (McMillan & Schumacher, 2010) and therefore considered relevant for the current study. It is also effective when developing components of a pluralistic concept such as ethical sensitivity. Hence it was used to explore participant views with the intent of using this information to develop an instrument and thereafter implement it with a sample from a representative population.

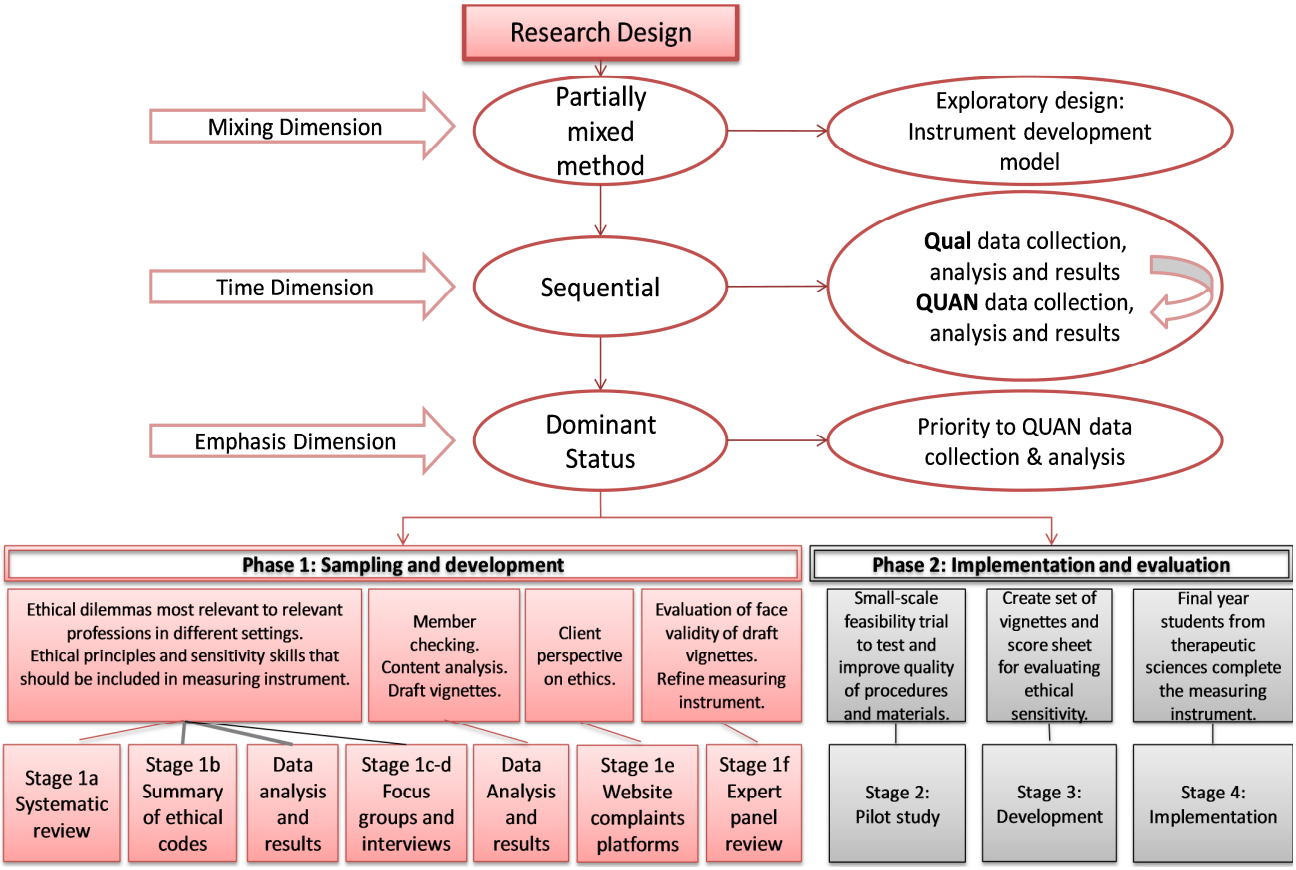


Figure 3.2: Graphic presentation of the research process

Phase 1 focused on the development of the measuring instrument and consisted of a qualitative exploration of ethical sensitivity as it relates to the therapeutic sciences. Focus group discussions and in-depth interviews were conducted and complaint platforms for the public were consulted to determine the ethical dilemmas viewed as most relevant by therapists as well as the public. The collected data was used to construct the first vignettes that were presented to therapists with expert knowledge and special interest in the realm of ethics. Phase 1 was concluded by refining the measuring instrument to be used in Phase 2.

A qualitative approach is critical when the purpose is to construct profession-specific knowledge (Weaver, 2007). A qualitative approach in Phase 1 increased the validity of the study, because concepts and ideas were well matched with the way the therapists with expert knowledge and special interest (rather than the researcher) think about, conceptualise and respond to ethical dilemmas in the therapeutic

sciences (McMillan & Schumacher, 2010). Focus group discussions and in-depth interviews were conducted to gain insight into the shared understandings of professionals in the therapeutic sciences (audiologists, occupational therapists, physiotherapists and speech-language therapists) of ethical dilemmas in the field. The participants in the focus groups were homogeneous in characteristics related to the purpose for the study, based on specific participant selection criteria, in order to facilitate optimal group dynamics. In order to increase the validity of the measuring instrument, in-depth interviews were conducted with purposively selected therapists who have clinical experience and in-depth knowledge about ethical issues regarding the profession. These therapists' views formed the basis of the initial design of the vignettes.

3.7 PHASE 1: SAMPLING AND DEVELOPMENT

Phase 1 Stage 1 comprised six different steps for data collection (a-f). In Stage 1, the data collection and analysis were qualitative in nature and included the following: a systematic review; comparison of the ethical codes of the different therapists included in this study; focus group discussions; in-depth interviews; web-based consumer complaint forums, as well as an expert panel. After the expert panel revision of the measuring instrument, decisions were made regarding the format of the measuring instrument that would be implemented in Phase 2 during the pilot study.

3.7.1 Stage 1a: Systematic review

3.7.1.1 Aim

The purpose of the systematic review was to apply multiple perspectives in order to analyse published literature related to ethics in the field of audiology (Naudé & Bornman, 2014).

3.7.1.2 Rationale

Audiologists are particularly vulnerable to the changing requirements of the profession that compel them to balance professional obligations and business

principles. The researcher's background training also allowed for deep insight into the literature related to ethics in audiology. The systematic review allowed for a comparison between research-related ethics in audiology and ethics in physiotherapy. A systematic review on ethics knowledge in physiotherapy was done with literature published between 1970 and 2000 (Swisher, 2002).

3.7.1.3 Method

A two-phase mixed-method approach was used to analyse publications that met the specified criteria (Naudé & Bornman, 2014). Publications were sorted into categories, namely ethics approach, author, decade, role of the audiologist, component of morality, and common themes. The sample consisted of peer-reviewed articles cited in MEDLINE, CINAHL, ERIC, MasterFILE Premier, E-Journals, Africa-Wide Information, as well as Academic Search Premier electronic databases and non-peer-reviewed articles in Seminars in Hearing. The ethical principles and themes emerging from these two reviews were compared to further confirm the validity of a multidisciplinary measuring instrument.

3.7.1.4 Results

The results from the systematic reviews on ethics knowledge in audiology (Naudé & Bornman, 2014) and physiotherapy (Swisher, 2002) are described according to the sub-aims identified at the beginning of the chapter. Also see Table 3.2.

Table 3.2: Focus of ethics knowledge in audiology and physiotherapy

	Audiology (2000 – 2010)	Physiotherapy (1970 – 2000)
Approach	85% based on philosophical principles (n=23)	43% based on philosophical principles (n=35)
Ethical principles	Autonomy, beneficence, non-maleficence, justice, trust and veracity	Autonomy, beneficence, non-maleficence, justice
Components of morality	Moral judgement 93% (n=25) Moral sensitivity 7% (n=2)	Moral judgement (n=42 - 52%) Moral sensitivity (n=30 - 37%) Moral motivation (n=4 - 5%) All three combined (n=5 - 6%)
Areas identified as important during data collection	Recurrent themes: Professional ethical issues in private practice, business ethics, and malpractice. Questions: What ethical issues do audiologists routinely encounter? How do context and setting impact on the interpretation of ethical issues?	Recurrent themes: Informed consent, resource allocation and ethical responsibility of autonomous practice. Questions: What are the types of ethical issues physiotherapists encounter and how can they be classified? Relationship with other professions in the therapeutic sciences: Research by Barnitt (1998) found different themes related to ethical dilemmas for physiotherapists and occupational therapists. Previously, however, Barnitt and Partridge (1997) found that there are ethical dilemmas applicable to both professions and that context plays a big role in the overlapping ethical dilemmas faced by therapists.

During the systematic literature review, the researcher confirmed the need for research in the area of ethical sensitivity, as well as for knowledge on ethical issues that each profession in the therapeutic sciences routinely encounters. The important need to identify overlapping ethical issues for the four professions was highlighted (Barnitt & Partridge, 1997). The first step towards determining overlapping ethical issues was to summarise the ethical codes for each profession in accordance with the statutory body governing the professions.

3.7.2 Stage 1b: Summary of ethical codes for therapists

3.7.2.1 Aim

The aim was to identify and compare the main themes and principles formulated by the professional associations of each of the therapeutic sciences so as to confirm that the four relevant professions could share an ethical sensitivity measuring instrument. All therapists are required to register with the HPCSA in order to practise, and they have to adhere to the same broad rules and guidelines of the ethical code of conduct. These rules and guidelines have been further developed by each of the professional associations, and each emphasises what it views as most relevant for its specific profession.

3.7.2.2 Rationale

The purpose of professional ethical codes for therapists is to provide a structured set of principles and values that reflect the ideals of each professional organisation as guidelines for ethical practice. A summary of the principles and values of therapists was used throughout Phase 1 to ensure that the measuring instrument is rooted in ethical principles relevant for all four of the professions.

3.7.2.3 Data collection

The researcher constructed a table of the ethical principles articulated by the professions of audiology, occupational therapy, physiotherapy, as well as speech-language therapy. The main themes were identified and compared across the four professions.

3.7.2.4 Results

The Code of Ethics for all four professions emphasises the ethical principles of autonomy, justice, beneficence and non-maleficence. Specific values such as veracity, privacy and confidentiality and social responsibility – with specific reference to trust, record keeping, informed consent, patient-centred care, profession development as well as student training – are highlighted in these codes. The principles and values central to all four of the professions specified in this study are summarised in Figure 3.3. The researcher searched the literature to explore the link

between these principles and values as identified in the four different codes of ethics for therapists (see Figure 3.3).

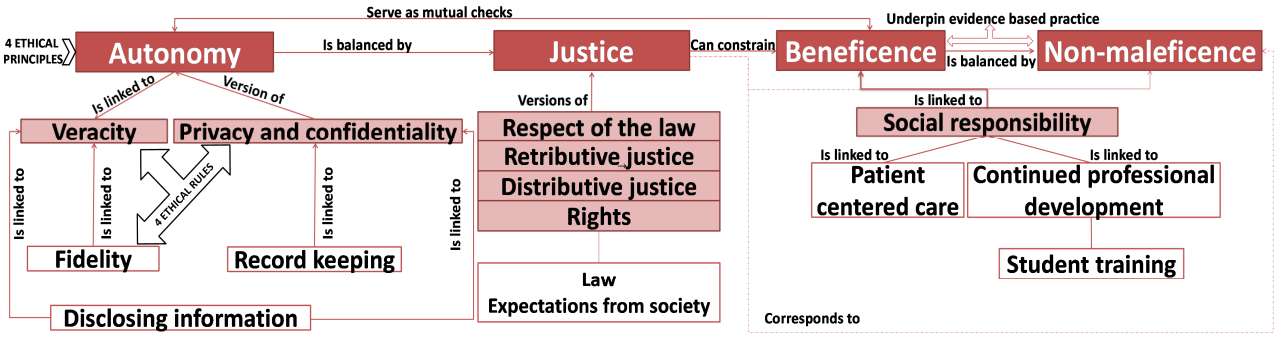


Figure 3.3: **Summary of overlapping ethical concepts related to the therapeutic sciences as derived from the Code of Ethics of each profession**

To summarise, Figure 3.3 consists of three levels. The first level comprises the overlapping ethical principles identified in the code of ethics as stipulated by the four different professional organisations. The second and third levels consist of sub-categories derived from the ethical principles already identified. These sub-categories refer to outcomes related to the ethical principles. For example, respecting the client's autonomy necessitates veracity (telling the truth) in order for clients to make informed decisions. Once the decision is made, the therapist should respect the client's privacy and keep their decision confidential. The four ethical rules introduced by Beauchamp and Childress (2001) as guidelines for ethical practice are closely linked to autonomy. Autonomy is balanced by justice, while beneficence is balanced by non-maleficence. Autonomy and beneficence serve as mutual checks to resolve the tension between these two ethical principles. Beneficence and non-maleficence form the basis of evidence-based practice.

3.7.3 Stage 1c: Focus groups

3.7.3.1 Aim

To gain insight, through organised discussion, into therapists' shared understandings, regarding the ethical principles and ethical sensitivity skills that were most applicable to the therapeutic sciences.

3.7.3.2 Participants

The selection criteria for the participants are specified and summarised in Table 3.3.

Table 3.3: Participant sample criteria for focus groups

Focus Groups		
Criteria	**Method**	**Justification**
Qualified therapists registered with the HPCSA, teaching at an institution for higher education in one of the following degree programmes: ✓ Audiology ✓ Occupational therapy ✓ Physiotherapy ✓ Speech-language therapy All five South African universities that offer all four therapy degree programmes were included, namely the University of Cape Town (UCT), University of KwaZulu-Natal (Westville), University of Limpopo (Medunsa), University of Pretoria (UP) and the University of the Witwatersrand (WITS).	Ask participants to provide their HPCSA registration numbers as well as their personnel numbers.	Therapists registered with HPCSA are expected to be informed regarding ethical rules and practice within the therapist's scope of practice. The HPCSA will not register anyone holding a qualification from an unaccredited institution and it monitors continued professional development, with a special focus on ethics. Individuals employed by higher education institutions are aware of theoretical aspects that are involved in training and assessment.
Minimum of 5 years' continuous experience in the relevant profession.	Short biographic questionnaire	Experienced therapists are more aware of relevant ethical issues in the field.
Show evidence of contribution (or special interest) in the field of ethics by means of: ✓ Published article(s) and/or paper(s) ✓ Lectures / workshops ✓ Research ✓ Professional Boards	Short biographic questionnaire	Professionals that realise the importance of ethics and contribute to the field in some way will most likely make a positive contribution to the group, since the purpose of the discussion is to create realistic and relevant case scenarios.

Eight therapists employed in higher education institutions (two from each profession specified) were invited to participate in each of the five focus groups. Qualitative research designs can involve multiple phases, with each phase building on the previous one. In such instances, different types of sampling techniques may be required at each phase. Purposive sampling is useful in these instances because it provides a wide range of non-probability sampling techniques for the researcher to draw on. For example, critical case sampling may be used to investigate whether a phenomenon is worth investigating further, before an expert sampling approach is adopted to examine specific issues further.

Demographic data on the participants was collected before the onset of the focus group discussions. Table 3.4 describes the participants in terms of gender, age, qualification, years of experience, ethical involvement or experience, as well as involvement with professional bodies.

Table 3.4: Description of focus group participants (n=29)

Registration with professional bodies/ associations*	Gender	Registered profession	Highest qualification	Ethical experience	Professional experience (years)
ASHA (n=1) HPCSA (n=29) OTASA (n=4) SAAA (n=6) SAALED (n=1) SAISI (n=1) SASLHA (n=10) SASP (n=4)	Female (n=24) Male (n=5)	Audiology (n=7) Occupational therapy (n=7) Physiotherapy (n=8) Speech-language therapy (n=7)	Bachelors degree (n=6) Master's degree (n=15) PhD (n=8)	Ethics module / workshop presenter (n=18) Continued professional development activity accreditor (n=3) Ethics committee member (n=8)	5 – 10 y (n=12) 11 – 20 y (n=7) 21 – 30 y (n=7) 31 – 40 y (n=3)

*All participants had HPCSA registration, but they could in addition also be registered with one or more professional association.

Although two therapists from each of the four specified professions were invited to join the five focus groups, and confirmed availability, not all were eventually able to attend the focus group session. From the 40 therapists who telephonically agreed and consented to participate in the focus group discussions, only 29 arrived on the day of the meeting. Each focus group did however comprise at least one therapist from each of the four specified professions. Only one focus group consisted of eight

participants, one of six participants and the remaining three focus groups consisted of five participants each.

3.7.3.3 Equipment and material

The equipment and the material used to develop and evaluate the measuring instrument for ethical sensitivity in Stage 1c are summarised in Table 3.5.

Table 3.5: Equipment and material used in relation to the focus groups

Material to obtain qualitative data	Discussion of equipment and material – qualitative data
Biographical questionnaire (Appendix B4)	• Aim: To ensure that the participants met the selection criteria and to provide descriptive information. • Rationale: A biographical questionnaire constitutes a quick and effective way of ensuring that participants meet the selection criteria and to view the general profile and common characteristics of the participants. A homogeneous group also makes it possible to gain high-quality data, as homogeneity increases trust and comfort level, which allows participants to speak more openly. • Use: Potential participants received the biographical questionnaire to complete before the focus group discussions commenced. • Areas covered: Refer to Table 3.3.
Focus group discussion	• Aim: To explore the important features of ethics in practice according to the sub-aims of Phase 1, and to enable the researcher to formulate relevant and realistic scenarios to develop a measuring instrument. A rolling interview guide was used to formulate objectives for exploring participants' views. • Rationale: The semi-structured focus group meeting was used as a data source because it allows the researcher "...to gather a substantial amount of carefully targeted data within a relatively short period" (Morgan, 1998, p. 32). It was used to provide insight into specific issues related to ethical sensitivity in the therapeutic sciences. The focus group schedule is a method used for structuring the group and it ensured that the focus remained clear.

Material to obtain qualitative data	Discussion of equipment and material – qualitative data
Focus group discussion (continue)	• Use: During the focus group discussions, focus group schedules with open-ended questions were used to provide structure to the discussions. The focus group plan was reviewed in collaboration with experts prior to use (Krueger, 1998). • Questions: Initially five questions were compiled as a guide during the focus group discussions (Appendix C). After discussion with the first focus group, it was decided to only pose four questions to the remaining four focus groups (Appendix C). None of the other focus groups recommended any changes with regard to the questions.
Session voice recordings	• Aim: To record all verbal discussions with participants and ensure accurate data collection that allows for verbatim transcriptions and storage of data for future reference. • Rationale: Reviewing of data increased validity and reliability of the study. • Use: During the data collection stage of the study, recordings (by means of digital voice-recording software) were made of all discussions and these were subsequently transcribed verbatim (Appendix D1).

The material summarised in Table 3.5 demonstrates how qualitative data was used to inform the quantitative phase, thus leading to a richer and more in-depth understanding of the phenomena. Phase 1 assisted to overcome the concern about information that is encoded in quantitative variables (McMillan & Schumacher, 2010). During the five focus group discussions, the researcher gained information about the most typical ethical dilemmas that are observed in the therapeutic sciences. Focus groups were used as one way to gain a clear understanding of how therapists view ethics and ethical sensitivity in the therapeutic sciences, and they assisted in the development of realistic and relevant vignettes to be used as part of the measuring instrument (see Phase 2 of the study) (Benoit & Holbert, 2008).

3.7.3.4 Data collection procedures

The procedure for conducting the five focus group sessions is presented in Figure 3.4.

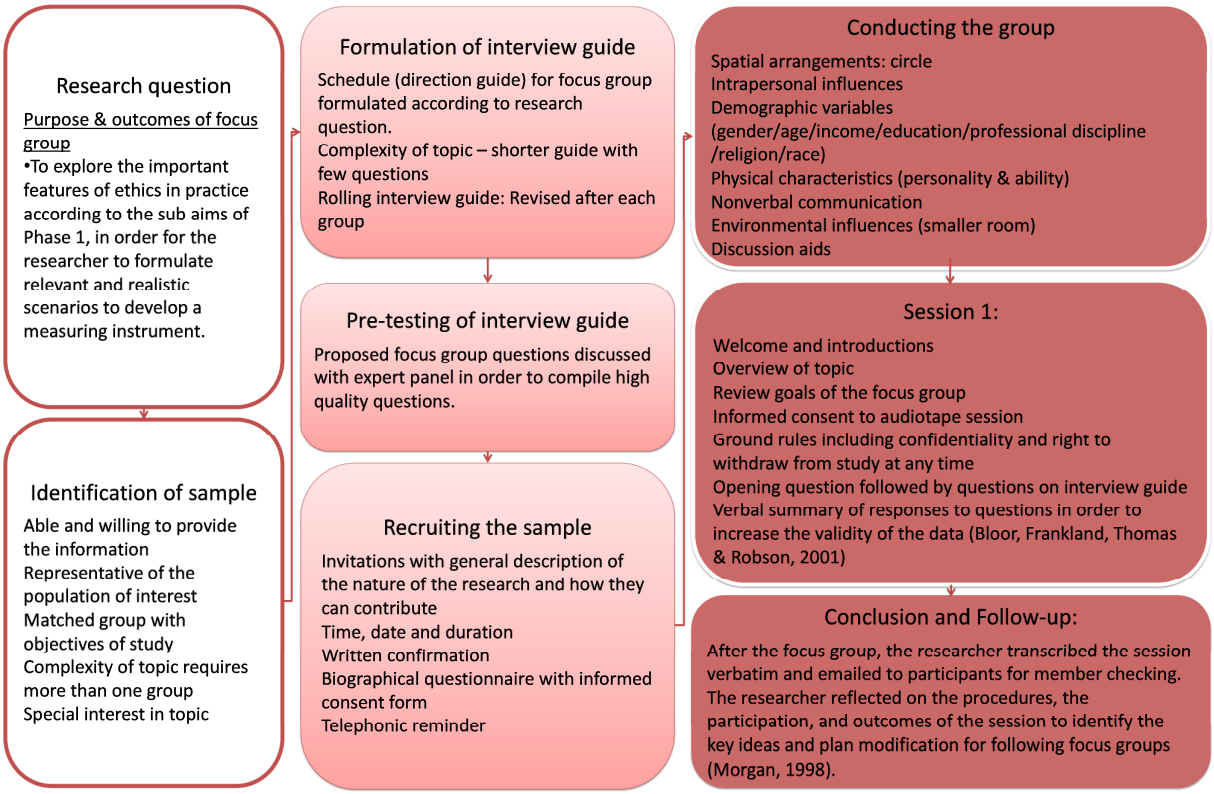


Figure 3.4: Protocol for conducting focus group discussions (Morgan, 1998)

Figure 3.4 also illustrates the structured design that was used to obtain data from the five focus groups. The questions were moderately structured. Since more than one focus group interview was planned, the researcher used a rolling interview guide (Stewart & Shamdasani, 1990). This implies that the experience of one focus group led the researcher to add or delete questions for the next focus group discussion, in other words the procedure offered the advantage of allowing for the adaptation of learning from one focus group session to the next one. The researcher also asked follow-up questions to help the participants develop their answers where applicable. Focus group discussions were recorded to allow for verbatim transcriptions, as shown in Appendix C.

3.7.3.5 Establishing trustworthiness: Legitimising the focus group data

Validity and reliability are two important concepts that contribute to the study's trustworthiness, because they promote objectivity and credibility of the research (Silverman, 2004). Validity is considered more important and comprehensive than reliability, as it is harder to measure (Ary, Jacobs, & Razavieh, 2002). It is important for the data collection to be reliable and valid in order to accurately answer the research question (Leedy & Ormrod, 2010). Research also needs to be defensible to research and practice communities (Onwuegbuzie & Johnson, 2006).

a. Strategies that enhanced validity in the conduct of qualitative inquiry

At its most basic level, validity is the degree to which the data accurately reflects what the researcher intends to measure. The researcher used five focus groups to better understand participants' views related to ethical dilemmas in their profession. The focus group data should, therefore, be defined as that which accurately reflects the participants' views and their perceived reality. A qualitative Legitimation Model (Onwuegbuzie, 2003) was used for assessing legitimation of the qualitative components of the study.

A summary of the possible threats to validity of the focus group data, as well as techniques of how it was addressed, is illustrated in Figure 3.5. Internal credibility refers to the credibility of interpretations and inferences based on the focus group discussions, while external credibility refers to the degree that the findings of the research can be generalised (Onwuegbuzie & Leech, 2007).

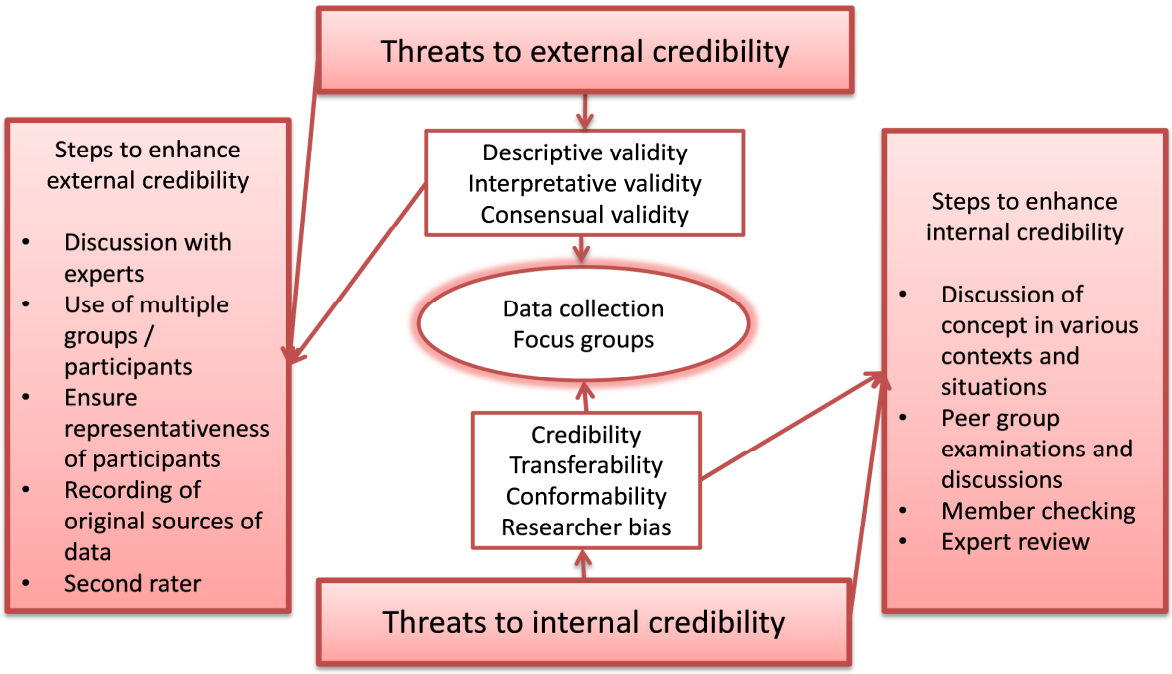


Figure 3.5: Qualitative legitimisation of focus group data

A detailed discussion of the strategy, technique, as well as application of the techniques used to enhance credibility of the focus group data is presented in Table 3.6.

Table 3.6: Increasing credibility of Stage 1c of the research during focus groups

Strategy	Technique	Application of technique in present research
Internal validity / Credibility *Refers to accuracy and objectivity of data (Walsh, 2003)*	Discussion of ethical dilemmas in various contexts and situation	All five universities offering degrees in the four therapeutic professions were included. The five universities represented four provinces in South Africa.
	Peer examinations and discussions	An independent researcher and PhD student with experience in qualitative research, but not related to the therapeutic sciences (early intervention consultant) assisted with the content analysis. Three independent researchers, also involved in PhD studies, assisted with the data analysis. This reduced personal bias based on the researcher's own expectations, perceptions and background.
	Member checking	Member checking was conducted following the verbatim transcription of each focus group session (Kidd & Parshall, 2000). After themes had been developed and the data analysed, results were presented to the participants to ensure that deductions made from the data were correct. This provided participants with the opportunity to correct factual mistakes and to volunteer new information.

Strategy	Technique	Application of technique in present research
Internal validity / Credibility *(continue)*	Recording equipment	The researcher used recording equipment that was sophisticated enough to record multiple participants and participants' talking at once without losing any individual participant's comments.
	Verbatim transcriptions	The transcription is an accurate account of what was said and ensures an accurate account of the formative data. A second rater checked 20% of all of the verbatim transcriptions.
Interpretive validity / Conformability / Justifiability *Captures how well the researcher reports the participants' meaning (Maxwell, 1992)*	Peer examination	An independent researcher and PhD student with experience in qualitative research, but not related to the therapeutic sciences (early intervention consultant) assisted with the content analysis. The key was to ensure that interpretations were not based on the researcher's perspective. Inter-rater scores were calculated with Cohen's Kappa. Scores were calculated for three categories, namely ethical principles, ethical sensitivity skills and ethical dilemma scenarios. The kappa value for the first and second category was 0.701 and 0.630 respectively, suggesting that the strength of agreement between the raters was substantial. The kappa value for the last category was 0.529, suggesting only a moderate level of agreement. This result (moderate level of agreement) was expected, since data-driven approaches are more flexible and open to discovery of ideas not previously considered.
Transferability/ external validity *Refers to the ability to apply the data universally (Walsh, 2003)*	Use of multiple groups	Five focus groups, representative of all the professionals in the therapeutic sciences, were used to ensure rich descriptive data. Results from the five groups were compared with each other as well as with the results from the individual interviews that followed the focus group sessions.
	Representativeness of participants	The researcher formulated specific sample criteria. Participants were included in the focus groups based on specific inclusion and exclusion criteria. Therapists from all five of the relevant universities participated. The demographic information obtained with a short questionnaire was used to ensure representativeness.
Consensual validity *Agreement on a significant social issue*	Agreement factor	During the thematic coding, the researcher noted the agreement between various therapists and indicated how they built on each other's examples and views.
Researcher bias	Neutral questions and comments	The researcher did not indicate approval or disapproval at any comments from the respondents. No leading questions were asked. The researcher did not express personal views on the topic to avoid a situation where respondents would try to match their answers with the opinion of the researcher.

b. Strategies that enhanced reliability in the conduct of qualitative inquiry

The traditional notions of reliability are of less importance when considering the trustworthiness aspects of focus group research. The results of the focus group were heuristic, in that they provided direction for more quantitative research in Phase 2 of the research. The strategies used to enhance reliability of the findings are summarised in Table 3.7.

Table 3.7: Increasing credibility of Stage 1c of the research during focus group sessions

Strategy	Technique	Application of technique in present research
External reliability *Refers to Level of replication of the study*	Replication logic	Focus groups were conducted with multiple groups up to the point of data saturation.
	Audit trail	The researcher has explained all the procedures followed during the study. The researcher followed a standard, definable protocol both for conducting the focus groups and analysing the data. The transcribed data is available in Appendix C.
Internal reliability *Extent to which assessments, judgements and rating are agreed upon between researchers*	Observation by multiple observers	The researcher consulted peers to check on the consistency of coding strategies.
	Stepwise replication	The researcher involved a second rater to evaluate the consistency of compiling the patterns (networks) in the computer-based qualitative data analysis programme.
	Researcher's position	The researcher declared personal biases relating to the data collection and analyses and explained ways in which it was overcome.

3.7.4 Stage 1d: In-depth interviews

3.7.4.1 Aim

The aim of the in-depth interviews was to explore the thoughts and experiences of therapists who have had direct experiences with ethical dilemmas in practice. This type of interview was considered an effective method to obtain detailed and thorough information on a topic such as ethics (Patton, 1990). Open-ended questions were asked to elicit depth of information from relatively few people – i.e. to collect rich information that can inform programme development. Furthermore, it is a discovery-

oriented method, which allows the researcher to deeply explore the participant's feelings and perspectives on the subject of ethics.

3.7.4.2 Participants

A description of the selection of participants for the individual interviews is summarised in Table 3.8.

Table 3.8*: Stage 1d participant selection criteria for in-depth interviews*

In-depth Interviews		
Criteria	Method	Justification
Eight qualified therapists registered with HPCSA, currently practising. ✓ 2 Audiologists ✓ 2 Occupational therapists ✓ 2 Physiotherapists ✓ 2 Speech-language therapists	The four professional bodies were contacted and asked for the names of two therapists per profession who are either in private practice or employed in government settings but also have an interest in ethics, and who are considered / respected as experts by their colleagues.	Therapists in the field should be able to identify the ethical dilemmas currently experienced in their specific professions, as well as provide insight into what kind of scenarios might be expected in the future.

Eight experienced practising therapists who were not part of any of the five focus groups were invited to participate in an in-depth interview where similar questions were used as during the focus group sessions. Non-probability purposive sampling, specifically expert sampling, was used to select these participants. One of the key benefits of purposive sampling is the comprehensive set of sampling techniques that can be used.

The rationale for using this technique was to gather knowledge from individuals who have special insight into the area of ethics in the profession, as well as personal experience of ethical problem solving. This expertise was required during the exploratory qualitative phase of this research to highlight potential areas not covered by therapists in the setting forming part of the focus groups, namely teaching at universities. Expert sampling was specifically chosen to further endorse the

information gathered from the focus groups and to confirm that a measuring instrument for all four professions was indeed possible, as there was no empirical evidence available to confirm the possibility of a multidisciplinary measuring instrument for ethics.

The description of participants for the eight in-depth interviews are summarised in Table 3.9. The criteria were determined by means of a short biographical questionnaire (Appendix B4).

Table 3.9: Description of participants in the in-depth interview (n=8)

Profession	Gender	Professional body registration	Highest qualification	Ethical experience	Years of experience
Audiologist (n=2)	Female (n=8)	SAAA (n=2) SASLHA (n=2)	Bachelors (n=1) Master's (n=1)	Ethics workshop presenter (n=1) Member of organisational ethics committee (n=1)	11 – 20 years 31 – 40 years
Occupational therapist (n=2)		OTASA (n=1) SAISI (n=1)	Bachelors (n=1) Master's (n=1)	Member of organisational body committee (1) Ethics workshop presenter (n=1)	5 – 10 years 11 – 20 years
Physiotherapist (n=2)		SASP (n=2)	Bachelors (n=2)	Ethics workshop presenter (n=1) Facilitates ethics continued professional development lunchtime discussion group (n=1)	21 – 30 years 5 – 10 years
Speech-language therapist (n=2)		SASLHA (n=2)	Bachelors (n=1) Master's (n=1)	Member of organisational body committee (n=1) Facilitates ethics CPD lunchtime discussion group (n=1)	11 – 20 years 31 – 40 years

From this table it is evident that all the participants were female, which is in line with the workforce profile in South Africa. All the participants registered with an additional professional association, apart from the HPCSA, indicating commitment to the profession they belong to. The participants represented a wide range of experience.

3.7.4.3 Equipment and material

The equipment and material used during the in-depth interviews are summarised in Table 3.10.

Table 3.10: Equipment and material used during Stage 1d for in-depth interviews

Material to obtain qualitative data	Discussion of equipment and material qualitative data
Biographical questionnaire (Appendix B4)	• Aim: To ensure that participants meet the sample criteria and assist in identifying special conditions or circumstances that may have impacted on the interview. • Rationale: Quick and effective way to ensure that participants met the selection criteria and to view the general profile of the common characteristics of the participants. • Use: The time, date and place of the interview as well as demographic information about the participant were recorded. • Areas covered: Refer to Table 3.9.
Interview guide	• Aim: To list the questions and overall themes to be explored during the interview. • Rationale: In a one-on-one setting, the researcher was able to devote complete attention to each participant, listening actively and taking time to establish good rapport. Since the participants had different working hours and responsibilities it was easier to accommodate each individual in terms of time and setting. In-depth interviews are described as a good method to gain deeper insights when participants have specific knowledge about a topic (Boyce & Neale, 2006). • Use: Open-ended questions were formulated to be used as a checklist, ensuring that the main areas of investigation were addressed during the interview (Appendix E). The questions were formulated as a guide to facilitate discussion with the participants. Probes were used as needed, for example: • Would you give me an example? • Can you elaborate on that idea? • Would you explain that further? • I'm not sure I understand what you're saying. • Is there anything else?
Session voice recordings	• Aim: To record all verbal discussions with participants to ensure accurate data collection, and to allow for verbatim transcriptions and storage of data for future reference. • Rationale: Reviewing of data increased the trustworthiness of the study. • Use: Recordings (digital voice-recording software) were made of all discussions during the data collection stage of the study and transcribed verbatim (Appendix D2).

The material summarised in Table 3.10 demonstrates how qualitative data was used to inform the quantitative phase, leading to a richer and more in-depth understanding of the phenomena. Phase 1 assisted to overcome the concern about information encoded in quantitative variables (McMillan & Schumacher, 2010). During the in-depth interviews, the researcher gained information regarding the most typical ethical dilemmas observed in the therapeutic science professions. A clear understanding of how therapists view ethics and ethical sensitivity informed the development of a realistic and relevant measuring instrument to be used during Phase 2 of the study (Benoit & Holbert, 2008).

3.7.4.4 Data collection procedures

Seven steps were followed during the interview process (Kvale, 1996).

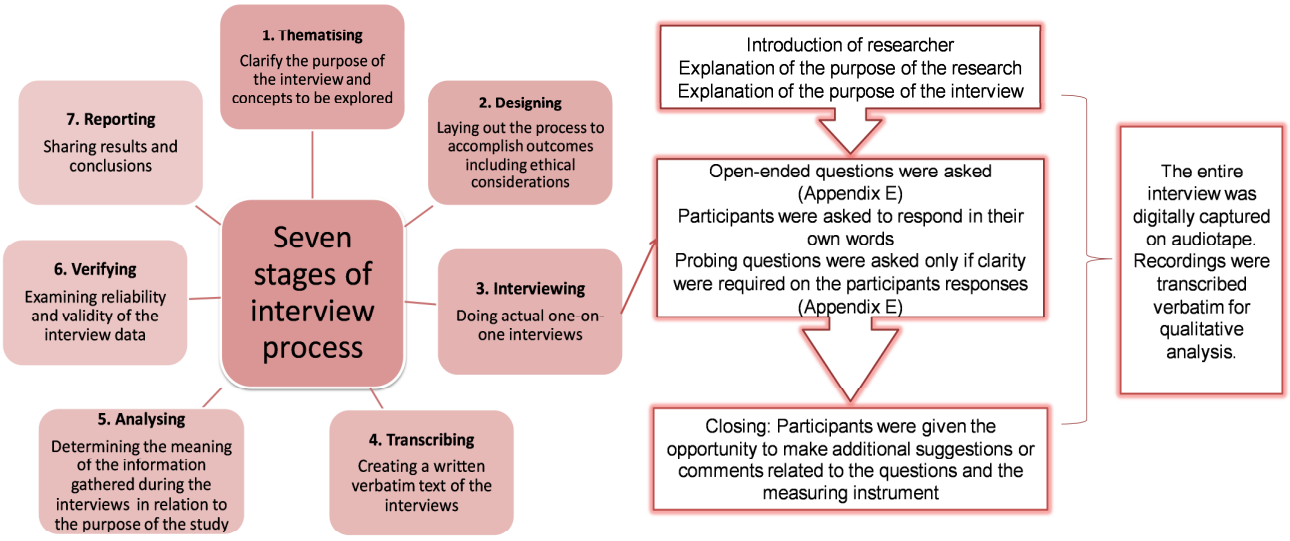


Figure 3.6: Procedure for conducting the in-depth interviews

Figure 3.6 sets a clear outline of the semi-structured interviews that were conducted with the participants described in Table 3.9.

3.7.4.5 Establishing trustworthiness and dependability: Legitimising the in-depth interview data

In-depth interviews emphasise validity, the truth of prepositions, resulting in data that is representative of participant's real views and beliefs. A research method which emphasises validity does not attempt to be reliable. Subjects responses are individual, and it is is not expected that different respondents will give comparable data. There is no list of allowed responses agianst which reliability can be assessed. Although the results cannot be used to assess views of the wider population it may provide information that suggests a pattern of opinion.

a. Strategies that enhanced validity in the conduct of qualitative inquiry

The researcher used in-depth interviews to explore participant's views related to ethical dilemmas in their specific profession. The data should accurately reflect the participant's views and their perceived reality. A summary of the possible threats to validity of the in-depth-interview data as well as techniques of how it was addressed are illustrated in Figure 3.7.

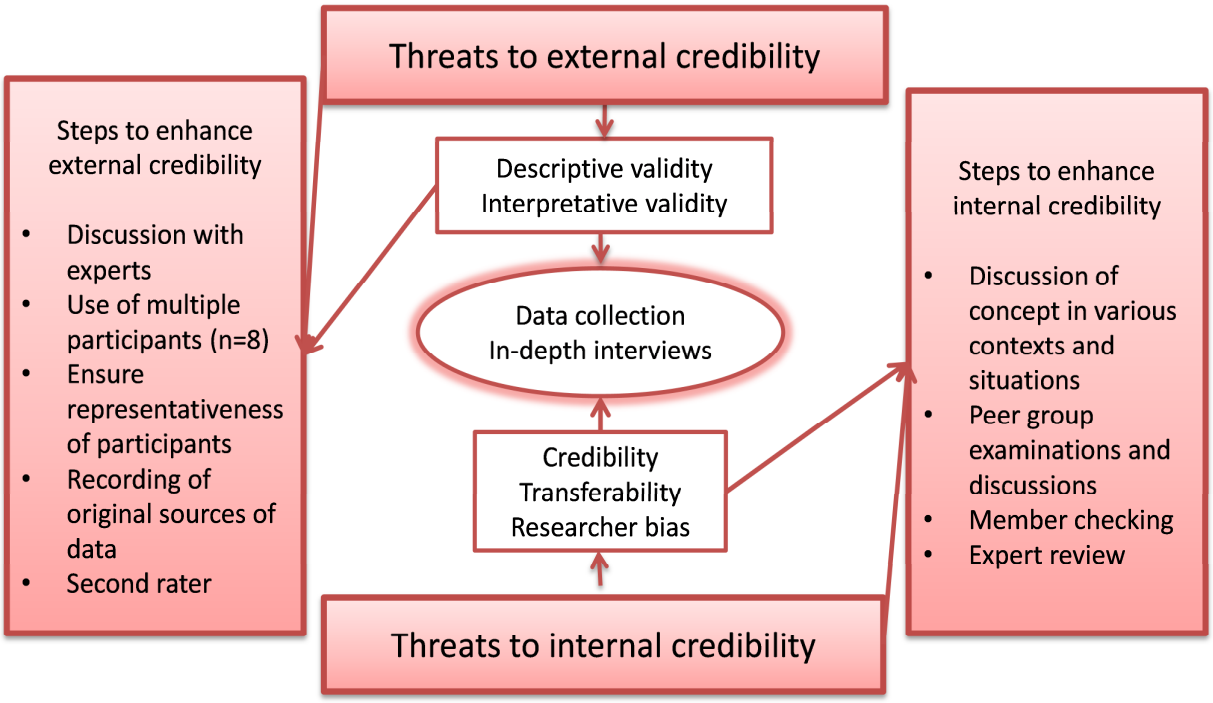


Figure 3.7: Increasing credibility of the research during the in-depth interviews

A detailed discussion of the strategy, technique as well as application of the techniques used to enhance credibility of the in-depth individual interview data are presented in Table 3.11.

Table 3.11: Procedure to enhance credibility of the in-depth interviews

Strategy	Technique	Application of technique in present research
Descriptive validity / Credibility *Refers to accuracy and objectivity of data (Walsh, 2003)*	Discussion of ethical dilemmas in various contexts and situation	Two therapists (one in private sector and the other in public sector) representing each of the four therapeutic sciences were individually interviewed to obtain information regarding the most relevant profession specific ethical dilemmas.
	Peer examinations and discussions	An independent researcher and PhD student with experience in qualitative research, but not related to the therapeutic sciences (early intervention consultant) assisted with the content analysis. Three independent researchers, also involved in PhD studies assisted with the data analysis. This helped to prevent personal bias related to the researcher's own expectations, perceptions and background.
	Member checking	Member checking was conducted after verbatim transcription of the individual interview sessions (Kidd & Parshall, 2000). After themes were developed and the data analysed, results were presented to the participants to ensure that deductions made from the data were correct. This provided participants with the opportunity to correct factual mistakes and to volunteer new information.
	Recording equipment	The researcher used recording equipment that was sophisticated enough to record high quality conversations in noisy environments.
	Verbatim transcriptions	The transcription is an accurate account of what was said ensuring an accurate account of the formative data.
	Evaluate word frequency count inference accuracy	Synonyms of words were identified and included in the same category in order not to underestimate the importance of a concept. A Key Word In Context search was performed to test for the consistency of usage of word by viewing it in context of the sentence.

Strategy	Technique	Application of technique in present research
Interpretive validity / Conformability / Justifiability *Captures how well the researcher reports the participants' meaning (Maxwell, 1992)*	Peer examination	An independent researcher and PhD student with experience in qualitative research, but not related to the therapeutic sciences (early intervention consultant) assisted with the content analysis. The key was to ensure that interpretations were not based on the researcher's perspective. Interrater scores showed substantial strength of agreement for ethical principles and ethical sensitivity skills. A moderate level of agreement was found for ethical dilemma scenarios.
Transferability *Refers to the ability to apply the data universally* (Walsh, 2003)	Use of participants from different sectors	Two therapists per profession were used to ensure rich descriptive data. Results from the interviews were compared with each other as well as with the results from the focus groups.
	Representativeness of participants	Participants were included in the focus groups based on specific inclusion and exclusion criteria. Therapists from all five of the relevant universities participated. The demographic information obtained with a short questionnaire was used in order to ensure representativeness.
Bias	Reduce moderator bias	The researcher remained neutral in terms of tone and body language and refrained from giving personal opinions.
	Avoid biased questions	The researcher formulated the question in the interview guide which was evaluated by peers. Questions were framed neutrally instead of leading.
	Reduce sensitivity bias	The topic of ethics is a sensitive area of professional practice and therapists might not want to answer the questions honestly, in fear of being in the wrong or implicating a colleague. The researcher focused on building trust and ensuring confidentiality. The researcher asked participants not to use real names in their examples. Projective techniques and indirect question were also used to obtain accurate information.
	Avoid sample bias	Sample criteria were formulated to ensure that the sample represented the group of interest.
Member validation *Adds to validity of the observers interpretation of data*	Member checking	The researcher submitted an account of the verbatim transcriptions to the participants for checking.

Strategy	Technique	Application of technique in present research
Credibility (internal validity) *Adequate representation of interpretations*	Theoretical saturation achieved (no new themes) Match between responses of experts for individual interviews, focus groups and theory.	Data considered credible as saturation was achieved.
	Content analysis with ATLAS.ti (Dowling, 2008).	The processes for coding and drawing conclusions from the raw data are transparent and available in Appendix F. The second coder was experienced in the process of content analysis and familiar with the software. The coder was provided with precise coding definitions and clear coding instructions.
Content validity	Lawshe content validity ratio	The content validity ration across items were +0.8 indicating high overall instrument content validity.

b. Dependability (Reliability)

Although the focus was on the validity, the researcher used strategies to enhance reliability to increase the trustworthiness of the data. The strategies are explained in Table 3.12.

Table 3.12: Increasing reliability of Stage 1 (d) of the research during in-depth interviews

Strategy	Technique	Application of technique in present research
Credibility leading to dependability	Inter-coder reliability Different interviewer giving similar rating when observing the same performance	Confirmatory thematic analysis Intraclass correlation coefficient indicated perfect (+1) agreement
	Reliability: Interview style	One-to-one interviews with standardised questions
	Overlapping method	The results of the five focus group and the eight individual interviews were combined to determine the similarities in terms of the answers to the same questions.
	Process description	The processes within the study were reported in detail, enabling future researchers to repeat the work, if not necessarily to gain the same results.

3.7.5 Text data analysis and results for Stage 1c-d focus groups and in-depth interviews

The analysis and results described in this section are based on a combination of the five focus groups and eight in-depth interviews data.

3.7.5.1 Member checking

In qualitative research, member checking, also known as respondent validation, is a technique used by researchers to help improve the accuracy, credibility, validity and transferability of the data. Lincoln and Guba (1985) posit that this is the most crucial technique for establishing credibility. The verbatim transcriptions were sent to the participants for narrative accuracy checks.

Participants agreed that the verbatim transcriptions were accurate and represented the focus group and individual interview discussions. Some of the participants, however, sent additional information related to the questions discussed during the focus group discussions, in order to expand on their initial answer. Transcriptions were sent out via email to all the participants. The researcher received confirmation of receipt from all the participants. One therapist from each profession, but from different focus groups, added information to expand on their initial comments. None of the participants for the individual interviews added any information. The additional information provided by the participant are summarised in Table 3.13.

Table 3.13: Additional information received after member checking

Therapist / Group	Additional information provided
Audiologist Focus group 3	Defamation of character of other professionals People on ethics boards seem to get away with things due to their position
Occupational therapist Focus group 1	Being discouraged by profession as a whole to report others to HPCSA
Physiotherapist Focus group 1	Increased pressure on lecturers regarding throughput might lead to students that are not competent to be put through Using codes for procedures codes are not available
Speech- language therapist Focus group 2	Unethical behaviour is not reported to HPCSA, reporting is discouraged by professional bodies

These additions were taken into account, and added to the verbatim transcriptions to truly reflect the thought of the therapists that took part in the focus groups. Member checking was followed by content analysis.

3.7.5.2 Content analysis

Content analysis is a widely used qualitative research technique (Hsieh & Shannon, 2005). Rather than being a single method, current applications of content analysis show three distinct approaches: conventional, directed, or summative. All three approaches were used to interpret meaning from the content of text data. In this study, qualitative content analysis is used as a research method for the subjective interpretation of the verbatim transcriptions through the systematic classification process of coding and identifying themes or patterns.

Step one involved summative content analysis in the form of a word-frequency count, which is considered the most common notion in qualitative research (Stemler, 2001). The assumption is made that the words that are most frequently mentioned reflect the greatest significance or concerns. The word crunch function in Atlas.ti was used to determine the amount and specific words used during the focus groups and individual interviews. The word crunch was applied after the researcher's questions and comments were removed. A formal analysis of word frequencies with the software mentioned, resulted in a word-frequency list with a total of 1708 different words used by participants (Appendix G).

Words were distilled by removing the following categories:

1. Meaningless words (e.g. uhm, yeah, mmm) resulting in 1703 different words.
2. Core words as described by Banajee, DiCarlo and Buras-Stricklin (2003) (e.g. a, all, I, in, it, that, have, be, other, we, where, not) were removed resulting in 495 different words.
3. Various verb forms were combined (e.g. understand + understanding; assume + assumption) plural and singular forms (e.g. code + codes, assessment + assessments) resulting in a total of 299 different words.

4. Conceptual constructs with the same meaning (e.g. money + billing; kids + paediatric + children; knowing + acknowledge; marketing + advertise; assessment + evaluation; Twitter + WhatsApp; email + fax; teamwork + multi/interdisciplinary) resulted in 275 different words.
5. All words or associated words as combined in steps 3 and 4 with a frequency of less than 5 were removed resulting in 103 word categories.
6. Non-contributional words (e.g. business, centred, date, include, offer, related, ethical) were removed resulting in a final total of 94 words. These words are shown, in alphabetical order, in Table 3.14.

Words that occur frequently were identified as important, recurring themes that participants associated with ethics in the therapeutic sciences. This allowed the researcher to classify large amounts of text into an efficient number of categories (Table 3.14).

Table 3.14: Word frequency count including focus group and individual interview data

Word frequency (measured in times occurred)							
Specific words articulated	5-10	11-15	16-20	21-25	26-30	31-35	36-40
	Abuse*	Access	Discuss*	Communicat*	Aid*	Confidential*	Refer*
	Appropriate	Care*	Scope	Train*	Assess*	Feel*	
	Attitude*	Choose	Skills		Consent	Focus*	
	Autonomy	Competency	Understand*		Responsible	Children	
	Balance	CPD			Treat*	Privacy	
	Behaviour	Culture				Sensitive	
	Benefit*	Decide*					
	Boundaries	Deliver*					
	Community	Educate*					
	Concern*	Effective*					
	Consider*	Experience					
	Counselling	Internet (social					
	Dilemma*	media)					
	Document*	Help*					
	Emotional	Law*					
	Empathy	Parent*					
	Evidence	Respect*					
	Explain*	Rights					
	Fact*	Team*					
	Honest*	Trust*					
	Improve*						
	Individual						
	Insight	46-50	56-60	61-65	71-75	76-80	96-100
	Justify	Professional*	Inform*	Document*	Know*	Need*	Bill* (charge,
	Language*		Service*				money, tariffs)
	Listen*						
	Management						
	Measure*						
	Neglect*						
	Observe*						
	Outcome*						
	Play*						
	Prioritise						
	Procedure*						
	Progress						
	Protect*						
	Reasoning						
	Recognise						
	Rehab*						
	Relationship*						
	Resources						
	Rules						
	School						
	Share						
	Supervise						
	Technology						
	Whistleblowing						

Table 3.14 shows the words that were mentioned more than 50 times. These words focus specifically on the following aspects:

- adequate knowledge to address the specific needs of patients during service delivery (competence)
- obtaining full informed consent throughout the management process
- ethical billing of services delivered.

Next, the researcher followed a theory driven directed approach. In order to code the data, prior formulated theoretical derived aspects of ethical principles were used (priori coding), allowing for deductive category application (Potter & Levine-Donnerstein, 1999). These codes were identified during the systematic review (Naudé & Bornman, 2014) as well as the professional code of ethics comparisons. The codes were defined and assigned to the focus group and in-depth interview data. The process is depicted in Figure 3.8.

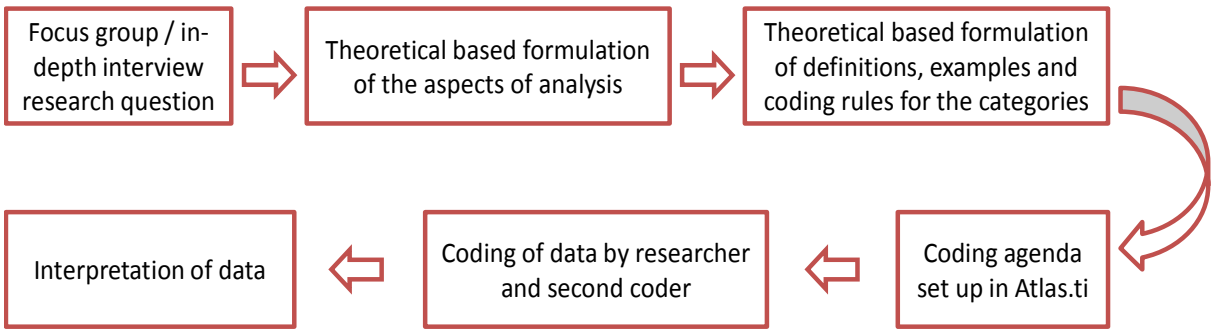


Figure 3.8: Model of directed content analysis (deductive category application) for focus group and individual in-depth interview data

The results obtained from the process of directed content analysis, using both the focus group and individual in-depth interview data, are presented in Table 3.15.

Table 3.15: Frequency with which ethical principles were mentioned (n=37)

Ethical principle	Individual interview (n=8)	Focus group (n=29)	Total Frequency	%
AUTONOMY	**77**	**112**	189 times	28%
BENEFICENCE	**77**	**113**	190 times	29%
JUSTICE	**93**	**116**	209 times	32%
NON-MALEFICENCE	**32**	**43**	75 times	11%

Except for non-maleficence which was only mentioned in 11% of the eight interviews and five focus groups, the other three bio-ethical principles were relatively equally referred to during the focus group discussions as well as the individual in-depth interviews, ranging between 28 - 32%. According to this reflection, it was decided to represent the ethical principles in the measuring instrument in accordance to the frequencies reflected in the content analysis data.

Ethical sensitivity does not only refer to ethical principles but also to ethical sensitivity skills. Therefore, the transcripts were also coded to reveal the ethical sensitivity skills underlying the examples provided by the participants during the focus groups and individual interviews. The results are summarised in Table 3.16.

Table 3.16: Frequency with which ethical sensitivity skills were mentioned

Ethical principle	Individual interview (n=8)	Focus group (n=29)	Total Frequency	%
FOCUS ON SELF				
1. Controlling social bias	10	11	21 times	5%
FOCUS ON OTHERS				
1. Relating to others	29	64	93 times	20%
2. Taking the perspective of others	33	63	96 times	21%
FOCUS ON SELF AND OTHERS				
1. Effective verbal and non-verbal communication	25	36	61 times	13%
2. Interpreting ethics in a situation	53	99	152 times	33%
3. Perceiving and responding to diversity	13	12	25 times	5%
4. Understanding emotional expression	5	8	13 times	3%

Except for the ethical skill of perceiving and responding to diversity which was not mentioned by any of the speech-language therapist participants, all of the seven ethical sensitivity skills presented in Figure 2.2 (Chapter 2) were mentioned by all four of the professions during the focus group discussions and individual interviews. All of these ethical sensitivity skills will be included in the measuring instrument with equal distribution across the scenarios.

As the final step, the researcher applied data driven conventional content analysis, where coding categories are derived directly from the text data (inductive approach). The researcher needed real world examples to ensure that the vignettes are relevant. The scenarios most likely to lead to ethical dilemmas were identified through inductive coding of the data. The researcher grouped and distilled a list of common themes from the text which represents the communality of voices across participants. While sorting and naming themes requires some level of interpretation, "interpretation" was kept to a minimum. The four steps followed during the analysis are illustrated in Figure 3.9.

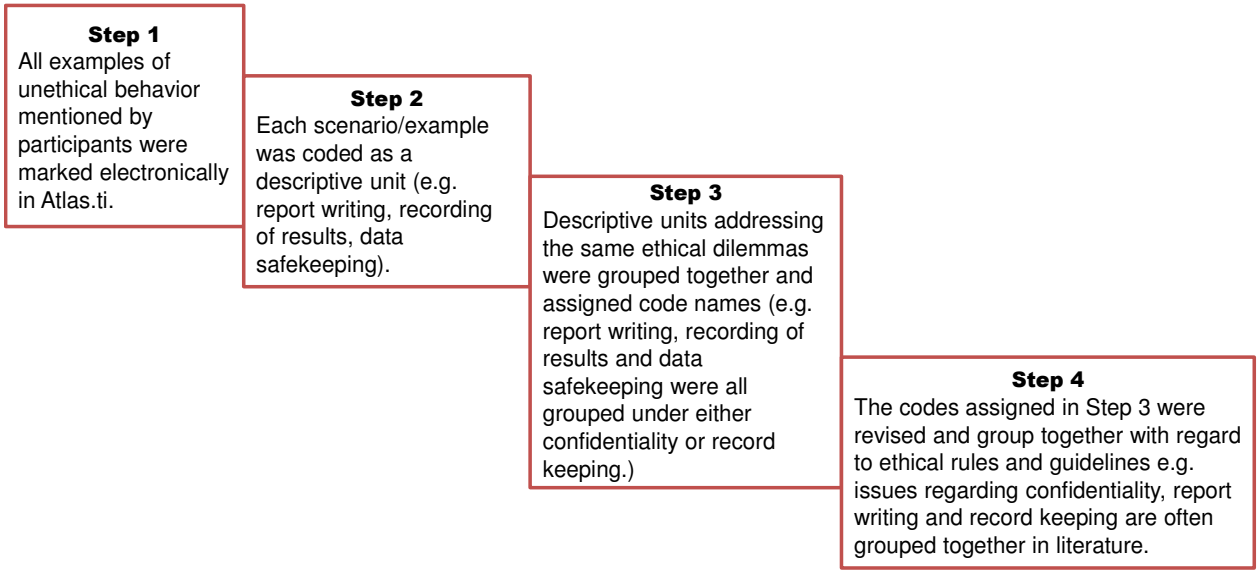


Figure 3.9: Model of conventional content analysis (inductive category application) for focus group and individual in-depth interview data

The themes for the different examples provided by the participants are reflected in Table 3.17.

Table 3.17: Scenarios identified by focus group and individual interview participants which cause ethical dilemmas (n=37)

Scenario codes	Individual interview (n=8)	Focus group (n=29)	Total Frequency	%
Assessment material	**2**	**0**	2 times	1%
Confidentiality and records	**19**	**17**	36 times	18%
Professional development	**21**	**43**	64 times	32%
Work setting and marketing	**2**	**1**	3 times	1%
Money	**15**	**17**	32 times	16%
Relationships	**17**	**42**	59 times	29%
Whistle blowing	**4**	**3**	7 times	3%

From Table 3.17 it is clear that scenarios regarding professional development and relationships are considered to be most likely to cause ethical dilemmas and possibly unethical behaviour. Scenarios that include professional development issues include continued professional development courses and training, e.g. training that is not evidence based or presented by experienced professionals, signing for a course you haven't attended, asking the receptionist to complete an article for continued professional development points; evidence based patient management; competence and scope of practice; as well as a lack of role models in the field. Relationship scenarios related to issues such as teamwork, empathy, trust and respect, cultural sensitivity and client focused management.

Information from Table 3.14 – Table 3.17 was used to write 20 vignettes that reflect ethical issues and 5 controls that do not, to be included in the measuring instrument. The 20 vignettes measuring ethical sensitivity were developed so that they represent the percentage of ethical principles and ethical skills as identified in Table 3.18.

Table 3.18: Summary of ethical principles and ethical skills represented in 20 vignettes

Vignette number	Ethical principle	% use	Vignette number	Sensitivity skill	% use
2, 6, 7, 14, 17	Autonomy	30%	**5**	Controlling social bias	5%
3, 4, 12, 13,15,18	Beneficence	30%	**12 - 14**	Effective verbal and non-verbal communication	15%
1, 5, 9, 10, 11, 20	Justice	30%	**15 - 20**	Interpreting ethics in a situation	30%
8, 19	Non-maleficence	10%	**11**	Perceiving and responding to diversity	5%
			1 - 4	Relating to others	20%
			6 - 9	Taking the perspective of others	20%
			10	Understanding emotional expression	5%

The vignettes were, as shown in Table 3.18, constructed based on the data originating from the focus groups as well as the in-depth interviews. It is, however, important that the vignettes reflect what is important to clients. Ethics guide the therapist in terms of professional behaviour in the best interest of the client, in order to protect the client from harm. This leads to Stage 1e.

3.7.6 Stage 1e: Consulting server provider website complaint platforms

3.7.6.1 Aim

The aim of this stage was to review a variety of existing sources providing insight into the client perspectives of ethical issues in therapeutic service delivery, in order to align the measuring instrument to both professional and client dimensions of ethics, as the focus of professional ethics is ultimately to protect the client.

3.7.6.2 Participants

Since both the HPCSA and HelloPeter.com offer the public anonymity, the researcher does not have access to the personal details of the participants. It can, however, be said that the participants are resident in South Africa and therefore the data is relevant to the current study. It can also be deducted by the number of entries

made on these platforms that the data obtained is representative of 165 members of the public.

3.7.6.3 Rationale

The HPCSA is a statutory body that governs practicing health care professionals, including therapists. The HPCSA investigates complaints against all its member on behalf of the public. It was envisaged that viewing guilty verdicts and/or admission of guild provided insight into the type of complaints made by die public regarding unethical practices of therapists. Initially, the researcher only viewed the guilty verdicts related to therapists during the year 2013. The data was, however, not adequate due to a limited number of entries. The researcher, therefore, included all the online guilty verdicts on the HPCSA website. The available entries included guilty verdicts and/or admission of guilt for the period 2007 – 2013. The data included 34 convictions for the six year period. This was still not considered representative of the client's view related to ethical issues in the therapeutic sciences.

The local (South African) website, HelloPeter.com, aims at making consumers aware of their rights to demand honest service. The site has become the *de facto* platform for South Africans to report poor service including those provided by therapists. This platform included 131 complaints in 47 days. Exploring common themes addressed in the concerns of the public resulted in increased insight into ethical situations most important to them, so giving them a voice in terms of the measuring instrument developed for this study.

3.7.6.4 Equipment and material

The equipment and material used to extrapolate information from these online platforms are summarised in Table 3.19.

Table 3.19: Equipment and material used to obtain a client's perspective on ethics in the therapeutic sciences

Material to obtain qualitative data	Discussion of equipment and material qualitative data
HPCSA online guilty verdicts and/or admission of guilt register	• Aim: To collect by reviewing existing independently verifiable data / information on the client / public's perspective of important ethical dimensions related to services provided by therapists. • Rationale: Quick and effective way to collect information regarding the client / public's perspectives in order to evaluate if the proposed measuring instrument addresses the issues important to clients / the public. • Use: The guilty verdicts and/or admission of guilt available on the HPCSA website were copied onto an Excel spreadsheet to allow for inductive coding of the data. • Areas covered: Only data relevant to therapists were included for analysis.
HelloPeter.com	• Aim: To collect independently verifiable data / information on the client / public's perspective of important ethical dimensions related to services provided by therapists. • Rationale: Quick and effective way to collect information regarding the client / public's perspectives in order to evaluate if the proposed measuring instrument addresses the issues important to clients / the public. • Use: The name of each therapy profession was typed into the platform search engine. Due to the large volume of entries, the researcher selected the day of data collection and dated the search back to the beginning of the previous month. • Areas covered: Only data relevant to therapists were included for analysis.
Microsoft Excel 2010	• All the entries obtained from the website complaint platforms were copied onto an Excel spreadsheet.

Table 3.19 summarises the material used during the data collection to determine the ethical issues important to clients. The process of planning and conducting the document reviews are set out in the next section.

3.7.6.5 Data collection procedure

Archival research consisted of two electronic (Internet-based) platforms containing complaints from the public regarding therapy service delivery. Figure 3.10 displays the steps followed in order to obtain information regarding client's views of ethical issues related to therapeutic service delivery in order to ensure that the proposed vignettes where in line with public (client) expectations.

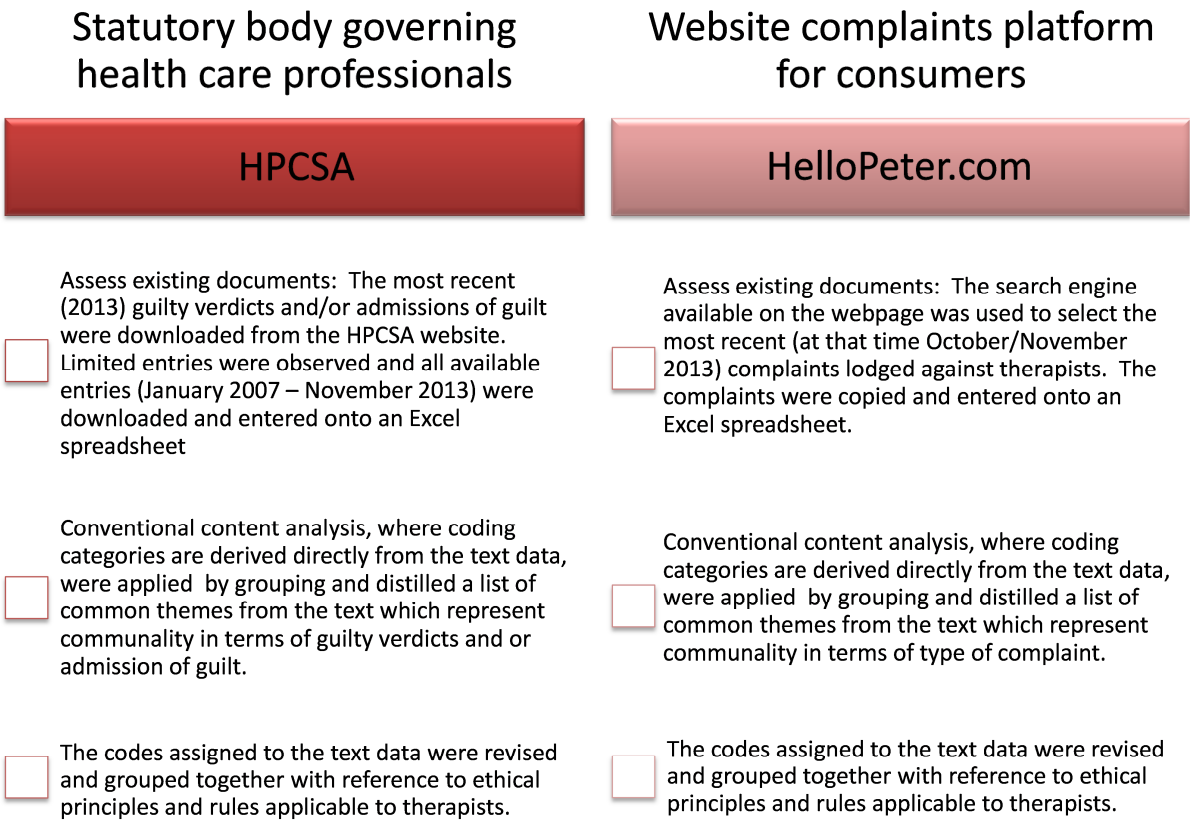


Figure 3.10: Steps for collecting data on ethical issues important to clients

3.7.6.6 Trustworthiness

The four factors considered in establishing the trustworthiness of the document review process namely credibility, transferability and confirmability as described in Table 3.20.

Table 3.20: Increasing trustworthiness of Stage 1e during document review

Strategy	Technique	Application of technique in present research
Credibility leading to dependability	*Triangulation*	The researcher ferreted out data from multiple sources through multiple methods – in particular, focus groups, in-depth interviews and document reviews. Corroboration of data increased the confidence of the researcher regarding the constructed vignettes.
The confidence one can have in the truth of the findings	Negative case analysis	Re-examination of the document review process where performed, after the initial analysis, confirming repeatability of emergent codes.
Transferability *Means that other researchers can apply the finding of the study to their own.*	Detailed description of data collection and analysis	The data collection and analysis is described in section 3.6.6.5 and 3.6.6.7.
Confirmability *Refers to the coherence of the data in relation to the findings, interpretations, and recommendations*	Audit trail	A Master's student at UNISA, familiar with the coding method of analysis, followed the data collection and analysis trail. There were no difference between the perspectives of the 'auditor' and the researcher and Stage 1e was considered sound with respect to the findings and conclusions.

3.7.6.7 Results

The codes that were identified as well as the number of complaints lodged by the public is summarised in Table 3.21.

Table 3.21: Identified themes as well as number of complaints by the public

Theme category	Audiologist	Occupational therapist	Physiotherapist	Speech-language therapist
Accounts/billing				
HelloPeter.com	20	12	10	11
HPCSA	1	0	14	4
Total	**21**	**12**	**24**	**15**
Communication/feedback				
HelloPeter.com	2	1	12	4
HPCSA	0	0	1	0
Total	**2**	**1**	**13**	**4**
Attitude/service				
HelloPeter.com	4	2	29	1
HPCSA	0	0	4	0
Total	**4**	**2**	**33**	**1**
Record keeping				
HelloPeter.com	5	0	0	0
HPCSA	3	0	1	0
Total	**8**	**0**	**1**	**0**
Informed consent				
HelloPeter.com	2	2	0	2
HPCSA	0	0	3	0
Total	**2**	**2**	**3**	**2**
(In)competence				
HelloPeter.com	4	3	4	1
HPCSA	0	1	2	0
Total	**4**	**4**	**6**	**1**

It is clear from Table 3.21 that the public lodged more complaints with HelloPeter.com than with HPCSA. This could be as a result of lack of knowledge regarding the HPCSA's role to protect the public. The category that stands out in terms of number of complaints is accounts/billing, emphasising the importance of making therapists aware of possible unethical behaviour as well as the consequences thereof. This correlates well with the elements highlighted during content analysis of the five focus group and eight individual interview data as summarised in Table 3.14 – 3.17.

3.7.7 Stage 1f: Expert panel review of measuring instrument

3.7.7.1 Aim

In-depth interviews were conducted with experienced therapists, creating an expert panel, in order to obtain detailed information regarding their perceptions of the usability or relevance of the measuring instrument in the therapeutic sciences.

3.7.7.2 Participants

A description of the selection of participants for the expert review of the vignettes are the same as that of the in-depth interviews and summarised in Table 3.8. The participants are described in Table 3.9.

3.7.7.3 Equipment and material

The equipment and material used during the in-depth expert panel interviews are summarised in Table 3.22.

Table 3.22: Equipment and material used during Stage 1f for expert review of vignettes

Material to obtain qualitative data	Discussion of equipment and material for qualitative data
Proposed vignettes	• Aim: To assess the vignettes for their realism, the ethical principles and ethical sensitivity skills violated as well as the subtlety of the issues in final preparation leading up to the pilot study. • Rationale: To ensure high quality vignettes that are relevant and practical to administer, providing usable results. • Use: The proposed vignettes where presented to an expert panel. The data collection procedure is described under section 3.7.7.4.
Quality control check list	• Aim: To ensure that the vignettes were constructed in accordance to guidelines in the literature. • Rationale: To ensure high quality vignettes improving the value of the measuring instrument in the therapeutic sciences. • Use: The checklist in Table 3.23 was presented to the expert panel for completion.

3.7.7.4 Data collection procedures

The 20 proposed vignettes were presented to the expert panel (Appendix E). Firstly, the researcher presented them with a list of definitions incorporating the ethical principles and ethical sensitivity skills relevant to the vignettes. This was followed by

the request to complete the measuring instrument, indicating the level of difficulty of each vignette as well as selecting the most relevant ethical principle and most relevant ethical sensitivity skill per vignette to determine face validity of the vignettes. Participants were encouraged to only select one option. The results are presented in Table 3.24. The researcher also asked questions to determine overall instrument content validity as well as quality of the vignettes. This is described in detail as part of trustworthiness section 3.7.7.5.

3.7.7.5 Trustworthiness related to the proposed vignettes

Validity of the vignettes developed in Phase 1 and to be used in Phase 2 of the study is essential (Onwuegbuzie & Johnson, 2006). Firstly, the appropriateness and relevance of each item (content validity) on the instrument was addressed in the interviews discussions to ensure that all the facets of ethical sensitivity relevant to the therapeutic sciences are represented by the measuring instrument. In addition to this, the technique proposed by Lawshe (1975) was applied to determine validity of the measuring instrument to pinpoint the value and importance of specific ethical elements in today's technology driven environment. During this process, a panel of subject matter experts was selected for a judging panel. They were required to answer the following question per item presented to them: "Is the skill measured by this item 'essential,' 'useful, but not essential,' or 'not necessary' as part of the measuring instrument for ethical sensitivity?" The mean content validity ratio across items were +0.8 (range: +1 to -1), indicating high overall instrument content validity.

In addition, the researcher consulted the literature to determine the important factors that produce a good vignette and presented it in a question format to be presented as a checklist to the expert panel (Table 3.23).

Table 3.23: Checklist to evaluate the quality of the vignettes (Braun & Clarke, 2013)

Questions	Yes	No	Unsure	Comments
• Does the vignette make use of hypothetical scenarios and characters?				
• Is enough context and information included for participants to have an understanding of the scenario?				
• Is it vague enough to not influence the participant by putting too much emphasis on something or making the ethical issue too obvious?				
• Does it involve a specific moral dilemma?				
• Will the researcher gain information on how the participant thinks the situation described in the vignette should be handled?				
• Is official instruction given to the participants?				
• Is the detail in the vignette authentic?				
• Is the vignette based on the literature as well as focus groups and/or interviews?				
• Is the scenario and character(s) plausible and meaningful to the therapeutic sciences?				
• Is the vignette vivid and engaging in order to reveal values, social norms or impression of events?				
• Is the vignette simple, rather than complex?				
• Is the vignette written in a way to encourage participants to view the scenario from the standpoint of a particular character?				
• Does the vignette allow the researcher to explore participant's perceptions and understandings around the issue / target principle or skill?				
• Does the vignette include a description revealing the social relationship qualities of a specific moment?				
• Does the scenario depict important clinical challenges commonly encountered by therapists?				

The results of the expert panel were compared with the ethical principle and sensitivity skills identified by the researcher per vignette. The results of this comparison are presented in Table 3.24.

Table 3.24: Comparison of expert panel opinion regarding principles and skill represented in the vignettes

Vignette number with target principle/skill	AUD 1	AUD 2	OT 1	OT 2	PT 1	PT 2	SLT 1	SLT 2	Total Appropriate options/ Possible alternatives
1 Ethical principle: J	J	J	J	J	J	J	J	J	8/8
Ethical sensitivity skill: RO	IE	RO	RO	RO	RO	IE	RO	RO	6/8
2 Ethical principle: A	A	A	A	A	A	A	A	A	8/8
Ethical sensitivity skill: RO	TP	RO	RO	RO	RO	RO	RO	TP	6/8
3 Ethical principle: B	J	B	B	B	B	J	B	B	6/8
Ethical sensitivity skill: RO	IE	IE	RO	TP	RO	RO	RO	CB	5/8
4 Ethical principle: B	B	A	B	B	B	B	J	B	6/8
Ethical sensitivity skill: RO	RO	RO	RO	TP	RO	IE	TP	RO	5/8
5 Ethical principle: J	J	A	B	A	A	J	B	J	3/8
Ethical sensitivity skill: CB	IE	RO	CB	TP	RO	CB	CB	CB	4/8
6 Ethical principle: A	A	A	A	A	A	A	A	J	7/8
Ethical sensitivity skill: TP	IE	TP	TP	TP	IE	TP	TP	CB	5/8
7 Ethical principle: A	B	A	B	A	B	J	A	A	4/8
Ethical sensitivity skill: TP	RO	EC	TP	RO	TP	RO	TP	TP	4/8
8 Ethical principle: NM	NM	NM	NM	NM	NM	NM	NM	NM	8/8
Ethical sensitivity skill: TP	IE	TP	TP	IE	TP	TP	TP	TP	6/8
9 Ethical principle: J	J	J	J	J	J	B	J	B	6/8
Ethical sensitivity skill: TP	IE	TP	TP	TP	TP	RO	TP	TP	6/8
10 Ethical principle: J	B	B	B	B	J	J	B	B	2/8
Ethical sensitivity skill: UE	UE	TP	UE	UE	PT	UE	UE	UE	6/8
11 Ethical principle: J	J	J	J	J	J	J	J	J	8/8
Ethical sensitivity skill: PD	PD	PD	PD	CB	PD	CB	PD	PD	6/8
12 Ethical principle: B	A	J	B	B	B	B	B	B	7/8
Ethical sensitivity skill: EC	IE	RO	EC	RO	EC	RO	RO	EC	3/8
13 Ethical principle: B	B	B	B	B	B	B	B	B	8/8
Ethical sensitivity skill: EC	TP	RO	EC	RO	RO	EC	RO	RO	2/8
14 Ethical principle: A	A	A	A	A	B	A	A	A	7/8
Ethical sensitivity skill: EC	EC	EC	EC	EC	EC	EC	TP	EC	7/8
15 Ethical principle: B	J	B	J	B	B	B	J	J	4/8
Ethical sensitivity skill: IE	IE	IE	IE	IE	IE	IE	IE	IE	8/8
16 Ethical principle: A	A	A	A	A	A	A	A	A	8/8
Ethical sensitivity skill: IE	IE	EC	IE	IE	IE	IE	IE	IE	7/8
17 Ethical principle: A	A	A	A	J	A	A	A	NM	6/8
Ethical sensitivity skill: IE	RO	IE	IE	IE	IE	IE	IE	IE	7/8
18 Ethical principle: B	B	B	B	B	B	B	B	B	8/8
Ethical sensitivity skill: IE	IE	IE	IE	IE	IE	IE	IE	IE	8/8
19 Ethical principle: NM	NM	NM	NM	NM	B	NM	NM	NM	7/8
Ethical sensitivity skill: IE	IE	IE	IE	IE	IE	IE	IE	IE	8/8
20 Ethical principle: J	J	J	J	J	J	J	J	J	8/8
Ethical sensitivity skill: IE	IE	IE	IE	IE	IE	IE	IE	IE	8/8

Ethical principles: **A**=Autonomy **B**=Beneficence **J**=Justice **NM**=Non-maleficence
Ethical sensitivity skills: **CB**=Controlling social bias **PD**=Perceiving and responding to diversity **EC**=Effective communication **IE**=Interpreting ethics in a situation **RO**=Relating to others **TP**=Taking the perspective of others **UE**=Understanding emotional expression

The last column of Table 3.24 shows the agreement of the experts with the ethical principles and ethical sensitivity skills identified targeted for each vignette. The experts were blind to the ethical principles and sensitivity skills. They were asked to read each vignette and indicate which ethical principle and sensitivity skill were most evident to them. They were provided with a list of definitions for each ethical principle as well as ethical sensitivity skills. During the expert panel review it became evident that 20 vignettes with five controls were too extensive for a 60 minute measuring instrument. After discussion with the experts it was estimated that approximately 12 vignettes with three controls would be reasonable for a 60 minute measuring instrument. In order to eliminate eight cases and two controls, the following steps were followed:

1. The vignettes where the agreement between the target and the experts were less than 75% (6/8) where excluded from the measuring instrument. These vignettes (3-7; 10; 12-13; 15) are highlighted in Table 3.24.
2. Two of the control vignettes (Appendix E) were excluded at this point. Vignette 22 was excluded based on the fact that it was the longest of the five. Vignette 25 was excluded because one of the experts mentioned that she thought it contained an ethical aspect related to confidentiality.
3. The remaining vignettes had to represent the distribution of ethical principles and ethical sensitivity skills as shown in Table 3.15 and Table 3.16. Excluding the vignettes in step one left four vignettes on justice (36,5%) and four on autonomy (36,5%), two on non-maleficence (18%) and one (9%) on beneficence.
4. To obtain a more representative ratio and to develop a measuring instrument that contains 15 vignettes, which were deemed appropriate for an one hour completion time, two more beneficence vignettes were added (number 3 and 4) and one autonomy vignette (number 16) excluded.
5. The measuring instrument now included four vignettes referring to justice (33%), three referring to autonomy (25%), three to beneficence (25%) and two referring to non-maleficence (17%).
6. The selected vignettes were then scrutinised for distribution in terms of ethical sensitivity skills. Controlling social bias as well as understanding emotional expression was represented in none (0%) of the vignettes, relating to others as well as interpreting ethics in a situation in four (33,5%), effective verbal and

non-verbal communication as well as perceiving and responding to diversity in one (8%) and taking the perspective of others in two (17%). This meant that one vignette had to be adjusted to include both controlling social bias and understanding emotional expression by exchanging them with two examples of relating to others. In order to achieve this, Vignette 3 was replaced by Vignette 10. In Vignette 10, the expert did well with identifying understanding emotional expression. In Vignette 18, all the experts identified the ethical principle to be beneficence. Since Vignette 4 was originally excluded it was decided to rework Vignette 4 to include controlling social bias. After consulting the literature it was discovered that social bias related factors such as gender, age and ethnicity is fairly well controlled in society due to continuous exposure through the media. The social-bias factors considered problematic relates to people with disability. It was therefore decided to rework Vignette 4 to include beneficence and controlling social bias, as it relates to disability.

7. After step 5 was completed the measuring instrument included one vignette referring to controlling social bias (8%), effective verbal and non-verbal communication (8%), perceiving and responding to diversity (8%) and understanding emotional expression (8%), two vignettes referring to relating to others (17%) and taking the perspective of others (17%) and four relating to interpreting ethics in a situation (33%).
8. During the final step, the 15 vignettes (Appendix E) were marked according to level of difficulty based on the total score determined in Table 3.24. This was done to ensure that when the cases were randomised during the pilot study level of difficulty of the cases was distributed equally. Vignette 18 and 20 were identified as having a low degree of difficulty (easy). Vignette 14, 16 and 19 were identified as having a moderate degree of difficulty (hard). Vignette 1, 2, 8 and 11 were identified as having a high degree of difficulty (complex). Vignette 9, 10 and 26 were identified as having a very high degree of difficulty (extremely difficult). Vignette 21, 23 and 24 were marked as controls. Each vignette was given a name based on the client or therapist involved (e.g. Mr R) to avoid confusion during the analysis of the data.

3.8 SUMMARY

Phase 1 focused on the development of the measuring instrument. During the five focus groups and eight in-depth interviews specifically, the researcher gained information regarding the ethical principles most likely to be violated, as well as the most typical ethical scenarios in the therapeutic science professions. A clear understanding of how therapists view ethics and ethical sensitivity informed the development of a realistic and relevant measuring instrument to be used during Phase 2 of the study (Benoit & Holbert, 2008). The procedures employed in this chapter lead to a richer and more in-depth understanding of the phenomena of ethics in order to construct the vignettes. Phase 1 concluded with an expert panel review to refine the measuring instrument in preparation for the pilot study in Phase 2. This chapter concluded with a measuring instrument that is ready for the next step, namely the pilot study. The pilot study as well as the main study is presented in Chapter 4.

Chapter 4
Research Methodology
Phase 2: Implementation and Evaluation

4.1 INTRODUCTION

In this chapter, Phase 2 of the methodology pertaining to the implementation and evaluation of the measuring instrument is explained. The outline of the research methodology is summarised in Figure 4.1, where the focus of this chapter is highlighted.

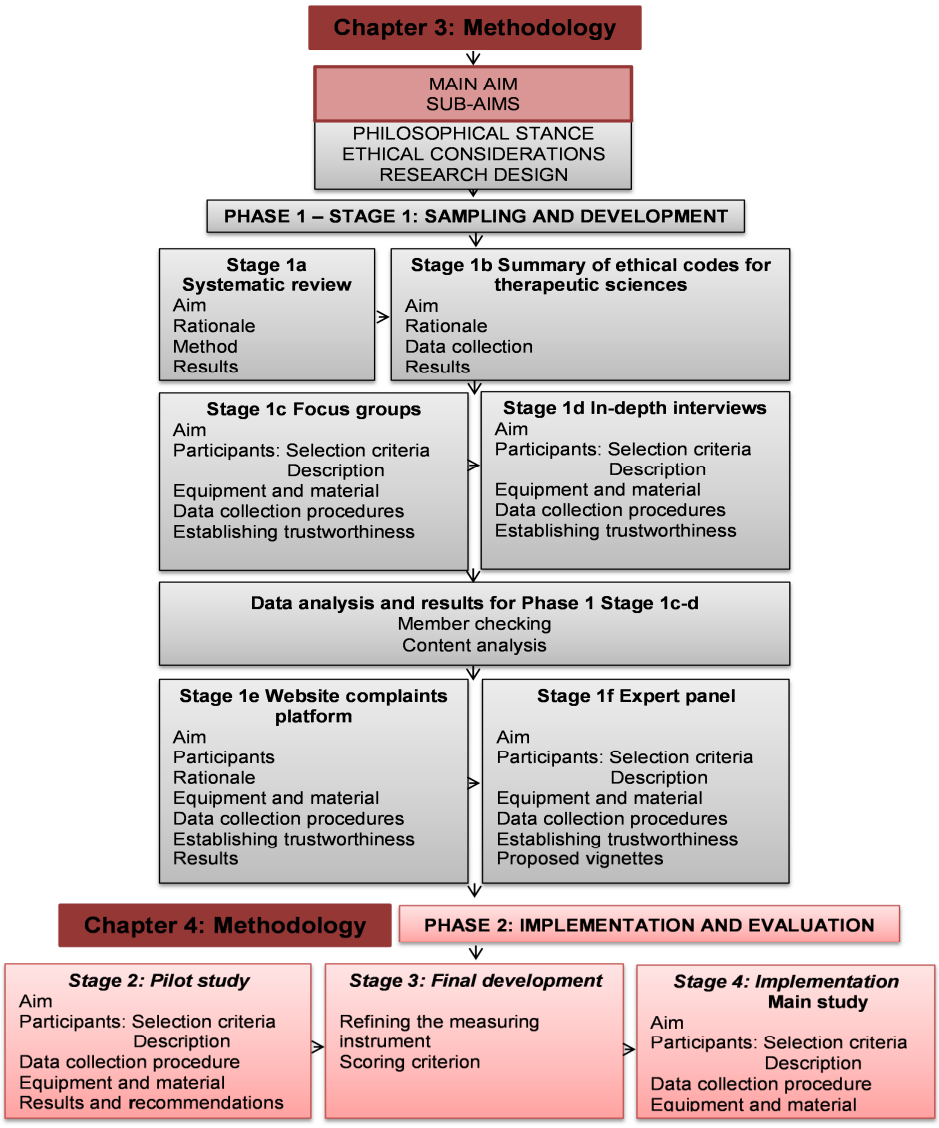


Figure 4.1: Summary of chapter outline

4.2 MAIN AIM

The aim of the study is to develop and implement a multidisciplinary measure of ethical sensitivity for healthcare professionals in the therapeutic sciences in the South African context. This measure is intended to be specific to audiology, occupational therapy, physiotherapy and speech-language therapy. The main aim of the current research is realised in the following two sub-aims (set out in accordance with the two phases of the research).

4.3 SUB-AIMS

Phase 1: Sampling and Development

- Refer to Chapter 3 for an outline of the sub-aims for Phase 1.

Phase 2: Implementation and Evaluation

- To describe the ethical sensitivity of final-year students in the four therapeutic sciences as it relates to ethical principles and ethical sensitivity skills
- To identify distinct discipline-related ethical sensitivity patterns in the therapeutic sciences
- To determine the effect of specific ethical principles and ethical sensitivity skills on overall ethical sensitivity
- To describe the ethical flexibility of participants related to the four ethical principles
- To determine the specificity and sensitivity of the measuring instrument

4.4 RESEARCH DESIGN

This study followed a two-phased, sequential mixed-methods research design (Creswell & Plano Cark, 2011). Phase 2 involved the quantitative data collection and analysis as highlighted in Figure 4.2, and constitutes the focus of this chapter.

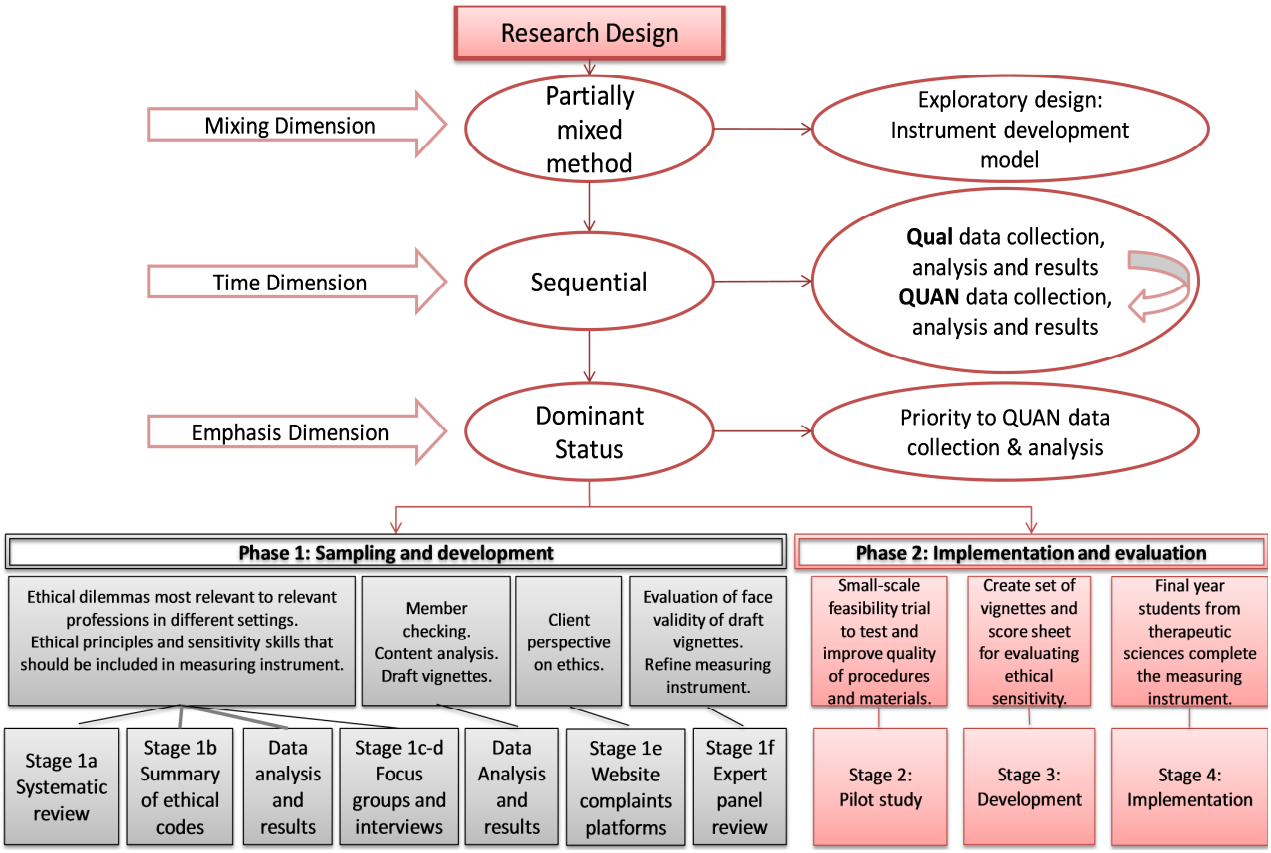


Figure 4.2: Graphic presentation of the research process

Phase 2, the quantitative phase, followed after the qualitative phase and had the purpose of evaluating a **m**easuring **i**nstrument for **e**thical **s**ensitivity in the **t**herapeutic sciences (MIEST)[2].

In the quantitative phase, the pilot study was the final step in preparing the MIEST as it was used to collect data from final-year students registered in the four therapeutic sciences included in this study. The students' responses were scored and compared against target ethical principles and ethical sensitivity skills identified during the vignette development that was described in Chapter 3.

[2] In the Slovakian language, MIEST means sophisticated, refined and polished.

4.5 FINAL DEVELOPMENT PHASE FOR MIEST

4.5.1 Stage 2: Pilot study

4.5.1.1 Aim

The pilot study was used as a small-scale feasibility trial to pretest the measuring instrument in practice. It also served to improve the methodological quality of the procedures and material related to the implementation of the measuring instrument.

The above aim was addressed through the following objectives:

- Familiarising the researcher with the procedures included in the implementation of the measuring instrument.
- Revealing deficiencies (e.g. ambiguous instructions, inadequate time limits etc.) prior to use in the main study.
- Evaluating logistical and practical factors related to the implementation of the measuring instrument.
- Improving the quality and efficiency of the measuring instrument.

4.5.1.2 Participants

Eighteen final-year students who were dually registered in two of the disciplines included in the study, namely speech-language therapy and audiology, were included in the pilot study. All of them granted informed consent to their participation in the pilot study. A description of the selection criteria is presented in Table 4.1.

Table 4.1: Phase 2 participant selection criteria for Stage 2

	Pilot study	
Criteria	Method	Justification
Final-year students registered for the dual qualification of speech-language therapy and audiology.	Approached a university with a variety of students in terms of language, gender and race.	One pilot study targeting two professions without eliminating options for the main study. The diversity of the participants allowed for valuable input in finalising the MIEST.
Registered with HPCSA.	Used information obtained from Head of Department	Proof of registration at an accredited educational institution in accordance with the (Health Professions Act, 1974)
Use English as the language of instruction.	Used information obtained from Head of Department	Determining the experience of students in completing an English measuring instrument if English is not their first language. This would reveal any deficiencies in the instrument specifically related to language.

All the participants completed the biographical questionnaire (Appendix B4). The aim of this questionnaire was firstly to ensure that the participants met the selection criteria and secondly for descriptive purposes. A description of the participants who met the inclusion criteria set in Table 4.1 is presented in Table 4.2.

Table 4.2: Description of pilot study participants (n=18)

Gender	Age	Number of years in the programme	First language
Female: 78% (n=14)	21 – 25	4 years: 67% (n=12)	Sepedi: 33% (n=6)
Male: 22% (n=4)		5 years: 22% (n=4)	Tshivenda: 22% (n=4)
		6 years: 11% (n=2)	Xitsonga: 16% (n=3)
			isiNdebele: 6% (n=1)
			SiSwati: 6% (n=1)
			Setswana: 6% (n=1)
			isiXhosa: 6% (n=1)
			Afrikaans: 6% (n=1)

The description of participants of the pilot study are summarised in terms of gender, age, number of years in the current programme, as well as first language. The majority (78%) of participants were female, which is not unusual in the therapeutic sciences. The mean age of the participants (n=18) were 22 years. The majority (72%) of the participants (n=13) indicated English as their third language, with only 28% of the participants (n=5) identifying English as their second language.

4.5.1.3 Data collection procedure

The data collection procedure followed throughout the pilot study is portrayed in Figure 4.3.

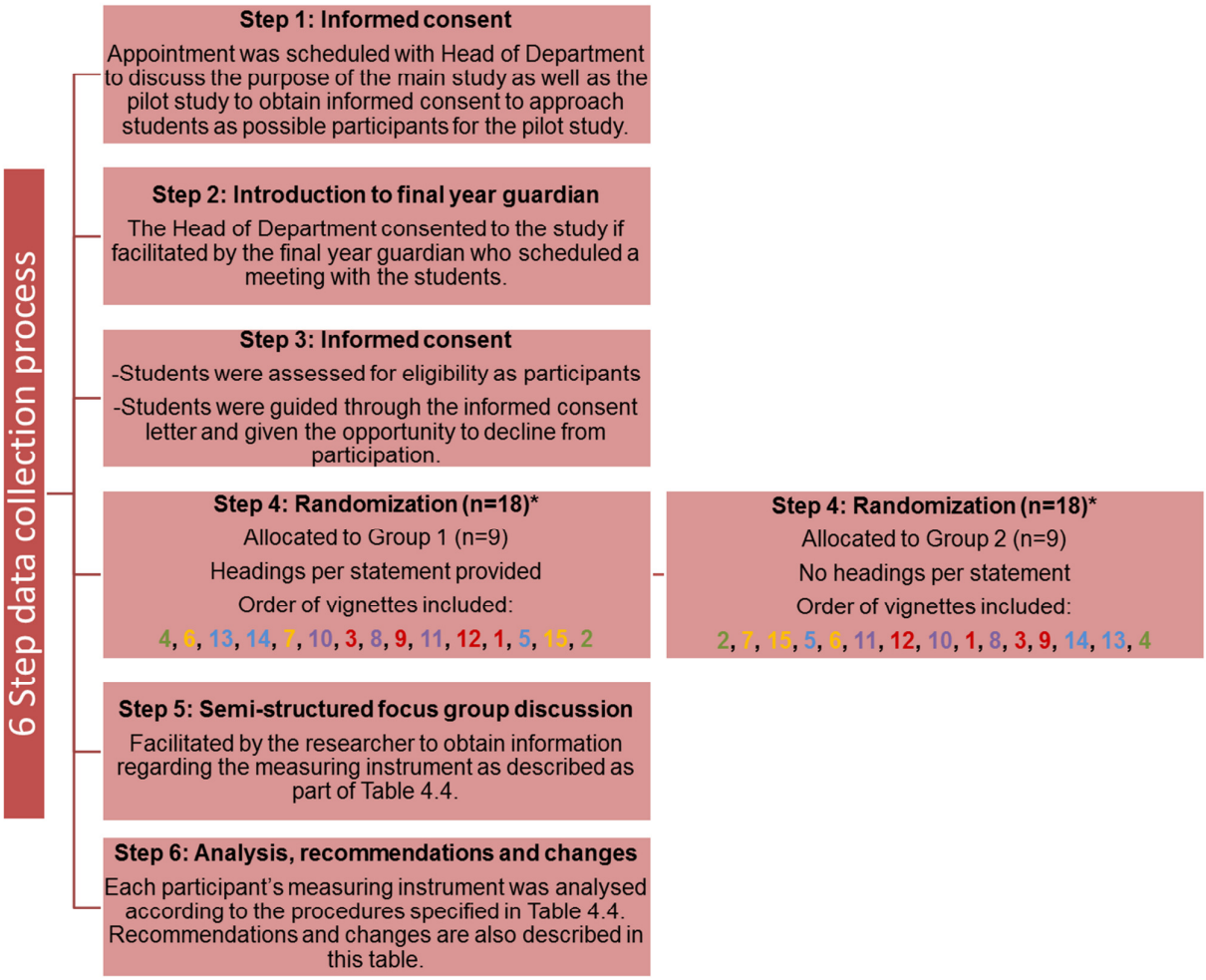


Figure 4.3: Data collection procedure for pilot study

The awareness and development of behaviour that help people behave ethically, even in stressful situations, is referred to as "Ethical fitness" (Dunn & Dyson, 2005). Since ethical fitness is an advanced concept of ethical awareness, the researcher linked ethical fitness to physical fitness so as to categorise the level of difficulty associated with each vignette. These levels, as well as the colours, were adapted from predicted levels of difficulty used for categorising hiking trails (Hike difficulty calculator, 2003). This ensured that the level of difficulty of the vignettes was randomised for both groups. This enabled the researcher to determine if an order effect, that could influence the overall ethical sensitivity scores, existed.

4.5.1.4 Equipment and material

The equipment and material used to collect data during the pilot study are summarised in Table 4.3.

Table 4.3: Equipment and material used during pilot study

Equipment and material	Discussion of equipment and material
Measuring instrument	• Aim: To present the measuring instrument to final-year students. • Rationale: To assess the adequacy of the measuring instrument as part of the final process in developing the final version of the MIEST. • Use: Final-year students completed the measuring instrument consisting of 15 vignettes based on 14 statements each.
Pens	• Aim: To provide each participant with a pen to complete the measuring instrument. • Rationale and use: To ensure that all participants can record their responses on the measuring instrument.
Stopwatch	• Aim: To calculate the time it takes for participants to complete the measuring instrument. • Rationale: To determine the feasibility of the study with regard to time needed for completion. • Use: Each participant indicated the time used for completion on their copy of the measuring instrument.
Notepad	• Aim: To record comments and suggestions made by participants during the semi-structured focus group sessions. • Rationale and use: To ensure that the researcher can refer back to the discussion with the participants.

4.5.1.5 Results and recommendations

The aims, as well as the procedures, results and recommendations from the pilot study are presented in Table 4.4.

Table 4.4: Aim, procedures, results and recommendations of the pilot study

Aim	Procedures	Results of the pilot study	Recommendations
Feasibility			
1. To determine how much time is needed to complete the measuring instrument	All the participants started at the same time. The researcher started the stopwatch and participants were asked to indicate when they have completed the measuring instrument. The researcher read the time off the stopwatch, which the participants then wrote down in the top right-hand corner of the first page.	The mean time to complete the 15 vignettes was 60 minutes with a standard deviation of 15 minutes. The median time was 52 minutes.	The mean time for completion met the expectations of the researcher who estimated that one vignette should take approximately 4 minutes to complete. No changes were recommended.
2. To determine whether any of the students would have reason not to take part in the study	At the onset of the meeting, the students were guided through the letter of informed consent and asked to indicate if they were willing to participate, or not.	All of the students signed the letter of informed consent and completed vignettes 1 to 15. The anticipated number of participants for the main study would depend on the group size but was expected to be high.	No changes to the consent letters were recommended.
3. To ensure that the quality of the data is adequate	The measuring instrument was administered in exactly the same way as anticipated for the main study. The researcher checked that all questions were answered. Participants were asked for feedback to identify ambiguities and difficult questions or terms. The researcher assessed whether each question gave an adequate range of responses.	All the participants (n=18) completed all fourteen questions for vignettes 1 to 15. They did not highlight any ambiguities or difficult terminology. Results for their range of responses are addressed in point 7 below.	No changes to the measuring instrument were recommended.
4. To ensure that the MIEST is easy to implement	The researcher had to determine the best recruitment method. She also had to determine the best way to approach the target group.	The Head of Department preferred direct contact with the researcher to present the research proposal and ethics clearance certificate. The final-year guardian acted as the facilitator for engaging the participants.	Heads of Department will be contacted and asked permission to contact final-year guardians to approach students as potential participants in the study.

Aim	Procedures	Results of the pilot study	Recommendations
5. To assess aspects such as language use, format, etc.	Participants were requested to comment on the following aspects: Font size, line spacing and visual layout Shading of alternate statements per vignette Heading specifying the focus of the statement (the class was divided into two groups – one group received the statements with headings and the other group did not)	Participants reported that the font size, line spacing, visual layout and language were appropriate. After completion of the instrument the groups viewed the layout of the other group. They agreed that the heading did not make any difference to the instrument.	Participants recommended that all statements should be shaded (e.g. green and cream) instead of just one (green and white). This was implemented. The researcher decided to remove the headings from the statements to allow for more space on the page.
6. To determine acceptability and compliance	Participants were asked to provide feedback and/or make suggestions.	Participants reported that they did not mind completing the instrument as long as it did not impact on any of their marks and was not required to be performed after hours.	The consent form already guarantees confidentiality and the researcher would ask guardians to assist at a convenient time during normal lecturing or clinical times.
7. To detect floor or ceiling effects (task too difficult or too easy)	Scores were calculated for each respondent. The scores were calculated separately for ethical principles and ethical sensitivity skills. One point was awarded for a correct response for each statement.	The mean score related to ethical principles for the participants (n=15) was 8.45 (56%) with a minimum value of 4/15 and a maximum value of 12/15. The mean score related to ethical sensitivity skills was 8.68 (58%) with a minimum score of 5/15 and a maximum score of 13/15.	The results did not reveal any floor or ceiling effects.
8. To identify adverse effects	Participants were asked to provide feedback regarding anxiety or any other effects as a result of completing the MIEST.	Participants did not report any adverse effects.	The consent form included the assurance that participants would not experience any adverse effects during data collection.
Methodological quality			
1. To determine whether it would be possible to blind the participants	Participants were asked to guess what the research topic was and write it on the final page of the draft MIEST.	All the participants referred to some topic related to ethics.	The three categories inserted to suggest a focus on practice management were excluded, leaving a remaining eleven statements per vignette. The original decision to collect data without participants knowing the real purpose of the study was discarded. No briefing was therefore necessary either.

Aim	Procedures	Results of the pilot study	Recommendations
2. To determine whether vignettes were being completed properly and instructions were clear/ comprehensible.	The researcher reviewed the participants' responses but also asked for feedback.	Participants reported that the instructions were clear and that it was easy to complete the instrument. The researcher did not note any concerns in the written responses of the participants.	No changes required for main study.
3. To determine the most efficient way to complete the instrument e.g. colours/with headings, etc.	Addressed in point 5 in the previous section under feasibility		
Internal validity			
1. To gain feedback from participants in order to identify ambiguities and difficult questions	Addressed in point 3 under feasibility.		
2. To record the time taken to complete the questionnaire and decide whether it is reasonable	Addressed in point 1 under feasibility.		
3. To assess whether each question gives an adequate range of responses	Addressed in point 7 under feasibility		
4. To check that all questions are answered	Addressed in point 3 under feasibility.		
5. To determine the effect of the order in which questions were arranged	The order of the questions was randomised to determine whether the students performed better, worse or the same during the second half of the test. Hence the researcher tried to ensure that fatigue would not reduce performance and that exposure to ethics cases would not increase sensitivity towards the end of the instrument.	There was no statistical significance ($p<0.05$) between the vignette scores related to the order in which they were presented. There was also no pattern suggesting that participant responses related to the first and second part of the instrument.	The vignettes were kept in the order as presented to group 1 of the pilot study.

4.5.1.6 Conclusion of the pilot study

On completion of the pilot study, its recommendations were implemented to refine both the instrument and the methods for data collection. These changes increased the reliability of the data and contributed positively to the quality of the main study.

4.5.2 Refining the measuring instrument

The process for developing the final version of the MIEST is summarised in the Figure 4.4. It shows each of the original 15 vignettes and highlights the ethical principles and ethical sensitivity skills targeted by each of the vignettes. It also includes the recommendations following the pilot study, as well as how these changes were realised. Finally, the vignettes for the main study are shown with the target ethical principles and ethical sensitivity skills which together constitute ethical sensitivity. Once the measuring instrument had been refined, the final MIEST (Appendix H1) consisted of 12 vignettes. The estimated time for completing the instrument was considered to be 2 to 5 minutes per vignette (24 to 60 minutes in total for all 12 vignettes), based on the experience with the pilot study. The ethical principles and ethical sensitivity skills were paired based on the scenarios obtained from the focus groups, the individual interviews, as well as the public forums. The four target ethical principles were each used three times, while each of the seven ethical sensitivity skills were represented twice. It should be noted that the numbers of the vignettes are not reflective of the numbers used in the MIEST as described in Chapter 5. The final 12 vignettes in Figure 4.4 are merely numbered in this way to illustrate how the original vignettes were adapted.

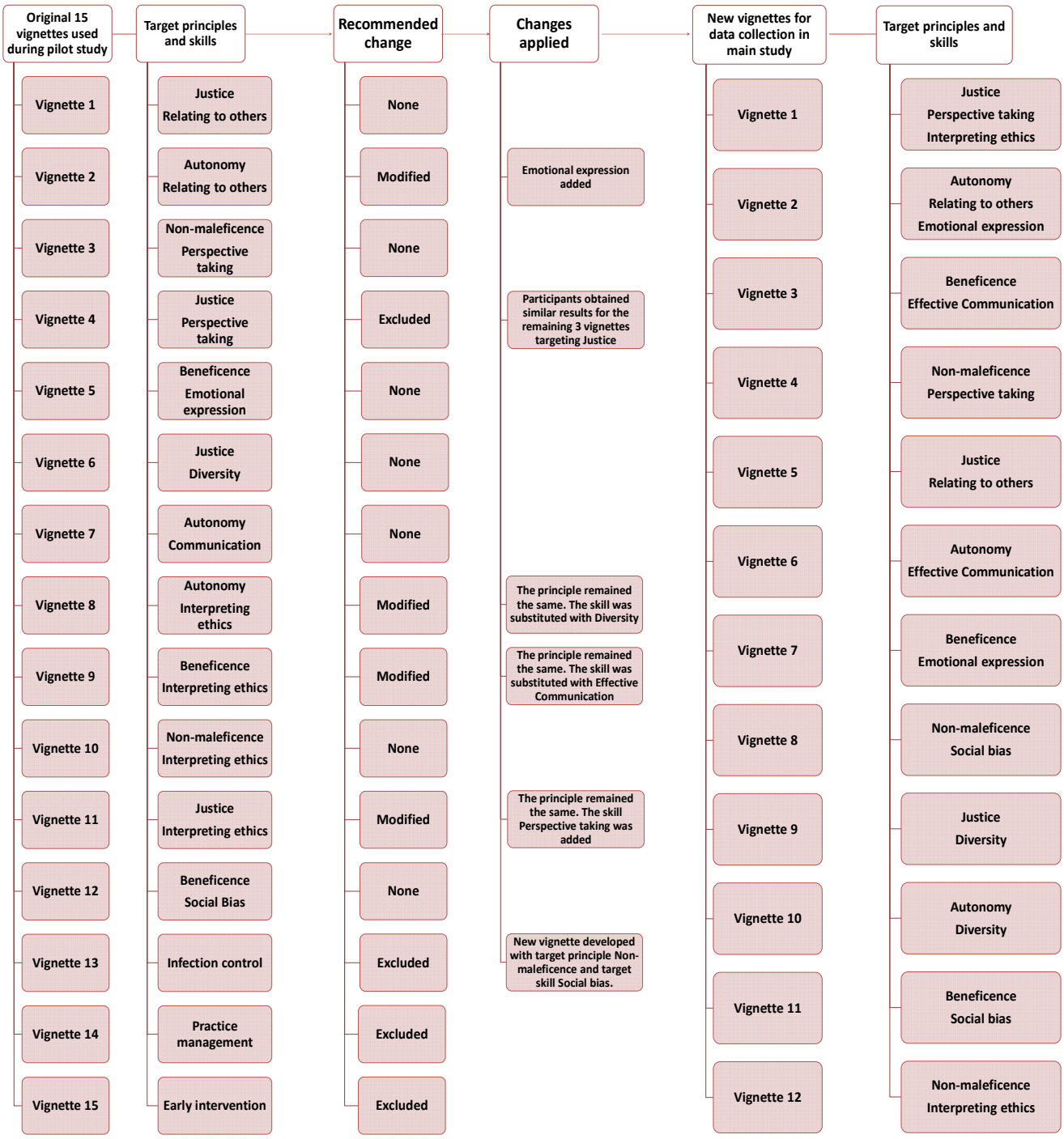


Figure 4.4: Refining process for MIEST

4.5.2.1 Developing a scoring criterion for the MIEST

A score sheet was prepared for each vignette. The same sheet (7-point Likert scale) used by the participants to complete the MIEST was used as score sheet. Each of the 11 statements (four related to an ethical principle, and seven related to an ethical sensitivity skill) received a score. If the participants correctly identified the target ethical principle as applicable, they were awarded a score of (+2). If they failed to identify the target principle, they were awarded a score of (-2). An exception was made when a participant selected an ethical principle that was not targeted but that could be debated regarding its relevance. In such a case, the score was changed to (0) instead of (-2).

Since the identification of ethical sensitivity skills that were not targeted in the vignette could not result in an unethical course of action, negative marking was not implemented as was the case with ethical principle identification. If the participants correctly identified the target ethical sensitivity skill, they were awarded a score of (+2). If they identified a skill that could be argued to be relevant even though not targeted, they were awarded a score of (+1). If the chosen skill was not relevant to the vignette, a score of (0) was allocated. An example of how the participants' responses were scored is provided in Table 4.5.

Table 4.5: Example of scoring sheet

Vignette 1 score sheet	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree	TOTAL SCORE MIN	TOTAL SCORE MAX
Ethical sensitivity skill	0	0	0	2	0	0	0	0	2
Ethical sensitivity skill	1	1	1	2	0	0	0	0	2
Ethical principle	0	0	0	2	-2	-2	-2	-2	2
Target ethical sensitivity skill	0	0	0	0	2	2	2	0	2
Ethical sensitivity skill	1	1	1	2	0	0	0	0	2
Target ethical principle	2	2	2	-2	-2	-2	-2	-2	2
Ethical sensitivity skill	0	0	0	2	0	0	0	0	2
Target ethical sensitivity skill	2	2	2	0	0	0	0	0	2
Ethical principle	0	0	0	2	-2	-2	-2	-2	2
Ethical sensitivity skill	0	0	0	2	0	0	0	0	2
Ethical principle	-2	-2	-2	2	-2	-2	-2	-2	2
TOTAL								**-8**	**22**

In Table 4.5 the target responses are highlighted, showing that one target ethical principle and two target ethical sensitivity skills were related to Vignette 1. In the last column, both the minimum and maximum possible scores[3] for the vignette are shown as an example.

A rubric was developed to increase the consistency and reliability of scoring. The development process is based on the work of Stevens and Levi (2005), Allen (2004), as well as Huba and Freed (2000). Rubrics are widely used to evaluate performance with the intention of including the result in a format that is easy to report and compare over time. Rubric development involves four components, namely task description, defining a scale, dimension identification and dimension description. The responses of the participants were scored, with the intention to grade for individual and group performance.

A summary of this process is summarised in Figure 4.5.

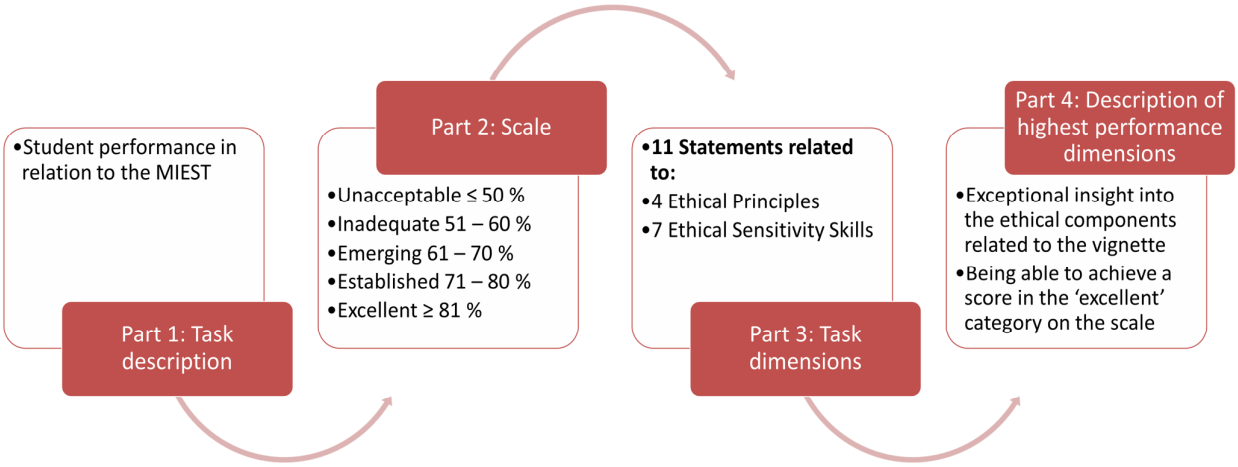


Figure 4.5: Rubric development for scoring performance on MIEST[3]

[3]These scores are used in Chapter 5 during the illustration of the results.

The scoring criteria were developed by determining an acceptable level of performance. In accordance with the HPCSA guidelines regarding ethics performance, the researcher selected a score of >70% as an indicator for established ethical sensitivity skill. Higher education requires a score of >50% to pass any assessment and therefore ≤50% was labelled as unacceptable performance. Since it is recommended in literature that the distance between points should be equal, performance in the 61-70% range was described as emerging. This level would be acceptable for undergraduate students with limited clinical experience, but with presumably adequate theoretical knowledge. The performance level just below the acceptable performance range was consequently labelled as inadequate. Performance levels can be used to measure learning and to show or monitor professional growth pertaining to ethical sensitivity.

The scoring criteria levels can be defined as follows:

- Unacceptable: This level is unfavourable and, without intervention, serving the community could lead to detrimental outcomes. Obtains a score of ≤50%.
- Inadequate: Does not yet meet the acceptable standard for insight into the ethical components represented in the 12 vignettes. Obtains a score of between 51-60%.
- Emerging: Meets the acceptable standards for final-year students in the therapeutic sciences. Understanding of the ethical components represented in the 12 vignettes is still developing. Although on the right track, mastery is not thorough. Obtains a score of between 61-70%.
- Established: Demonstrates a sound understanding of many of the ethical components represented in the 12 vignettes and approaches the excellence level. Obtains a score of between 71-80%.
- Excellent: Exceptional insight into the 11 ethical components represented in the 12 vignettes. Obtains a score of ≥81%.

Each of the 12 vignettes targeted different ethical principles and ethical sensitivity skills, which meant that a general rubric could be used, but that the coding differed for each of them (as indicated below in Table 4.6).

Table 4.6: Rubric used for scoring the MIEST

Vignette statement	Ethical principle and ethical sensitivity skill components	Score	Predicted difficulty Levels 1 - 4	Performance level based on total score
Criterion 1	Controlling social bias	0/1/2	1 / 2 / 3 / 4	
Criterion 2	Effective communication	0/1/2	1 / 2 / 3 / 4	
Criterion 3	Non-maleficence	-2/0/2	1 / 2 / 3 / 4	
Criterion 4	Perspective taking	0/1/2	1 / 2 / 3 / 4	
Criterion 5	Relating to others	0/1/2	1 / 2 / 3 / 4	
Criterion 6	Justice	-2/0/2	1 / 2 / 3 / 4	
Criterion 7	Perceiving and responding to diversity	0/1/2	1 / 2 / 3 / 4	
Criterion 8	Interpreting ethics in a situation	0/1/2	1 / 2 / 3 / 4	
Criterion 9	Beneficence	-2/0/2	1 / 2 / 3 / 4	
Criterion 10	Understanding emotional expression	0/1/2	1 / 2 / 3 / 4	
Criterion 11	Autonomy	-2/0/2	1 / 2 / 3 / 4	
TOTAL		**( )/22**		**Unacceptable** **Inadequate** **Emerging** **Established** **Excellent**
Comments:				

4.6 MAIN STUDY

4.6.1 Aim

The purpose of data collection during the main study was to implement the measuring instrument developed in the pilot study in order to describe the ethical sensitivity of final-year students in the four different therapeutic sciences that are the focus of this study.

4.6.2 Participants

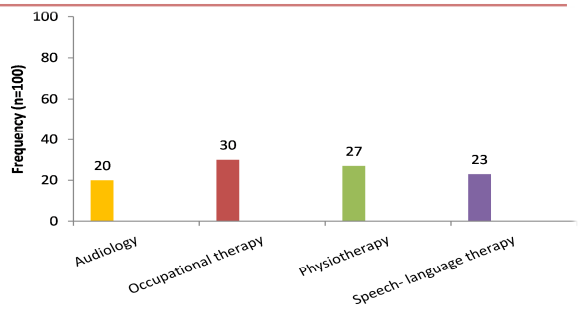
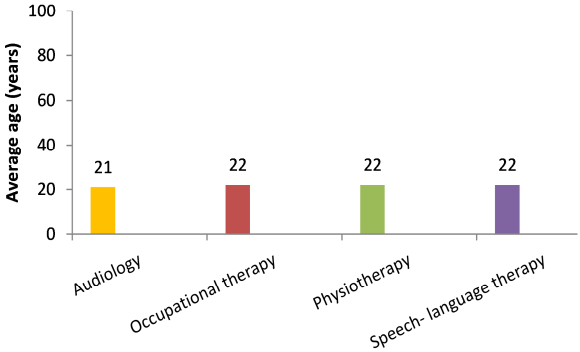
4.6.2.1 Selection criteria

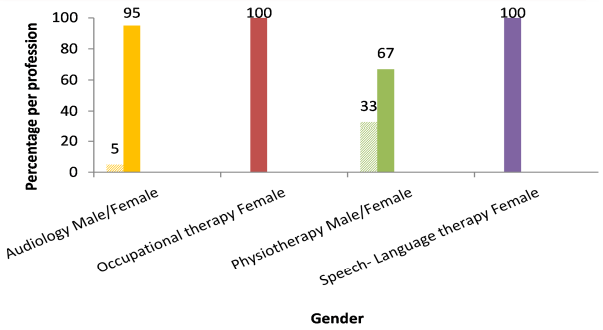
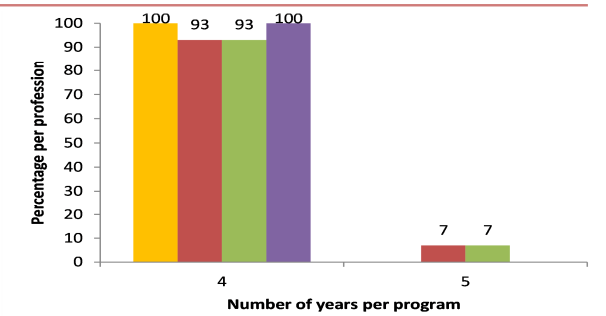
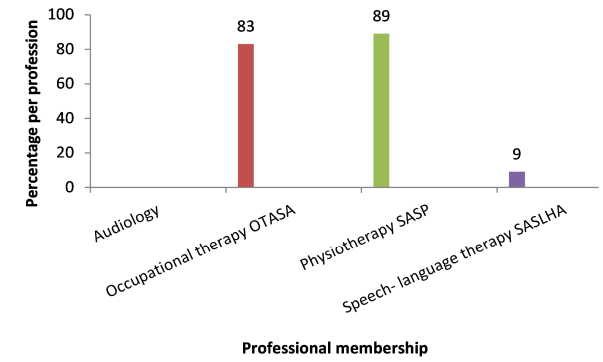
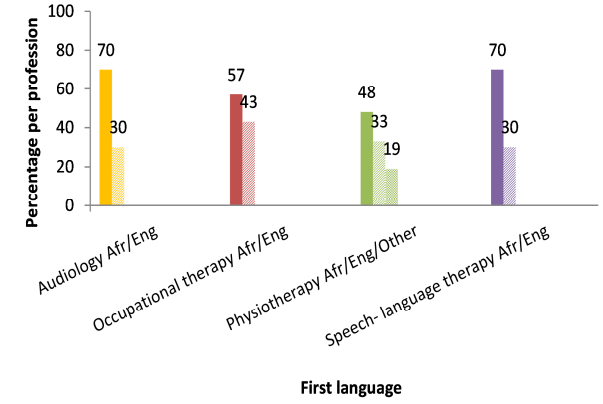
The selection criteria for the main study were the same as for the pilot study (see Table 4.1), except for the fact that participants' first language could be English. All the final-year students enrolled in one of the four therapeutic science degree courses at one selected university, which offered all four of these degree courses, were invited to participate in the study.

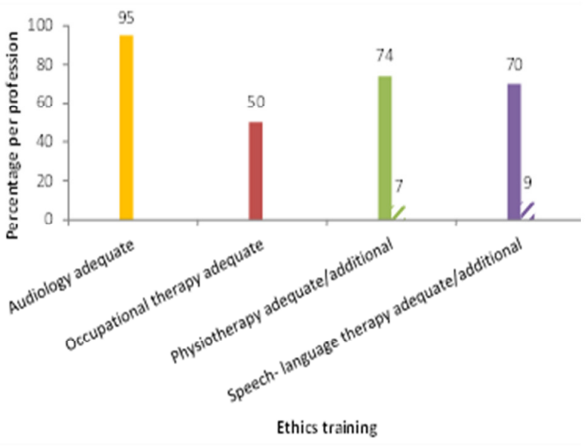
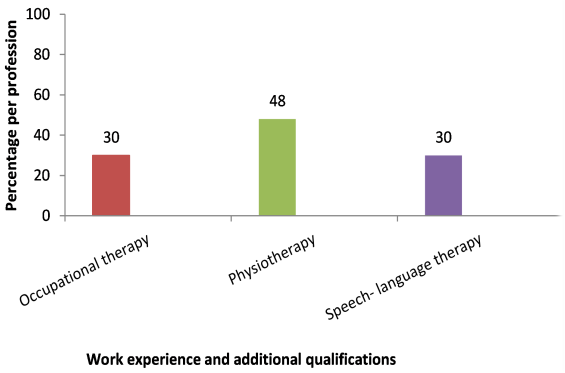
4.6.2.2 Description

The total number of final-year students at the selected university included 25 audiologists, 43 occupational therapists, 44 physiotherapists and 24 speech-language therapists. From this total group of 136 final-year students, 100 (74%) eventually consented and participated in the study. Non-participation was as a result of personal choice, as well as due to some students' being off-site for practical work in the profession.

Table 4.7: Description of participants during the implementation stage of the study

Discussion	Results (n=100)
	Legend for graphs Audiologists (n=20) Occupational therapists (n=30) Physiotherapists (n=27) Speech-language therapists (n=23)
Description of participants representing the four therapeutic sciences in the main study: A total of 100 participants participated in the main study. This group consisted of 20 audiologists, 30 occupational therapists, 27 physiotherapists and 23 speech-language therapists.	 Distribution of participants per profession
Age: The average age across the four therapeutic sciences was 22 years, ranging from 21 years to 27 years. For audiologists the average age was within a range of 21 to 22 years. For occupational therapists, physiotherapists and speech-language therapists, the average age was 22 years within a range of 21-27 years, 21-25 years and 21-26 years respectively.	 Distribution of participant's average age per profession

Discussion	Results (n=100)
Gender: Ninety per cent of the participants were female with only 1 (5%) male in the audiology group and 9 (33%) males in the physiotherapy group.	
Years in programme: The majority (96%) of the participants specified that their final year was their 4th year in the programme with only 4% indicating an additional year of study. The latter group was equally represented by occupational therapists and physiotherapists.	
Membership of professional organisations: The majority (83%, 89% respectively) of occupational therapists and physiotherapists indicated that they were also members of their profession-specific organisations, with only a small percentage (9%) of speech-language therapists and no audiologist belonging to their professional organisations.	
First Language: Sixty percent of the participants indicated Afrikaans as their first language, 35% English and 5% other languages, which included isiZulu, Mandarin and Tshivenda. Physiotherapists were the only group with participants in the 'other' language group. The audiology and speech-language therapy groups showed the biggest difference between Afrikaans and English home language with the majority (70%) of participants falling in the Afrikaans first language category.	

Discussion	Results (n=100)
Ethics training: Seventy percent of participants indicated that they believe their ethics training was adequate for professional service delivery, with audiologists being the most confident with regard to their ability to provide ethical services. Four per cent of participants had received additional training not included in the standard therapy training programme. This 4% constituted 7% of physiotherapists and 9% of speech-language therapists.	
Work experience / additional qualifications: Altogether 68% of participants indicated that they either had some job experience and/or obtained additional qualifications before training in the therapeutic sciences. Audiologists were the only group who did not indicate any job experience or additional qualifications.	

4.6.2.3 Data collection procedure

The data collection procedure followed throughout the main study is portrayed in Figure 4.6.

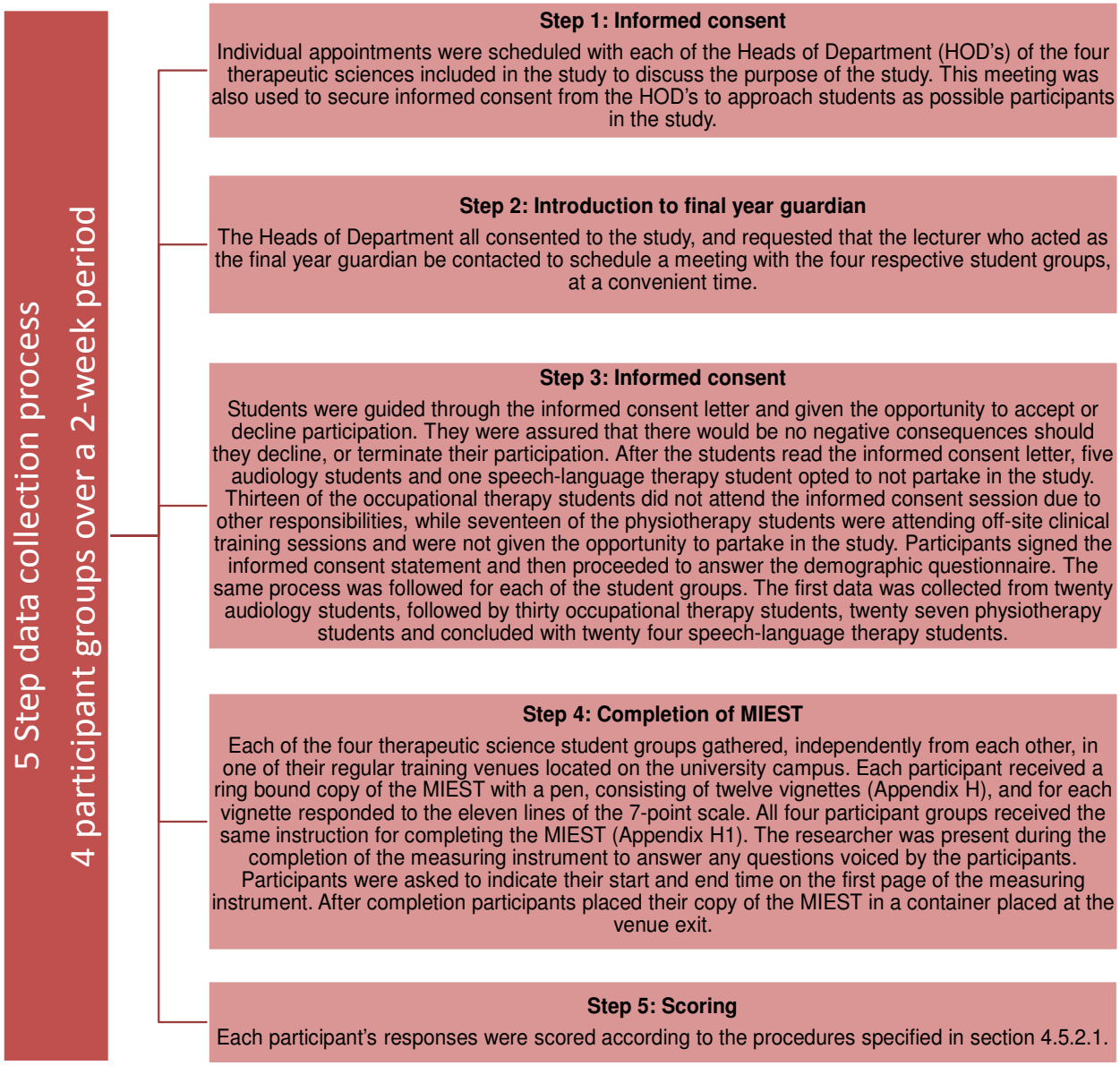


Figure 4.6: Data collection procedure for main study

From Figure 4.6 it is clear that data collection was performed in a linear manner, repeating the process four times, once for each of the professions.

4.6.3 Equipment and material used to collect data in main study

A summary of the material and equipment is shown in Table 4.7, following the recommendations from the pilot study.

Table 4.8: Equipment and material used during Phase 2

Equipment and material	Discussion of equipment, material and tools to obtain quantitative data
Measuring instrument (MIEST)	• Aim: To present the measuring instrument to final-year students in one of the four therapeutic sciences. • Rationale and use: To measure an individual's ability to recognise ethical issues often encountered within the therapeutic sciences. To gain information regarding the application value of one instrument to the measuring of ethical sensitivity in four separate disciplines within the therapeutic sciences. Twelve vignettes were presented to 100 students.
Instrument scores	• Aim: To obtain information from the completed measure for statistical analysis. • Rationale: To quantify the data for statistical analysis. • Use: Each participant's responses were scored as described in Section 4.5.2.1.

The equipment and material used during Phase 2 of the study – in other words the MIEST and the scores obtained on it – led to answering of the sub-aims specified at the beginning of the chapter. According to Johnson and Onwuegbuzie (2004), using a measuring instrument with scores is ideal for statistical analysis and the results would therefore help to predict ethical sensitivity in the therapeutic sciences.

4.6.3.1 Data analysis

The data from Phase 2 was analysed quantitatively with the help of a statistician. All coded responses and the demographic data were entered and captured electronically to be analysed using the statistical analysis software (SAS) version 9.3.

The first part included descriptive statistical analysis procedures that were used to describe, summarise and make sense of the data (Neuman, 1997). Descriptive

indices such as measures of location (e.g. relative standing and percentile ranks) and measures of spread (e.g. median and mean) were calculated. The calculations also include measures of variability, for example range, variance and standard deviation, and the normal distribution (Leedy & Ormrod, 2010). Specifically, Excel NORMSDIST function was used to determine the reliability of the participants' responses. The overall performance (score and completion time) of the participants in relation to the MIEST was analysed using measures of location, spread and variability. Ethical flexibility of participants was determined using measures of location. These calculations allowed the researcher to describe the ethical sensitivity of final-year students in the four therapeutic sciences as it relates to ethical principles and ethical sensitivity skills

The second part of the analysis included parametric (e.g. ANOVA) and inferential statistics (e.g. chi-square test of statistical significance) to analyse and describe the participants' responses related to the MIEST. The data was organised into 2x2 contingency tables to determine the dependencies between ethical principles and ethical sensitivity skills as represented in the MIEST, allowing the researcher to answer the sub-aims related to this study namely to identify distinct discipline-related ethical sensitivity patterns in the therapeutic sciences, as well as the specificity and sensitivity of the measuring instrument.

Results are presented and described in Chapter 5, according to the aims formulated in Chapter 3 and Chapter 4, and presented in the form of tables and graphs.

4.7 SUMMARY

In this chapter, Phase 2 of the methodology related to the implementation and evaluation of the measuring instrument was explained. This included a discussion on the implementation and results of the pilot study. The process of refining and scoring the vignettes was described and the format of the final vignettes to be included in the MIEST was presented. The chapter concluded with a description of the participants who completed the MIEST as part of the main study, as well as a short description of how the data was analysed.

Chapter 5
Results

5.1 INTRODUCTION

This chapter begins with an analysis of and report on the integrity of the procedures and reliability of the data. Following this verification, the results of the statistical analysis are presented against the background of sub-aims for Phase 2 as specified in Chapter 4. The first part of the sub-aims relates to participants' ethical sensitivity, which includes both ethical principles and ethical sensitivity skills. The second part focuses on a description of the effect that ethical principles, ethical sensitivity skills and the level of complexity of a vignette have on participants' ethical sensitivity. Finally, profession-specific patterns of ethical sensitivity are described and the related results are mentioned under each sub-heading.

5.2 SUMMARY OF DATA ANALYSIS

The first step in preparing the data for analysis included coding of the responses provided by the participants (n=100). A 7-point Likert scale with 11 Likert statements was used for each of the 12 vignettes. The Likert scale was based on the following responses: 1=strongly disagree; 2=disagree; 3=disagree somewhat; 4=neither agree nor disagree; 5=agree somewhat; 6=agree; 7=strongly agree. The responses were coded to reflect that a higher score would reflect a higher degree of agreement.

Data analysis began with the use of descriptive statistics. Thereafter, inferential techniques were used to test hypotheses posed by the researcher. Analysis of variance techniques was used to analyse responses for the four professional groups represented by the participants. Data was further simplified and reduced to the nominal level by combining the six response categories into two nominal categories, namely correct and incorrect. Coding of a correct or an incorrect response was based on the data obtained from the expert reviewers as discussed in Chapter 4 (see Section 4.5.2.1). This allowed for the use of a Chi-square test approach to analyse the data, set up a comparison between the four professional groups, and analyse the

frequency of each choice between the groups. The 11 Likert-type items were combined into a single composite score during the process of data analysis in order to provide a quantitative measure of ethical sensitivity. The same was done for the four separate ethical principle-based Likert-type items and the seven separate ethical sensitivity skill-based Likert-type items. Figure 5.1 provides a schematic outline for the presentation of the results.

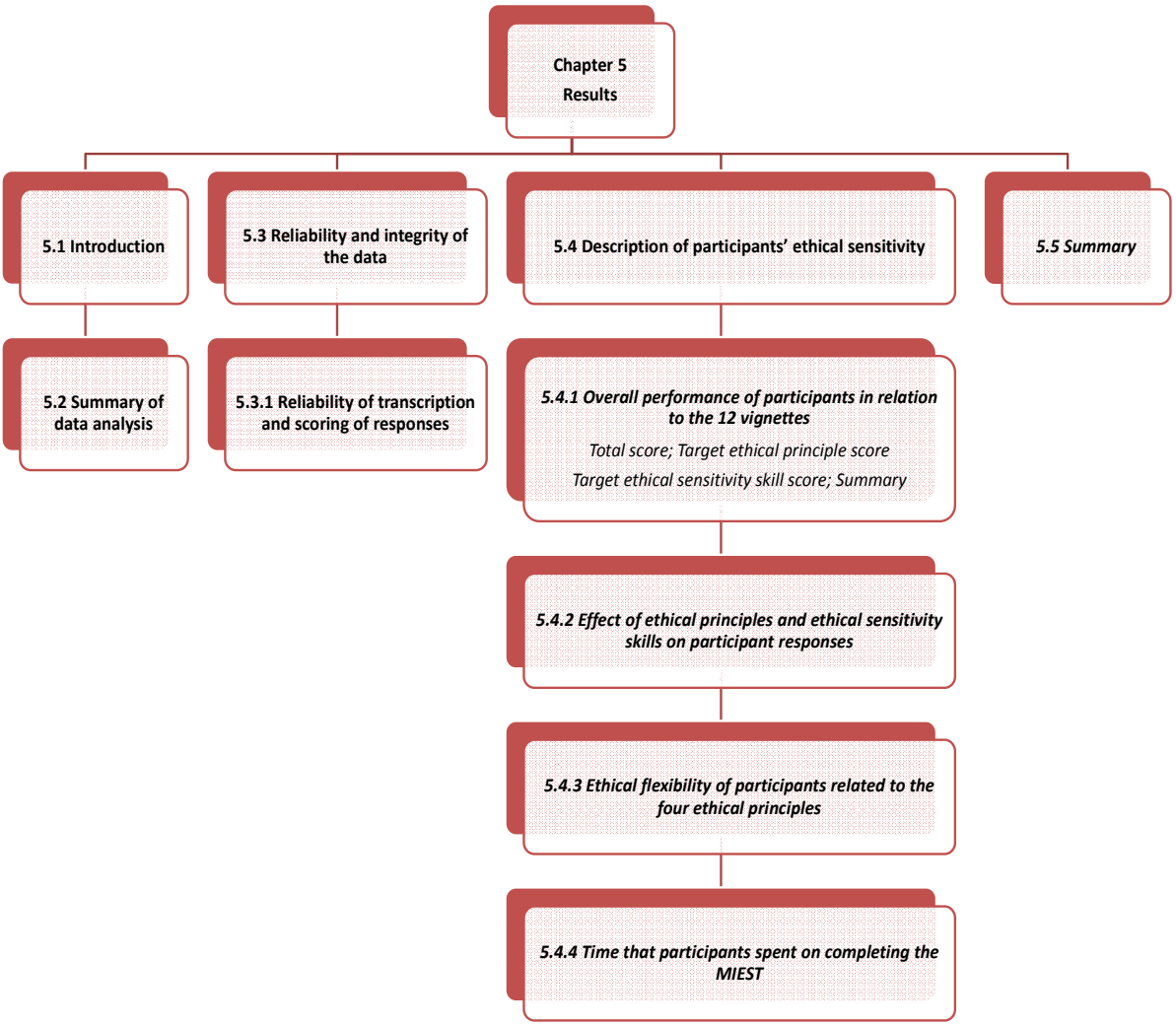


Figure 5.1: Schematic outline of the results

The results described in this chapter reflect the ethical sensitivity of final-year students registered in one of the four therapeutic sciences as measured with the MIEST, approximately six months prior to graduation.

5.3 RELIABILITY AND INTEGRITY OF THE DATA

5.3.1 Reliability of transcriptions and scoring of participant responses related to the MIEST

5.3.1.1 Reliability of transcriptions

In this study, the reliability with which the data was scored was assessed using inter-rater reliability as a measure. An independent observer – a dually qualified speech-language therapist and audiologist enrolled as a postgraduate student at UNISA, with 14 years of experience – checked 20% of randomly selected verbatim transcriptions of the focus groups and individual in-depth interviews. The inter-rater reliability was measured at 100%.

5.3.1.2 Coding of participant responses

The statistician coded the responses recorded on each Likert item manually as well as with the statistical software. There was a 100% match between the manually coded template and the software-generated printout.

5.3.1.3 Scoring of MIEST

Following the same procedure as described in 5.3.1.1, the dually qualified speech-language therapist and audiologist scored 20% of randomly selected responses from participants who completed the MIEST. These scores from the determined MIEST responses were compared with those scored by the researcher, and agreement was 100%.

5.3.1.4 Reliability of participant responses

The likelihood that participants had randomly selected responses was determined with the use of the Excel NORMSDIST function. This Standard Normal Cumulative Distribution Function was used to test the following hypothesis:

π_0 Population proportion appropriate of ethical principle from the vignettes = 0.5

π_0 Population proportion appropriate of ethical principle from the vignettes => 0.5.

The results (0.98>0.5) indicated that the likelihood of participants guessing what the correct answers were, was low, which increased the reliability of the responses.

5.3.1.5 Test-retest reliability

Test-retest reliability was not considered appropriate because the vignettes together with the 11 statements may have stimulated the respondents to reflect on the topic. This (reflection) could in turn have led to new perspectives or attitudes towards a subject, and thus to an inconsistency in responses with regard to the two test situations. Moreover, correlations that are found in this type of research are not considered to be stable over time.

5.3.1.6 Data cleaning

The process of data cleaning was applied to increase the data quality for statistical analysis, seeing that incorrect data would lead to false conclusions. The process of data cleaning included the verification related to correct data values. All of the character variables had a limited number of valid values. The variables were coded [e.g. male (1) and female (2)] and checked for out-of-range data values. The raw data was analysed manually and the data compared to the descriptive statistics provided by the statistician. Frequency counts were also performed with the statistical software (SAS) to ensure that valid values were entered into the dataset and to confirm that there was no missing data. Having knowledge of reasonable values for each of the variables, the researcher reviewed the statistical procedure option PROC UNIVARIATE with the output label 'Extremes' to detect invalid values.

5.4 DESCRIPTION OF PARTICIPANTS' ETHICAL SENSITIVITY

The total score obtained by participants in the four different disciplines was calculated for each vignette by awarding a value to each answer provided on the measuring instrument. The figures in Table 5.1 are presented in the order of the vignettes presented in the MIEST.

5.4.1 Overall performance of participants in relation to the 12 vignettes

The overall performance of the participants is summarised, per vignette, in Table 5.1. It starts by showing the participants' total score across all 11 categories, followed by

an analysis of the development of ethical principles and ethical sensitivity skills ranging from unacceptable to excellent, and finally, the correct identification of the principle and skill(s) focused on in the vignette. Each vignette targeted one principle, and either one or two skills, as discussed earlier in Section 4.5.1.

The results presented in Table 5.1 are presented per vignette, starting with Vignette 1, in the following order:

a. At the beginning of each vignette the target ethical principle and ethical sensitivity skill(s) are specified.
b. This is followed by a descriptive discussion of the total mean score (Appendix I, Table 1) for participants (n=100) as well as for the four therapeutic sciences individually.
c. These scores are then grouped into five possible categories, including unacceptable (≤50%), inadequate (51 – 60%), emerging (61 – 70%), established (71 – 80%) and excellent (≥81%), as described in section 4.5.2.1.
d. Next, the research question was asked, namely whether there was a significant difference in the population proportions of the mean scores. In order to answer the research question, inferential statistics with analysis of variance (ANOVA) were used to test the hypothesis of H_0 at a 5% level of significance. All the results are presented in Appendix I, Table 2, with only statistically significant results displayed in Table 5.1.
   - H_0 *The population mean score is the same across the four professions forming part of the therapeutic sciences.*
   - H_1 *The population mean score differs across the four professions forming part of the therapeutic sciences.*
e. If H_0 was rejected, multiple pairwise comparisons were conducted to determine which professions' mean scores were statistically significant. Post hoc analyses using the Scheffé post hoc criterion for significance (alpha = 0.05) were used for this purpose. All the results are presented in Appendix I, Table 3, with only statistically significant results displayed in Table 5.1.
f. The overall highest and lowest scores are described. A value of 22 reflects the highest possible score (maximum) on the MIEST, while a value of -8 reflects the lowest possible score (minimum) on the MIEST. The results are presented in Appendix I, Table 1.

g. At this point, the focus shifts from the total mean score to the target score. The scores of participants related to the specific target principle and ethical sensitivity skill(s) specified for the relevant vignette are described.

h. In the same way as described in (d) above, ANOVA was used to test the hypothesis of H_0. The results are presented in Appendix I, Table 2.

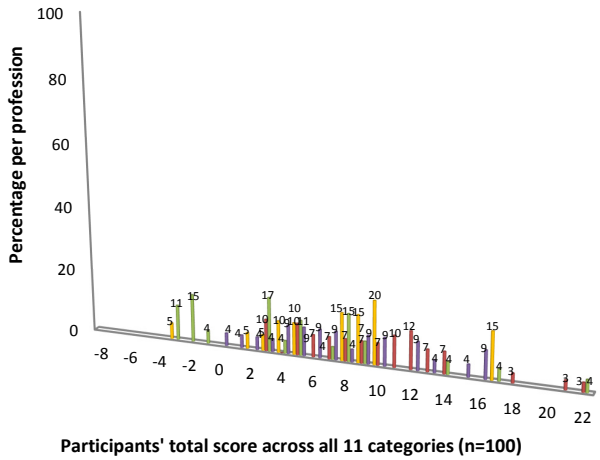
   H_0 *The population target score is the same across the four professions forming part of the therapeutic sciences.*

   H_1 *The population target score differs across the four professions forming part of the therapeutic sciences.*

i. If H_0 was rejected, the same steps used in (e) were used and results reported accordingly. The results are presented in Appendix I, Table 3.

A summary of the results in relation to the overall performance of participants is provided in Table 5.1.

Table 5.1: Participant performance in terms of the measuring instrument (n=100)

Discussion	Results (n=100)
	Legend used with figures Audiologists (n=20) Occupational therapists (n=30) Physiotherapists (n=27) Speech-language therapists (n=23)
Vignette 1: Total score Target ethical principle: Justice Target ethical sensitivity skills: Perspective Taking; Interpreting Ethics in a Situation The total mean score for the participants (n=100) was 8/22. The mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 8; 10; 5; 8 respectively. Occupational therapists obtained the highest overall score with 80% of the group falling in the Emerging – Excellent range. Only 37% of the physiotherapists were represented in the Emerging – Excellent range, while audiologists and speech-language therapists had 65% of their group represented in the Emerging and Established range, with no representation in the Excellent group.	

Discussion

The ANOVA test returned a p-value of 0.00032 <0.05, leading to the rejection of H_0 in favour of H_1. This indicated a significant difference among the population mean scores of the four professions. The multiple pairwise comparisons indicated that there was a statistically significant difference between the total population mean score for occupational therapists and physiotherapists (F =5.3, p<0.05).

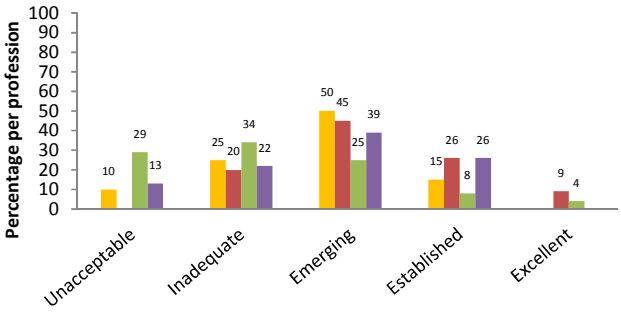
Overall, the highest score obtained was 22. This score was awarded to 2% of the total participants (n=100) as shown in Appendix I Table 1. This 2% comprised 3% of the occupational therapists and 4% of physiotherapists. The lowest score obtained overall was -3, while The lowest minimum could be -8. This score was awarded to 4% of the total number of participants (n=100). This 4% comprised 5% of audiologists and 11% of physiotherapists.

Vignette 1: Target ethical principle (EP) and ethical sensitivity skill (ESS) score

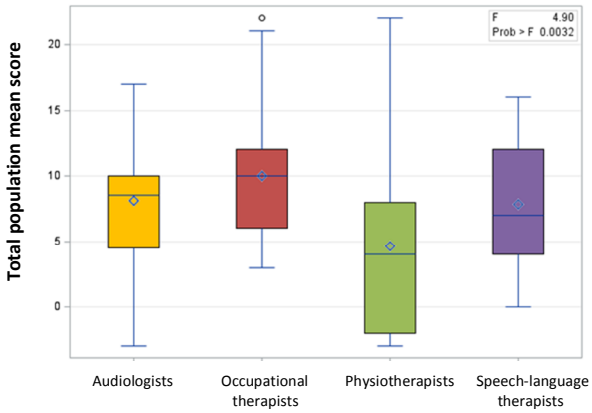
As expected for the therapeutic sciences, participants demonstrated that Perspective Taking was identified correctly more frequently than were Justice and Interpreting Ethics for audiologists (95%, 90%, 55% respectively), physiotherapists (59%, 44%, 33% respectively) and speech-language therapists (87%, 83%, 70% respectively). Occupational therapists did not follow this same pattern and obtained comparable scores across the ethical principle and ethical sensitivity skills with Justice leading (97%), followed by Interpreting Ethics (90%) and finally Perspective Taking (87%). The group performed slightly poorer with regard to Justice, but it is clear that they experienced the greatest difficulty with Interpreting Ethics in a situation.

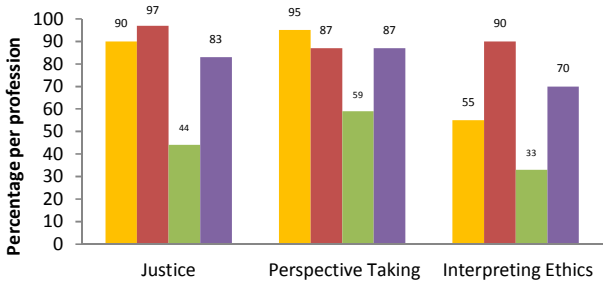
A p-value of <0.0001 <0.05 led to the rejection of H_0 in favour of H_1 indicating a significant difference among the population mean scores of the four professions. The pairwise comparisons revealed a statistically significant difference between the total population's mean score for occupational therapists and physiotherapists (F =3.77, p<0.05), as well as for the audiologists and physiotherapists (F =2.97, p<0.05).

Results (n=100)

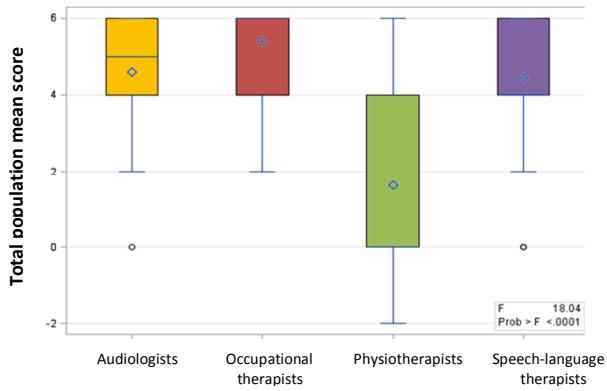


Participants' performance related to the identification of EP and ESS across all 11 categories





Appropriately identified vignette-specific EP and ESS



Discussion

Vignette 2: Total score

Target ethical principle: Autonomy
Target ethical sensitivity skills: Relating to Others; Emotional Expression

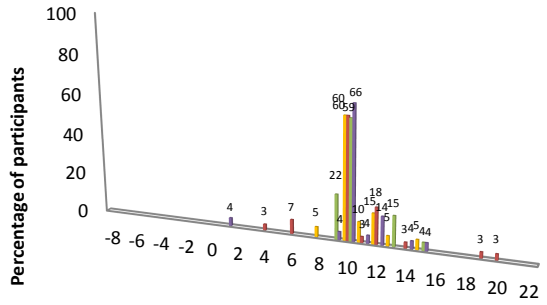
The total mean score for the participants (n=100) was 11/22. The mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 11; 11; 10; 10 respectively. The scores across all participants fell mostly in the Emerging category, implying that their ethical sensitivity is beginning to develop but growing and evolving. Occupational therapists were the only group with participants in the Excellent category. Their overall score was 97% across the Emerging – Excellent range. The scores of all the audiologists and physiotherapists fell in the Emerging – Established category, with 96% of speech therapists also falling in this category. The ANOVA test led to the tendency to accept the H_0 indicating that there was no statistical significance between the four groups with a p-value of 0.8974 >0.05.

Generally the participants performed well with no negative scores. Overall the highest score obtained was 20. This total score was awarded to 1% of the total number of participants (n=100). This 1% comprised 3% of occupational therapists. The lowest score obtained was 1. This score was awarded to 1% of the total number of participants (n=100) as shown in Appendix I Table 1. This 1% comprised 4% of speech-language therapists.

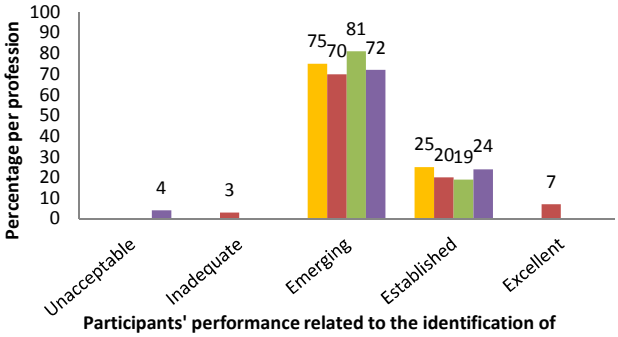
Vignette 2: Target EP/ESS score

Participants (n=100) demonstrated high proficiency across all three categories. Understanding Emotional Expression was correctly identified by all participants in two professions (occupational therapists and physiotherapists). Occupational therapists also identified Relating to Others 100% correctly. The ANOVA test returned a p-value of 0.94 >0.05, which led to a tendency to accept H_0.

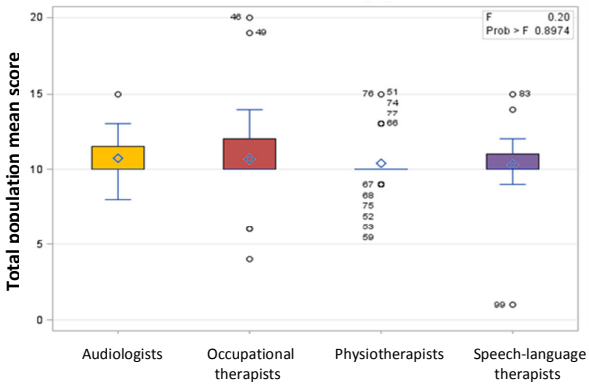
Results (n=100)



Participants' total score across all 11 categories (n=100)



Participants' performance related to the identification of EP and ESS across all 11 categories (n=100)



Appropriately identified vignette-specific EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.

Discussion

Vignette 3: Total score

Target ethical principle: Beneficence
Target ethical sensitivity skill: Effective Communication

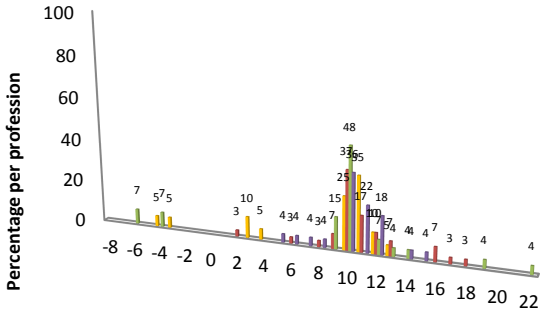
The total mean score for all the participants was 10/22. The total mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 8; 11; 9; 10 respectively. Occupational therapists and physiotherapists were the only groups with participants in the Excellent category (3%, 8% respectively). The overall score of occupational therapists fell in the Emerging – Excellent range (97%), with 86% of physiotherapists in the same category. Speech-language therapists who demonstrated Emerging – Established skill in identifying the relevant factors related to the vignette represented 96% of the group. The majority (75%) of audiologists obtained scores that indicated that the relevant skills have been Established. None of the audiologists fell in the Emerging or Excellent category. The ANOVA test returned a p-value of 0.1495 >0.05, leading to the tendency to accept the H_0. The majority (75%) of participants (n=100) demonstrated that the ethical principle and ethical sensitivity skill targeted in this specific vignette was well established in all the participants.

Overall the highest score obtained was 22 and it was awarded to 1% of the total number of participants (n=100). This 1% comprised 4% of physiotherapists. The lowest score obtained was -6 and was awarded to 2% of the total number of participants (n=100). This 2% comprised 7% of physiotherapists.

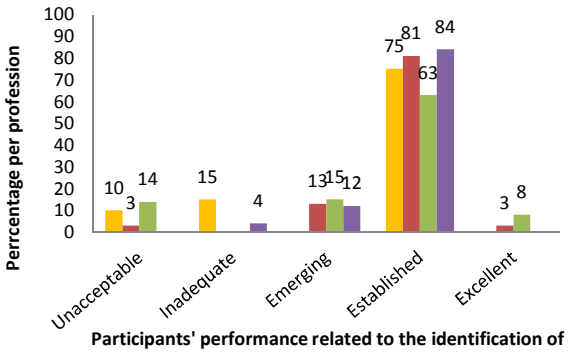
Vignette 3: Target EP/ESS score

Participants (n=100) demonstrated proficient skill in identifying the appropriate use of Beneficence but experienced noticeable difficulty to identify the importance of effective communication. Only 3% of occupational therapists, 9% of speech-language therapists, 15% of both audiologists and physiotherapists correctly identified this skill in the specific vignette. The ANOVA test returned a p-value of 0.29 >0.05, which led to a tendency to accept H_0.

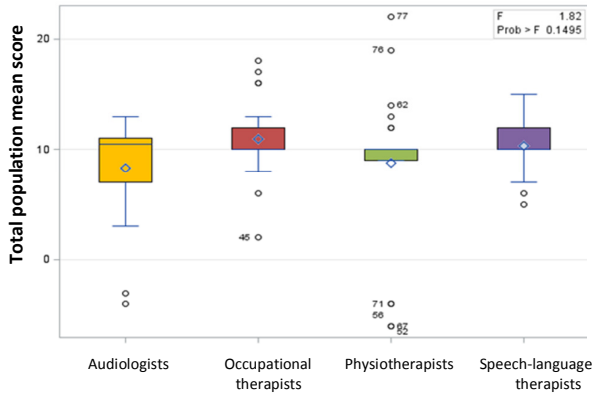
Results (n=100)

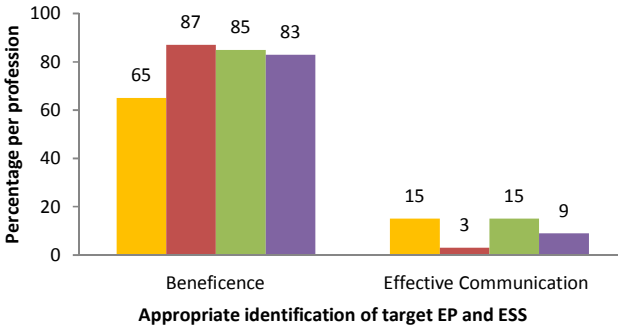


Participants' total score across all 11 categories (n=100)



Participants' performance related to the identification of EP and ESS across all 11 categories





Appropriate identification of target EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.

Discussion

Vignette 4: Total Score

Target ethical principle: Non-maleficence
Target ethical sensitivity skill: Perspective Taking

It is evident from the first figure that the majority of the participants performed on the negative side of the scale, indicating that they found it difficult to identify the relevant ethical principles and ethical sensitivity skills. The total mean score for all the participants was 3/22. The mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 1; 5; 2; 2 respectively. Physiotherapists and occupational therapists were the only two groups with participants in the Established and Excellent category (6%, 8% respectively). The overall score of occupational therapists was 43% in the Emerging – Excellent range, with 15% of physiotherapists in the same category. Audiologists and speech-language therapists demonstrated that some participants are still developing skills, placing them in the Emerging category (25%, 16% respectively).

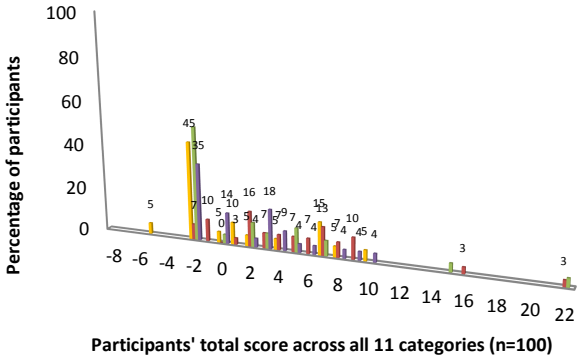
The ANOVA test returned a p-value of 0.01 <0.05, which led to the rejection of H_0 in favour of H_1 and indicated a significant difference among the population mean scores of the four professions, specifically for occupational therapists and physiotherapists (F =3.44, p = <0.05).

Overall the highest score obtained was 22. This score was awarded to 2% of the total number of participants (n=100). This 2% comprised 3% of occupational therapists and 4% of physiotherapists. The lowest score obtained was -5 and was awarded to 1% of the total number of participants (n=100). This 1% comprised 5% of audiologists.

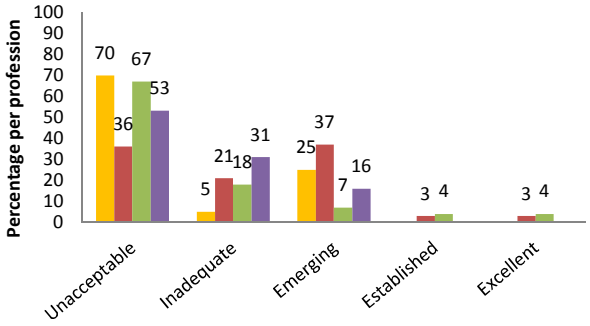
Vignette 4: Target EP/ESS score

Participants (n=100) demonstrated a high level of proficiency for identifying the appropriate use of the ethical sensitivity skill, Perspective Taking. All the participants, however, had difficulty with identifying the relevance of non-maleficence in the vignette, with occupational therapists who obtained the highest and speech-language therapists the lowest score (not statistically significant).

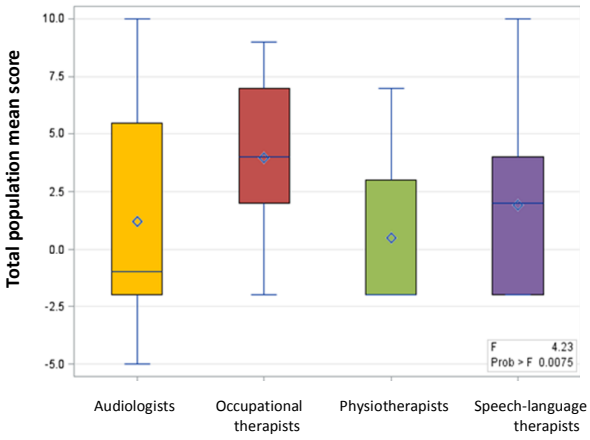
Results (n=100)

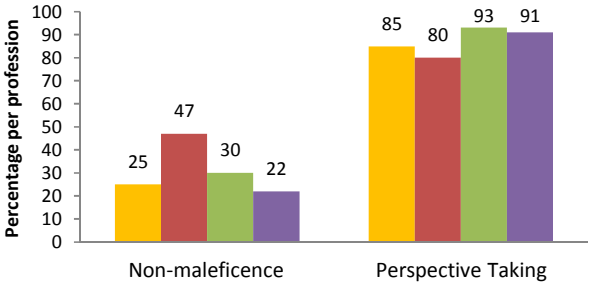


Participants' total score across all 11 categories (n=100)



Participants' performance related to the identification of EP and ESS across all 11 categories





Appropriately identified vignette-specific EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.

Discussion

Vignette 5: Total score

Target ethical principle: Justice
Target ethical sensitivity skill: Relating to Others

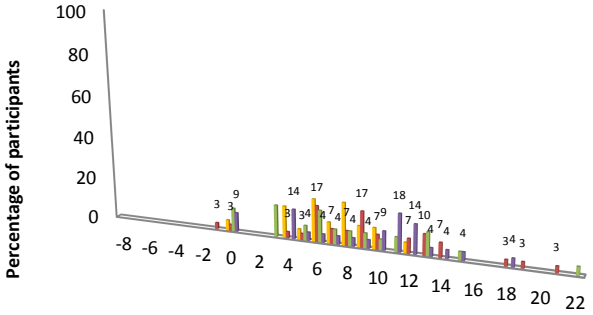
The total mean score for all the participants was 8/22. The total mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 7; 9; 7; 9 respectively. The majority (76%) of participants (n=100) demonstrated Emerging to Excellent ability to identify the relevant ethical principles and ethical sensitivity skills. Audiologists were the only group not represented in the Excellent category, with 75% of participants in the Emerging – Established category. Occupational therapists showed the highest proficiency for identifying the ethical principle and sensitivity skill related to this vignette with a score of 88% represented in the Emerging – Excellent group, followed by occupational therapists with a score of 73%, and physiotherapists with a score of 67% in the same category. The ANOVA test returned a p-value of 0.1654 >0.05, leading to the tendency to accept the H_0.

Overall, the highest score obtained was 22. This score was awarded to 1% of the total number of participants (n=100), and this 1% comprised 4% of physiotherapists. The lowest score obtained, -1, was awarded to 1% of the total participants (n=100). This 1% comprised 3% of occupational therapists.

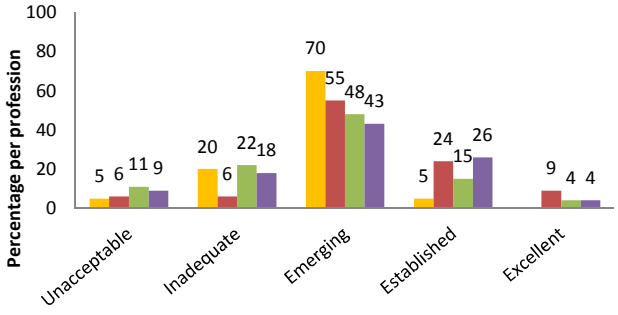
Vignette 5: Target EP/ESS score

Participants across the four professions demonstrated that they could identify the most relevant ethical principle and sensitivity skills, with occupational therapists showing the best performance in both categories. Similar to the results in Vignette 1, physiotherapists performed poorer in terms of correctly identifying the ethical principle of Justice than did the other participants. The ANOVA test returned a p-value of 0.04 <0.05, leading to the rejection of H_0 in favour of H_1. The difference between the total population mean score for occupational therapists and physiotherapists (F =1.33, p<0.05) was statistically significant.

Results (n=100)

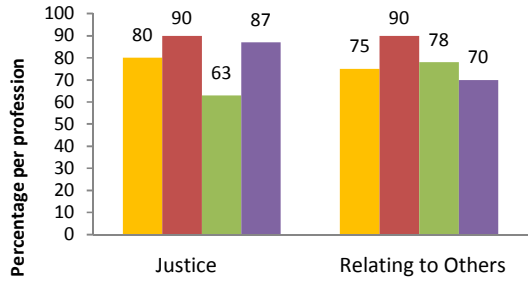


Participants' total score across all 11 categories (n=100)

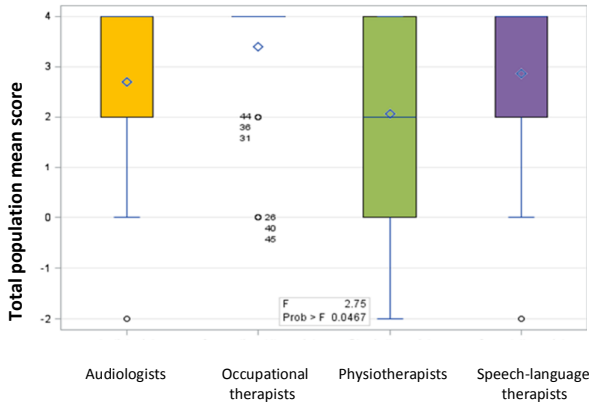


Participants' performance related to the identification of EP and ESS across all 11 categories

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.



Appropriately identified vignette-specific EP and ESS



Discussion

Vignette 6: Total score

Target ethical principle: Autonomy
Target ethical sensitivity skill: Effective communication

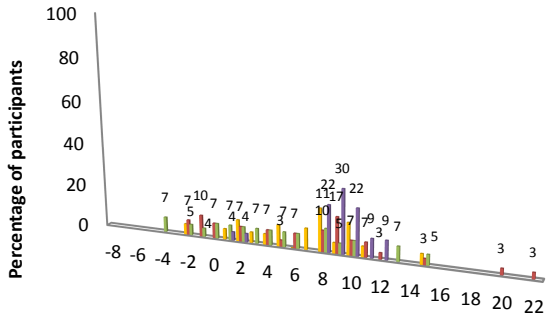
The total mean score for all the participants was 7/22. The total mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 7; 7; 5; 9 respectively. Occupational therapists were the only group with participants (6%) in the Excellent category. Their overall score was 60% in the Emerging – Excellent range. In the Emerging – Established category, speech-language therapists represented 92%, audiologists 60% and physiotherapists 42% of the respective professions. The ANOVA test returned a p-value of 0.0301 <0.05, leading to the tendency to reject the H_0 indicating a significant difference among the population total mean scores of the four professions, specifically between speech-language therapists and physiotherapists (F =4.2, p = <0.05).

Overall, the highest score obtained was 22. This score was awarded to 1% of the total number of participants (n=100). This 1% comprised 3% of the occupational therapists. The lowest score obtained, -4, was awarded to 2% of the number of total participants (n=100). This 2% comprised 7% of physiotherapists.

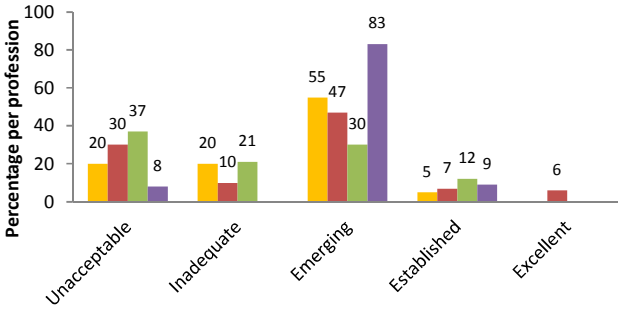
Vignette 6: Target EP/ESS score

Physiotherapists (n=27) performed the worst in terms of their ability to identify the relevance of autonomy, with only 33% correctly identifying the principle of autonomy. This group scored the lowest in relation to both ethical principle and ethical sensitivity skill. Speech-language therapists (n=23) presented with the highest score of 87% in terms of identifying the importance of the ethical sensitivity skill, namely Effective Communication. This group scored highest in relation to both ethical principle and the ethical sensitivity skill. The difference between the total population mean score for speech-language therapists and physiotherapists proved to be significant (F =2.40, p<0.05), rejecting H_0.

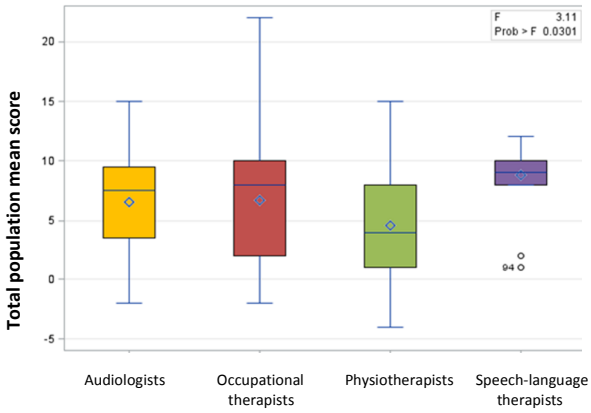
Results (n=100)

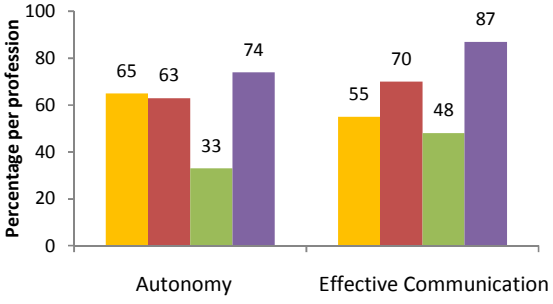


Participants' total score all across 11 categories (n=100)



Participants' performance related to the identification of EP and ESS across all 11 categories





Appropriately identified vignette-specific EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.

Discussion

Vignette 7: Total score

Target ethical principle: Beneficence
Target ethical sensitivity skill: Emotional Expression

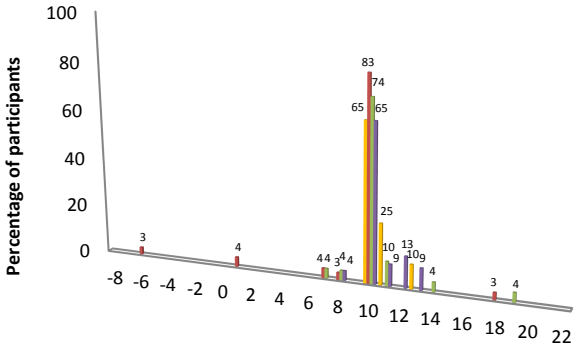
The total mean score for all the participants was 10/22. The total mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 11; 9; 10; 11 respectively. Almost all (98%) of the participants (n=100) obtained scores falling in the Emerging – Excellent category. Occupational therapists were the only group with participants (7%) in the Unacceptable category. Occupational therapists and physiotherapists were also the only groups represented in the Excellent category (3% and 4% respectively). As expected from the descriptive data, occupational therapists displayed the biggest range (24) with regard to their test score. All the participants showed high scores on Emerging skills in terms of recognising relevant ethical principles and sensitivity skills related to ethical scenarios. As expected from the descriptive data, the ANOVA test returned a p-value of 0.1484 >0.05, leading to the tendency to accept the H_0.

Overall the highest score obtained was 19. This score was awarded to 1% of the total number of participants (n=100), which comprised 4% of the physiotherapists. The lowest score registered, -6, was awarded to 1% of the total number of participants (n=100). This 1% comprised 3% of occupational therapists.

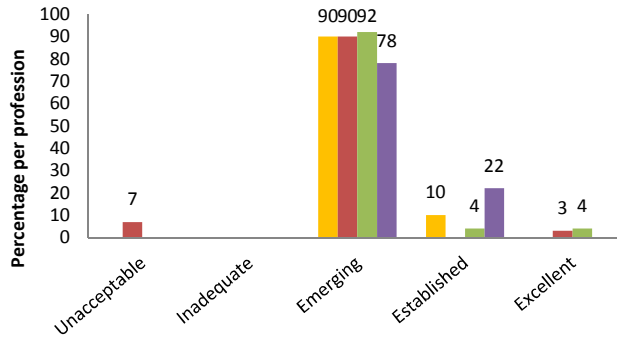
Vignette 7: Target EP/ESS score

Participants (n=100) demonstrated an exceptionally high performance in identifying the most relevant ethical principle and sensitivity skill correctly. Audiologists (n=20) correctly identified both the ethical principle and ethical sensitivity skill. In line with the total mean score, the ANOVA test returned a p-value of 0.27>0.05, leading to a tendency to accept H_0 and suggesting that the scores of the four professions were the same.

Results (n=100)

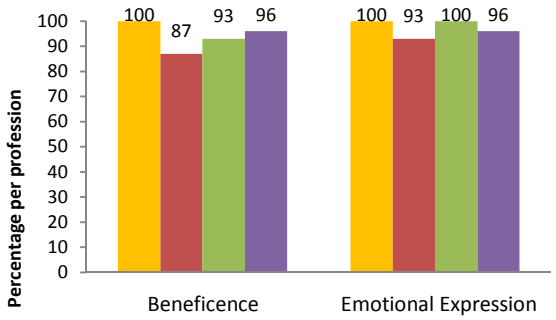


Particpants' total score across all 11 categories (n=100)



Participants' performance related to the identification of EP and ESS across all 11 categories

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.



Appropriately identified vignette-specific EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.

Discussion

Vignette 8: Total score:

Target ethical principle: Non-maleficence
Target ethical sensitivity skill: Controlling Social Bias

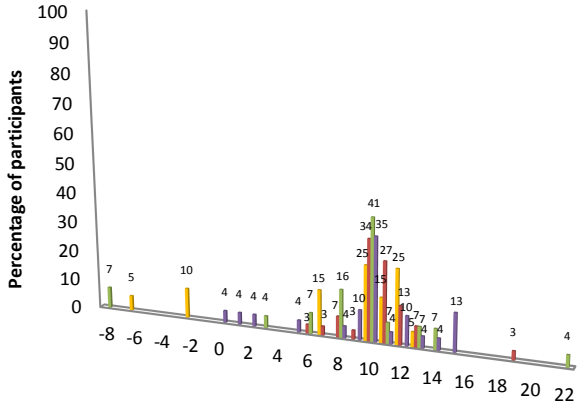
The total mean score for all the participants was 9/22. The total mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 8; 11; 9; 10 respectively. Total performance for this vignette was high, with 90% of the total number of participants (n=100) scoring in the Emerging – Excellent category. As for vignettes 1, 3, 4 and 7, only the occupational therapists and the physiotherapists scored in the Excellent category (3% and 4% respectively). Occupational therapists were the only group not represented in the Unacceptable – Inadequate categories. Audiologists and speech-language therapists were represented almost equally in the Emerging – Established range (85% and 84% respectively). Physiotherapists performed well, with the majority (89%) of their scores falling in the Emerging – Excellent range. There was no statistical difference between the population mean scores (p-value of 0.3013 >0.05), suggesting the acceptance of H_0.

Overall, the lowest score registered, -8, was awarded to 2% of the total number of participants (n=100). This 2% comprised 7% of physiotherapists. The highest score obtained, 22, was awarded to 1% of the total number of participants (n=100). This 1% comprised 4% of the physiotherapists.

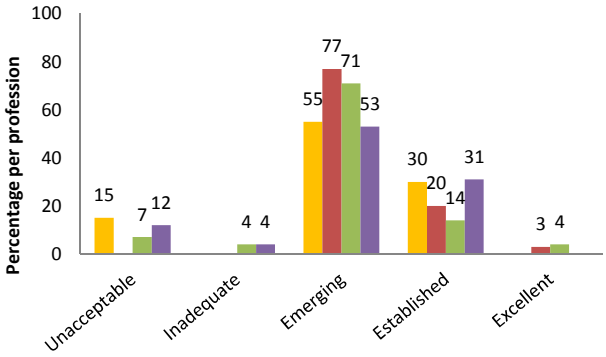
Vignette 8: Target EP/ESS score

Participants (n=100) demonstrated high performance with regard to identifying both the ethical principle and ethical sensitivity skill correctly. Audiologists and occupational therapists performed better than the other two professions in identifying the relevance of Controlling Social Bias (85% and 87% respectively), even though not statistically significant (the ANOVA test returned a p-value of 0.26>0.05, leading to a tendency to accept H_0 and suggesting that the scores of the four professions were the same).

Results (n=100)

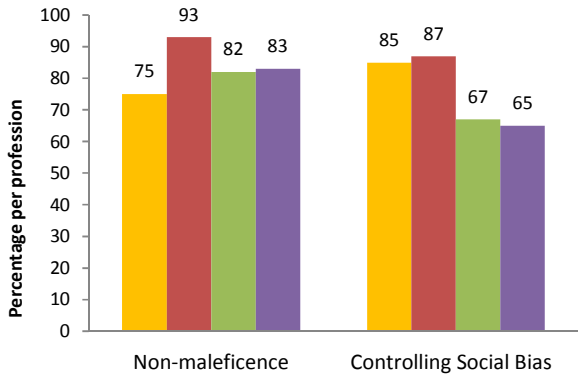


Participants' total score across all 11 categories (n=100)



Participants' performance related to the identifcation of EP and ESS across all 11 categories

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.



Appropriately identified vignette-specific EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.

Discussion

Vignette 9: Total score

Target ethical principle: Justice
Target ethical sensitivity skill: Responding to Diversity

The total mean score for all the participants was 9/22. The total mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 9; 10; 8; 11 respectively. The majority (80%) of participants (n=100) demonstrated Emerging ethical sensitivity, with no participants in the Excellent category. Speech-language therapists were the only group not represented in the Unacceptable – Inadequate category. Although no professional group obtained 100%, in general, high scores (90 – 97%) for principle and slightly poorer (74 – 87%) for the ethical sensitivity skill were reported.

The ANOVA test showed a statistically significant difference between the total population mean score for speech-language therapists and physiotherapists (F =2.8, p = <0.05), rejecting H_0.

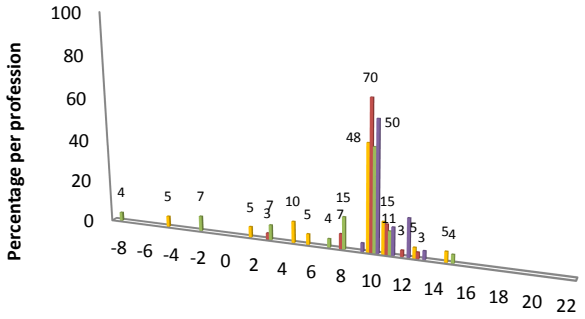
Overall, the highest score obtained was 15. This score was awarded to 2% of the participants (n=100). This 2% comprised 4% of the physiotherapists and 5% of audiologists.

The lowest score registered, -8, was awarded to 1% of the participants (n=100). This 1% comprised 4% of physiotherapists.

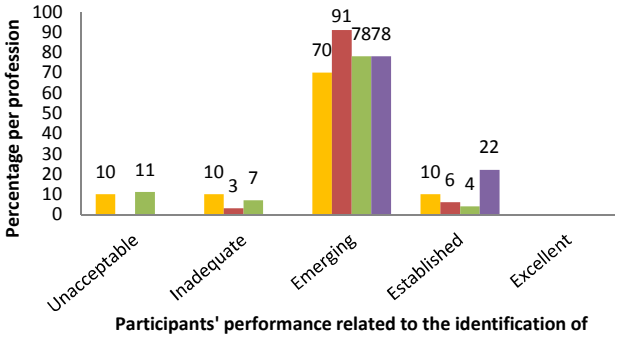
Vignette 9: Target EP/ESS score

Participants (n=100) demonstrated high proficiency in identifying the most relevant ethical principle and sensitivity skill related to this vignette. The ANOVA test returned a p-value of 0.79>0.05, leading to a tendency to accept H_0 and suggesting that the scores of the four professions were the same.

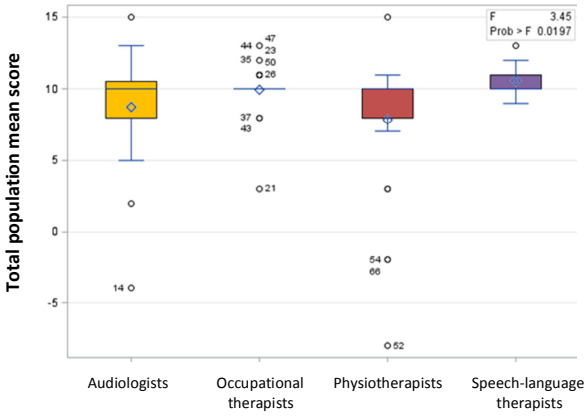
Results (n=100)

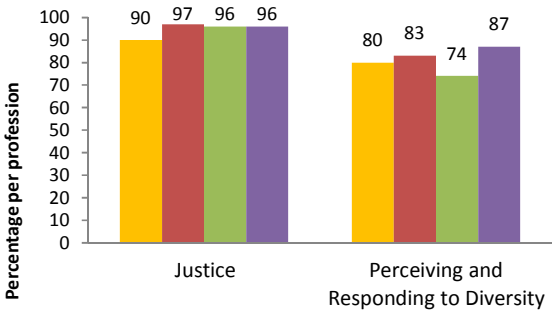


Participants' total score across all 11 categories (n=100)



Participants' performance related to the identification of EP and ESS across all 11 categories





Appropriately identified vignette-specific EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.

Discussion

Vignette 10: Total score

Target ethical principle: Autonomy
Target ethical sensitivity skill: Responding to Diversity

The total mean score for all the participants was 11/22. The total mean score for audiologists, occupational therapists, physiotherapists and speech-language therapists were 11; 11; 11; 10 respectively. The majority (84%) of participants (n=100) demonstrated Emerging skills related to identifying the ethical principle and sensitivity skill targeted in the vignette. Physiotherapists were the only group with 4% of participants in the Excellent category. None of the physiotherapists or audiologists was represented in the Unacceptable – Inadequate categories. Occupational therapists and speech-language therapists obtained a high overall score with 97% and 88% of the group respectively in the Emerging – Established range.

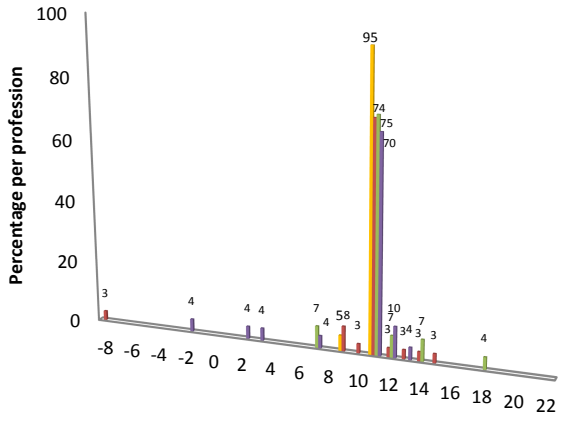
The ANOVA test lead to the tendency to accept the H_0 indicating that there was no statistical significance between the four groups (F=1.31, p= >0.05).

Overall the highest score obtained was 18. This score was awarded to 1% of the total participants (n=100). This 1% comprised 4% of the physiotherapists. The lowest score recorded, -8, was awarded to 1% of the total participants (n=100). This 1% comprised 3% of occupational therapists.

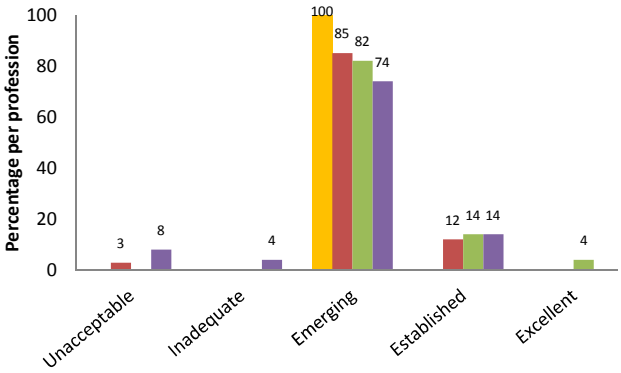
Vignette 10: Target EP/ESS score

Participants demonstrated high-level performance for identifying the most relevant ethical principle and sensitivity skill related to the vignette. The ANOVA test returned a p-value of 0.35>0.05, leading to a tendency to accept H_0 and suggesting that the scores of the four professions were the same. This is in contrast to Vignette 6 in which autonomy was also the main ethical principle of focus, the physiotherapists did exceptionally well in this vignette with 93% of the group accurately identifying autonomy as the target ethical principle.

Results (n=100)

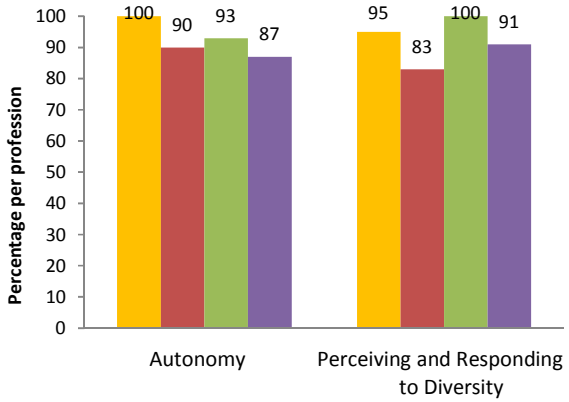


Participants' total score across all 11 categories (n=100)



Participants' performance related to the identification of EP and ESS across all 11 categories

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.



Appropriately identified vignette-specific EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.

Discussion

Vignette 11: Total score

Target ethical principle: Beneficence
Target ethical sensitivity skill: Controlling Social Bias

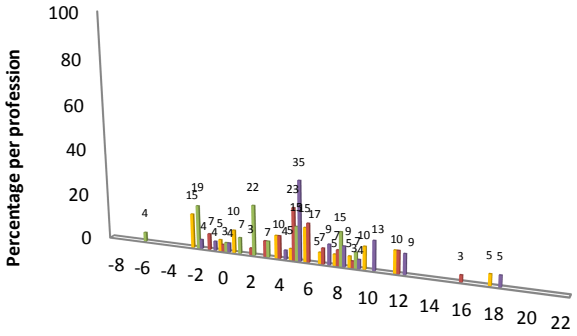
The total mean score for all the participants was 5/22. The total mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 6; 6; 3; 7 respectively. More than half (58%) of the total number of participants (n=100) scored within the Unacceptable – Inadequate categories. Audiologists and speech-language therapists were the only groups represented in the Emerging – Excellent categories (55% and 49% respectively). Occupational therapists were represented by 47% of the group and obtained scores in the Emerging – Established category. Physiotherapists showed the lowest level of skill related to identifying the relevance of ethical principles and sensitivity skills, with no participants in the Established or Excellent group but 22% in the Emerging category. ANOVA showed a statistically significant difference between the total population mean score for speech-language therapists and physiotherapists (F =3.9, p = <0.05), rejecting H_0.

Overall the highest score obtained was 18, awarded to 2% of the total number of participants (n=100). This 2% was made up of 5% of the speech-language therapists and 5% of audiologists. The lowest score recorded,-6, was awarded to 1% of the total number of participants (n=100). This 1% comprised 4% of physiotherapists.

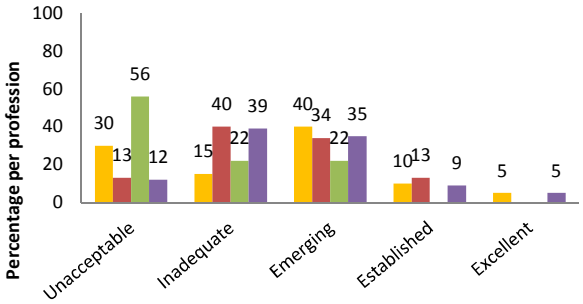
Vignette 11: Target EP/ESS score

All the participants (n=100) struggled to correctly identify Beneficence as the most relevant ethical principle related to the vignette. Occupational therapists and speech-language therapists performed the best in identifying the skill of Controlling Social Bias represented by 80% and 83% of the group respectively. Even though speech-language therapists performed the best with regard to the ethical sensitivity skill, they obtained the lowest score for the ethical principle. The pattern of response scores is similar to that of Vignette 4 where participants performed better in relation to the ethical sensitivity skill compared to the ethical principle. In contrast, participants performed significantly better in identifying the ethical principle in Vignette 3 (Beneficence).

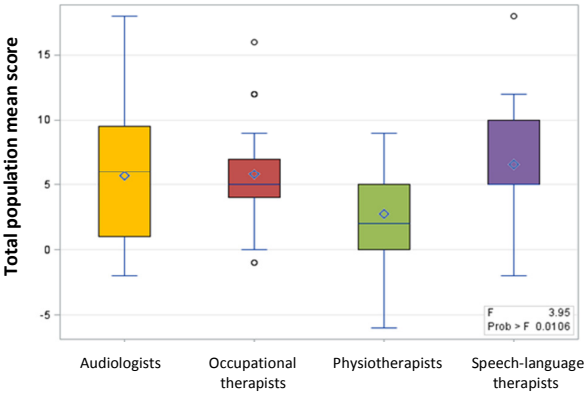
Results (n=100)

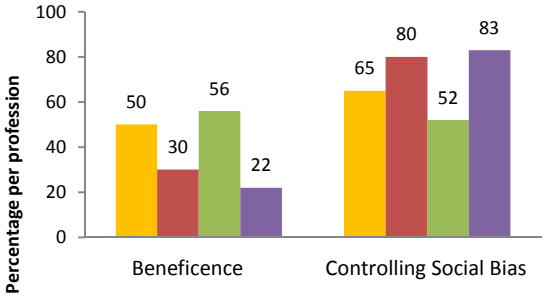


Participants' total score across all 11 categories (n=100)



Participants' performance related to the identification of EP and ESS across all 11 categories





Appropriately identified vignette-specific EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table3 .

Discussion

Vignette 12: Total score

Target ethical principle: Non-maleficence
Target ethical sensitivity skill: Interpreting Ethics in a Situation

The total mean score for the participants was 6/22. The total mean scores for audiologists, occupational therapists, physiotherapists and speech-language therapists were 7; 7; 7; 5 alternatively. More than half (57%) of the total participants (n=100) demonstrated an Emerging level of ethical sensitivity. Physiotherapists were the only group represented in the Excellent category. Their overall score in the Emerging – Excellent range represented 71% of participants in this group. Audiologists' and occupational therapists' overall scores were similar in the Emerging – Established category representing 65% and 67% of the participants in these two groups respectively. Speech-language therapists' highest overall performance only reached the Emerging category, representing 66% of participants in this group.

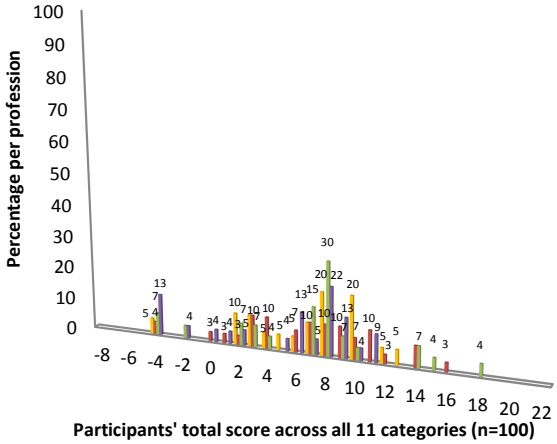
The results of the ANOVA test led to the tendency to accept the H_0 indicating that there was no statistical significant difference between the four groups (F =0.85, p = >0.05).

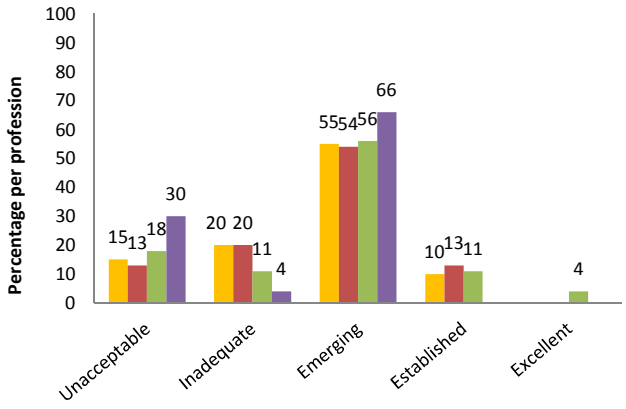
Overall, the lowest score recorded, -4, was awarded to 7% of the total participants (n=100). This 7% comprised all four professions. The highest score, 18, was awarded to 1% of the total number of participants (n=100). This 1% comprised 4% of the physiotherapists.

Vignette 12: Target EP/ESS score

All the participants (n=100) demonstrated average skill in identifying the most relevant ethical principle and sensitivity skill, which was a reflection of the high incidence of participants in the Emerging category. Participants from the different professional groups obtained similar results for the ethical principle of Non-Maleficence. In terms of Interpreting Ethics in a Situation, the occupational therapists performed better than the speech-language therapists with scores of 80% and 52% respectively. This difference was, however, not statistically significant. The ANOVA test returned a p-value of 0.97>0.05, leading to a tendency to accept H_0 and suggesting that the scores of the four professions were the same.

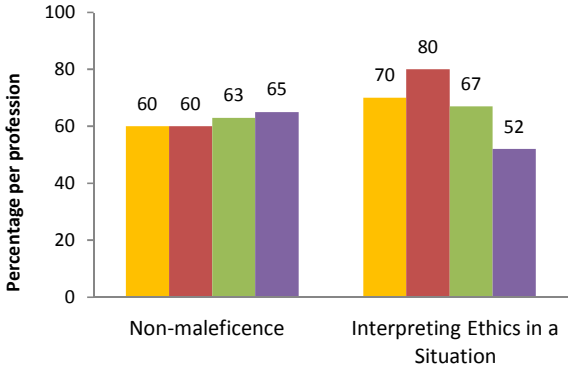
Results (n=100)





Participants' performance related to the identification of EP and ESS across all 11 categories

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.



Appropriately identified vignette-specific EP and ESS

As explained under section 5.4.1, box plots with multiple pairwise comparisons for results that are not statistically significant appear in Appendix I Table 3.

5.4.1.1 Summary

The following main findings emerged from the data analysis related to Vignettes 1 – 12:

- Overall, the four professional groups performed similarly in relation to the MIEST with statistically significant differences in only five of the vignettes (1, 4, 6, 8, 11) on the 5% level of confidence ($p<0.05$).
- Occupational therapy participants performed significantly better than physiotherapy participants in two of the vignettes (1, 4). Both of these vignettes incorporate the ethical sensitivity skill of Perspective Taking.
- Speech-language therapy participants performed significantly better in comparison to physiotherapy participants in three vignettes (6, 8, 11). Vignettes 8 and 11 both target the ethical sensitivity skill of Controlling Social Bias, whilst Vignette 6 targets the ethical sensitivity skill of Effective Communication.
- Overall scores on the MIEST were lowest on Vignette 4 for all four professions, followed by Vignette 12, indicating that participants experienced these two vignettes as the most challenging. The target ethical principle for both Vignettes 4 and 12 is Non-Maleficence.
- The overall scores on the MIEST in relation to all 12 vignettes showed comparable total average scores for audiology participants (7.8), occupational therapy participants (8.9), physiotherapy participants (7.1) and speech-language therapy participants (8.5) respectively.

5.4.2 Effect of ethical principles and ethical sensitivity skills on participant responses

5.4.2.1 Participants' ability to identify the same ethical principle in different vignettes

To determine the number of participants who were able to correctly identify the same ethical principles in three different vignettes, the data was organised into 2x2 contingency tables. The observed and expected frequencies in the contingency tables are provided in Appendix I Table 4.

It is evident from Appendix I, Table 4 that the sample proportions of the correct identification of an ethical principle differ for three of the vignettes, albeit to various degrees. The research question is whether there is a significant difference in the population proportions of the correct identification of an ethical principle at three different vignettes. This was done by testing the two hypotheses below at a 5% level of significance. A comparison was made between the cell chi-square statistic for correct responses and the critical value of ≥3.84.

H_0 *The population proportions of the correct identification of an ethical principle in three relevant vignettes concerned with the specific ethical principle, are the same.*

H_1 *The population proportions of the correct identification of an ethical principle in the three vignettes differ.*

The cell chi-square values were calculated to determine the dependencies between the row and column categories that represent correctly selected ethical principles (Appendix I, Table 4). If the chi-square value was greater than or equal to the critical value, H_0 would be rejected in favour of H_1. The difference between actual data and the expected data was probably too great to be attributed to chance and the researcher could safely conclude that the sample supports the hypothesis of a difference. If the chi-square value had been less than the critical value, the researcher could conclude that the data does not support the hypothesis of a difference, hence rejecting H_1 in favour of H_0.

Table 5.2 is a summary of the 2x2 contingency tables (Appendix H1, Table 6) and shows the frequency of participants who could correctly identify the same target ethical principle represented in different vignettes.

Table 5.2: Participant responses related to the same ethical principles in different vignettes (n=100)

ETHICAL PRINCIPLE (EP)	Correct identification of EP per vignette	Correct identification of EP in all 3 vignettes	Cell chi-square statistic
Autonomy			
Vignette 2	94		
Vignette 10	92		
Vignette 6	58	50	0.02
Beneficence			
Vignette 7	93		
Vignette 3	81		
Vignette 11	39	30	0.06
Non-maleficence			
Vignette 8	84		
Vignette 12	62		
Vignette 4	32	18	0.03
Justice			
Vignette 9	95		
Vignette 5	80		
Vignette 1	78	66	0.01

The cell chi-square values for all the ethical principles in the different vignettes were calculated in relation to the critical value ≥ 3.84 at a 5% level of significance, with one degree of freedom [$\chi^2(0;05;1)$]. Since the value of the test statistic was lower than the critical value of 3.84, H_1 was rejected in favour of H_0 indicating that there was no significant difference between the population proportions for identifying the same ethical principles in different vignettes. The ethical principle of Justice showed the highest correlation between the three vignettes related to this principle.

5.4.2.2 Participants' ability to identify the same ethical sensitivity skill in different vignettes

The same statistics used in 5.4.2.1 was used to determine participants' ability to identify the same ethical sensitivity skill in different vignettes, and the results were presented in a similar way. The research question was whether there is a significant difference in the population proportions of the correct identification of an ethical sensitivity skill at two different vignettes. This was done by testing the following two hypotheses at a 5% level of significance:

H_0 The population proportions of the correct identification of an ethical sensitivity skill in two different vignettes concerned with the specific skill are the same.

H_1 The population proportions of the correct identification of an ethical sensitivity skill in two different vignettes concerned with the specific skill differ.

Table 5.3: Participant responses related to the same ethical sensitivity skills in different vignettes (n=100)

Ethical sensitivity skills (ESS)	Correct ESS per vignette	Correct ESS for both vignettes	Cell chi-square statistic
Emotional Expression Vignette 2 Vignette 7	 98 97	96	0.01
Relating to Others Vignette 2 Vignette 5	 93 79	75	0.03
Diversity Vignette 9 Vignette 10	 81 92	74	0.004
Perspective Taking Vignette 1 Vignette 4	 81 87	70	0.003
Effective Communication Vignette 3 Vignette 6	90 65	59	0.004
Social Bias Vignette 8 Vignette 11	 76 70	52	0.03
Interpreting Ethics Vignette 1 Vignette 12	 63 68	48	0.62

The value of the cell square statistic was lower than the critical value of 3.84, thus H_1 was rejected in favour of H_0 indicating that there is no significant difference between the population proportions for identifying the same ethical sensitivity skill in different vignettes. The ethical sensitivity skill Perspective Taking showed the best correlation between the two vignettes related to this skill.

5.4.2.3 Effect on participants' ability to identify the ethical principle related to the targeted ethical sensitivity skill per vignette

The following hypotheses were tested in a similar way (see descriptions in sections 5.4.2.1 and 5.4.2.2 respectively).

H_0 The population proportions of the correct identification of an ethical principle in relation to ethical sensitivity skills are the same (meaning that it was easy).

H_1 The population proportions of the correct identification of an ethical principle in relation to ethical sensitivity skills differ (meaning that it was more difficult).

Table 5.4: Participants' ability to identify the appropriate ethical principle in relation to their ability to identify the appropriate ethical sensitivity skill (n=100)

Ethical sensitivity skill per vignette	ETHICAL PRINCIPLES				Cell chi-square statistic
	Non-maleficence	Beneficence	Autonomy	Justice	
Emotional Expression					
Vignette 2			94		0.04
Vignette 7		92			0.04
Relating to Others					
Vignette 2			89		0.03
Vignette 5				63	0.00
Diversity					
Vignette 9				80	0.12
Vignette 10			88		0.13
Perspective Taking					
Vignette 1	27			65	0.05
Vignette 4					0.03
Effective Communication					
Vignette 3		80			0.69
Vignette 6			52		**5.42***
Controlling Social Bias					
Vignette 8	69				0.42
Vignette 11		17			**3.89***
Interpreting Ethics					
Vignette 1				58	1.60
Vignette 12	49				1.11

The cell chi-square values for the ethical principle/ethical sensitivity skill combination Social Bias/Beneficence and Effective Communication/Autonomy were higher than the critical value of 3.84, rejecting H_0 in favour of H_1 and indicating that there is a statistically significant difference between the population proportions for identifying these two combinations. The remaining ethical principle/ethical sensitivity skill combinations revealed cell chi-square values <3.84; thus, H_1 was rejected in the favour of H_0, indicating that there is no significant difference between the population proportions for identifying these combinations. The three combinations showing the smallest difference were Autonomy/Relating to Others; Non-maleficence/Perspective Taking and Justice/Relating to Others.

5.4.2.4 Participants' ability to identify one ethical principle in relation to their ability to correctly identify one of the other three ethical principles

Contingency tables were used to present the number of participants who were able to correctly identify one ethical principle in all three vignettes and those who were able to correctly identify the remaining three ethical principles.

H_0 The population proportions of the correct identification of one ethical principle were the same as the population proportions of the correct identification of the remaining three ethical principles.

H_1 The population proportions of the correct identification of one ethical principle were different from the population proportions of the correct identification of the remaining three ethical principles.

Table 5.5: Participant responses related to one ethical principle in relation to the remaining three principles (n=100)

ETHICAL PRINCIPLE	Autonomy	Cell chi-square statistic
Beneficence	17	0.27
Non-maleficence	15	0.82
Justice	41	1.94
	Beneficence	
Non-maleficence	6	0.07
Justice	23	0.52
	Justice	
Non-maleficence	12	1.00

The cell chi-square value for all the ethical principles in relation to each other was <3.84, thus H_1 was rejected in favour of H_0 indicating that there is no significant difference between the population proportions for identifying a specific ethical principle in relation to another ethical principle.

5.4.2.5 Participants' ability to appropriately identify ethical principles in relation to their ability to identify ethical sensitivity skills correctly

Contingency tables were used to present the number of participants who were able to appropriately identify ethical principles in relation to a specific ethical sensitivity skill.

H_0 The population proportions of the appropriate identification of one ethical principle related to a specific ethical sensitivity skill, were the same

H_1 The population proportions of the appropriate identification of one ethical principle related to a specific ethical sensitivity skill, were different

Table 5.6: Participant response related to the ethical principle combined with each ethical sensitivity skill (n=100)

ETHICAL PRINCIPLE/SKILL	Autonomy	Non-maleficence	Justice	Beneficence
Controlling Social Bias Cell chi-square statistic	32 1.38	13 1.42	40 0.94	13 0.43
Communication Cell chi-square statistic	44 **7.13***	12 0.18	45 0.94	18 0.01
Perspective Taking Cell chi-square statistic	38 0.26	13 0.01	51 0.50	21 0
Relating to Others Cell chi-square statistic	37 0.01	14 0.02	53 0.25	25 0.28
Diversity Cell chi-square statistic	44 1.32	12 0.13	48 0.01	21 0.06
Interpreting Ethics Cell chi-square statistic	32 2.67	9 0.02	40 2.19	15 0.03
Emotional Expression Cell chi-square statistic	50 0.08	18 0.03	65 0.04	30 0.05

The cell chi-square values for all four of the ethical principles in relation to all seven of the ethical sensitivity skills were <3.84, thus H_1 was rejected in favour of H_0 indicating that – with one exception – there was no significant difference between the population proportions for identifying a specific ethical principle in relation to a specific ethical sensitivity skill. The exception was a statistically significant difference between Autonomy and Effective Communication.

5.4.2.6 Summary

The participants' ability to identify the same ethical principle represented in three different vignettes was statistically similar, even though it can be noted descriptively that the stability for the ethical principle Justice was the highest and for Beneficence the lowest. Participants' ability to identify one ethical principle correctly did not influence their ability to identify another target ethical principle.

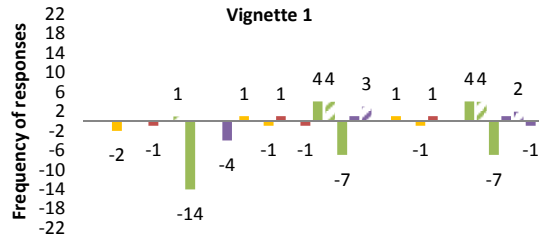
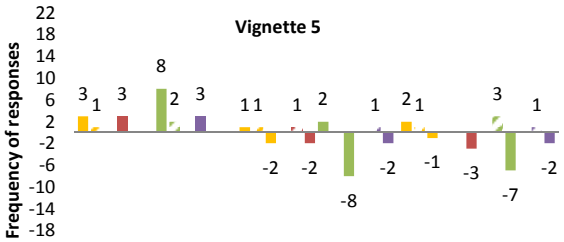
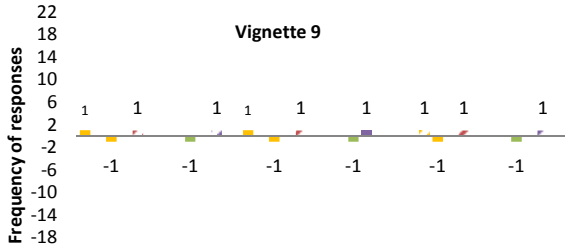
The participants' ability to identify the same ethical sensitivity skill represented in two different vignettes was statistically similar, even though it can be noted descriptively that the stability for the ethical sensitivity skill Perspective Taking was the highest and for Interpreting Ethics in a Situation the lowest.

Participants responded similarly in terms of identifying the target ethical principle and ethical sensitivity skill, except for Vignettes 6 and 11 where there was a significant difference between the ethical principle/ethical sensitivity skill combinations for Social Bias/Beneficence and Effective Communication/Autonomy. The participants' ability to identify the target ethical principle of Autonomy impacted negatively on their ability to identify the target ethical sensitivity skill of Effective Communication.

5.4.3 Ethical flexibility of participants related to the four ethical principles

In a high-pressure world with increasing time constraints, where there is often little or no time to refer to the rules and regulations of the profession, it is not always noticeable whether therapists are ethically sensitive or compliant. In situations where there are clear correct and incorrect responses, compliance with the professional code of conduct could be sufficient to guide the therapist to act accordingly. When ethical dilemmas present themselves, however, situations are more difficult to handle because they present issues where the answer is not always clear or where different options could all seem right. It is often these situations of right versus 'more right' or 'less right' that lead to ethical misconduct. Sensitivity to the relevance of different factors involved in a situation will influence professional action and enable a therapist to select the appropriate option. The use of vignettes to capture ethical principles was thus an attempt to echo these real-life ethical dilemmas. Table 5.7 outlines the responses of the participants, when choosing an alternative option to the appropriate or target principle. The responses are divided into those that were completely inappropriate and those that were possible alternatives as identified during the individual interviews (see Chapter 3). Analysis of error patterns was performed to identify difficulties that participants may have with specific ethical principles, ethical sensitivity skills or combinations thereof. Identifying the type of error allows the researcher to address these problems more efficiently.

Table 5.7: Alternative ethical principles selected by participants

Discussion	Results
	Legend: Aud possible alternative interpretation (+) / Aud appropraite (+) Aud not appropriate (-) / OT possible alternative interpretation (+) OT appropriate (+) / OT not appropriate (-) PT possible alternative interpretation (+) / PT appropriate (+) PT not appropriate (-) / SLT possible alternative interpretation (+) SLT appropriate (+) / SLT not appropriate (-)
TARGET ETHICAL PRINCIPLE: JUSTICE	
Vignettes 1, 5, 9 Although Justice was the target ethical principle, some participants identified Beneficence, Autonomy or Non-Maleficence as alternative options. All three of these principles could be justified as possible options. The answer would be considered 'appropriate' when participants selected 'not applicable', as a 'possible alternative interpretation' when they identified the alternative principle as being absent in the therapist's behaviour, and as 'not appropriate' when they identified it as present in the therapist's behaviour. It should be noted that they were able to select more than one alternative and hence the frequency per profession does not accumulate to the frequency axis. Twenty-two participants (from the total n=100) did not appropriately identify Justice as the target ethical principle in Vignette 1. The 22 participants comprised 2 audiologists, 2 occupational therapists, 15 physiotherapists and 3 speech-language therapists. Twenty participants in Vignette 5 did not appropriately identify Justice as the target ethical principle and comprised 4 audiologists, 3 occupational therapists, 10 physiotherapists and 3 speech-language therapists. Only 5 from the total participants (n=100) identified an alternative ethical principle for Vignette 9. These participants comprised 2 audiologists, 1 occupational therapist, 1 physiotherapist and 1 speech-language therapist. It should be noted that they were able to select more than one alternative and hence the frequency per profession does not accumulate to 5. Physiotherapists were more inclined than the other three professions to select the 'not appropriate' option, with a specific statistical difference between physiotherapists and occupational therapists. Although the number of responses was less than needed for inferential statistics, it appears that Beneficence varied the most in terms of 'possible alternative interpretation' or 'appropriate' and 'not appropriate' options.	 **Distribution of participants' alternative responses per profession (n=22)**  **Distribution of participants' alternative responses per profession (n=20)**  **Distribution of participants' alternative responses per profession (n=5)**

Vignettes 2, 6,10

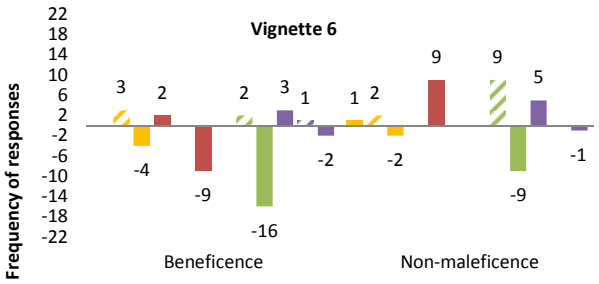
Although Autonomy was the target ethical principle, some participants identified Beneficence, Non-Maleficence or Justice as alternative options. All three of these principles could be motivated as possible options. The answer would be considered 'appropriate' when participants selected 'not applicable', as a 'possible alternative interpretation' when they identified the alternative principle as being absent in the therapist's behaviour, and as 'not appropriate' when they identified it as present in the therapist's behaviour. It should be noted that they were able to select more than one alternative and hence the frequency per profession does not accumulate to the frequency axis.

The 42 participants who did not appropriately identify Autonomy as the target ethical principle for Vignette 6 comprised 7 audiologists, 11 occupational therapists, 18 physiotherapists and 6 speech-language therapists.

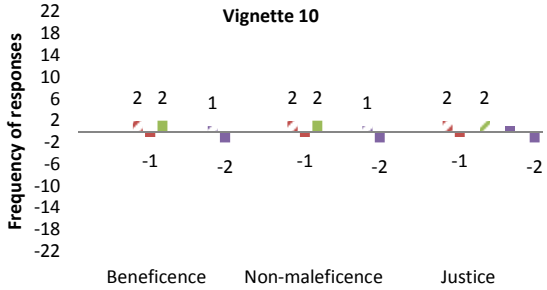
Only 8 from the total participants (n=100) identified an alternative ethical principle for Vignette 10. These participants did not include any audiologists but comprised 4 occupational therapists, 2 physiotherapists and 2 speech-language therapists.

Only 6 from the total participants (n=100) identified an alternative ethical principle for Vignette 2. These participants comprised 2 audiologists, 3 occupational therapists and 1 speech-language therapist, but no physiotherapists.

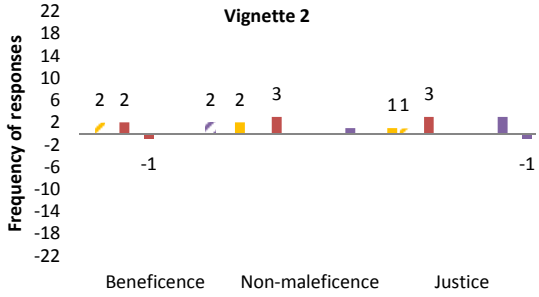
Beneficence was more frequently selected as a 'not appropriate' option, with Justice being the least frequently selected option.



Distribution of participants' alternative responses per profession (n=42)



Distribution of participants' alternative responses per profession (n=8)



Distribution of participants' alternative responses per profession (n=6)

TARGET ETHICAL PRINCIPLE: BENEFICENCE

Vignettes 3, 7, 11

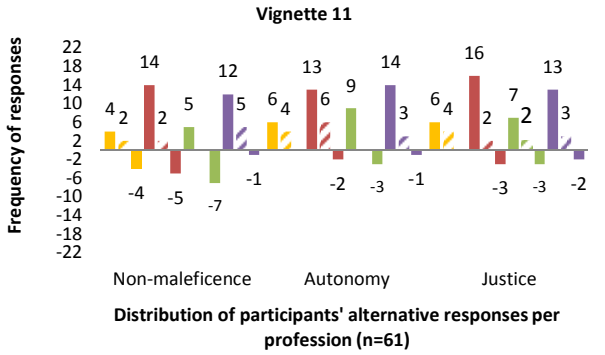
Although Beneficence was the target ethical principle, some participants identified Non-Maleficence, Autonomy or Justice as alternative options. All three of these principles could be justified as possible options. The answer would be considered 'appropriate' when participants selected 'not applicable', as a 'possible alternative interpretation' when they identified the alternative principle as being absent from the therapist's behaviour, and as 'not appropriate' when they identified it as present in the therapist's behaviour. It should be noted that they were able to select more than one alternative and hence the frequency per profession does not accumulate to the frequency axis.

The 61 participants (from the total n=100) who did not appropriately identify Beneficence in Vignette 11 included 10 audiologists, 21 occupational therapists, 12 physiotherapists and 18 speech-language therapists.

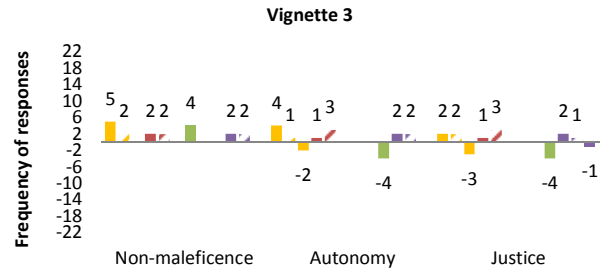
The 19 participants (from the total n=100) in Vignette 3 comprised 7 audiologists, 4 occupational therapists, 4 physiotherapists and 4 speech-language therapists.

Only 7 from the total participants (n=100) identified an alternative ethical principle for Vignette 7. These participants included no audiologists, 4 occupational therapists, 2 physiotherapists and 1 speech-language therapist.

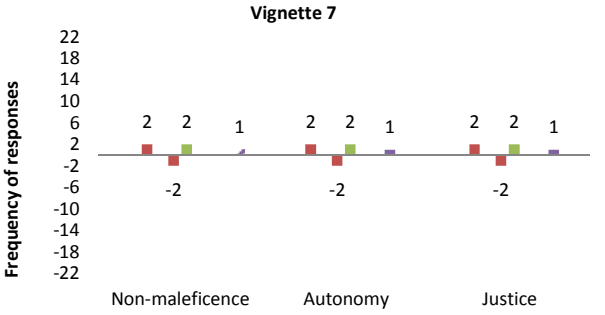
The alternatives identified were distributed evenly across the three options, with 87 responses per alternative option across the 3 vignettes. The options also tended to be more frequently selected as 'appropriate' or 'possible alternative interpretation' (76%), than as 'not appropriate' (24%).



Distribution of participants' alternative responses per profession (n=61)



Distribution of participants' alternative responses per profession (n=19)



Distribution of participants' alternative responses per profession (n=7)

Vignettes 4, 8,12

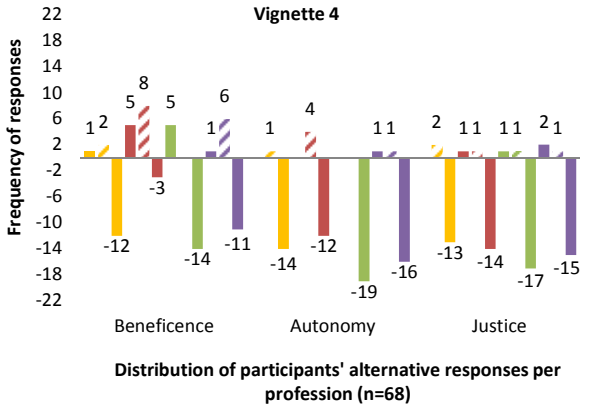
Although Non-Maleficence was the target ethical principle, some participants identified Beneficence, Autonomy or Justice as alternative options. All three of these principles could be motivated as possible options. The answer would be considered 'appropriate' when participants selected 'not applicable', as a 'possible alternative interpretation' when they identified the alternative principle as being absent from the therapist's behaviour and as 'not appropriate' when they identified it as present in the therapist's behaviour. Note again that they were able to select more than one alternative and hence the frequency per profession does not accumulate to the frequency axis.

Sixty-eight participants (from the total n=100) did not appropriately identify Non-maleficence as the target ethical principle in Vignette 4. The 68 participants comprised 15 audiologists, 16 occupational therapists, 19 physiotherapists and 18 speech-language therapists. Since they were able to select more than one alternative, the frequency per profession does not accumulate to 68.

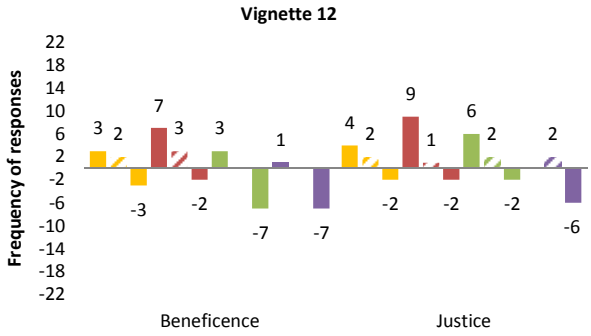
The 38 participants who did not appropriately identify the target ethical principle in Vignette 12 comprised 8 audiologists, 12 occupational therapists, 10 physiotherapists and 8 speech-language therapists.

The 16 participants who did not appropriately identify the target ethical principle in Vignette 8 comprised 5 audiologists, 2 occupational therapists, 5 physiotherapists and 4 speech-language therapists.

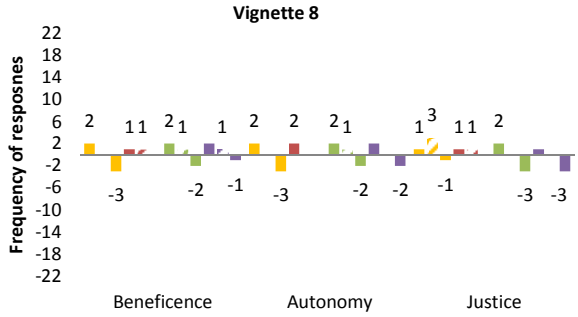
There was an equal distribution of selected answers among the different professionals for the different options. Participants were twice as likely to select a 'not appropriate' than an 'appropriate' or 'possible alternative' interpretation.



Distribution of participants' alternative responses per profession (n=68)



Distribution of participants' alternative responses per profession (n=38)



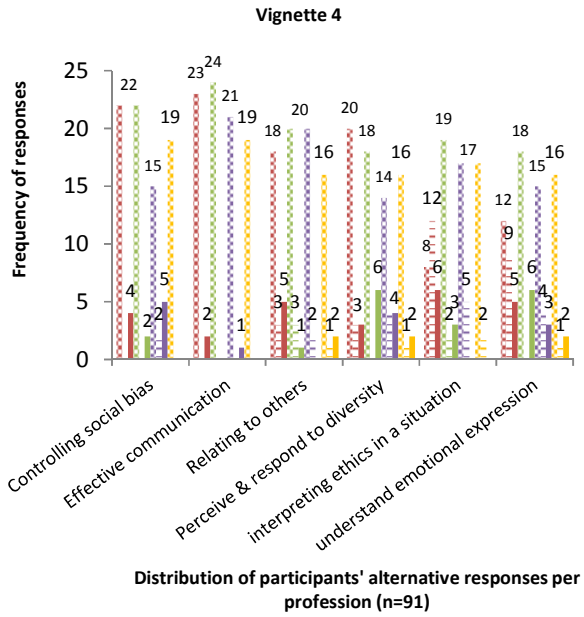
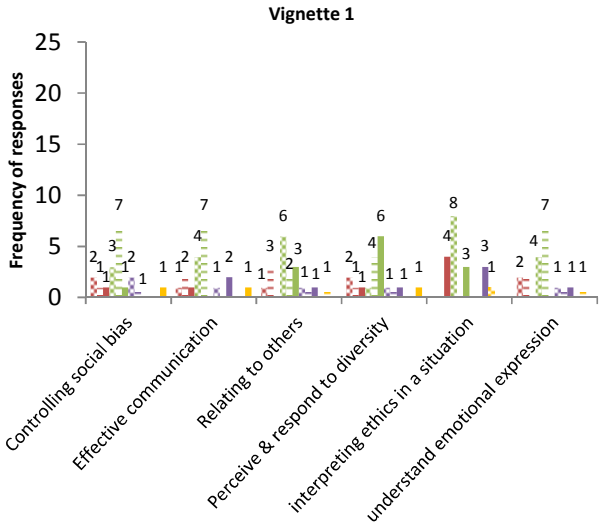
Distribution of participant's alternative responses per profession (n=16)

5.4.3.1 Summary

Overall, the ethical principles Autonomy and Beneficence were replaced with 'appropriate' or 'possible alternative interpretation' options, while Justice and Non-Maleficence were replaced with a 'not appropriate' response. Beneficence was overall the most frequently selected alternative identified by participants, regardless if it was identified as a 'possible alternative interpretation' or 'not appropriate' option. In relation to Justice and Autonomy, Beneficence was the ethical principle that was most often identified as 'not appropriate'. When alternative ethical principles were identified for the target principle of Beneficence, participants selected either an 'appropriate' or 'possible alternative interpretation' and are evenly distributed between Autonomy, Justice and Non-Maleficence. Alternative ethical principles selected in the place of the target ethical principles were distributed among the four professions, except for the ethical principle of Justice, where physiotherapists identified a 'not appropriate' option more frequently than did therapists from the other three disciplines. 'Appropriate' and 'not appropriate' responses were similar for the target ethical principles of Justice and Autonomy. For Beneficence, respondents identified an 'appropriate' alternative (evenly distributed between the three remaining ethical principles) four times more than a 'not appropriate' response. In the case of the target ethical principle Non-Maleficence, respondents were twice as likely to select a 'not appropriate' alternative.

In line with the results discussed earlier in 5.4.3, the alternative responses of participants with regard to ethical sensitivity skills were analysed and the results are next discussed in Table 5.8.

Table 5.8: Alternative ethical sensitivity skills selected by participants

Discussion	Results
	Legend: Aud possible alternative interpretation (+) / Aud appropraite (+) Aud not appropriate (-) / OT possible alternative interpretation (+) OT appropriate (+) / OT not appropriate (-) PT possible alternative interpretation (+) / PT appropriate (+) PT not appropriate (-) / SLT possible alternative interpretation (+) SLT appropriate (+) / SLT not appropriate (-)
TARGET ETHICAL SENSITIVITY SKILL: PERSPECTIVE TAKING	
Vignettes 1, 4 Although Perspective Taking was the target ethical sensitivity skill, some participants selected one or more of the remaining six skills. The participants' responses would be considered 'appropriate' if another ethical sensitivity skill was identified as 'not applicable'; as a 'possible alternative interpretation' if one of the remaining skills were selected as being absent from the therapist's (in vignette) behaviour, and as 'not appropriate' if one of the remaining skills were identified as being present in the therapist's behaviour. It should again be noted that participants were allowed to select more than one alternative, hence the frequency per discipline does not accumulate to the frequency axis. The 91 participants (from the total n=100) who did not appropriately identify Perspective Taking as target ethical sensitivity skill in Vignette 4 comprised 19 audiologists, 26 occupational therapists, 24 physiotherapists and 22 speech-language therapists. Nineteen of the total participants (n=100) did not identify the appropriate ethical sensitivity skill in Vignette 1. The 19 participants comprised 1 audiologist, 4 occupational therapists, 11 physiotherapists and 3 speech-language therapists. Overall, participants who did not identify Perspective Taking as the target skill identified a 'not appropriate' option. The most favourite 'not appropriate' choice was Effective Communication, with Understanding Emotional Expression as the favourite 'possible alternative interpretation' option. Related to Perspective Taking as presented in Vignettes 1 and 4, physiotherapists were most inclined to select the 'not appropriate' option, followed by occupational therapists.	 Distribution of participants' alternative responses per profession (n=91)  Distribution of participants' alternative responses per profession (n=19)

Vignettes 1, 12

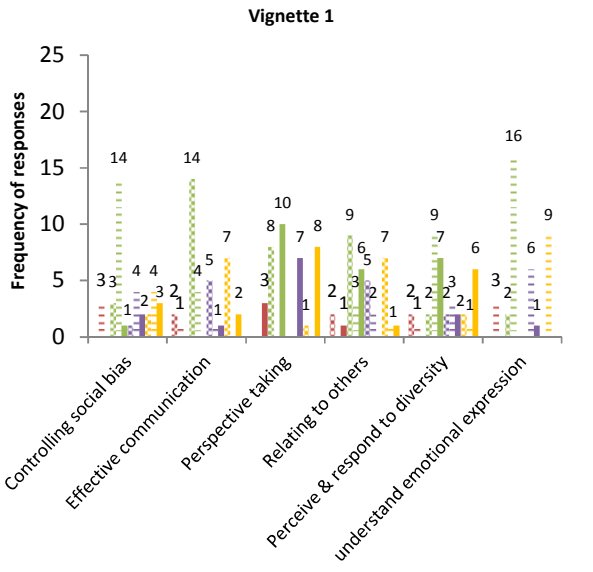
Although Interpreting Ethics in a Situation was the target ethical sensitivity skill, some participants selected one or more of the remaining six ethical sensitivity skills.

The participants' response would be considered 'appropriate' if another ethical sensitivity skill was identified as 'not applicable'; as a 'possible alternative interpretation' if one of the remaining skills were selected as being absent in the therapist's (in vignette) behaviour, and as 'not appropriate' if one of the remaining skills were identified as being present in the therapist's behaviour. Since participants were allowed to select more than one alternative, the frequency per discipline does not accumulate to the frequency axis.

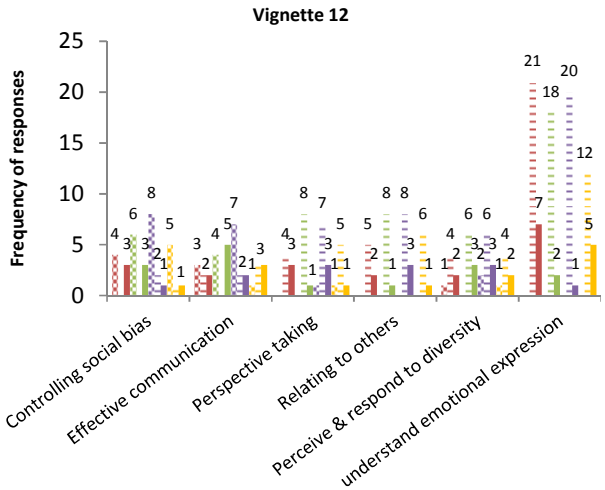
The 37 participants (from the total n=100) who did not appropriately identify the target ethical sensitivity skill Interpreting Ethics in a Situation in Vignette 1 comprised 9 audiologists, 3 occupational therapists, 18 physiotherapists and 7 speech-language therapists.

The 32 from the total participants (n=100) who did not appropriately identify the target ethical sensitivity skill in Vignette 12 comprised 6 audiologists, 6 occupational therapists, 9 physiotherapists and 11 speech-language therapists.

Overall, participants who did not identify Interpreting Ethics in a Situation as the target ethical sensitivity skill identified the 'possible alternative interpretation' option. The 'not appropriate' response that participants selected most frequently was Effective Communication, with Understanding Emotional Expression being selected most frequently as a 'possible alternative interpretation' option. Related to Interpreting Ethics in a Situation as presented in Vignettes 1 and 12, physiotherapists were most inclined to select the 'not appropriate' option, followed by speech-language therapists.



Distribution of participants' alternative responses per profession (n=37)



Distribution of participants' alternative responses per profession (n=32)

Vignettes 2, 5

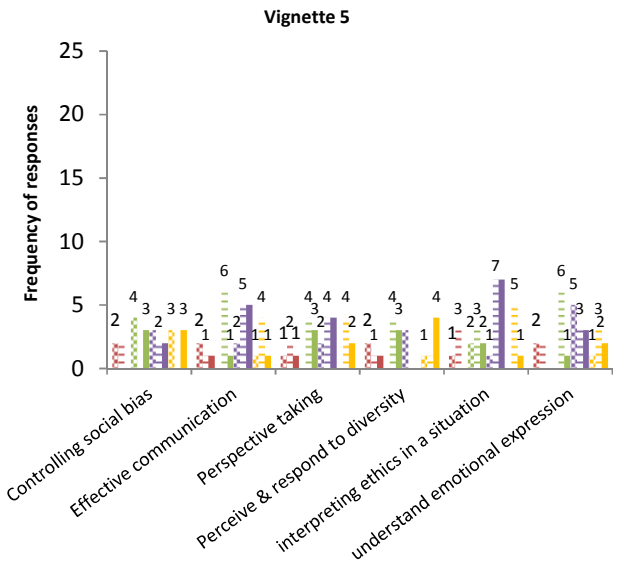
Although Relating to Others was the target ethical sensitivity skill, some participants selected one or more of the remaining six ethical sensitivity skills.

The participants' response would be considered 'appropriate' if another ethical sensitivity skill was identified as 'not applicable'; as a 'possible alternative interpretation' if one of the remaining skills were selected as being absent from the therapist's (in vignette) behaviour, and as 'not appropriate' if one of the remaining skills were identified as being present in the therapist's behaviour. Participants were allowed to select more than one alternative, hence the frequency per discipline does not accumulate to the frequency axis.

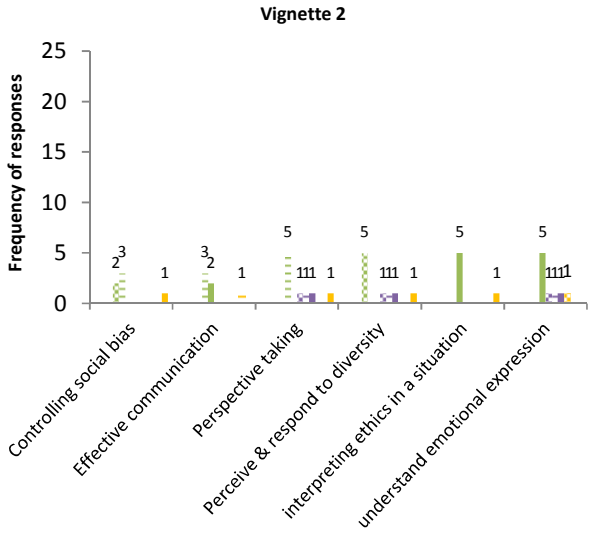
The 25 participants (from the total n=100) who did not appropriately identify the ethical sensitivity skill Relating to Others in Vignette 5 comprised 4 audiologists, 4 occupational therapists, 8 physiotherapists and 9 speech-language therapists.

Only 7 participants (from the total n=100) identified one of the remaining six ethical sensitivity skills for Vignette 2. These participants comprised 1 audiologist, 5 physiotherapists and 1 speech-language therapist. Related to all 12 vignettes that represented a total of seven target ethical principles (each twice), the largest number of participants selected the target skill of Relating to Others.

Overall, participants who did not identify Relating to Others as the target ethical sensitivity skill, identified a 'possible alternative interpretation' option. The most frequently selected 'not appropriate' option among participants was for Controlling Social Bias, with Perspective Taking selected most frequently as the 'possible alternative interpretation' option. In terms of relating to others as presented in Vignettes 2 and 5, physiotherapists were most inclined to select the 'not appropriate' option, followed by speech-language therapists.



Distribution of participants' alternative responses per profession (n=25)



Distribution of participants' alternative responses per profession (n=7)

Vignettes 2, 7

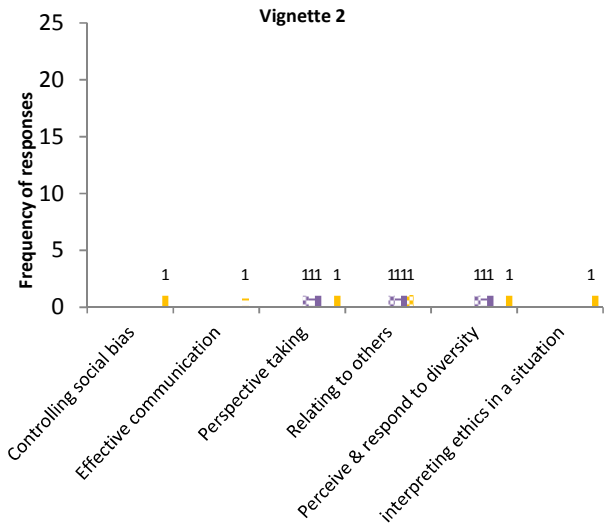
Although Emotional Expression was the target ethical sensitivity skill, some participants selected one or more of the remaining six ethical sensitivity skills.

The participants' response would be considered 'appropriate' if another ethical sensitivity skill was identified as 'not applicable'; as a 'possible alternative interpretation' if one of the remaining skills were selected as being absent from the therapist's (in vignette) behaviour, and as 'not appropriate' if one of the remaining skills were identified as being present in the therapist's behaviour. Note again that participants were allowed to select more than one alternative, hence the frequency per discipline does not accumulate to the frequency axis.

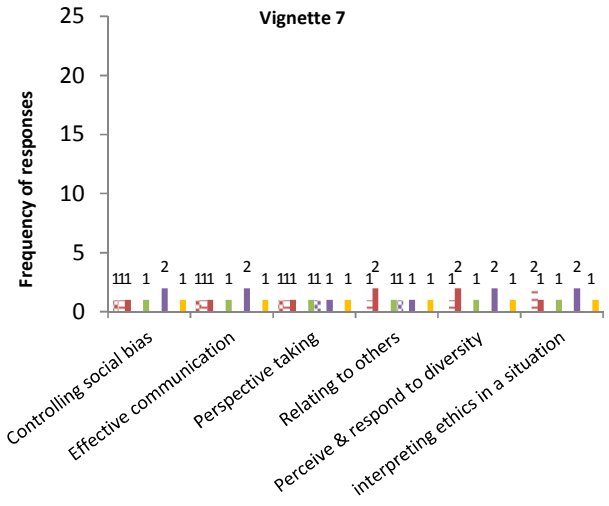
Only 8 of the participants (from the total n=100) identified one of the remaining six ethical sensitivity skills for Vignette 2. The participants comprised 4 audiologists and 4 speech-language therapists.

Only 6 of the participants (from the total n=100) identified one of the remaining six ethical sensitivity skills for Vignette 7. These participants comprised 1 audiologist, 2 occupational therapists, 1 physiotherapist and 2 speech-language therapists.

Overall, participants who did not identify Emotional Expression as the target ethical sensitivity skill identified an 'appropriate' alternative. Due to the small numbers represented in each group no further statistical comparisons were possible.



Distribution of participants' alternative responses per profession (n=8)



Distribution of participants' alternative responses per profession (n=6)

Vignettes 3, 6

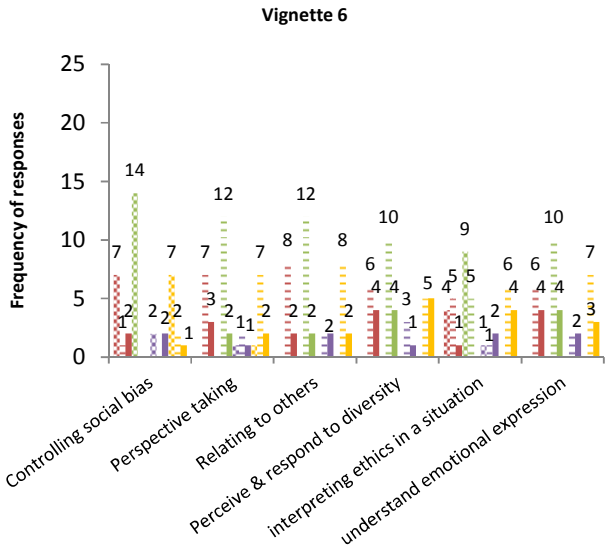
Although Effective Communication was the target ethical sensitivity skill, some participants selected one or more of the remaining six ethical sensitivity skills.

The participants' response would be considered 'appropriate' if another ethical sensitivity skill was identified as 'not applicable'; as a 'possible alternative interpretation' if one of the remaining skills were selected as being absent in the therapist's (in vignette) behaviour, and as 'not appropriate' if one of the remaining skills were identified as being present in the therapist's behaviour. Since participants were allowed to select more than one alternative, the frequency per discipline does not accumulate to the frequency axis.

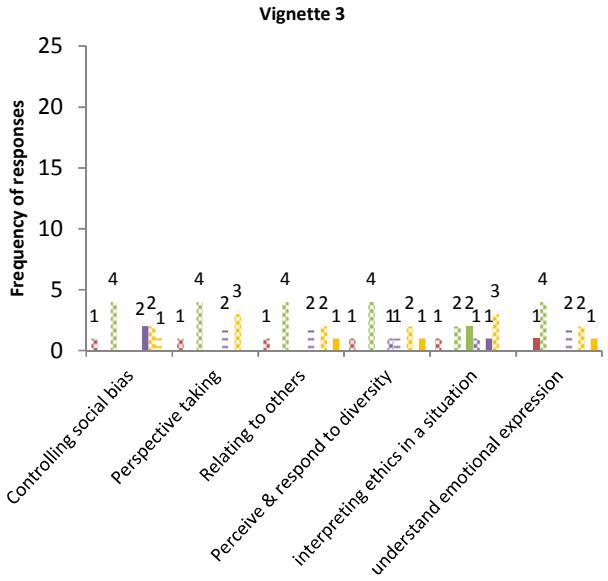
The 38 from the total participants (n=100) who did not appropriately identify the target ethical sensitivity skill Effective Communication in Vignette 6 comprised 8 audiologists, 8 occupational therapists, 16 physiotherapists and 6 speech-language therapists.

Only 10 from the total participants (n=100) identified one of the remaining six ethical sensitivity skills for Vignette 3. The participants included 1 occupational therapist, 3 audiologists, 4 physiotherapists and 2 speech-language therapists.

Overall, most of the participants who did not identify Effective Communication as the target ethical sensitivity skill identified a 'possible alternative interpretation' option. The most frequently selected 'not appropriate' option among participants was Controlling Social Bias, with Relating to Others as the most frequently 'possible alternative interpretation' option. Physiotherapists were most inclined to select the 'not appropriate' option, followed by audiologists. As shown in Table 5.4, participants experienced greater difficulty in identifying Effective Communication in combination with Autonomy as the target principle than when Beneficence was the target principle. This difference was statistically significant (cell chi-square statistic 5.41>critical value 3.89).



Distribution of participants' alternative responses per profession (n=38)



Distribution of participants' alternative responses per profession (n=10)

Vignettes 8, 11

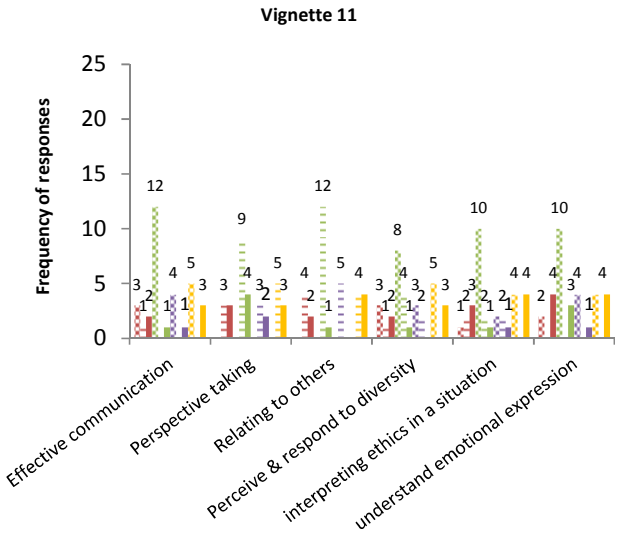
Although Controlling Social Bias was the target ethical sensitivity skill, some participants selected one or more of the remaining six ethical sensitivity skills.

The participants' response would be considered 'appropriate' if another ethical sensitivity skill was identified as 'not applicable'; as a 'possible alternative interpretation' if one of the remaining skills were selected as being absent in the therapist's (in vignette) behaviour, and as 'not appropriate' if one of the remaining skills were identified as being present in the therapist's behaviour. Since participants were allowed to select more than one alternative, the frequency per discipline does not accumulate to the frequency axis.

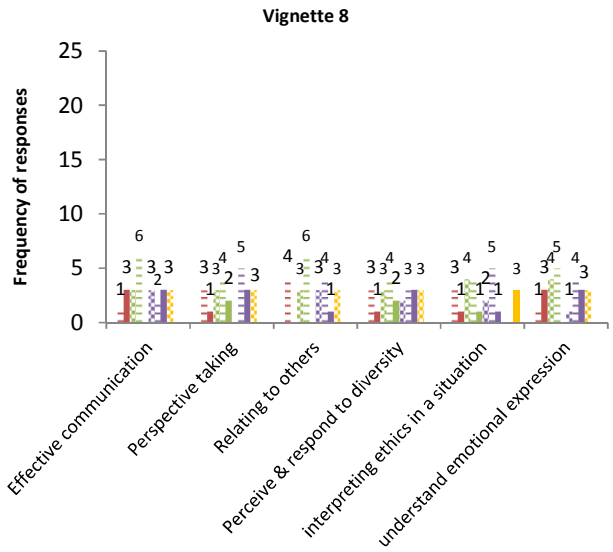
The 32 from the total participants (n=100) who did not appropriately identify the ethical sensitivity skill Controlling Social Bias in Vignette 11 comprised 8 audiologists, 6 occupational therapists, 13 physiotherapists and 5 speech-language therapists.

Nineteen of the total participants (n=100) identified one of the remaining six ethical sensitivity skills for Vignette 8. The participants comprised 3 audiologists, 4 occupational therapists, 5 physiotherapists and 7 speech-language therapists.

Overall, participants who did not identify Controlling Social Bias as the target ethical sensitivity skill identified a 'not appropriate' option. The most frequent 'not appropriate' option among participants was Effective Communication, with Understanding Emotional Expression as the most frequently selected 'possible alternative interpretation' option. Speech-language therapists most frequently selected the 'not appropriate' option.



Distribution of participants' alternative responses per profession (n=32)



Distribution of participant's alternative responses per profession (n=19)

Vignette 9, 10

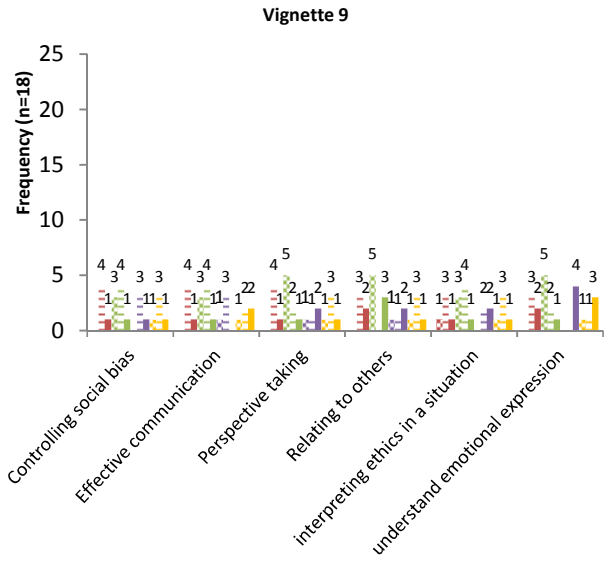
Although Perceiving and Responding to Diversity was the target ethical sensitivity skill, some participants selected one or more of the remaining six ethical sensitivity skills.

The participants' response would be considered 'appropriate' if another ethical sensitivity skill was identified as 'not applicable'; as a 'possible alternative interpretation' if one of the remaining skills were selected as being absent from the therapist's (in vignette) behaviour, and as 'not appropriate' if one of the remaining skills were identified as being present in the therapist's behaviour. Since participants were allowed to select more than one alternative, the frequency per discipline does not accumulate to the frequency axis.

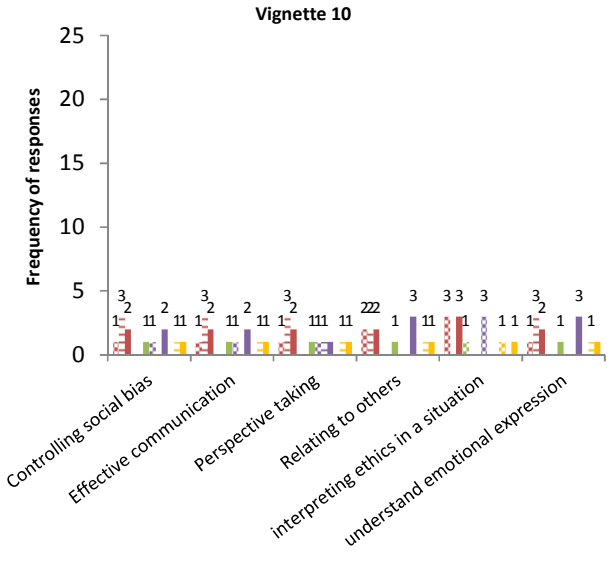
Eighteen of the total participants (n=100) identified one of the remaining six ethical sensitivity skills for Vignette 9. The participants comprised 4 audiologists, 2 occupational therapists, 8 physiotherapists and 4 speech-language therapists.

Only 12 of the total participants (n=100) identified one of the remaining six ethical sensitivity skills for Vignette 10. The participants included 2 audiologists, 4 occupational therapists, 1 physiotherapist and 5 speech-language therapists.

Overall, participants who did not identify Perceiving and Responding to Diversity as the target ethical sensitivity skill selected an 'appropriate' option, followed by the 'possible alternative interpretation' option. The most frequently selected 'not appropriate' option among participants was Interpreting Ethics in a Situation, with Understanding Emotional Expression as the most frequently selected 'possible alternative interpretation' option. Physiotherapists were most inclined to select the 'inappropriate' option, followed by occupational therapists.



Distribution of participants' alternative responses per profession (n=18)



Distribution of participants' alternative responses per profession (n=12)

5.4.3.2 Summary

Participants who did not identify the two target ethical sensitivity skills, namely Perspective Taking and Controlling Social Bias, were more inclined to select a 'not appropriate' option as a response. The 'not appropriate' option selected most often in lieu of Perspective Taking and Controlling Social Bias was Effective Communication, with Understanding Emotional Expression the choice option for a possible alternative. Physiotherapist and occupational therapists were more likely to replace the target of Perspective Taking with inappropriate/irrelevant options. Speech-language therapists and physiotherapists were more inclined to replace the target of Controlling Social Bias with inappropriate/irrelevant options.

Participants who did not identify the target ethical sensitivity skills, Interpreting Ethics in a Situation, Relating to Others, Understanding Emotional Expression and Effective Communication, were more inclined to select a possible option as a response. The most frequently selected 'possible alternative interpretation' option with Interpreting Ethics in a Situation as the target ethical sensitivity skill was Understanding Emotional Expression, and inappropriate response Effective Communication. The most frequently selected 'possible alternative interpretation' choice with Relating to Others as the target ethical sensitivity skill was Perspective Taking, and 'not appropriate' response Controlling Social Bias. The most frequently selected 'possible alternative interpretation' with effective communication as the target ethical sensitivity skill was Relating to Others. Physiotherapists and occupational therapists were more likely to replace the target of Perspective Taking with 'not appropriate' options. Speech-language therapists and physiotherapists were more inclined to replace the target of Controlling Social Bias with 'not appropriate' options.

5.4.4 Time that participants spent on completing the MIEST

Audiology participants, on average, took the shortest length of time (20 minutes on average with a range of 15 to 27 minutes) to complete Vignettes 1 to 12, compared to speech-language therapy participants (25 minutes on average with a range of 18 to 35 minutes), occupational therapy participants (34 minutes on average with a range of 27 to 42 minutes) and physiotherapy participants (39 minutes on average with a range of 20 to 48 minutes).

H_0 The average time to complete Vignettes 1-12 is the same across the four professions.

H_1 The average time to complete Vignettes 1-12 differs across the four professions.

An analysis of variance showed that some or all of the inter-group completion times for the four professions led to the rejection of H_0 in favour of H_1 indicating a significant difference (p <0.0001) between the times to completion. To determine in which specific professions the participants' test completion scores were statistically significant different from each other, further testing was conducted. Post hoc analyses using the Scheffé post hoc criterion for significance (alpha = 0.05) indicated that there was a statistically significant difference among all the groups F >4.6, p = <0.05.

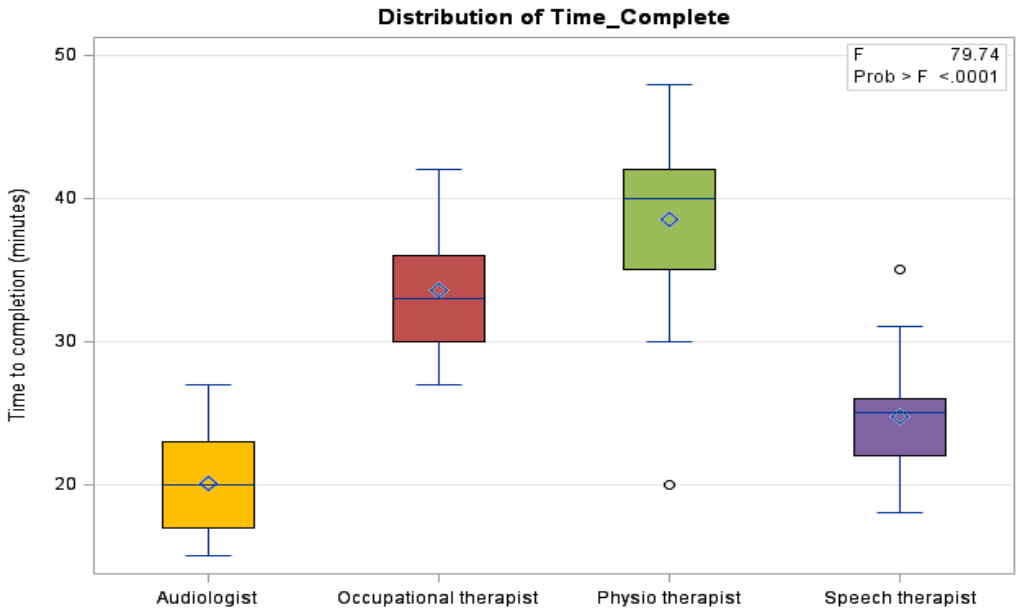


Figure 5.2: Box plot representing the distribution of time taken to complete MIEST

5.4.4.1 Summary

With regard to the time it took participants to complete the MIEST, the time measurements for all four professions represented in the study differed significantly from one another. Physiotherapy participants took the longest time to complete the measuring instrument, while audiology participants completed the MIEST in the shortest time. Only the physiotherapy and speech-language therapy participants had one outlier each in as far as the group average was concerned.

5.5 SUMMARY

The research question was addressed by investigating participants' ethical sensitivity in terms of ethical principles as well as ethical sensitivity skills. Overall, the four professional groups performed similarly in relation to the MIEST with statistically significant differences in only five of the vignettes (1, 4, 6, 8, 11) on the 5% level of confidence ($p<0.05$). Overall scores on the MIEST were lowest, for all four professions, concerning the target ethical principle Non-Maleficence (Vignette 4, 12). The participants' ability to identify the same ethical principle as well as ethical sensitivity skill represented in different vignettes was statistically similar. Beneficence was overall the most frequently selected alternative identified by participants. The completion time on the MIEST, for all four professions represented in the study, differed significantly from one another. On average, physiotherapy participants had the longest completion times, while audiology participants completed the MIEST in the shortest time. Discussion and integration of the results presented in this chapter is described in Chapter 6.

Chapter 6
Discussion of results

6.1 INTRODUCTION

This research is based on the premise that ethical sensitivity can be taught and that the development of this skill can be measured. A measuring instrument for ethical sensitivity may provide insights into the readiness of therapists to engage in ethical decision making in clinical practice. In line with the aims of the study it is important to consider the question: "What has the current study contributed to the body of existing knowledge about ethical sensitivity in the therapeutic sciences?"

The purpose of this chapter, therefore, is to discuss and integrate the results of the current study so as to answer the stated question. Ethical sensitivity as measured with the MIEST is discussed in relation to the relevant literature. The discussion focuses on the two components central to ethical sensitivity, namely ethical principles and ethical sensitivity skills.

6.2 SHORT SUMMARY OF MAIN RESULTS

Table 6.1 presents a short synopsis of the most significant findings that emerged from the data analysis and synthesis as described in Chapter 5.

Table 6.1: Significant findings related to implementation of the MIEST

Ethical sensitivity (MIEST)	Ethical principles	Ethical sensitivity skills
• Significant difference on completion time for all four professions (physiotherapy participants longest; audiology participants shortest). • Expected level of performance based on level of difficulty differed between students and qualified therapists. • Average score of all participants ≥70%. • Physiotherapy participants	• No order effect related to the vignettes and participant performance. • Sensitivity for one principle did not correlate with participants' sensitivity for other principles. • For all participants, overall scores on the MIEST were lowest on two of the vignettes targeting the principle Non-Maleficence. • The stability for the principle Justice was the highest.	• In relation to physiotherapy participants, occupational therapy participants displayed significantly higher sensitivity related to the target skill Perspective Taking. • Occupational therapy participants showed the highest consistency as well as sensitivity towards the target skill Controlling Social Bias. • In relation to physiotherapy participants, speech-language therapy participants

Ethical sensitivity (MIEST)	Ethical principles	Ethical sensitivity skills
displayed similar levels of insight for both ethical principles and ethical sensitivity skills, as described in relation to their selected MIEST responses. • A significant difference was noted between the ethical principle/ethical sensitivity skill combinations for Beneficence/Social Bias and Autonomy/Effective Communication. • Participants were less likely to identify the target ethical sensitivity skill, namely Effective Communication, when occurring in conjunction with the target ethical principle Autonomy.	• The principles Autonomy and Beneficence were substituted with 'appropriate' or 'possible alternative interpretation' options, while Justice and Non-Maleficence were more frequently substituted with a 'not appropriate' response. • Beneficence was overall the most frequently selected alternative in lieu of the target principle and was substituted with a 'possible alternative interpretation' option four times more than a 'not appropriate' response. • The target principle Non-Maleficence was twice as frequently substituted with a 'not appropriate' alternative.	displayed significantly higher levels of sensitivity related to the ability to identify disability bias. • The stability for the skill Perspective Taking was the highest. • The two target skills, Perspective Taking and Controlling Social Bias, were most frequently substituted with the skill Effective Communication. • The target skills, Interpreting Ethics in a Situation, Relating to Others, Understanding Emotional Expression and Effective Communication, were more frequently substituted with a 'possible alternative interpretation' option.

6.3 ETHICAL SENSITIVITY

A primary objective of this research was to construct and subsequently apply an instrument for measuring ethical sensitivity in the context of the therapeutic sciences. Participants' overall scores on the MIEST were comparable for audiologists, occupational therapists, physiotherapists and speech-language therapists, confirming the multidisciplinary usability of the MIEST. One area of specific interest with regard to the overall scores of participants is the negative correlation related to participant ethical sensitivity as recorded on the MIEST and the time recorded to complete the 12 vignettes.

Participants who spent a smaller but adequate amount of time on completing the 12 vignettes displayed higher overall scores, which suggest that additional time spent on analysing the vignettes does not increase ethical sensitivity as measured by the MIEST. All the participants completed the MIEST within the expected 24 to 60 minutes as described in Section 4.5.2. Audiology, occupational therapy and speech-language therapy participants all completed the MIEST in less than 45 minutes. The participants who did not complete the MIEST within the 45-minute limit all came from the physiotherapy group, and on average obtained the lowest MIEST scores. Three

possible explanations for the phenomenon of obtaining higher MIEST scores with shortened completion times were found in the published literature, and they relate to personality type, decision-making preference and processing speed.

Roger Dawson, author of several training programmes, presents 'Left Brain/Right Brain' as one way of evaluating four personality types in relation to decision making (Dawson, 1993). According to Dawson, the amiable personality wants everyone to be comfortable and happy, and therefore avoids conflict (including whistle blowing) and values the autonomy of the client (individualistic culture)[4] above beneficence related to the community (collectivistic culture). The amiable personality also has a long attention span and makes decisions more slowly and typically based on emotion. Hence, this would result in therapists rather aligning their behaviour with ethical sensitivity skills than with ethical principles. For example, if a therapist takes the perspective of the client, he/she may, out of compassion, be more inclined to 'bend the rules' to accommodate special requests presented by the client. This may also have been true for participants in the study who were upset with the behaviour of the therapists in the vignettes, as they seemed to identify emotionally with the client when observing their verbal comments, e.g. 'What was she thinking?' Both examples (avoiding conflict and emotional decision making) could potentially explain the relationships between extended completion times and a lower overall score on the MIEST.

With regard to individual preferences for decision making, the Myers-Briggs Type Inventory (MBTI – scale 4) distinguishes between individuals with a judging preference and those with a perceiving preference (Kennedy, 2002). Individuals with a preference for perceiving are naturally curious and described as having questioning minds, which is often typically characteristic of individuals selected as part of the degree programmes for the therapeutic sciences. The emphasis that South African universities place on selection criteria and the selection process of potential therapists results from the high volume of annual applications for entry into one of the therapy programmes. Potential candidates are evaluated against academic and non-academic criteria in terms of the perceived likelihood of their academic achievement

[4] Refer to Section 6.3.3.2 for an explanation of Individualistic and collectivistic culture

and subsequently success as effective therapists. The selection process is likely to result in students with similar strengths and attributes to be accepted into one of the therapeutic science degree programmes.

Individuals with a perceiving preference can be extremely patient and open to reconsideration of decision. They need time for thought and can be perceived as indecisive (Kennedy, 2002), possibly explaining the fact that 74% of physiotherapy participants changed some of their initial answers. With regard to the changing of initial responses, a study by Takeda (2007) suggested a correlation between longer time taken and the loss of score. In the conclusion of Takeda's study, it is also mentioned that students who reviewed and then changed their answers (responses) naturally take longer to complete an assessment. That study also suggests that the old saying of 'go with your first instinctive response', may hold true. The results of this study are in line with the results of Takeda's study. Participants who changed their initial answers recorded longer completion times and obtained decreased overall MIEST scores.

A third possible explanation is that processing speed could have impacted on the results. Processing speed is sensitive to, among other factors, motivation and emotion (Butnik, 2013). Physiotherapists were eager to assist the researcher and expressed a keen interest in the topic of the study, as well as in the importance of giving good, reliable results. This could have led to performance anxiety or an inclination towards perfectionism that lowered their processing speed and increased the time spent on the MIEST (McPherson, 2000). Negative emotions, for example feeling shocked or upset by the unethical behaviour of the therapist in the vignettes, can also impede processing speed and interfere with an individual's ability to concentrate on all the facts (Butnik, 2013).

In view of the factors offered as possible explanations for differing recording times, which affected the MIEST scores, the reader is encouraged to also consider the results of the study in relation to individual preferences for decision making and not necessarily in relation to a therapy group. Even though the results discussed are based on the average completion times of the participants, each of the four therapy

groups in the study displayed a range of completion times, suggesting a variety of decision-making preferences among individual therapists.

Another interesting finding relates to participant scores for individual vignettes. Ethical sensitivity of the participants did not all correlate with the suggested difficulty levels obtained from the individual interviews with experts in the field. Experts considered two vignettes as easy, but the participants performed poorly on them. Sparks and Hunt (1998) offer a possible explanation for this by pointing out that ethical sensitivity is a skill, developed through learning and socialisation, in a particular sphere of life. Although the students participating in this study had recently completed their training in ethics, this exposure could have been insufficient to raise their awareness of the ethical issues involved in these two cases (Vignettes 4 and 8). Both vignettes targeted the ethical principle of Non-Maleficence, including both ethical and legal implications. The two vignettes also depicted the therapist as someone trying to do good and assuming the perspective of the client. This is essential information for developing ethical sensitivity in the therapeutic sciences as it emphasises the importance of realising that even though Beneficence is a central principle in the therapeutic sciences (and often the principle over-emphasised in ethics training), it must always be balanced by considering the principle of Non-Maleficence (Figure 3.3). Blindly following the principle of Beneficence could result in unethical (or unlawful) practice, even if unintentional.

In contrast to Vignettes 4 and 8, participants performed well on two vignettes that the experts classified as difficult. These two (Vignettes 6 and 10) clearly showed aspects of Beneficence as well as Confidentiality, with the target principle being Autonomy. The students who participated probably found it easy as these vignettes could be related to an ethics of care (Agarwal & Malloy, 2002). The additional focus in all the therapeutic science professions on instructing students with regard to Autonomy would also make participants more sensitive to violations of Autonomy. Both Beneficence and Autonomy are considered to be fundamental principles of ethics (Beauchamp & Childress, 2008). Emotional aspects related to clinical practice, for example the therapist's feelings concerning clients who are uninvolved in the therapy process, or building relationships with the family of the client, are probably more foreign to students, whilst this emotion inhibits the ethical sensitivity of experienced

therapists. Therapists have to put their own bias and personal feelings aside, which complicates the ethical implications in the vignette. Reflection and discussion of these types of vignettes as part of continued professional development will increase therapists' sensitivity to the ethical dimensions often masked by emotion.

All four therapy groups complied with the sub-minimum for ethics performance (70%) as defined by the HPCSA (2009). This consistency permits more reliable comparison of outcomes across the four professions. Comparable scores also suggest that the MIEST is a suitable tool for all four professions represented by the therapeutic sciences, suggesting that ethical sensitivity (as a multidisciplinary concept) can be evaluated with the use of a single measuring instrument. The overall performance of audiology and speech-language therapy participants on the MIEST was the most alike. This is probably due to the students being exposed to shared lectures, clinical climate and philosophy in this specific context. Physiotherapy participants displayed the finest balance between ethical sensitivity in relation to ethical principles and ethical sensitivity skills, with the remaining three professional groups displaying increased ethical sensitivity for ethical principles rather than ethical sensitivity skills. The connection between ethical principles and ethical sensitivity skills in terms of their influence on professionals' ethical sensitivity is of primary interest in this study. A discussion regarding this association follows next.

6.3.1 Ethical principles

6.3.1.1 Four distinct principles

This research generally supports the idea that the ethical principles represented in this study are independent of each other in terms of performance. Firstly, there appears to be no order effect (Auspurg & Jackle, 2012) of the vignettes influencing the ethical awareness of the participants. The participants did not display increased sensitivity to ethical constructs as they progressed through the vignettes. Secondly, the independence of ethical principles suggests that a sound understanding or exceptional insight (see section 4.5.2.1 scoring criteria) into one ethical principle does not increase a therapist's ability to correctly identify another. The results highlight the importance of an equal focus on all the relevant ethical principles during undergraduate training as well as during continued professional development. It also

confirms the importance of assessing all four ethical principles and not inferring adequate ethical knowledge and/or skill based on a therapist's ability to identify one specific ethical principle. This is important for the development of professional ethics with reference to the Ethics Education Continuum (EEC) outlined in the International Ethics Practice Statements (International accounting education standards board, 2007). The EEC identifies knowledge of general ethical principles and fundamental principles of professional ethics as the platform for developing ethical sensitivity (International accounting education standards board, 2007). Ethical knowledge and ethical sensitivity assist individuals in applying a well-grounded process of making ethical decisions.

Participants displayed a decreased sensitivity in vignettes where the target ethical principle pertained to Non-Maleficence. This result is discussed in more detail below.

6.3.1.2 Non-Maleficence

Participants overall misidentified the ethical principle of Non-Maleficence more frequently when compared to the other three principles measured in the MIEST. Three vignettes (Vignettes 4, 8 and 12) measured participants' sensitivity in identifying the ethical principle of Non-Maleficence. The participants displayed decreased sensitivity in relation to Vignettes 4 and 12 respectively. These two vignettes depict the therapist in situations where behaviour is in line with 'keeping the peace' or avoiding conflict with patients or colleagues, which might be related to Dawson's (1993) left-brain/right-brain amiable personality type discussed earlier in this chapter.

In Vignette 8, in which all participants demonstrated a sound understanding of the ethical principle Non-Maleficence, the decision of the therapist in the vignette does not involve any form of conflict with a client or a colleague, since the therapist is the only one aware of the impact of her clinical decision of not rendering certain services. Non-infliction of harm (Non-Maleficence) is often discussed in terms of two principles, namely sanctity of life and quality of life (Pera, 2011). None of the three vignettes incorporated the preservation of life, but Vignette 8 addressed the issue of quality of life, possibly explaining why participants found it easier to identify the target ethical principle.

In addition, Grace (2013) offers another possible explanation for increased ethical sensitivity related to Vignette 8, namely that transgressions in relation to Non-Maleficence can be very subtle. Grace (2013) mentions that violation of the ethical principle of Non-Maleficence often occurs as a result of failing to anticipate foreseeable harmful effects of actions and failing to expose incompetent colleagues. One reason offered in literature for failing to anticipate harmful effects of actions is as a result of the challenge to separate Beneficence and Non-Maleficence in clinical practice (Pera, 2011). The therapist may be focused on the principle of Beneficence towards the client or a colleague and fail to see the implications thereof for the broader community or on other individuals (collectivist culture). Acting in the best interest of a patient or professional could be in conflict with the interests of the community (Pera, 2011). Secondly, rules of Beneficence are typically more demanding than rules of Non-Maleficence, and rules of Non-Maleficence are negative prohibitions of action that must be followed impartially and that provide moral reasons for legal prohibitions of certain forms of conduct. By contrast, rules of Beneficence state positive requirements of action, need not always be followed impartially, and rarely, if ever, provide moral reasons that support legal punishment when agents fail to abide by the rules. Preventing harm is also morally more challenging than Beneficence (Beauchamp, 2013).

6.3.1.3 Representation of ethical principles in the MIEST

The participants' ability to identify the same ethical principle represented in three different vignettes was statistically similar, even though it can be noted descriptively that the ethical principle for Justice was the most stable and for Beneficence the least stable. This is not surprising, since Beneficence focuses on doing the most possible good for a patient in every situation. What is good for one patient may not be good for another, so each situation should be considered individually. Therefore therapists' ability to identify beneficence is more case dependant than Justice, as Justice is more impartial than Beneficence. The results show an important feature of a conception of Justice in the therapeutic sciences, namely 'relative stability'. The stability of Justice means that when faced with an ethical dilemma, professionals will be able to maintain their allegiance to principles of Justice and the professional bodies they belong to (even if this is only in accordance with their own limited knowledge) (Rawls, 1999). Furthermore, Immanuel Kant divided morality into Justice

and Beneficence. Beneficence entails a duty to do good things – sometimes, but not always (Kant's so-called 'imperfect' obligation). In general, doing 'good' is much more complex than most clinicians appreciate (Macciocchi, 2009). Justice, on the other hand, is a strict duty – one must always be just and follow professional rules and standards, which probably results in the described stability that is in line with the concept of relative stability of justice.

6.3.1.4 Ethical flexibility

Participants showed ethical flexibility in terms of the ethical principles Autonomy and Beneficence. The goals of professionals in the therapeutic sciences are beneficent – they are inherently for the patient's good, and more broadly, aim to further societal health. Therapists exist because they provide what is referred to as 'a critical good', which includes acts of kindness, charity and maximising the advantages of therapy for clients. Therefore, Beneficence underlies all actions of the professional (Grace, 2013). This is probably also the reason why Beneficence was overall the most popular alternative selected by participants, even when done so inappropriately. Historically, healthcare decisions were based on the principles of Beneficence and sanctity of life, with little or no reference to the patients' own views of their interests or of the value of their lives. However, from this position of insignificance in traditional medical ethics, the principle of respect for patient Autonomy has come to be widely recognised in healthcare decision making in recent decades. Autonomy is now regarded as a fundamental ethical principle governing healthcare decisions (Beauchamp & Childress, 2008). Since both Beneficence and Autonomy are considered to be fundamental cornerstone of ethics for the therapeutic sciences, they are expected to be well integrated into all aspects of professional training and well established in therapists.

Not only did physiotherapists perform poorer than the other three therapy groups in terms of Justice, they also chose a 'not appropriate' option more frequently than did the remaining three therapy groups. As with the other three professional groups, they did not favour a specific alternative but responses were distributed among ethical principles. This variance across alternative options could be indicative of a lack of ethical principle knowledge (International accounting education standards board, 2007). The lack of knowledge could have resulted in participants guessing. According

to Edwards, Delany, Townsend and Swisher (2011), the ethical principle of Justice remains the least consensually understood and developed principle in the ethics literature of physical therapy. This offers a possible explanation for physiotherapy participants' performance on the MIEST and indicates that for them the ethical principle of Justice is in the developing stage and not yet established.

The impact of individual differences such as personality and cognitive styles on how people approach and process information, could offer another explanation for the results (Huitt, 1992). Individuals with a sensing preference will be more likely to pay attention to facts, details, as well as professional standards and guidelines. Intuitive decision makers, on the other hand, process data by picking out those pieces they regard as relevant in understanding the holistic picture. They are also attracted by the opportunity to change traditional systems (Kennedy, 2002). In doing so, they can miss out on important details. Left-brain/right-brain thinking directly links with personality and cognitive styles with regard to decision making. Intuitive decision making can be a result of emotional triggers, consistent with right-brain thinking. Left-brain thinking focuses on details and analytic facts to make conscious decisions. Physiotherapy participants displayed strong emotional reactions to the vignettes at the time of completing the MIEST. They were making sounds of disbelief and shaking their heads, clearly upset about the behaviour displayed by the therapist in the vignettes. This reaction was not noted in any of the other three participant groups.

In conclusion, it should also be considered that the specific educational training approach followed could have an impact on the results. The fact that physiotherapists seemed to find it more challenging to identify the target principle of Justice, could possibly be explained by the training approach and/or curriculum, if their training focused more on applied ethics than on theoretical policy training (Edwards et al., 2011). Higher education institutions from around the world have moved towards the development of generic attributes and higher-level academic abilities that include self-directed learning, collaborative problem solving, team building, as well as identifying, accessing, assimilating and communicating information (Ramsden, 2003). In South Africa, this was also underscored by the call from the Medical and Dental Board of the HPCSA to modernise curricula at all the country's medical schools (Seggie, 2010). Problem-based learning (PBL) (Maudsley, 1999) has since been

adopted as a popular method of instruction. PBL offers an environment where students can participate in discussions related to ethics and is considered a useful learning strategy in developing students' ethical decision-making skills (Harasym, Tsai, & Munshi, 2013). The disadvantage, however, is that some studies have showed a decrease in basic knowledge (which is essential for ethical decision making) when taught with a PBL pedagogy (Albanese & Mitchell, 1993). A deep understanding of any subject knowledge starts with the content itself (e.g. ethical background and theories, reasoning and decision making, professional rules and guidelines), learned through disciplinary study. Content knowledge then has to be backed up with instruction that conveys content most effectively, enabling students and/or other therapists to achieve mastery. In other words, knowing how to solve an ethical dilemma using an ethical decision-making model falls short of the content knowledge needed for guiding others in making ethical decisions. The focus on group work in PBL can make it difficult for lecturers to assess whether each individual student shows equivalent learning in ethics/reasoning skills. It is also difficult to provide a broad-based exposure to ethics problems. The focus on critical thinking and problem solving in combination with self-directed learning could also result in neglecting step 1 of ethical decision making, namely ethical principle knowledge (International accounting education standards board, 2007).

6.3.2 Ethical sensitivity skills

6.3.2.1 The seven ethical sensitivity skills

The participants' ability to identify the same ethical sensitivity skill represented in two different vignettes was statistically similar. This highlighted the construct validity related to the vignettes, as well as allowed the opportunity to use one vignette for training purposes. It can however be noted descriptively that the stability for the ethical sensitivity skill Perspective Taking was highest while for Interpreting Ethics in a Situation it was lowest.

6.3.2.2 Perspective Taking

Occupational therapy participants performed best in situations where participants needed to recognise the importance of Perspective Taking as an ethical sensitivity

skill. In this regard, physiotherapists performed poorest of all the participants in the remaining three professions included in the study.

Although Perspective Taking is important for all professionals in the therapeutic sciences, occupational therapists' effective performance on the MIEST could possibly be explained from the basic philosophy of the profession. One of the guiding beliefs of the occupational therapy profession is that, through positive empathic interactions (which include Perspective Taking) they reach out in a caring manner, trusting that the people they work with will find their own strength (Baum, 1980). Occupational therapy focuses on enabling people to be involved in the significant activities of daily life (Clark et al., 2001). Therefore, occupational therapists address barriers to participation that are due to a lack of skills and abilities, as well as specific aspects of the activities or lack of environmental support. The basic philosophy of occupational therapy expresses that engagement in meaningful activities promotes health, well-being and quality of life (World Federation of Occupational Therapists, 2011). The importance of empathy and Perspective Taking in occupational therapy was reported as early as in 1977, when Charles Christiansen measured empathy ratings of occupational therapy students. Since then, various measuring instruments have been used to measure the different components related to empathy in occupational therapy. As already mentioned, Perspective Taking increases willingness to engage in social contact, facilitates social coordination and fosters social bonds that increase participation (Galinsky, Ku, & Wang, 2005). Brown et al. (2010) investigated the extent of cognitive empathy (Perspective Taking) among occupational therapy students at an Australian university and found that these students displayed good levels of Perspective Taking as measured by the Jefferson Scale of Physician Empathy. Brown et al. (2010), however, suggest that students applying for entry into the occupational therapy degree generally display good skills with regard to Perspective Taking as they did not find statistically significant differences between different year groups, thereby failing to show a progressive increase in Perspective-Taking skills during the course of the degree programme.

Literature offers some possible explanations regarding the physiotherapists' scores for Perspective Taking in the current study. It is possible that, due to their training, physiotherapists are more likely to function from a level of concrete reality instead of

a level of idealism, as described by Shapiro and Rucker (2004). It has been suggested that once students' have progressed from their first year of academic education and gained hands-on experience through the completion of fieldwork education placements, their views of their chosen fields move from an 'idealised perception' to a more 'realistic perception' (Greene, 1998; Henry-Tillman, Deloney, Savidge, Graham, & Klimberg, 2002). Furthermore, exposure to the realities of working with clients (some of whom may present with particularly demanding clinical challenges) may encourage students to develop a 'professional or clinical distance' as a coping strategy to handle the stressors. Hence, with increased academic education and clinical fieldwork experience, the empathy levels of students in the therapeutic sciences, and possibly in all healthcare professions, may decrease (Reynolds & Scott, 2000).

Furthermore, there is a prevailing belief that therapist detachment could lead to less burnout, the thought being that "If I don't overly feel for my clients, I won't get consumed". Dr Larry Benz (2013), physical therapy specialist (University of Louisville), recently wrote a post on the EIM (evidence in motion) blog where he reported on internal studies on the profiling of physiotherapists. The study revealed that physiotherapists most frequently place Perspective Taking in the bottom five (out of 34) of strengths measured. In addition to these profiling studies, there is evidence that suggests that in clinical practice many physiotherapists still adopt a biomedical approach to treating clients, affording little practical significance to the influence that therapeutic interaction (of which Perspective Taking constitutes an important element in the therapeutic relationship) may have on treatment outcomes (Jorgensen, 2000). Research suggests that although physiotherapists are aware of biopsychosocial models of healthcare in theory, they still adopt a biomedical approach to clients in practice (Talvitie & Reunanen, 2002). A study by Gladwin (2012) showed that physiotherapists were more likely to extend empathy with the affective element of clients' reported physical challenges and when the challenges were related to clients' personal issues other than the presenting physical problem. It is not known in the current research to which extent Perspective Taking training is incorporated in the physiotherapy training curriculum. Physiotherapists are more likely to struggle with empathy as a cognitive trait (Perspective Taking) (Gladwin, 2012).

Literature also suggests that a decrease in Perspective Taking could be part of the dehumanisation process in an age and culture where, internally, there is too much focus on acquisition and status with too little emphasis on values, and externally, a healthcare environment of daunting regulations and compliance pressure (Hojat et al., 2011; Youngston, 2012). At this point, however, it is essential to mention that although physiotherapy participants were awarded lower scores as measured by the MIEST, they still demonstrated a sound understanding related to the clinical application of Perspective Taking and achieved an average score in the Established category (see Section 4.5.2.1).

6.3.2.3 Controlling Social Bias

In relation to the MIEST, occupational therapy participants displayed exceptional insight into the ethical sensitivity skill Controlling Social Bias, while audiology and speech-language therapy participants demonstrated a sound understanding related to this skill. Physiotherapy participants demonstrated emerging levels of awareness toward Controlling Social Bias. Due to extensive linguistic and cultural diversity in the world, exemplified in the multi-cultural, multi-lingual South African 'rainbow nation', there is a specific need for culturally valid and reliable developmental assessment tools that can accommodate the diversity of the population. Occupational therapists, speech-language therapists and audiologists are specifically trained to view the client holistically and consider the impact of his/her cultural (a way of life of a specific group of people) and linguistic background. Developmental assessments should never be tests of cultural knowledge (Bornman, Sevcik, Romski, & Pae, 2010; McCabe & Bliss, 2003).

Published literature has identified a need for increased understanding of the richness as well as the limitations of the socio-cultural contexts in which different clients operate, in order to avoid the pitfall of "adopting a paradigm in which one socio-cultural group is considered normative and all others diverse" (Barrera & Kramer, 1997; Bornman et al., 2010; Williams et al., 2013). This focus during undergraduate training to develop clinical judgement so as to enable future therapists to differentiate between impairments such as hearing loss, development and/or language delay, and poor performance on standardised assessment tools related to other factors (for example cultures and world knowledge, as the tests used are often not normed on a

South African sample), could possibly increase sensitivity towards identifying social bias. Physiotherapy participants' sensitivity to identifying social bias could possibly be related to their sensitivity towards the ethical sensitivity skill of Perspective Taking. The latter reduces prejudice and racism as a result of a need to reach out and help others who are not in your own social group (Reich, 2004; Hochschild, 2005). It is therefore assumed that the physiotherapy participant's lowered MIEST scores related to Perspective Taking, as compared to the remaining three therapy groups, influenced their sensitivity to the identification of social bias.

The only statistical difference related to awareness of the ethical sensitivity skill Controlling Social Bias occurred in relation to physiotherapy participants and speech-language therapy participants, and only in Vignette 11, which included disability bias. Speech-language therapy participants displayed exceptional insight related to disability bias, in contrast with physiotherapy participants who demonstrated inadequate awareness related to disability bias as measured by the MIEST. Cultural awareness is a developmental process that evolves over time through the process of attaining cultural knowledge. Cultural awareness involves internal changes associated with the qualities of openness and flexibility in relation to others. All individuals are at various levels of awareness, knowledge and skills along the cultural competence continuum. Milton Bennett (1993) constructed a developmental model of intercultural sensitivity in which he examined attitudes towards intercultural sensitivity and how these related to intercultural competence. Intercultural sensitivity is viewed as occurring along a continuum consisting of six different levels, as shown in Figure 6.1.

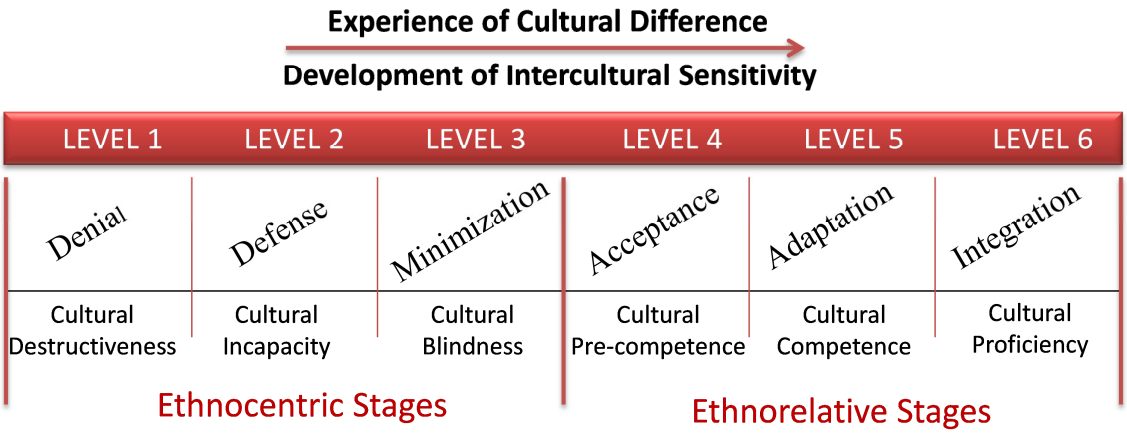


Figure 6.1: A model of intercultural sensitivity in combination with the cultural competence continuum

The greater therapists' intercultural sensitivity, the easier it is to increase their knowledge regarding the group under consideration and their ability to function effectively in it. Intercultural sensitivity is not something a therapist is born with. It is only through experience and reflection upon cultural differences that therapists will begin to experience their own internal logic within a certain culture. It is therefore proposed that all the participants of this study found themselves somewhere along this continuum of cultural competence, which allows them to control social bias to different degrees. In line with the professional view of (Leavitt, 2003), the researcher is of the opinion that the therapy participants are progressing from cultural blindness (level 3) to cultural pre-competence (level 4), which is likely to increase with professional exposure during their career. Pre-competence includes a realisation of the need to control social bias as a commitment to the right of clients. It does however also include the danger of a false sense of success in respect of the ability to control social bias. There is a need for an increased focus on exposing undergraduate therapy students to situations where they can experience cultural difference and develop their intercultural sensitivity to at least a level 4 by the end of their degree. Training in this regard would provide a solid foundation for further growth on the continuum of cultural competence.

6.3.3 Ethical flexibility

Participants displayed appropriate ethical flexibility in terms of the majority of ethical sensitivity skills. The discussion in terms of 'possible alternative interpretation' responses is presented in Table 6.2 and in Table 6.3 regarding the 'not appropriate' responses reported on in this study.

Table 6.2 specifically emphasises the 'possible alternative interpretation' responses selected by participants. It is evident from this table that ethical sensitivity skills are closely related, as was illustrated earlier in Figure 2.3. The focus of therapists on the ethical sensitivity skill of Perspective Taking and/or Relating to Others highlights the importance of training therapists in cognitive empathy. The results, however, also suggest that a crucial step in ethical growth is learning how to balance an important therapeutic skill such as Perspective Taking with ethical principles formulated to guide professionals, including therapists, and protecting clients.

Table 6.2: 'Possible alternative interpretation' responses selected

Target ethical sensitivity skill	Replaced with	Possible reasons for the alternative response
Interpreting Ethics in a Situation	Understanding Emotional Expression	The emotions of the clients in the vignettes were expressed (e.g. anxious, embarrassed). The participants clearly focused on the emotional aspect of the vignettes, thereby missing the details on generating appropriate alternatives in a situation. The therapists in the vignettes made decisions based on the emotions of the clients but did not always execute the most appropriate actions. Another possible explanation relates to idea priming (Herbert, 2011). The first part of the vignette could (as a result of e.g. repetition of understanding emotional expression in training or association of the specific vignette with the importance of emotional expression) focus the participants' attention on the first part of the vignette, leading them to miss important information in the latter part of the vignette. This possibility arises from the fact that the awareness of a client's emotional state is seen as a necessary prerequisite for successful treatment (Tyni-Lenné, 1991).
Relating to Others	Perspective Taking	Theories of social behaviour have emphasised role taking and perspective taking as cognitive processes critical to understand others, relate to others, and foster a sense of community among individuals (Coulmas, 2006). Perspective Taking is clearly needed in order to relate to others and is a viable alternative for therapists in their journey towards ethical maturity.
Understanding Emotional Expression	Perspective Taking	The principle of care requires a cognitive evaluation of the other person's situation, including his/her emotions and the desire to take action to help. This cognitive capacity to consider a situation from the point of view of another person is a description of the term Perspective Taking. The ability to understand another's emotional expressions seems to be a precursor to Perspective Taking. Emotional insights make an important contribution to good judgement overall (Mayer & Salovey, 2004) – during physiotherapy there is a resonance with the client's emotions that guides the therapist to imagine how it feels to be in the client's position (Halpern, 2003).
Effective Communication	Relating to Others	As early as in 1977 the link between communication skills and the ability to relate to others was emphasised (Egan, 1977). More recently Beebe, Beebe and Redmond (2013) published a book that emphasises the importance of interpersonal communication skills in relationships.

Table 6.3: 'Not appropriate' alternative responses selected

Target ethical sensitivity skill	Replaced with	Discussion
Perspective Taking	Understanding Emotional Expression	It is interesting to note that although it was appropriate to substitute Effective Communication with Relating to Others, the opposite is not true. Although the link between these two skills is distinctly described in Table 6.2, the fact that participants selected alternative skills that were 'not appropriate' to the vignette could, as mentioned in Table 6.2, possibly be explained with reference to idea priming. Physiotherapists and occupational therapists were more likely to replace the target of Perspective Taking with inappropriate/irrelevant options. It is not clear what the connection between physiotherapy and occupational therapy is in relation to this, but it should be noted that these two professions form part of the Healthcare Sciences Faculty, while speech-language therapy and audiology form part of Humanities and Liberal Arts Faculty at the specific university. The underlying research and teaching philosophy of the different faculties could possibly offer an explanation.
Controlling Social Bias	Understanding Emotional Expression	Understanding the emotional expression of others can help therapists to regulate their own behaviour in line with social norms, which in turn helps to Control Social Bias (Wood, 2012). In addition, when individuals watch other colleagues' social interactions, they can use that emotional information to guide their own behaviour (Repacholi, Meltzoff, Rowe, & Toub, 2014). This interaction between Controlling Social Bias and Understanding Emotional Expression is one possible explanation for why emotional insight was chosen as a substitute for regulation behaviour. Speech-language therapy and physiotherapy participants were more inclined than audiology and occupational therapy participants to replace the target of Controlling Social Bias with 'not appropriate' options. There are many factors that could lead to such a result. One possibility is a tendency to understate specific types of bias, e.g. disability bias during undergraduate training, leaving students with little or no exposure to practise the skill of identifying and responding appropriately to disability bias (Narvaez & Endicott, 2009). Factors such as idea priming, personality type and cognitive processing could also contribute to selecting 'not appropriate' options. A participant's response ('possible alternative interpretation' or 'not appropriate') could possibly provide insight into his/her level of cultural sensitivity.

Table 6.3 specifically emphasises the 'not appropriate' responses selected by participants. In summary, it is evident from Table 6.3 that participants focused on the ethical sensitivity skill of Understanding Emotional Expression when they did not identify the target skill as 'appropriate'. One possible explanation could be that of idea priming, where therapists' undergraduate degree training highlights the importance of a therapist's ability to Understand Emotional Expression in providing effective therapy, resulting in a heightened sensitivity and more critical perception of other professionals' ability to understand the emotional expression of clients.

In addition to Table 6.1 and Table 6.2 it is also interesting to note that, in general, effective communication was selected as wrong/irrelevant 25% more than any other option. This could possibly be due to the fact that Effective Communication is central to all therapeutic interaction and is increasingly identified in standards of health and social care. The quality of one's communication may affect the outcomes of the care that you provide and is known to make a difference to the satisfaction that your clients feel (Priest, Sawyer, Roberts, & Rhodes, 2005). Participants were more inclined to choose an option that they have been exposed or 'primed' to (Herbert, 2011).

6.3.4 Relationship between ethical principles and ethical sensitivity skills

There is some evidence within the professional field of psychology that knowledge of professional ethics increases ethical awareness and ultimately behaviour (Rest, 1994). The MIEST therefore included ethical principles in addition to ethical sensitivity skills. Although each was discussed separately, the research also revealed a possible influence of each one on the other. These relationships will be discussed in this section.

Participants performed better in terms of identifying target principles compared to ethical sensitivity skills. This is probably due to a focus on principalism during undergraduate training as it forms part of the philosophy of the therapeutic sciences (Irwin et al., 2007). One of the unexpected results, however, was the decline in sensitivity measures associated with Vignette 3 (target: Beneficence/Effective

Communication), Vignette 4 (Non-Maleficence/Perspective Taking) and Vignette 11 (Beneficence/Controlling Social Bias). Each of these three vignettes will be discussed individually to offer possible explanations for these results.

6.3.4.1 Beneficence and Effective Communication

The majority of the participants failed to identify that the skill of Effective Communication was lacking in Vignette 3. During undergraduate training, students need to learn in what areas they need knowledge, skills and experience to practise safely and effectively in the best interests of clients (Irwin et al., 2007). This focus on understanding scope of practice – including the distinction between scope of competence and scope of practice, stressing the responsibility of the students to ensure they have adequate knowledge and skills to practise capably in their chosen role, as well as maintaining adequate competence (through continued professional development) to meet the standards of proficiency for ongoing registration with the HPCSA – could offer a possible explanation for this occurrence. The vignette in which the participants performed poorly in identifying a lack of Effective Communication focused strongly on competence, which also reflects on the foundational ethical principle of Beneficence. This could have masked the issue of inadequate communication since it is the issue of (in)competence that could ultimately lead to litigation. A possible explanation could be that of idea priming (Herbert, 2011). The inclusion of the foundational ethical principle Beneficence, especially with reference to a violation that relates to competence, could have led to therapists being less focused on an ethical sensitivity skill. This is a useful finding in terms of developing training programmes in ethics. If therapists are more frequently exposed to ethical aspects that can easily be ‘masked’ by other principles, they may become more sensitive to the implications and consequences of these aspects.

6.3.4.2 Non-Maleficence and Controlling Social Bias

Vignette 4 is one of just two vignettes (Vignette 4 and 11) where participants performed better in relation to the ethical sensitivity skill compared to the ethical principle. Vignette 4 was considered a complex vignette, since it required from participants to have an awareness of Social Justice. Participants selected taking the perspective of the individual above taking the perspective of the wider community. This is in line with the culture in Western society, which is individualistic (Kagitcibasi,

2005). Studies show that individualistic societies value self-reliance, independence and autonomy (Kagitcibasi, 2005). Individualist cultures are contrasted with collectivist cultures which "... promote care, mutuality, solidarity and inter-dependence. [They emphasise] equality ... trust and cooperation, [holding] individuals responsible for contributing to the common good and restraining their competitive impulses. [They focus] on justice ... as concerned with fair shares of the benefits of cooperation" (Jordan & Jordan, 2000, p. 44).

Hence, the emphasis is on groups and interdependence as the "basis for all human well-being ... the fundamental moral principle is responsibility towards the community and fairness between members, who co-operate" (Jordan & Jordan, 2000, p. 44). Collective-based actions are described in relation to the field of social work, which as a profession aims to enhance people's (society's) well-being, promoting services that result in equal opportunity to increase quality of life for all people (Reichert, 2007). Collective-based actions are considered to be important for defending "a vision of social work based on social justice" (Jones, Ferguson, Lavalette, & Penketh, 2006, p. 3).

An individualised society, with which therapists in general comply, could possibly explain why participants chose Beneficence as the target principle. With a focus on Autonomy, in addition to Feeling Sympathy, and allowing the client to make the final decision, they could view the therapist's behaviour as Beneficent. Participants did not choose the possible alternative of Justice, which could indicate that undergraduate teaching of therapists need a stronger focus on Justice as participants performed the lowest in terms of identifying and/or selecting Justice as an appropriate alternative. This is an important finding that emphasises the fact that taking the perspective of a client and meaning to do good could lead to causing harm to the greater community and violating the law (HPCSA, 2008).

6.3.4.3 Beneficence and Controlling Social Bias

The second vignette where participants achieved higher scores with regard to the ethical sensitivity skill relates to Beneficence. This was considered unexpected, since Beneficence is a foundational principle in the therapeutic sciences. On closer investigation, however, the results revealed that participants were more likely to

identify when a principle was violated than when a principle was correctly applied. The injustice related to not Controlling Social Bias seemed to mask the correct/ethical behaviour that the therapist did display. This phenomenon of human perception closely relates to what cognitive psychologists Christopher Chabris and Dan Simons (2010) refer to as inattentional blindness. The principle of inattentional blindness implies that if we are paying very close attention to one thing, we often fail to notice other things, even if they are very obvious. The majority of the participants selected an appropriate alternative, mostly identifying that the principle of Autonomy was violated. Although participants could not identify ethical behaviour that took place, they were able to identify violated principles and it is therefore evident that they had insight into this case. Undergraduate students or professionals just entering the professional field proved to be more sensitive to reflect on ethical violation (Kinsella, Park, Appiagyei, Chang, & Chow, 2008).

6.4 SUMMARY

Ethical sensitivity can be measured in the therapeutic sciences since the concept can be operationalised because of an established and agreed upon ethic of the professions. The results indicate that although participants may be oblivious to an issue in one vignette, in another vignette there is nonetheless variability in recognition of the very same issue. Sensitivity to ethical aspects is case specific and dynamic, implying that new ethical situations and dilemmas will arise as the professions expand and develop. It is therefore essential that individuals' ethical sensitivity is assessed and described, based on information that is current and relevant to 'the real world'. The pattern of responses within and across items suggests a criterion-referenced, rather than a norm-referenced scale. The vignettes were designed to address the therapist's responsibility to the individual client, the family and the larger community. Participants showed greatest sensitivity towards the therapist's duty to the individual. The high inter-case correlation between cases addressing the same principles indicates that some of the vignettes could be combined or some could be used for instructional purposes.

Chapter 7
Summary, conclusions and recommendations

"*Your journey has moulded you for your greater good, and it was exactly what it needed to be. Don't think you've lost time. There is no short-cutting to life. It took each and every situation you have encountered to bring you to the now. And now is right on time*." — Asha Tayson (2001)

7.1 INTRODUCTION

This chapter contains a summary of the research and conclusions arrived at following the development and implementation of the MIEST with final-year students in four different therapeutic sciences at one specific university. It also contains a discussion of the clinical implications of the research, and the research is evaluated in terms of limitations and strengths. Finally, this chapter concludes with recommendations for further research.

7.2 SUMMARY OF THE RESULTS AND CONCLUSIONS

The purpose of this research was to develop and implement a multidisciplinary measure of ethical sensitivity for healthcare professionals in the four therapeutic sciences within the South African context. This measure is specific to audiology, occupational therapy, physiotherapy and speech-language therapy. The measuring instrument is intended to measure therapists' ability to identify the ethical dimensions of a clinical situation. The MIEST presents an original approach to examining ethical sensitivity in therapists.

The MIEST is theoretically grounded in the first step (i.e. ethical sensitivity) of Rest's (1983) four-component model and based on principles identified in codes of professional ethics. The MIEST can be used to investigate the relative impact of training courses in ethics (undergraduate training and continued professional development) in terms of the development of ethical sensitivity related to specific ethical principles and ethical sensitivity skills. Different instructional methods

(pedagogy) can also be examined in terms of their effectiveness in further developing ethical sensitivity. This will assist therapists who provide ethics training to assess the effect of their training on the trainee. The MIEST can also be used to monitor ethical growth pertaining to ethical sensitivity, over time. The custom-developed vignettes provide a stable platform for training workshops based on the principles of problem-based learning (PBL), which are considered effective for the development of deeper competency in adult learners.

Data for the development of the MIEST (and therefore the specific vignette) was obtained by exhausting the following resources:

- Systematic review of literature
- Code of ethics related to the four therapeutic sciences relevant to this study
- Five focus group discussions
- Eight in-depth interviews
- Expert panel review
- Website complaint platforms

The data for the application of the MIEST was obtained from 100 final-year students enrolled in one of the therapeutic sciences, all at one university, so as to collect data from a group that is homogeneous in terms of institutional culture. The values and behaviours that contribute to the unique social and psychological environment in which students are trained, could act as a variable that hinders the process of comparing the four professional groups that form part of the therapeutic sciences. In this study the MIEST was used to investigate the usability of the instrument in the therapeutic sciences. Also of interest was the performance of the participants in terms of their awareness of ethical principles and ethical sensitivity skills.

This study demonstrates that a measuring instrument that asks therapists to identify ethical issues by using vignettes has the potential to discriminate between participants in each therapy group, as well as between therapy groups. The study reveals interesting findings regarding the level of development of ethical sensitivity of the participants, and should be regarded as an exploration of specific variables viewed as important for competent ethical comportment in the therapeutic science.

The researcher seeked to describe the extent to which final-year students in the therapeutic sciences are aware of the ethical dimensions of dilemmas and the principle(s) on which they mostly base their decisions. All the participants achieved an overall minimum score of 70%, hence meeting the acceptable standards for final-year students in the therapeutic sciences. The research study clearly demonstrated that students in their final year of study (in the therapeutic sciences) reflect a range of sensitivity to ethical issues embedded in the vignettes that were developed for the MIEST. This suggests that although they are not sensitive to all ethical concerns, they have a solid foundation to build on as they gain experience in their profession.

According to the data, most of the participants were found to make decisions based on the principle of Beneficence. An integral part of work as a professional is the foundational ethic of Beneficence, which is in line with the theory of caring (Kinsinger, 2009). It was noted that participants were particularly sensitive regarding the impact of the therapist's actions on the individual client – sometimes to such an extent that they overlooked their duty to the community. This was mostly observed in respect of the ethical principle of Non-Maleficence and was probably due to their lack of knowledge of ethics and experience, or an overemphasis on Beneficence. The two vignettes in which the participants performed worse than expected (Vignettes 4 and 11) revealed that the participants were ethically less sensitive in situations related to Social Justice or Non-Maleficence with regard to the community. Therapists seem to make decisions that are in line with an individualistic culture, in contrast to, for example, social workers who are more focused on the collective good. They tend to consider issues in relation to care, and act in the best interest of the individual by focusing on ethical sensitivity skills rather than on ethical principles. Some of the results could possibly be explained in terms of personality types with regard to decision making and should be explored in future studies.

7.3 CRITICAL EVALUATION OF STUDY

The strengths and limitations of the study in terms of design, methods and findings are specified in Table 7.1.

Table 7.1: Strengths and limitations of the study

DISCUSSION AREAS	STRENGTHS OF THE STUDY	LIMITATIONS OF THE STUDY
Sequential exploratory design	• This mixed-method approach allowed for the researcher to develop a quantitative measure for ethical sensitivity in the therapeutic sciences that is grounded in the views of experienced therapists (resulting in well-thought through conceptualisation of the construct to be measured, which in turn increased the internal validity of the MIEST). • This is a well-established design used for the development of new instruments, especially when available measures do not represent the population being studied, namely therapists (Creswell & Plano Cark, 2011). • Creswell (1999) was among the first scholars to introduce a sequential exploratory design with the rationale of instrument development. The researcher had the opportunity to discuss the methodology of this study with Dr Creswell (personal communication, 15 April 2014). He encouraged the researcher to adapt the standard 3-step methodology to include a pilot study, thereby strengthening the validity of the measuring instrument.	• During sequential exploratory design an enhanced emphasis is placed on internal validity and not external validity, which implies that the results have to be interpreted with care in terms of their universal application.

DISCUSSION AREAS	STRENGTHS OF THE STUDY	LIMITATIONS OF THE STUDY
Phase 1: Sampling and development	• Focus group discussions as well as individual interviews were conducted to obtain detailed and thorough data with which to construct the vignettes. • All five South African universities falling within the defined criteria participated in the focus group discussions, and viewpoints were collected from different institutional cultures from across the whole country. • Therapists from the government and private sector participated in the in-depth interviews, which increased the researcher's insight into different possible work scenarios and the ethical implications related to each. • The systematic review confirmed the gaps in the current knowledge regarding ethics for audiologists. In comparison with the existing systematic review published for physiotherapists, it highlighted many similarities that confirm the possibility of constructing a multidisciplinary measure for ethical sensitivity. • The systematic review that was published as a result of this study identified specific areas in terms of ethics requiring further research.	• Not all the ethical principle/sensitivity skill combinations were included in the MIEST. • A systematic review of ethics in the therapeutic sciences was only available for physiotherapy and audiology. The similarities between these two therapy groups, the similarities defined in literature between physiotherapy and occupational therapy, as well as the similarities in terms of training for audiologists and speech-language therapists led to the assumption that all these therapists could be evaluated with a single instrument. • The use of a paper-based measuring instrument implied that therapists' sensitivity in terms of effective communication could only be assessed in terms of verbal communication. Factors related to e.g. body language could not be incorporated without drawing attention to the element of evaluation.

DISCUSSION AREAS	STRENGTHS OF THE STUDY	LIMITATIONS OF THE STUDY
Phase 1: Sampling and development (continue)	• It is strictly a professional measure, as it is associated with a professional code of ethics relevant to the therapeutic sciences, which makes it appropriate for determining the level of ethical sensitivity in the therapeutic sciences. • By using and enhancing the sophistication of the MIEST, more studies on ethical sensitivity will be possible. • The construct (concepts-by-postulation/thick multidimensional) of ethical sensitivity was defined explicitly due to its thick multidimensional nature and captured by using simpler concepts (concepts-by-intuition), such as four specific ethical principles and seven ethical sensitivity skills. • A measuring instrument of ethical sensitivity could only be constructed after insight had been gained into specific ethical dilemmas currently relevant in the therapeutic sciences. The design allowed for the combining of information from complementary sources such as focus groups, in-depth interviews, documentation and a systematic review.	• According to Sparks and Merenski (2000), using (undergraduate senior business) students to evaluate a recognition-based measure of ethical sensitivity is not ideal, due to a lack of first-hand experience in the context of the measuring instrument. Students in the therapeutic sciences do however gain experience during clinical training. Other researchers (Bebeau & Rest, 1982) are in favour of assessing ethical sensitivity in students. The purpose of Sparks and Merenski's (2000) study was to draw conclusions from the therapy groups in general. The researcher agrees that students are not the ideal population to meet that aim. Where participants displayed a lack of socialisation to the ethical norms of the therapeutic sciences, the findings were used to describe participants' level of sensitivity in identifying developmental needs for specific skills.

DISCUSSION AREAS	STRENGTHS OF THE STUDY	LIMITATIONS OF THE STUDY
Phase 1: Sampling and development (continue)	• Both the insiders' (stemming from focus group discussions and in-depth interviews) and outsiders' (stemming from extant theories and consultation with expert panel) views were incorporated for development of the MIEST. • An emic viewpoint resulted in emerging concepts, which ensured that the vignettes constructed for the MIEST were meaningful and appropriate for therapists. • An ethic viewpoint allowed the researcher to take existing theories and conceptual frameworks related to ethical sensitivity and apply them to a new setting, namely the therapeutic sciences.	
Phase 2: Implementation and evaluation	• The MIEST proved to be an easy-to-administer, objective, multidisciplinary measure for the therapeutic sciences. • The MIEST is not a test with a pass or fail criterion. The MIEST measures the level of ethical sensitivity and focuses on areas for development and growth.	• The assessment of measurement validity in the MIEST focused on content and construct validity. Criterion-related validity was not part of the aim of this study, but is considered the next step in validating the MIEST. The MIEST scores should be correlated with scores of external variables that are considered to measure directly the phenomenon of ethical sensitivity.

DISCUSSION AREAS	STRENGTHS OF THE STUDY	LIMITATIONS OF THE STUDY
Phase 2: Implementation and evaluation (continue)	• Vignettes were constructed to not give the implication of the relevant behaviour. This, together with the fact that participants did not know how many ethical principles or sensitivity skills were applicable to each vignette, allowed the researcher to evaluate the way in which the participants selected responses. This strategy revealed valuable information regarding the participants' level of ethical sensitivity development. • The MIEST can be used as is, or as a screening tool. If a workshop is presented on e.g. autonomy, the vignettes related to that principle can be selected and implemented in a pre-/post-test manner. • A concept that was before this study not measurable in the therapeutic sciences became measurable as a result of the MIEST.	
Findings	• The interpretation of the results was discussed with an experienced statistician to ensure that the findings were presented in a way that was not biased or inaccurate. • Participants from all four professional groups complied with the HPCSA (2009) defined sub-minimum for ethics performance (70%). This consistency permits a more reliable comparison of	• The researcher did not, where participants changed their answers in relating to the MIEST, view their initial answer. • Although objectivity is central to ethical decision making, there is a psychological side to decision making as well (Nichols, 2011). These factors

DISCUSSION AREAS	STRENGTHS OF THE STUDY	LIMITATIONS OF THE STUDY
Findings (continue)	outcomes across the four professions. Comparable scores also suggest that the MIEST is a suitable tool for all four professions represented by the therapeutic sciences. • The results provide guidance for training programmes in higher education, highlighting areas that need more discussion and hands-on application. • An effective tool to measure ethical sensitivity by using vignettes was developed for the therapeutic sciences, including audiologists, occupational therapists, physiotherapists and speech-language therapists.	were not measured. • The findings were not correlated with the curriculum of each of the four professions. • If only the overall scores are used to evaluation ethical sensitivity of therapists, it is possible that well-developed ethical sensitivity skills in some vignettes might mask areas of weakness.

7.4 CLINICAL IMPLICATIONS OF THE STUDY

- First and perhaps foremost, education and assessment tools could be developed and used to increase the sensitivity of students in the therapeutic sciences to the ethics of situations.
- Use of carefully constructed vignettes in the MIEST makes the MIEST an effective tool for PBL.
- It is important that therapists know whether they can reliably interpret ethical issues, articulate the norms, values, laws and codes that govern professional practice and implement defensible action plans effectively and efficiently. Instruction without measures to help therapists see their own strengths and shortcomings, and to compare them to peers as well as to seasoned and exemplary colleagues, is unlikely to promote competence. Further, university lecturers and continued professional development workshop presenters need to take seriously their responsibility to design authentic assessments to demonstrate that instruction makes a measurable difference in abilities that relate to everyday moral functioning.
- Using the MIEST as a way to take the cognitive aspects of recognition and analysis of ethical situations into consideration, an ethics curriculum that prepares future therapists for practice can serve to support these professionals' development. They can learn to confront complex situations with more reflective thought and understanding of their initial emotional reactions, as well as the implications thereof.
- Training programmes developed to enhance ethical sensitivity as the first step in the ethical decision-making process should incorporate all the ethical principles. Focusing on one principle does not seem to have a positive impact on any of the remaining three ethical principles. Focusing on one ethical principle is also likely to lead to idea priming, which could negatively influence ethical sensitivity.
- The number of complaints lodged by the public on HelloPeter.com, compared to those available on the HPCSA website, might suggest that the HPCSA could play a more active role in guiding the public by participating in such public forums.

- Another suggestion for increasing the HPCSA's role in the development of therapists' ethical sensitivity is to construct vignettes based on real-life situations and present them as an exercise of reflection, indicating possible alternatives, as well as the implications of each. Some of the professional organisations have such information available for their members, but this is not available to all therapists. Providing suitable information to members opens up an opportunity for the HPCSA to be actively involved in the continued professional development of therapists, specifically pertaining to ethics for which dedicated continued professional points are needed.

7.5 RECOMMENDATIONS FOR FUTURE RESEARCH

- The ultimate goal of research on ethical sensitivity would be to relate sensitivity to ethical/unethical decision making. It would therefore be valuable to administer the MIEST in conjunction with a decision-making assessment tool to investigate the relationship between the findings.
- The MIEST requires further work in testing and refining both the vignettes and items to meet higher standards of reliability and validity.
- Ethical sensitivity can be investigated in relation to a cognitive empathy scale and/or levels of emotional intelligence.
- Empirical social science research has something unique to contribute to measuring the effectiveness of discipline-specific ethics courses. Assessing both the ethical sensitivity of therapists teaching ethics, as well as the impact of a programme or course on the ethical sensitivity of students, will enhance our understanding of professional and student ethical development. The process may also encourage programme or course improvement projects. Some higher-education training institutions may also want to test those who facilitate ethics courses to determine if additional training is needed for growth of staff.
- By piloting the MIEST on other professions registered in the healthcare sciences (e.g. optometry, dietetics and nutrition), the methodology of this research may be used to construct new and relevant vignettes.
- The curriculum outcomes should be correlated with participants' responses on the MIEST.

7.6 SUMMARY

The MIEST has been shown to be a potentially useful tool in assessing and describing ethical sensitivity in the therapeutic sciences. The results and limitations of this study have raised many questions about factors that have an impact on ethical sensitivity, and which can be addressed through further research.

This chapter summarises the results of the research as described in Chapter 5 and discussed in Chapter 6. This is followed by a critical evaluation of the study in terms of the design and methods used, and the findings obtained. Recommendations for future research emerge from a critical evaluation of the research, as well as the clinical implications of the MIEST.

In general, this research attempted to provide a multidisciplinary measuring instrument of ethical sensitivity for the therapeutic sciences. During this process, it answered the main research question, and at the same time created some new questions based on which to conduct future research.

References

Agarwal, J., & Malloy, D. (2002). An integrated model of ethical decision-making: A proposed pedagogical framework for a marketing ethics curriculum. *Teaching Business Ethics*, *6*(2), 245–268.

Ahmed, A. (2007). Can education affect pro-social behavior? Cops, economists and humanists in social dilemmas. *International Journal of Social Economics*, *35*(4), 298–307.

Albanese, M., & Mitchell, S. (1993). Problem-based learning: A review of the literature on its outcomes and implementation issues. *Academic Medicine*, *68*(1), 52–81.

Allen, M. (2004). *Assessing academic programs in higher education*. Bolton, MA: Anker publishing.

Andersen, P. (1999). *Nonverbal communication: Forms and functions* (pp. 2–8). Mountain View, CA: Mayfield.

Anesi, V. (2008). Incentives and prosocial behavior in democratic societies. *Journal of Economic Psychology*, *29*(6), 894–855.

Arend, R. (2003). Revisiting the logical and research considerations of competive advantage. *Strategic Management Journal*, *24*, 279–285.

Arnold, P. (1997). *Sport, ethics and education*. London: Cassell.

Ary, D., Jacobs, L., & Razavieh, A. (2002). *Introduction to research in education*. Belmont, CA: Wadsworth/Thomson learning.

Asenjo, B., & More, K. (2009). Ethics for speech language pathologists and audiologists. Care2Learn online publication. Retrieved March 5, 2010, from http://www.care2learn.com/resourcelinks.aspx.

Aune, B. (1970). *Rationalism, empiricism, and pragmatism: An introduction*. New York: Random House.

Auspurg, K., & Jackle, A. (2012). First equals most important? Order effects in vignette-based measurement. *Institute for Social and Economic Research*, *2012-01*. Retrieved December 12, 2014, from https://www.iser.essex.ac.uk/ research/publications/ working-papers/iser/2012-01.pdf.

Banajee, M., DiCarlo, C., & Buras-Stricklin, S. (2003). Core vocabulary determination for toddlers. *Augmentative and Alternative Communication, 2,* 67–73.

Barnitt, R. (1998). Ethical dilemmas in occupational therapy and physical therapy: A survey of practitioners in the UK national health service. *Journal of Medical Ethics*, *24*, 193–199.

Barnitt, R., & Partridge, C. (1997). Ethical reasoning in physical therapy and occupational therapy. *Physiotherapy Research International*, *2*, 178–194.

Barrera, I., & Kramer, L. (1997). From monologues to skilled dialogues: teaching the process of crafting culturally competent early childhood environments. In P. Winton, J. McCollum, & C. Catlett (Eds.), *Reforming personnel preparation in early intervention: issues, models and practical strategies* (pp. 217–251). Baltimore: Paul H Brookes.

Bartels, R. (1967). A model for ethics in marketing. *Journal of Marketing*, *31*(1), 20–26.

Baum, C. (1980). Occupational therapists put care in the health system (Eleanor Clarke Slagle Lecture). *American Journal of Occupational Therapy*, *34*, 505–516.

Beauchamp, T. (2013). *The principle of beneficence in applied ethics*. (E. N. Zalta, Ed.) *The Stanford Encyclopedia of Philosophy* (Winter 201). Stanford, CA: Stanford University. Retrieved from http://plato.stanford.edu/entries/principle-beneficence/

Beauchamp, T., & Childress, J. (2001). *Principles of biomedical ethics* (5th ed.). Oxford: Oxford University Press.

Beauchamp, T., & Childress, J. F. (2008). *Principles of biomedical ethics* (6th ed.). New York: Oxford University Press.

Bebeau, M. J. (1994). Influencing the moral dimensions of dental practice. In J. R. Rest & D. Narvaez (Eds.), *Moral development in the professions - Psychology and applied ethics* (pp. 121–146). New York: Psychology Press.

Bebeau, M. J., & Brabeck, M. (1987). Integrating care and justice issues in professional moral education: a gender perspective. *Journal of Moral Education*, *16*(3), 189–203.

Bebeau, M., & Rest, J. (1982). *The Dental Ethical Sensitivity Test*. Minneapolis, MN: Burton Hall.

Bebeau, M., Rest, J., & Yamoor, C. (1985). Measuring dental students' ethical sensitivity. *Journal of Dental Education*, *49*(4), 225–235.

Beebe, A., Beebe, S., & Redmond, M. (2013). *Interpersonal communication: Relating to others* (7th ed.). San Francisco, NJ: Pearson Inc.

Bennett, M. (1993). Towards ethnorelativism: A developmental model of intercultural sensitivity. In R. Paige (Ed.), *Education for the intercultural experience*. Yarmouth, ME: Intercultural Press.

Benoit, W., & Holbert, R. (2008). Conducting communication research at methodological intersections: Replication, multiple quantitative methods, and bridging the quantiative-qualitative divide. *Journal of Communication*, *58*, 615–628.

Benz, L. (2013). Empathy-the Secret Sauce in physicaltherapy? Retrieved December 27, 2014, from http://www.evidenceinmotion.com/about/blog/2013/07/empathy-the-secret-sauce-in-physicaltherapy/

Beukelman, D., & Mirenda, P. (2013). *Augmentative and alternative communication: Supporting children and adults with complex communication needs* (4th ed.). Baltimore: Paul H. Brookes.

Biglan, A., & Hinds, E. (2009). Evolving prosocial and sustainable neighborhoods and communities. *Annual Review of Clinical Psychology*, *5*, 169–196.

Blosch, M. (2001). Pragmatism and organizational knowledge management. *Knowledge and Process Management*, *8*(1), 39–48.

Borenstein, J., Drake, M., Kirkman, R., & Swann, J. (2008). The test of ethical sensitivity in science and engineering (TESSE): A discipline-specific assessment tool for awareness of ethical issues. In *Proceedings of the Annual ASEE Conference, American Society for Engineering Education,* (AC 2008-339).

Bornman, J., Sevcik, R., Romski, M., & Pae, H. (2010). Successfully translating language and culture when adapting assessment measures. *Journal of Policy and Practice in Intellectual Disabilities*, *7*, 111–118.

Boyce, C., & Neale, P. (2006). Conducting in-depth interviews: a guide for designing and conducting in-depth interviews. *Pathfinder International Tool Series Monitoring and Evaluation*, *2*(May), 3–12.

Brabeck, M., Rogers, L., Sirin, S., Henderson, J., Benvenuto, M., & Weaver, M. (2000). Increasing ethical sensitivity to racial and gender intolerance in schools: Development of the racial ethical sensitivity test. *Ethics and Behaviour*, *10*(2), 119–137.

Braun, V., & Clarke, V. (2013). *Successful qualitative research*. Thousand Oaks, UK: Sage Publications.

Brown, T., Williams, B., Boyle, M., Molloy, A., McKenna, L., Molloy, L., & Lewis, B. (2010). Levels of empathy in undergraduate occupational therapy students. *Occupational Therapy International*, *17*(3), 135–41.

Butnik, S. (2013). Understanding, diagnosing, and coping with slow processing speed. Retrieved January 04, 2015, from http://www.davidsongifted.org/db/Articles_id_10782.aspx

Butterfield, K., Trevino, L., & Weaver, G. (2000). Moral awareness in business organizations: Influences of issue-related and social context factors. *Human Relations*, *53*, 981–1018.

Califano, J. (1991). *The triumph and tragedy of Lyndon Johnson.* New York: Simon Schuster.

Callahan, D. (1980). Goals in the teaching of ethics. In D. Callahan & S. Bok (Eds.), *Ethics teaching in higher education* (pp. 61–80). New York: Plenum Press.

Campbell, L., Vasques, M., Behnke, S., & Kinscherff, R. (2010). *APA ethics code commentary and case illustrations*. Washington, DC: American psychological association.

Chabon, S., & Morris, J. (2004). A consensus model for making ethical decisions in a less-than-ideal world. *The ASHA Leader*, *9*(3), 18–19.

Chabris, C., & Simons, D. (2010). *The invisible gorilla: and other ways our intuitions deceive us*. Clarkson Potter.

Cherow, E. (1994). Professional autonomy: Then is now. *Seminars in Hearing*, 15(3), 178-189.

Choi, D., & Perry, J. (2010). Developing an instrument to measure ethical sensitivity in public administration and its application. *International Review of Public Administration*, *14*(3), 1–12.

Clark, F., Stanley, P., Azen, R., Zemke, R., Jackson, J., Carlson, M., & Lipson, L. (2001). Embedding health promoting changes into the lives of independent living older adults: Long term follow up of an occupational therapy intervention. *Journal of Gerontology: Psychological Sciences*, *56*(1), 60–63.

Clark, J. (2007). Patient-centered practice: aligning professional ethics with patient goals. *Seminars in Hearing*, *28*(3), 163–170.

Clarkeburn, H. (2002). A test for ethical sensitivity in science. *Journal of Moral Education*, *31*(4), 439–453.

Coetzee, N. (2010). *Certificates of evaluation using the new 10-level NQF*. *SAQA Update,* 12, 1–8.

Coulehan, J. (2005). Today's professionalism: Engaging the mind but not the heart. *Academic Medicine*, *80*(10), 892–898.

Coulmas, M. (2006). *A study of the effect of clinical experience on nursing empathy* (p. 102). ProQuest. Retrieved from https://books.google.com/books?id=suU1nujnNgoC&pgis=1

Creswell, J. (1999). Mixed-method research: Introduction and application. In G. Cizek (Ed.), *Handbook of educational policy* (pp. 455–472). San Diego, CA: Academic Press.

Creswell, J. (2003). *Research design: Qualitative, quantitative and mixed methods approaches* (2nd ed.). London, UK: Sage Publications.

Creswell, J., & Plano Cark, V. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Creswell, J., Plano Clark, V., Gutmann, M., & Hanson, W. (2003). Advanced mixed methods research designs. In *Handbook of mixed methods in social and behavioural research* (pp. 209–240). Thousand Oaks, CA: Sage Publications.

Crick, N., & Dodge, K. (1994). A review and reformulation of social information processing in children's social adjustment. *Psychological Bulletin*, *115*, 74–101.

Dawson, R. (1993). *The confident decision maker: How to make the right business and personal decisions every time*. La Habra Heights: CA: Nightingale-Conant.

Day, L. (2003). *Ethics in media communications: Cases and controversies* (4th ed.). Belmont, CA: Thomson/Wadsworth.

Donnelly, P. (2000). Ethics and cross-cultural nursing. *Journal of Transcultural Nursing*, *11*(2), 119–126.

Dowling, M. (2008). ATLAS.ti (Software). In L. Given (Ed.), *The SAGE Encyclopedia of Qualitative Research Methods* (pp. 37–38). Thousand Oaks, CA: SAGE Publications, Inc.

Dunn, S., & Dyson, D. (2005). *Professionalism under stress: Lessons for professionalism stress, and gunfighting in military and civilian life*. Leave a legacy Publishing. Retrieved from http://www.amazon.com/Professionalism-Under-Stress-Gunfighting-Military/dp/0871210142

Duquette, A., & Cara, C. (2000). Le caring et la santé de l'infirmière. *L'infirmière Canadienne*, *1*(2), 10–11.

Durand, R. (2002). Competitive advantages exist: A response to Powell. *Strategic Management Journal*, *23*(9), 867–872.

Edwards, I., Delany, C., Townsend, A., & Swisher, L. (2011). Moral agency as enacted justice: A clinical and ethical decision-making framework for responding to health inequities and social injustice. *Physical Therapy*, *91*(11), 1653–63.

Egan, G. (1977). *You and me: The skills of communicating and relating to others* (1st ed.). Boston, MA: Cengage Learning.

Eisenberg, N., & Mussen, P. (1989). *The roots of prosocial behavior in children*. Cambridge: Cambridge University Press.

Emanuel, E., & Emanuel, L. (1996). What is accountability in health care? *Annals of Internal Medicine*, *124*, 229–239.

Employers network for equality and inclusion. (2014). Disability: a research study on unconscious bias. Retrieved from http://www.enei.org.uk/ data/files/ publications/734/Disability-A-Research-Study-on-Unconscious-Bias.pdf

Ewing, D. (1995). An employee bill of rights. In W. Hoffman & R. Frederick (Eds.), *Business ethics: Readings and cases in corporate morality* (2nd ed) (p. 1). New York: McGraw-Hill.

Flew, A. (Ed.). (1979). *Golden rule: A dictionary of philosophy.* (p. 134). London: Pan Books in association with The MacMillan Press.

Gabard, D., & Martin, M. (2003). *Physical therapy ethics*. Philadelphia, PA: Davis.

Galinsky, A., Ku, G., & Wang, C. (2005). Perspective-taking and self-other overlap: Fostering social bonds and facilitating social coordination. *Group Processes and Intergroup Relations*, *8*(2), 109–124.

Gladwin, J. (2012). Empathy in clinical interactions: What is it? Why does it matter? How is it done? The research journey from the perspective of a physiotherapist in private practice. In *Physiotherapy today, tomorrow and the future III*. The SECRN conference.

Grace, P. J. (2013). *Nursing ethics and professional responsibility in advanced practice* (2nd ed.). Burlington: Jones and Bartlett. Retrieved from http://www.amazon.com/Nursing-Professional-Responsibility-Advanced-Practice/dp/1449667422

Greene, D. (1998). Student perceptions of aging and disability as influenced by service learning. *Physical and Occupational Therapy in Geriatrics*, *15*(3), 39–55.

Grimen, H. (2009). Power, trust, and risk: Some reflections on an absent issue. *Medical Anthropology Quarterly*, *23*(1), 16–33. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/19449710

Gunderman, R. (2011). Emotional intelligence. *Journal of the American College of Radiology*, *8*(5), 298–299.

Halpern, J. (2003). What is clinical empathy? *Journal of General Internal Medicine*, *18*, 670–674.

Hamill, T. (2006). Ethics in audiology - Guidelines for ethical conduct in clinical, educational, and research settings. Reston, VA: American Academy of Audiology.

Harasym, P., Tsai, T., & Munshi, F. (2013). Is problem-based learning an ideal format for developing ethical decision skills? *Kaohsiung Journal of Medical Science*, *29*(10), 523–529.

Hargie, O. (2011). *Skilled interpersonal communication: Research, theory, and practice* (5th ed.). New York: Routledge Falmer.

Harman, L. (2001). Professional code of ethics and values. In L. Harman (Ed.), *Ethical challenges in the management of health information*. Gaithersburg, MD: Aspen.

Harrison, R., & Westwood, M. (2009). Preventing vicarious traumatization of mental health therapists: Identifying protective practices. *Psychotherapy: Theory, Research, Practice Training*, *46*(2), 203–219.

Health Professions Act 56 of 1974. Published under Government notice R579 in *Government Gazette*, *32244* (22 May 2009), 11-13. Retrieved from http://www.hpcsa.co.za/downloads/health_act/health_act_56_1974.pdf

Henry-Tillman, R., Deloney, L., Savidge, M., Graham, C. J., & Klimberg, V. (2002). The medical student as patient navigator as an approach to teaching empathy. *The American Journal of Surgery*, *183*(6), 659–662.

Herbert, W. (2011). *On second thought: Outsmarting your mind's hard-wired habits* (1st ed.). New York: Broadway Paperbacks.

Hike difficulty calculator. (2003). Northern Hiker. Retrieved from http://www.nwhiker.com/HikeEval.html

Hochschild, A. (2005). The chauffeur's dilemma. Retrieved December 27, 2014, from http://greatergood.berkeley.edu/article/item/the_chauffers_dilemma

Hojat, M. (2007). *Empathy in patient care antecedents, development, measurement and outcomes*. New York: Springer.

Hojat, M., Louis, D., Markham, F., Wender, R., Rabinowitz, D., & Gonnella, J. (2011). Physicians' empathy and clinical outcomes for diabetic patients. *Academic Medicine*, *86*(3), 359–364.

Holm, S. (1997). *Ethical problems in clinical practice: the ethical reasoning of health care professionals*. New York: Manchester University Press.

Horner, J. (2003). Morality, ethics, and law: Introductory concepts. *Seminars in Speech and Language*, *24*, 263–274.

HPCSA. (2008). Guidelines for good practice in the healthcare professions: Booklet 2, Ethical and professional rules for the HPCSA. In *Government Gazette*, R717/2006. Pretoria: HPCSA. Retrieved from http://www.hpcsa.co.za/downloads/conduct_ethics/rules/generic_ethical_rules/booklet_2.pdf

HPCSA. (2009). Generic examination guidelines for psychologists, registered counsellors and psychometrists: Form 255, *National Board Examinations Policy.* Pretoria: Professional Board for Psychology. Retrieved from http://www.hpcsa.co.za/PBPsychology

HPCSA. (2011). Continuing professional development. *Guidelines for the Health Care Professionals*, *January*. Retrieved from http://hpcsa.co.za/downloads/cpd.pdf

Hsieh, H., & Shannon, S. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, *15*(9), 1277–1288.

Huba, M., & Freed, J. (2000). *Learner-centered assessment on college campuses: Shifting the focus from teaching to learning*. Needham Heights, MA: Allyn and Bacon.

Huitt, W. (1992). Problem solving and decision making: consideration of individual differences using the Myers-Briggs Type Indicator. *Journal of Psychological Type*, *24*, 33–44. Retrieved from http://www.edpsycinteractive.org/papers/prbsmbti.html

Hundert, E. (2003). A model for ethical problem solving in medicine, with practical applications. *Focus Psychiatryonline*, *1*(4), 427–435. Retrieved from http://dx.doi.org/10.1176/foc.1.4.427

International Accounting Education Standards Board. (2007). International education practice statement 1. In *Approaches to developing and maintaining professional values, ethics, and attitudes*. New York: IFAC.

Irwin, D., Pannbacker, M., Powell, T. W., & Vekovius, G. (2007). *Ethics for speech-language pathologists and audiologists - An illustrative casebook*. New York: Thomson Delmar Learning.

Johnson, C. (2007). *Ethics in the workplace: Tools and tactics for organizational transformation*. Thousand Oaks, CA: Sage Publications.

Johnson, R., & Onwuegbuzie, A. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, *33*(7), 14–26.

Johnson, T. (1972). *Professions and power*. London: Macmillan.

Jonassen, D. H. (2000). Toward a design theory of problem solving. *Educational Technology Research and Development*, *48*(4), 63–85.

Jones, C., Ferguson, I., Lavalette, M., & Penketh, L. (2006). Forward thinking. *The Guardian, p. 3*.

Jones, T. (1991). Ethical decision making by individuals in organizations: An issue-contingent model. *The Academy of Management Review*, *16*(2), 366–395.

Jordan, B., & Jordan, C. (2000). *Social work and the third way: Tough love as social policy.* London: Sage Publications.

Jorgensen, K. (2000). Continental IR theory: The best kept secret. *European Journal of International Relations*, *6*(1), 9–42.

Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.

Kagitcibasi, C. (2005). Autonomy and relatedness in cultural context: Implications for self and family. *Journal of Cross-Cultural Psychology*, *36*, 403.

Kaplan, A. (1964). *The conduct of inquiry: Methodology for behavioral science*. Scranton, PA: Chandler Publishing.

Keim, D., Andrienko, G., Fekete, J., Görg, C., Kohlhammer, J., & Melancon, G. (2008). Visual analytics: Definition, process, and challenges. In A. Kerren, J. Stasko, J. Fekete, & C. North (Eds.), *Information visualization: Human-centered issues and perspectives* (pp. 1–18). Italy, MI:Springer-Verlag.

Kennedy, J. (2002). Personality type and judicial decision making. *Judicial Studies Institute Journal*, *2*(2), 50–67.

Kidd, P., & Parshall, M. (2000). Getting the focus and the group: Enhancing analytical rigor in focus group research. *Qualitative Health Research*, *10*(3), 293–308.

Kilmas, N. (2001). Ethical issues span practice settings: From telemedicine to academia. *Advance for Speech-Language Pathologists and Audiologists*,*11*(45) 7–8.

Kinsella, E., Park, A., Appiagyei, J., Chang, E., & Chow, D. (2008). Through the eyes of students: Ethical tensions in occupational therapy practice. *Canadian Journal for Occupational Therapy*, *75*(3), 176–183.

Kinsinger, F. (2009). Beneficence and the professional's moral imperative. *Journal of Chiropractic Humanities*, *16*(1), 44–6.

Klug, H. (2010). *The constitution of South Africa: A contextual analysis - Constitutional systems of the world*. Oxford: Hart Publishing.

Kottler, J. (2010). *On being a therapist* (4th ed.). San Francisco, CA: Jossey-Bass.

Krueger, R. (1998b). *Developing questions for focus groups: Focus group kit, 3*. Thousand Oaks, CA: Sage Publications.

Kushner, H. (2001). *Living a life that matters: Resolving the conflict between conscience and success*. New York: Knopf.

Landauer, J., & Rowlands, J. (2001). The importance of phylosophy. Retrieved August 23, 2013, from http://www.importanceofphilosophy.com/ Ethics_Main.html

Lawshe, C. (1975). A quantitative approach to content validity. *Personnel Psychology*, *28*, 563–575.

Leavitt, R. (2003). Developing cultural competence in a multicultural world - Part II. *Magazine of Physical Therapy*, *1*(1), 56–70.

Ledoux, J. (1996). *The emotional brain*. New York: Simon Schuster.

Leedy, P., & Ormrod, J. (2010). Practical research: Planning and design. Boston, MA: Allyn & Bacon.

Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry* (p. 416). Sage Publications. Retrieved from http://books.google.com/books?hl=en&lr=&id=2oA9aWlNeooC &pgis=1

Lind, R., & Rarick, D. (1997). Cognitive maps assess news viewer ethical sensitivity. *Journal of Mass Media Ethics*, *12*(3), 133–147.

Luther, H., DiBattista, R., & Gautschi, T. (1997). Perception of what the ethical climate is and what it should be: The role of gender, academic status and ethical education. *Journal of Business Ethics*, *16*, 205–217.

Lützén, K., & Nordin, C. (1993). Benevolence, a central moral concept derived from a grounded theory study of nursing decision making in psychiatric settings. *Journal of Advanced Nursing*, *18*, 1106–1111.

Lützén, K., Nordin, C., & Brolin, G. (1994). Conceptualization and instrumentation of nurses moral sensitivity in psychiatric practice. *International Journal of Methods in Psychiatric Research*, *4*(4), 241–248.

Macciocchi, S. (2009). Doing good: The pitfalls of beneficence. *Journal of Head Trauma Rehabilitation*, *24*(1), 72–74.

Maudsley, G. (1999). Do we all mean the same thing by "problem-based learning"? A review of the concepts and a formulation of the ground rules. *Academic Medicine*, *74*(2), 178–185.

Maxcy, S. (2003). Pragmatic threads in mixed methods research in social sciences: The search for multiple modes of inquiry. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioural research* (pp. 51–90). Thousand Oaks, CA: Sage Publications.

Maxwell, J. (1992). Understanding and validity in qualitative research. *Harvard Educational Review*, *62*(3), 279.

Mayer, J., & Salovey, P. (2004). Social intelligence. In C. Peterson & M. Seligman (Eds.), *Character strengths and virtues* (pp. 337–353). Washington, DC: American Psychological Association.

McCabe, A., & Bliss, L. S. (2003). *Patterns of narrative discourse: A multicultural, life span approach* (p. 212). Allyn and Bacon. Retrieved from http://books.google.co.za/books/about/Patterns_of_Narrative_Discourse.html?id=-lFiAAAAMAAJ&pgis=1

McMillan, J., & Schumacher, S. (2010). *Research in education: Evidence-based inquiry* (7th ed.). Boston, MA: Pearson Inc.

McNeel, S. (1994). College teaching and student moral development. In J. R. Rest & D. Narvaez (Eds.), *Moral development in the professions: Psychology and applied ethics*. New York: Psychology Press.

McPherson, F. (2000). *The memory key: Unlock the secrets to remembering*. Franklin Lakes, NJ: Career Press.

Michie, S. (2009). Pride and gratitude: How positive emotions influence the prosocial behaviors of organizational leaders. *Journal of Leadership and Organizational Studies*, *15*(4), 393–403.

Moody-Adams, M. (1994). Culture, responsibility, and affected ignorance. *Ethics*, *104*, 291–309.

Morgan, D. (1998). *The focus group guidebook: Focus group kit*. Thousand Oaks, CA: Sage Publications.

Narvaez, D. (1996). Moral perception: A new construct? In *Annual meeting of the American Educational Research Association*. New York: The Catholic University of America.

Narvaez, D., & Endicott, L. (2009). *Ethical sensitivity: nurturing character in the classroom*. Notre Dame, IN: Alliance for Catholic Education Press.

Naudé, A., & Bornman, J. (2014). A systematic review of ethics knowledge in audiology (1980-2010). *American Journal of Audiology*, *23*(2), 151–157.

Neuman, L. (1997). *Social research methods: Qualitative and quantitative approaches.* (3rd ed.). Boston, MA: Allyn & Bacon.

Nichols, J. (2011). Ethics for social work. In *Pennyroyal Mental Health Center CEU workshop*. Hopkinsville, KY:Author.

Noddings, N. (1984). *Caring, a feminine approach to ethics and moral education*. Berkeley, CA: University of California Press.

Onwuegbuzie, A. (2003). Expanding the framework of internal and external validity in quantitative research. *Research in Schools*, *10*(1), 71–90.

Onwuegbuzie, A., & Johnson, R. (2006). The validity issue in mixed research. *Research in Schools*, *13*(1), 48–63.

Onwuegbuzie, A., & Leech, N. (2007). Validity and qualitative research: An oxymoron? *International Journal of Methodology*, *41*, 233–249.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Newbury Park, CA: Sage Publications.

Pellegrino, E. (2004). Culture and **b**ioethics: Where ethics and morals meet. In L. Prograis & E. D. Pellegrino (Eds.), *African American bioethics: Culture, race, and identity*. Washington, DC: Georgetown University Press.

Pera, S. (2011). The moral and ethical foundation of nursing. In A. Oosthuizen & D. Van der Wal (Eds.), *Ethics in Healthcare (3rd ed.)* (pp. 3–14). Lansdowne: Juta.

Peterson, C., & Seligman, M. (2004). *Character strengths and virtues: A handbook and classification*. New York: Oxford University Press.

Petter, S., & Gallivan, M. (2004). Toward a framework for classifying and guiding mixed methods research in information systems. In *Proceedings of the 37th Hawaii International Conference on System Sciences*.

Potter, W., & Levine-Donnerstein, D. (1999). Rethinking validity and reliability in content analysis. *Journal of Applied Communication Research*, *27*, 258–284.

Powell, T. (2002). The philosophy of strategy. *Strategic Management Journal*, *23*, 872–880.

Powell, T. (2003). Strategy without ontology. *Strategic Management Journal*, *24*, 285–291.

Powell, T. W. (2001). Competitive advantage: Logical and philosophical considerations. *Strategic Management Journal*, *22*, 875–888.

Premack, D., & Woodruff, G. (1978). Does the chimpanzee have a theory of mind? *Behavioral and Brain Sciences*, *1*, 515–526.

Priest, H., Sawyer, A., Roberts, P., & Rhodes, S. (2005). A survey of interprofessional education in communication skills in health care programmes in the UK. *Journal of Interprofessional Care*, *19*(3), 236–250.

Purtilo, R. B. (1999). *Ethical dimensions in the health professions* (3rd ed.). Philadelphia, PA: Saunders Co.

Quillian, L. (2006). New approaches to understanding racial prejudice and discrimination. *Annual Review for Sociology*, *32*, 299–328.

Rallis, S., & Rossman, G. (2003). Mixed methods in evaluation contexts: A pragmatic framework. In A. Tashakkori & C. Teddlie (Eds.), *Handbook of mixed methods in social and behavioural research* (pp. 491–512). Thousand Oaks, CA: Sage Publications.

Ramsden, P. (2003). *Learning to teach in higher education* (2nd ed.). London: Routledge Falmer.

Randall, D. (1991). The social desirability resondents bias in ethics research. *Journal of Business Ethics*, *10*, 805–817.

Rawls, J. (1999). *A theory of justice*. Cambridge, MA: Belknap Press.

Reich, R. (2004). The cost of apathy. Retrieved December 27, 2014, from http://greatergood.berkeley.edu/article/item/the_cost_of_apathy.

Reichert, E. (2007). Human rights in the twenty-first century: creating a new paradigm for social work. In Reichert, E. (Ed). *Challenges in human rights: A social work perspective.* New York: Columbia University Press.

Repacholi, B. M., Meltzoff, A. N., Rowe, H., & Toub, T. S. (2014). Infant, control thyself: infants' integration of multiple social cues to regulate their imitative behavior. *Cognitive Development*, *32*, 46–57.

Rest, J. (1982). Morality. In J. Flavell & E. Markman (Eds.), *Carmichael's manual of child psychology (4th ed.)* (pp. 556–629). New York: John Wiley.

Rest, J. (1983). Morality. In J. Flavell & E. Markman (Eds.), *Handbook of child psychology (4th ed.)* (pp. 556–629). New York: John Wiley.

Rest, J. (1986). *Moral development: Advances in research and theory.* New York: Praeger.

Rest, J. (1994). Background: theory and research. In J. R. Rest & D. Narvaez (Eds.), *Moral development in the professions: Psychology and applied ethics* (pp. 1–26). Hillsdale, NJ: Lawrence Erlbaum Associates.

Reynolds, W. J., & Scott, B. (2000). Do nurses and other professional helpers normally display much empathy? *Journal of Advanced Nursing*, *31*(1), 226–234.

Riley, D., San Juan, R., Klinkner, J., & Ramminger, A. (2008). *Social and emotional development: Connecting science and practice in early childhood settings*. St. Paul, MN: Redleaf Press.

Roscigno, C. I., & Swanson, K. M. (2011). Parents' experiences following children's moderate to severe traumatic brain injury: A clash of cultures. *Qualitative Health Research*, *21*(10), 1413–1426.

Ruby, P., & Decety, J. (2003). What you believe versus what you think they believe: A neuroimaging study of conceptual perspective taking. *European Journal of Neuroscience*, *17*, 2475–2480.

Seedhouse, D. (1998). *Ethics. The heart of health care.* Chichester: John Wiley & Sons Ltd.

Seggie, J. L. (2010). MB ChB curriculum modernisation in South Africa – growing doctors for Africa. *African Journal of Health Professions Education*, *1*(2), 8–14.

Shapiro, J., & Rucker, L. (2004). The Don Quixote effect: Why going to the movies can help develop empathy and altruism in medical students and residents. *Families, Systems, & Health, 22*, 445–452.

Shaub, M. (1989). *An empirical examination of the determinants of auditors' ethical sensitivity*. (Unpublished doctoral dissertation). Texas Tech University, Lubbock, TX.

Silverman, D. (2004). *Qualitative research: Theory, method and practice*. London: Sage Publications.

Sim, J. (1997). *Ethical decision-making in therapy practice.* Oxford: Butterworth Heinemann.

Simga-Mugan, C., Daly, B., Onkal, D., & Kavut, L. (2005). The influence of nationality and gender on ethical sensitivity: An application of the issue-contingent model. *Journal of Business Ethics*, *57*(2), 139–159.

Sims, R. (2011). Working to develop an effective learning climate. In R. Sims & W. Sauser (Eds.), *Experiences in teaching business ethics* (pp. 53–82). Charlotte, MI: Information Age Publishing.

Sininger, Y., Marsh, R., Walden, B., & Wilber, L. (2003). Guidelines for ethical practice in research for audiologists. *Audiology Today*, *15*(6), 14–17.

Sirin, S., Brabeck, M., Satiani, A., & Rogers-Serin, L. (2003). Validation of a measure of ethical sensitivity and examination of the effects of previous multicultural end ethics courses on ethical sensitivity. *Ethics and Behaviour*, *13*(3), 221–235.

Smit, R. (2002). In search of "non-disease." *British Medical Journal*, *324*, 883–885.

Smith, M. (1995). Ethics in focus groups. *Qualitative Health Research*, *5*(4), 478–486.

Sparks, J., & Hunt, S. (1998). Marketing researcer ethical sensitivity: Conceptualization, measurement and exploratory investigation. *Journal of Marketing*, *62*, 92–109.

Sparks, J., & Merenski, J. P. (2000). Recognition-based measures of ethical sensitivity and reformulated cognitive moral development: An examination and evidence of nomological validity. *Teaching Business Ethics*, *4*(4), 359–377.

Steinbauer, A. (2000). Don't trust the ethicist (too much). *Philosophy Now*, *Ethics vs Morality, 26* (April/May), 9.

Stemler, S. (2001). An overview of content analysis. *Practical Assessment, Research and Evaluation*, *7*(17). Retrieved from http://pareonline.net/getvn.asp?v=7&n=17

Stetson, E., Hurley, A., & Miller, G. (2003). Can universal affective education programs be used to promote empathy in elementary aged children? A review of five curricula. *Journal of Research in Character Education*, *1*(2), 129–147.

Stevens, D., & Levi, A. (2005). *Introduction to rubrics: An assessment tool to save grading time, convey effective feedback, and promote student learning*. Sterling, VA: Stylus.

Stewart, D., & Shamdasani, P. (1990). *Focus groups: Theory and practice* (Applied social research methods series, 20). Newbury Park, CA: Sage Publications.

Stock, R. (2004). *Africa south of the Sahara: A geographical interpretation*. New York: Guilford Press.

Swanson, K. (1991). Empirical development of a middle range theory of caring. *Nursing Research*, *40*, 161–166.

Swanson-Kauffman, K. (1988). Caring needs of women who miscarried. In M. Leininger (Ed.), *Care: Discovery and uses in clinical and community nursing* (pp. 55–69). Seattle, WA: NCAST Publishing.

Swisher, L. (2002). Research report a retrospective analysis of ethics. *Physical Therapy Journal for the American Physical Therapy Association*, *82*, 692–706.

Takeda, H. (2007). Examination timing and student performance: The longer you take the worse you will do? In *Proceedings of the 2007 Southern Association for Information Systems Conference* (pp. 195–200).

Talvitie, U., & Reunanen, M. (2002). Interaction between physiotherapists and patients in stroke treatment. *Physiotherapy*, *88*(2), 77–88.

Tayson, A. (2001). *How I retired at 26! A step-by-step guide to accessing your freedom and wealth at any age*. Alexandria, VA: ATD Publishing.

Theodore Roosevelt quotes. (n.d.). Retrieved February 01, 2014, from http://www.theodorerooseveltcenter.org

Tiatorio, A. (1999). *The ethics workbook I: World history.* Boston, MA: Ethics-in-education.

Trevino, L., Weaver, G., Gibson, D., & Toffler, B. (1999). Managing ethics and legal compliance: What works and what hurts. *California Management Review*, *41*(2), 131–151.

Tylor, E. (1891). *Primitive culture* (p. 1). New York: John Murray.

Tyni-Lenné, R. (1991). Towards a physical therapy paradigm. *Proceedings of the 11th International Congress of the World Confederation for Physical Therapy*, *London*, 238–240.

Underwood, B., & Moore, B. (1982). Perspective-taking and altruism. *Psychological Bullitin*, 91, 143–173.

Vines, W., & Napier, N. (1992). Toward an understanding of cross-cultural ethics: A tentative model. *Journal of Business Ethics*, *11*, 831–841.

Vitell, S., Nwachukwu, S., & Barnes, J. (1993). The effect of culture on ethical decision-making: An application of Hofstede's typology. *Journal of Business Ethics*, *12*(10), 753–761.

Volker, J. (1984). *Counseling experience, moral judgment, awareness of consequences and moral sensitivity in counseling practice*. (Unpublished doctoral dissertation). University of Minnesota, Minneapolis, MN.

Vollhardt, J. (2009). Altruism born of suffering and prosocial behavior following adverse life events: A review and conceptualization. *Social Justice Research*, *22*(1), 53–97.

Walsh, K. (2003). Qualitative research: Advancing the science and practice of hospitality. *Cornell Hotel and Restaurant Quarterly*, *44*(12), 66–75.

Weaver, W. (2007). Ethical sensitivity: State of knowledge and needs for further research. *Nursing Ethics*, *14*(2), 141–155.

Weaver, K., Morse, J., & Mitcham, C. (2008). Ethical sensitivity in professional practice: concept analysis. *Journal of Advanced Nursing*, *62*(5), 607–618.

Weinstein, B. (2001). Thinking through questions of ethics: Four steps to better decision making. *Advance for Speech-Language Pathologists and Audiologists*, 28–29.

World Health Organization. (2001). *International classification of functioning, disability and health (ICF)*. Geneva: WHO.

Williams, A., Louw, B., Scherer, N., Bleile, K., Keske-Soares, M., & Trindade, I. (2013). Academic and clinical preparation in speech-language pathology and audiology: A global training consortium for U.S.-Brazil students. *Contemporary Issues in Communication Sciences and Disorders*, *40*, 40–49.

Williams, J. (2009). *Medical ethics manual* (2nd ed.). Paris, FR: World Medical Association, Inc.

Wittmer, D. (1992). Ethical sensitivity and managerial decision-making: An experiment. *Journal of Public Administration Research and Theory*, *2*(4), 443–462.

Wittmer, D. (2005). Developing a behavioral model for ethical decision making in organizations: Conceptual and empirical research. In G. H. Frederickson & R. K. Ghere (Eds.), *Ethics in public management* (pp. 49–69). New York: M.E. Sharpe, Inc.

Wood, P. (2012). *Snap: Making the most of first impressions, body language, and charisma.* Thousand Oaks, CA: New World Library.

World Federation of Occupational Therapists. (2011). Statement on occupational therapy. Retrieved from http://www.wfot.org/Portals/0/pdf/statement on occupational therapy 300811.pdf.

Youngston, R. (2012). *Time to care: How to love your patients and your job*. Wellington, NZ: Rebelheart Publishers.

Zimbardo, P. (2008). *The Lucifer effect: Understanding how good people turn evil*. New York: Random House.

Appendix A

Institutional approval

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Research Ethics Committee

8 June 2011

Dear Borman,

Project:	**Exploring ethical sensitivities in the South African context: developing and implementing a measure in the therapeutic sciences**
Researcher:	**AM Naude**
Supervisor:	**Prof J Bornman**
Department:	**Centre for Augmentative and Alternative Communication**
Reference:	**97016986**

I have pleasure in informing you that the Registrar has formally given **approval** for the above study to be conducted at the University of Pretoria. Please note that this approval is based on the assumption that the research will be carried out along the lines laid out in the proposal. Should your actual research depart significantly from the proposed research, it will be necessary to apply for a new research approval and ethical clearance.

Data collection may however not commence until the Research Ethics Committee's queries are sufficiently dealt with.

Sincerely

Prof John Sharp
Chair: Research Ethics Committee
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: john.sharp@up.ac.za

Research Ethics Committee Members: Dr L Blokland; Prof M-H Coetzee; Dr JEH Grobler; Prof KL Harris; Ms H Klopper; Prof A Mlambo, Dr C Paneblanco-Warrens; Prof J Sharp (Chair); Prof GM Spies; Prof E Taljard ; Dr J van Dyk; Dr FG Wolmarans, Dr P Wood

Appendix B1

Participant consent form: Focus group – Head of Department and participating staff

Centre for Augmentative and Alternative Communication
Sentrum vir Aanvullende en Alternatiewe Kommunikasie
& INTERFACE

2006 Laureate Award, Education Innovation for the Fofa Project
2004 T-Systems Age of Innovation & Sustainability Awards: Excellence in Innovation and Sustainability: Social
2003 National Science & Technology Awards: Corporate Organization over the last ten years.
2002 Shirley McNaughton Award for Exemplary Communication received from the International Society for Augmentative and Alternative Communication
1998 Rolex Award for Enterprise: Associate Laureate
1995 Education Africa Presidential Award for Special Needs

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe

Attention:
Head of Department

Re: Request for permission to conduct research with staff

Dear

I am currently in the final year of my PhD studies at the University of Pretoria. In order to comply with the degree demands, I have to complete an extensive research project resulting in a thesis. The Postgraduate Committee on 10 May 2011 as well as the Research Ethics Committee at the University of Pretoria approved this study on 26 May 2011.

Backgound

Ethical sensitivity may be defined as professionals' ability to recognize, interpret and respond appropriately to the concerns of those receiving professional services as well as an awareness of how their actions influence others. Ethical sensitivity can be used to reinforce and strengthen the ethical mindset and practice of therapists. A measure of ethical sensitivity in the South African context focusing on interdisciplinary collaboration is a valuable instrument to measure and develop ethical sensitivity.

What are the objectives of the study?

The main aim of the study is to develop and implement a measure of ethical sensitivity for Health Care Professionals in the therapeutic sciences within the South African context.

As part of the instrument development process I would like to request your permission to conduct a focus groups with your current staff. All five of the South African universities that provide training in all four of the therapeutic disciplines namely Speech therapy, Audiology, Physiotherapy and Occupational therapy will be approached for participation.

Why is your participation important?

Your participation in this research study will contribute to the development of a measuring tool to assess the first step in ethical decision making. The value of this study lies largely in providing educational ethics programs the opportunity to determine the effect on participants by applying a reliable measure specifically focused on ethical sensitivity. The measuring instrument will also be practical in a sense to be used as a training program itself. Recommendations resulting from this research will encourage new research on other related areas of ethics.

What is expected of you as a participant?

Should you give consent for your staff to participate in the study, I would like to kindly request that the staff with experience or a special interest in ethics participate in this study. Staff will be required to participate in a focus group, at a time specified by you depending on the availability of your staff. The focus group will take approximately 60 minutes.

Will your staff experience any risk or discomfort during this study?

Staff will not experience any risk or discomfort during the focus group.

What are your and your staff's rights as participants in the study?

You or your staff may at any given time throughout this study decide to withdraw. Any decision to withdraw will in no way penalize you or your staff. I will immediately destroy any information pertaining to anyone that wishes to withdraw from the study.

What will happen with the data collected from your staff?

All information gained in the study will be treated as confidential. Data will be stored for 15 years at the Centre for Alternative and Augmentative Communication at University of Pretoria. Results from this study will be presented in the form of a PhD dissertation, a scientific article and a presentation at an international conference.

Will you have access to the research results?

The research results will be made available upon request following the completion of the research study. The results of the study will be sent to you if you tick the box on the next page.

Who can be contacted if you have any further questions?

Should you require any further information, you are welcome to contact Prof. Juan Bornman at 012-420 2001 or [redacted] or Mrs. Alida Naude at [redacted]

I trust this letter has provided you with sufficient information as to make an informed decision about the participation of your students in the research study. Please would you kindly complete and sign the permission form attached at the back and return it indicating a possible time and date your staff will be available or provide details of a contact person in order to arrange a meeting time.

Kind regards

Mrs. A Naude
Researcher

Prof J Bornman
Supervisor

Centre for Augmentative and Alternative Communication (CAAC), Communication Pathology Building
University of Pretoria, Lynnwood Road
PRETORIA, 0002
Republic of South Africa

Fax/Faks: + 27 86 719 2666
Tel: + 27 12 420 – 2001
juan.bornman@up.ac.za
www.caac.up.ac.za

Sentrum vir Aanvullende en Alternatiewe Kommunikasie (SAAK), Kommunikasie Patologie gebou
Universiteit van Pretoria, Lynnwoodweg
PRETORIA, 0002
Republiek van Suid Afrika

Centre for Augmentative and Alternative Communication
Sentrum vir Aanvullende en Alternatiewe Kommunikasie
&
INTERFACE

2006 Laureate Award, Education Innovation for the Fofa Project
2004 T-Systems Age of Innovation & Sustainability Awards: Excellence in Innovation and Sustainability: Social
2003 National Science & Technology Awards: Corporate Organization over the last ten years.
2002 Shirley McNaughton Award for Exemplary Communication received from the International Society for Augmentative and Alternative Communication
1998 Rolex Award for Enterprise: Associate Laureate
1995 Education Africa Presidential Award for Special Needs

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe

Dear participant,

RE: REQUEST FOR PARTICIPATION IN A RESEARCH STUDY

I am currently a PhD student at the University of Pretoria. In order to comply with the degree demands, I have to complete an extensive research project resulting in a thesis. The main aim of the study is to develop and implement a measure of ethical sensitivity for Health Care Professionals in the therapeutic sciences within the South African context. The research will be based on an exploratory research design during which focus groups will be conducted. In order to perform this study I will need your participation in the focus groups during which your input is needed to identify specific situations in therapeutic science that require an ethical response.

The focus group will be concluded within two hours. Your input regarding the most effective way to present ethical issues will also be requested and valued. The focus group sessions will be digitally recorded. The qualitative analysis of administrative data is entirely impersonal and would therefore not be harmful in any way, but the following steps will also be taken to ensure confidentiality:

- No personal information that can link you with the study will be documented or used.
- During the data collection phase your name will only be recorded to prevent double entries.
- All information gained in the study will be treated as confidential.

Data will be stored for 15 years at the University of Pretoria, Centre for Augmentative and Alternative Communication. The results of this study will be presented in the form of scientific papers and possible conference presentations.

The researcher agrees to:
Allow participants to withdraw from the study at any time, without any negative consequences, ensure confidentiality of personal information and provide feedback of the results if required. If you wish to participate in the above mentioned study, please sign the attached consent form after which you will be contacted with further details. I will be very thankful if you will consider our application.

Kind regards

Mrs. A Naude
Researcher

Prof. J Bornman
Supervisor

Centre for Augmentative and Alternative Communication
(CAAC), Communication Pathology Building
University of Pretoria, Lynnwood Road
PRETORIA, 0002
Republic of South Africa

Fax/Faks: + 27 86 719 2666
Tel: + 27 12 420 – 2001

janbornman@up.ac.za
www.caac.up.ac.za

Sentrum vir Aanvullende en Alternatiewe Kommunikasie
(SAAK), Kommunikasie Patologie gebou
Universiteit van Pretoria, Lynnwoodweg
PRETORIA, 0002
Republiek van Suid Afrika

Please complete this form and return it to the researcher via e-mail [redacted].

Office use
Participant Nr

Statement concerning participating in a Research Project: Consent reply slip

Title of the Study:
Exploring ethical sensitivity in the South African context: Developing and implementing a measure in the therapeutic sciences

Researcher: Alida Naude, PhD student University of Pretoria

Supervisors: Prof J Bornman

I have read the information on the proposed study and given adequate time to rethink the issue. The aims and objectives of the study are sufficiently clear to me. I have not been pressurized to participate in any way. I understand that participation in this study is completely voluntary and that I may withdraw from it at any time and without supplying reasons. I know that the University of Pretoria Research Ethics Committee has approved this study. I am fully aware that the results of this study will be used for scientific purposes and may be published. I agree to this, provided that confidentiality is guaranteed. I hereby give consent to participate in this study. I also give permission for the researcher to digitally record the sessions for later analysis.

Name of participant		Signature of participant
Place	Date	Witness

Statement by researcher

I provided written information regarding this study.
I agree to answer any future questions concerning the study as best as I am able.
I will adhere to the approved protocol.

Mrs. A Naude Researcher	Prof. J Bornman Supervisor	Date	Place

I would like to get feedback about the results of this study. ☐

Appendix B2

Participant consent form: In-depth interview

Centre for Augmentative and Alternative Communication
Sentrum vir Aanvullende en Alternatiewe Kommunikasie
& INTERFACE

2006 Laureate Award, Education Innovation for the Fofa Project
2004 T-Systems Age of Innovation & Sustainability Awards: Excellence in Innovation and Sustainability: Social
2003 National Science & Technology Awards: Corporate Organization over the last ten years.
2002 Shirley McNaughton Award for Exemplary Communication received from the International Society for Augmentative and Alternative Communication
1998 Rolex Award for Enterprise: Associate Laureate
1995 Education Africa Presidential Award for Special Needs

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe

Dear _____

RE: REQUEST FOR PARTICIPATION IN A RESEARCH STUDY

I am currently a PhD student at the University of Pretoria. In order to comply with the degree demands, I have to complete an extensive research project resulting in a thesis. The main aim of the study is to develop and implement a measure of ethical sensitivity for Health Care Professionals in the therapeutic sciences within the South African context. The research will be based on an exploratory research design. In order to perform this study I will need your expertise in the area of ethics to confirm the validity of the measuring instrument. This will be done in the form of an in-depth interview. During the final phase of developing a measuring instrument you will be requested to make comments regarding the nature of the measuring instrument. The qualitative analysis of administrative data is entirely impersonal and would therefore not be harmful in any way, but the following steps will also be taken to ensure confidentiality:

- No personal information that can link you with the study will be documented or used.
- During the data collection phase your name will only be recorded to prevent double entries.
- All information gained in the study will be treated as confidential.

Data will be stored for 15 years at the University of Pretoria, Centre for Augmentative and Alternative Communication. The results of this study will be presented in the form of scientific papers.

The researcher agrees to:

Allow participants to withdraw from the study at any time, ensure confidentiality and anonymity of personal information and provide feedback of the results if required. If you wish to participate in the above mentioned study, please sign the attached consent form after which you will be contacted with further details. I will be very thankful if you will consider our application.

Kind regards

Mrs. A Naude
Researcher
2011-03-09

Prof. J Bornman
Supervisor
2011-03-10

Centre for Augmentative and Alternative Communication (CAAC), Communication Pathology Building University of Pretoria, Lynnwood Road PRETORIA, 0002 Republic of South Africa

Fax/Faks: + 27 86 719 2666
Tel: + 27 12 420 – 2001
juan.bornman@up.ac.za
www.caac.up.ac.za

Sentrum vir Aanvullende en Alternatiewe Kommunikasie (SAAK), Kommunikasie Patologie gebou Universiteit van Pretoria, Lynnwoodweg PRETORIA, 0002 Republiek van Suid Afrika

Please complete this form and return it to the researcher via e-mail

Office use
Participant Nr

Statement concerning participating in a Research Project: Consent reply slip

Title of the Study:
Exploring ethical sensitivity in the South African context: Developing and implementing a measure in the therapeutic sciences

Researcher: Alida Naude, PhD student University of Pretoria

Supervisor: Prof J Bornman

I have read the information on the proposed study and given adequate time to rethink the issue. The aims and objectives of the study are sufficiently clear to me. I have not been pressurized to participate in any way. I understand that participation in this study is completely voluntary and that I may withdraw from it at any time and without supplying reasons. I know that the University of Pretoria Research Ethics Committee has approved this study. I am fully aware that the results of this study will be used for scientific purposes and may be published. I agree to this, provided that confidentiality is guaranteed. I hereby give consent to participate in this study.

Name of participant	Signature of participant
Place	Witness
Date	

Statement by researcher
I provided written information regarding this study.
I agree to answer any future questions concerning the study as best as I am able.
I will adhere to the approved protocol.

Mrs. A Naude Researcher	Prof. J Bornman Supervisor	Date	Place

I would like to get feedback about the results of this study.

Appendix B3

Participant consent form: Main study

Centre for Augmentative and Alternative Communication
Sentrum vir Aanvullende en Alternatiewe Kommunikasie
& INTERFACE

2006 Laureate Award, Education Innovation for the Fofa Project
2004 T-Systems Age of Innovation & Sustainability Awards: Excellence in Innovation and Sustainability: Social
2003 National Science & Technology Awards: Corporate Organization over the last ten years.
2002 Shirley McNaughton Award for Exemplary Communication received from the International Society for Augmentative and Alternative Communication
1998 Rolex Award for Enterprise: Associate Laureate
1995 Education Africa Presidential Award for Special Needs

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe

Attention:
Head of Department

Re: Request for permission to conduct research with final year students

Dear

I am currently in the final year of my PhD studies at the University of Pretoria. In order to comply with the degree demands, I have to complete an extensive research project resulting in a thesis. This study was approved by the Postgraduate Committee on 10 May 2011 as well as the Research Ethics Committee at the University of Pretoria on 26 May 2011.

Backgound

Ethical sensitivity may be defined as professionals' ability to recognize, interpret and respond appropriately to the concerns of those receiving professional services as well as an awareness of how their actions influence others. Ethical sensitivity can be used to reinforce and strengthen the ethical mindset and practice of therapists. A measure of ethical sensitivity in the South African context focusing on interdisciplinary collaboration is a valuable instrument to measure and develop ethical sensitivity.

What are the objectives of the study?

The main aim of the study is to develop and implement a measure of ethical sensitivity for Health Care Professionals in the therapeutic sciences within the South African context.

During the first part of my study I developed a measuring instrument with the help of focus groups conducted at all five of the South African universities that provide training in all four of the therapeutic disciplines namely Speech therapy, Audiology, Physiotherapy and Occupational therapy. Interviews were also conducted with two professionals from each field considered to be experts in the field of ethics. I have also successfully completed the pilot of the measuring instrument at one of the five universities training professional in the therapeutic sciences.

Why is your participation important?

Your participation in this research study will contribute to the development of a measuring tool to assess the first step in ethical decision making. The value of this study lies largely in providing educational ethics programs the opportunity to determine the effect on participants by applying a reliable measure specifically focused on ethical sensitivity. The measuring instrument will also be practical in a sense to be used as a training program itself. Recommendations resulting from this research will encourage new research on other related areas of ethics.

What is expected of you as a participant?

For the final part of the study I need to evaluate the effectiveness of the measuring instrument. I have to evaluate the measuring instrument at a University that represents all four professions that form part of the therapeutic sciences, namely Speech- Language therapy, Audiology, Physiotherapy and Occupational Therapy.

Should you give consent for your students to participate in the study, I would like to kindly request that that the final year students in your current program participate in this study. Students will be required to complete a measuring instrument related to ethical sensitivity that consist of 15 case studies. Data collection will be conducted between 20 - 26 May 2014, at a time specified by you depending on the availability of your students. The measuring instrument will take 60 minutes to complete. Before they start I will need 30 minutes to give them instructions and allow them to complete informed consent forms.

Should you be interested in an ethics workshop or lecture for your students I would gladly arrange this with you upon request.

Will your students experience any risk or discomfort during this study?

Students will not experience any risk or discomfort during the study. During the pilot study students indicated that they did not feel any pressure or anxiety while completing the measuring instrument. Each student will be assigned a respondent number to ensure confidentiality.

What are your and your student's rights as participants in the study?

You or your students may at any given time throughout this study decide to withdraw. Any decision to withdraw will in no way penalize you or your students. I will immediately destroy any information pertaining to anyone that wishes to withdraw from the study.

What will happen with the data collected from your students?

All information gained in the study will be treated as confidential. Data will be stored for 15 years at the Centre for Alternative and Augmentative Communication at University of Pretoria. Results from this study will be presented in the form of a PhD dissertation, a scientific article and a presentation at an international conference.

Will you have access to the research results?

The research results will be made available upon request following the completion of the research study. The results of the study will be sent to you if you tick the box on the next page.

Who can be contacted if you have any further questions?

Should you require any further information, you are welcome to contact Prof. Juan Bornman at 012-420 2001 [redacted] Mrs. Alida Naude at [redacted]

I trust this letter has provided you with sufficient information as to make an informed decision about the participation of your students in the research study. Please would you kindly complete and sign the permission form attached at the back and return it indicating a possible time and date your students will be available or provide details of a contact person in order to arrange a meeting time.

Kind regards

Mrs. A Naude
Researcher

Prof J Bornman
Supervisor

Centre for Augmentative and Alternative Communication
(CAAC), Communication Pathology Building
University of Pretoria, Lynnwood Road
PRETORIA, 0002
Republic of South Africa

Fax/Faks: + 27 86 719 2666
Tel: + 27 12 420 – 2001
juan.bornman@up.ac.za
www.caac.up.ac.za

Sentrum vir Aanvullende en Alternatiewe Kommunikasie
(SAAK), Kommunikasie Patologie gebou
Universiteit van Pretoria, Lynnwoodweg
PRETORIA, 0002
Republiek van Suid Afrika

Centre for Augmentative and Alternative Communication
Sentrum vir Aanvullende en Alternatiewe Kommunikasie
& INTERFACE

2006 Laureate Award, Education Innovation for the Fofa Project
2004 T-Systems Age of Innovation & Sustainability Awards: Excellence in Innovation and Sustainability: Social
2003 National Science & Technology Awards: Corporate Organization over the last ten years.
2002 Shirley McNaughton Award for Exemplary Communication received from the International Society for Augmentative and Alternative Communication
1998 Rolex Award for Enterprise: Associate Laureate
1995 Education Africa Presidential Award for Special Needs

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Humanities
Fakulteit Geesteswetenskappe

Dear participant,

Re: Request for participation in a research study

I am currently in the final year of my PhD studies at the University of Pretoria. In order to comply with the degree demands, I have to complete an extensive research project resulting in a thesis. The Postgraduate Committee on 10 May 2011 as well as the Research Ethics Committee at the University of Pretoria approved this study on 26 May 2011.

Backgound

Ethical sensitivity may be defined as professionals' ability to recognize, interpret and respond appropriately to the concerns of those receiving professional services as well as an awareness of how their actions influence others. Ethical sensitivity can be used to reinforce and strengthen the ethical mindset and practice of therapists. A measure of ethical sensitivity in the South African context focusing on interdisciplinary collaboration is a valuable instrument to measure and develop ethical sensitivity.

What are the objectives of the study?

The main aim of the study is to develop and implement a measure of ethical sensitivity for Health Care Professionals in the therapeutic sciences within the South African context.

Why is your participation important?

Your participation in this research study will contribute to the development of a measuring tool to assess the first step in ethical decision making. The value of this study lies largely in providing educational ethics programs the opportunity to determine the effect on participants by applying a reliable measure specifically focused on ethical sensitivity. The measuring instrument will also be practical in a sense to be used as a training program itself. Recommendations resulting from this research will encourage new research on other related areas of ethics.

What is expected of you as a participant?

For the final part of the study I need to evaluate the effectiveness of the measuring instrument. I would like to kindly request that that you complete a measuring instrument related to ethical sensitivity that consist of 12 case studies. This should not take more than 60 minutes of your time.

Will you experience any risk or discomfort during this study?

You will not experience any risk or discomfort during the study. During the pilot study students indicated that they did not feel any pressure or anxiety while completing the measuring instrument. All data will be treated as confidential.

What are your rights as a participant in the study?

You may at any given time throughout this study decide to withdraw. Any decision to withdraw will in no way penalize you. I will immediately destroy any information you provided should you decide to withdraw from the study.

What will happen with the data collected?

All information gained in the study will be treated as confidential. Data will be stored for 15 years at the Centre for Alternative and Augmentative Communication at University of Pretoria. Results from this study will be presented in the form of a PhD dissertation, a scientific article and presentations.

Will you have access to the research results?

The research results will be made available upon request following the completion of the research study. The results of the study will be sent to you if you tick the box on the next page.

Who can be contacted if you have any further questions?

Should you require any further information, you are welcome to contact Prof. Juan Bornman at 012-420 2001 [redacted] r Mrs. Alida Naude at [redacted]. I trust this letter has provided you with sufficient information as to make an informed decision about participation in the research study. Please would you kindly complete and sign the permission form attached at the back.

Kind regards

Naudé

Mrs. A Naude
Researcher

Bornman

Prof J Bornman
Supervisor

Centre for Augmentative and Alternative Communication
(CAAC), Communication Pathology Building
University of Pretoria, Lynnwood Road
PRETORIA, 0002
Republic of South Africa

Fax/Faks: + 27 86 719 2666
Tel: + 27 12 420 – 2001
juan.bornman@up.ac.za
www.caac.up.ac.za

Sentrum vir Aanvullende en Alternatiewe Kommunikasie
(SAAK), Kommunikasie Patologie gebou
Universiteit van Pretoria, Lynnwoodweg
PRETORIA, 0002
Republiek van Suid Afrika

Please complete this form and return it to the researcher via e-mail

Office use
Participant Nr

Statement concerning permission for first year students to participant in a Research Project: Permission reply slip

Title of the Study:
Exploring ethical sensitivity in the South African context: Developing and implementing a measure in the therapeutic sciences

Researcher: Alida Naude, PhD student, University of Pretoria
Supervisor: Prof J Bornman

I have read the information on the proposed study and given adequate time to rethink the issue. The aims and objectives of the study are sufficiently clear to me. I know that the University of Pretoria Research Ethics Committee has approved this study. I am fully aware that the results of this study will be used for scientific purposes and may be published. I agree to this, provided that confidentiality of students is guaranteed. I hereby give permission for the researcher to approach final year students registered in _____ regarding consent to participate in this research project.

_____	_____
Name of HOD	Signature of HOD

_____	_____	_____
Place	Date	Witness

Statement by researcher
I provided written information regarding this study.
I agree to answer any future questions concerning the study as best as I am able.
I will adhere to the approved protocol.

_____	_____	_____	_____
Mrs. A Naude	Prof. J Bornman	Date	Place
Researcher	Supervisor		

I would like to get feedback about the results of this study. ☐

Appendix B4

Biographical questionnaire for all participants

BIOGRAPHICAL QUESTIONNAIRE

*Please answer the following questions in the space provided.

Name	
Current Employer	
Job description	
Registration with professional bodies	
Registered profession	
Qualifications	
Relevant ethical portfolios, interest or training	
Years of experience in current profession	

Appendix C

Focus group discussion questions

1. (Only used for the first focus group) – Read the following definition of ethical sensitivity AND (a) state if the definition is clear (b) describe one situation where you think ethical sensitivity is needed:

   Ethical sensitivity may be defined as a professionals' ability to recognize that an ethical problem exists. This implies that the professional with ethical sensitivity can:
   - Determine which problems are relevant to them, their family, their community and their profession
   - Formulate the problem including which factors affect their perception and who will be influenced by decisions related to this problem, both now and in future.
   - Identify possible solutions allowed within the profession and seek advice where necessary.

2. Name some of the ethical issues currently experienced by professionals in your profession (specifically in SA)?

3. Name areas or issues that you think might lead to future ethical problems.

4. What skills do you think professionals need to be better prepared for these ethical challenges?

5. If you had to design a test for ethical sensitivity, what kind of scenarios would you include?

Appendix D1

Verbatim transcriptions of focus groups

Focus group 1:

Welcome and thank you very much for participating in this focus group. I realise that it is a big sacrifice to give up an hour of your time. I'm going to start by giving you a definition of ethical sensitivity so that we can discuss it and if we all agree we can proceed with the rest of the questions and discussion.

Ethical sensitivity is about something that happens long before you actually make an ethical decision. It is not your ethical behaviour. Ethical sensitivity is about your ability to recognise ethical issues in a situation for example when you are with a patient and they ask you something or tell you something. To identify if it is a legal issue, a personal issue or a professional ethical issue. It is in other words not about your religion or your personal values but about the rules and guidelines specified by the profession and which you as a professional are expected to abide by. Once you have identified a professional ethical issue you should also be able to formulate a couple of options on how to react or what to do and what the impact of the different choices would be. Ethical sensitivity is not about making the final decision on what you would do. We cannot in an interview or test situation actually determine how people would really act in a situation but we can test their ability to formulate different options with their consequences. Just because you know what is right does not necessarily mean you will implement it in practice. So when you look at the hand out you will see where ethical sensitivity fits into the ethical problem solving process. We are looking at identifying that a professional ethical problem exists, what can be done in that case and who would be affected by our behaviour or decisions. The situation is therefore analysed but there is not action at this point of the process. Any questions or comments from your side?

Now when you think about ethical sensitivity and how that impacts on professionals it is and important aspect to investigate. There are professionals that are reported to HPCSA and they honestly did not recognise that their behaviour was wrong. A lot of people get into trouble because they just don't recognise the ethical issues. The reason why they get into trouble is that HPCSA states that ignorance is not an excuse and people are judge on the action and not the intention.

Let's discuss some examples in your specific professions where there is a lack of ethical sensitivity or where you think people need to develop their ethical sensitivity skills.

PT: I'd just like to clarify something. Can we answer from a student or professional practice perspective?

Yes.

SLT: I think the whole issue of confidentiality. In students, for example, you have to teach them how to treat documents as confidential and describe different scenarios e.g. don't let documents lie on the table. Also discussing patients with friends. And then a big problem is professionals out there. I think the role models for our students are a big problem. A lot of things happen in practice that is very unethical. One issue for example is regarding time and how sessions are documented. A therapist would bill for a full 30 min but not necessarily spend the full 30 min in therapy.

SLT: I think another issue is scope of practice or best practice. An example would be laryngectomy patients. As a speech therapist you cannot fit prostheses unless you are under the care of an ENT, but not all speech therapists conform to that. This also links to bad role modelling for students and other professionals.

AUD: I think something that links to that is the split degree. The boundaries in hospitals are not clear. Speech therapists are expected to also do hearing tests and as part of their job description they are expected to overstep their professional boundaries. That is a huge problem.

PT: With our students we focus a lot on how to introduce our student to the patients. We deal with a lot of patients with HIV positive status. Confidentiality is therefore very important as well. Students have to be taught to be sensitive to patients. The example that they are getting from professionals in the field is not good. Sensitivity and confidentiality is often lacking in qualified professionals and we focus a lot on it with our students. Patient privacy should also be respected. It often happens that patients are treated in full view of other patients. Space if often a problem but it is not an excuse.

OT: I supervise a lot in psychiatric practices. The biggest problem I've noticed is that students and even professionals seem to assume a lot. They assume for example that a patient is not competent and that they do not know their rights and the issue therefore of autonomy is a big problem. Confidentiality links to this as questions are asked in front of other patients and the individual patient is not treated with the respect they deserve. Most of the time the patients will not object, they will comply but it shows a low level of sensitivity from the professionals and students. The other thing I've observed is that professionals sometimes take over the client's life, again stressing the issue of autonomy. Patients are not expected to make decisions or take part in their management plan. Professionals decide what they believe is best and implement that without input from the patient.

SLT: I think the issue of patients being informed is very important. We don't spend enough time on counselling and informing patients.

PT: Part of this is also access to other professionals. Patients in hospitals for example have access to a whole team of professionals but they are not informed and not referred. That is very sad because we are not giving the patient the benefit of what the system has to offer.

OT: I agree and I think one reason is that we do not train our students well enough. We tell them about team work but we do not explain well enough the role of the other professionals.

AUD: The problem in public hospitals relates to the long waiting lists and lack of services. I think professionals become despondent and then stop referring.

SLT: Poor communication between professionals is part of the problem.

What are the biggest ethical issues that professionals are currently faced with?

SLT: One issue that is currently a big problem is that some therapists in public hospitals are not at work but sitting in private practice to make extra money. The first issue is obviously that they are paid by the hospital to be there but they are not but also they leave another professional behind that must carry a bigger case load.

AUD: For me the problem is that there are many audiologists in practice that do not do a full or complete assessment. I've seen patients fitted with the wrong hearing aids because of incomplete tests, especially children. I think it is a time issue. You need to see as many patients as possible to make enough money. Together with that is the problem if they end up with you. How do you handle that? You cannot tell them the other professional didn't do a proper job but what do you do?

OT: I see that there is a big variance in competency of professionals. Some lack experience and if they go into private practice immediately they cannot learn from someone or there is nobody to pick up if they make a mistake or do not follow the right protocol. They cannot determine themselves that they lack experience.

AUD: Places where audiologists nowadays work are strange. Some are working in shopping centres and pharmacies. I think it is because audiology is more and more viewed as a business. But something about it is just not right.

PT: When I was in private practice I sometimes got referrals from doctors but with for example a clear chest x-ray. It is my ethical duty to tell the doctor that the patient can be discharged or that they don't need physio care but regardless of the results the patient will remain in the care of the physiotherapist and receive physiotherapy until they are discharged. This is different in the public sector though where patients receive a full assessment and then management and are discharged as soon as the results show that they are better. The length of time a patient sometimes stays in hospital in the private sector is sometimes questionable.

Thank you. Let's move on to the next question, namely what do you think are going to be the ethical issues of the future?

SLT: For me I think it is informing the patient. You have to make it very clear from the beginning what you are going to do and what the goals are. Too many patients are unsure of what their prognosis is. Counselling and education is going to become more and more important especially as our patients have more access to resources like the internet. Maybe therapists lack confidence, sometimes we are not sure what the prognosis is and we do not want to look stupid in front of the client. This might also be due to a lack of communication with other team members.

OT: Money is an issue. You get better remunerated for assessment than treatment or counselling. Linking to this is respect for our clients. I think especially in our earlier years as professionals we do not necessarily listen to parents and incorporate their knowledge into what we do. Also the elderly, I think there is not enough understanding for them from the therapist's side. It is important to acknowledge the knowledge they bring with them.

AUD: I've seen that audiologists do the assessment, hearing aid fitting and then refer for rehab and counselling. That is not acceptable. We have a responsibility towards our clients.

SLT: I think time from referral to follow up is an issue and will be more of an issue in the future. It seems as if therapists struggle to prioritise referrals. And then if they can't see someone they don't refer to someone else and the patient is left without help.

OT: Competence and skill is also an issue. If you feel you cannot help someone it is your responsibility to increase your skill and I think that is also the purpose of CPD. Although I don't think if people really take it seriously or use it to plan their professional growth.

OT: There's a lot of talk in the literature about responsiveness and how patients are asking more questions and expecting more and knowing what they want. The issue of second opinions are also becoming more and more of a reality. They are more aware of their rights. They focus on their own dignity and how they are treated. I believe this is a challenge we need to brace ourselves for.

AUD: I don't know what to call it…maybe penny greed. I think it's part of society and I don't know if we can teach students to not be like this. This might be something that will get therapists into trouble.

My last question is: "If you had to design a test for ethical sensitivity, what kind of scenarios would you include?"

PT: I think harm to patients maybe because of lack of skill or acting outside of scope. I would include that.

SLT: Honesty. Also regarding prognosis, length of therapy. Informed consent.

SLT: Lack of resources. One example is lack of translators and who can be used as translators.

OT: Cultural sensitivity where you are not aware of what you are doing because of a lack of knowledge. Understanding the patient and where they come from is currently a barrier to successful patient management.

It is 11 o'clock and I would like to thank everybody for their input. Good luck with your busy schedules and finalising exam marks. Thank you.

Focus group 2:

Welcome. Thank you for your time. I know you are all very busy and I really appreciate your participation in this focus group. You all know each other so it is nice to have a discussion represented by speech-language therapists, audiologists, physiotherapists and occupational therapists. I want to ask that you please focus your answers and comments on your specific profession.

The first question is regarding the definition I sent you on Ethical Sensitivity. Is there something that you found to be unclear or that you disagree with or don't understand regarding Ethical Sensitivity.

SLT: I thought the definition wasn't very clear. I felt that if it was maybe presented in shorter sentences or bullet styled it would have been more clear. I had to read it a few times before it made sense. Maybe it is just me my limited abilities.

AUD: I want to agree with her. I had to read it a couple of times and then it made sense.

SLT: Yes, after a while it makes sense but I had to read and reread it.

Okay, just to clarify: The definition made sense to everybody in the end? GENERAL AGREEMENT. *But the recommendation is to make is shorter and easier to understand?*

Agreement with comment from PT: Maybe it would help to explain the definition with practical examples to make it easier to understand.

Thank you. That is exactly where we are going to start. I need an example from you, in your profession related to ethical sensitivity. So where would you need ethical sensitivity, or where do you feel there is a lack of ethical sensitivity. In other words, where people for example have a claim against them from HPCSA and then say but I didn't know / I didn't realize. They did not deliberately do something wrong. It is not where someone for example changes an account and then sends it to the Medical Aid knowing they've committed fraud but hoping that they won't get caught. It is very often a professional feeling sorry for a patient, trying to help. The action is motivated by compassion but they miss the ethical problem.

AUD: I would say people, audiologists specifically or maybe other professions too, during case history. I think it is a situation of you've given me some information and now I can continue with my testing forgetting that this is where you need to gain the patients trust. I think you also ask sensitive questions and I think the importance of case history is often forgotten.

AUD: For me I think it's about following the case history through the assessment and on to counselling. We get information on where the patient is at and you have to be sensitive to what you say to a patient, a mother. You get so many parents shopping around because they are not satisfied with what they heard at the first place.

PT: I would like to elaborate on that. Let's go to the scenario where there is a ward round in the hospital. The professional with the students stand there discussing the patient in front of the patient. I think sometimes the information is dealt with in an insensitive matter. The patient may hear words that they don't understand or make their own conclusions that are not correct. I think feedback is part of the problem. Patients or parents are sometimes very confused and unsure of treatment and plan of action for the future. This is an indication of poor communication with the patient and I view that as ethical insensitivity.

SLT: I personally feel that giving proper information to patients should be there from step one, even before you start your assessment. You need to explain to them what is going to happen and what the purpose is. Afterwards it is important to put it all together explaining what we did, what it means and what can be done. This is what we call best practice. And ethics to me is best practice. They go hand in hand. You are not really ethical if you do not practice your field of knowledge according to best practice. To do what is right.

I just want to formulate it in these terms – please tell me if you agree or not. In terms of what you are saying doesn't it relate to professionals not being able to place themselves in the shoes of the patient? I mean if you are the patient you would be able to identify that you are not treated appropriately or that the necessary information is not given to you. But professionals do not necessarily step back, think what they themselves would have liked if they were the patient and then treat the patient accordingly. This relates to ethical sensitivity.

AGREEMENT

AUD: I agree, I think sometimes we as professionals are so focused on 'fixing it' that we forget about all these other issues. Our primary goal is to fix the problem.

AUD: Yes, we sometimes tell them what to do but forget to explain the finer detail. I also find that, and I don't know if this is only my experience, but I find that this problem is more prominent in the government setting, where patients are not charged, than in the private setting. For some reason, maybe because the patient is paying for the service, they seem to be more informed. I don't think it is only because they have money to pay for it. It is possible that because they are of a better class they may have more access to resources such as internet etc. But it seems that the issues we have discussed are more related to government than private settings.

PT: I think professionals have a different attitude.

AUD: Yes because in private it is more about business. You have to in order to secure a salary but in government you get your salary regardless of the quality of the service you provide. You can sit in your office and close the door and still get your salary at the end of the month.

AUD: You should still be delivering the same service regardless of the setting you are in but in the real world it doesn't happen like that.

SLT: I want to speak from the perspective of a speech therapist working in schools. There are two things that I would like to mention. When I worked at a school I always felt that the learners were being discussed in the corridors. Other people walk pass and can hear conversations. You sometimes cringe when you hear what teachers say about children. Secondly, when you as a therapist go into the classroom. I don't know if we are more aware of the ethical implications than the teachers or if we are a bit more sensitive but I feel that as therapists we are more sensitive to this issue. We go into the classroom to give feedback to a teacher and I'm thinking now of an example that happened last week. I went into the classroom and asked the teacher if we could go outside and she asked very surprised 'Why? I need to see what my class is doing'. We can just discuss the children in the classroom'. I feel that many of the teachers are not sensitive toward the children's problems and also their needs. But I must admit I don't think it is only teachers but I feel that maybe they don't know it's wrong to do it in that manner. This places the therapist in a very difficult situation. I don't want to speak in the classroom in front of the children, I want to discuss feedback outside. The teacher doesn't want to leave the classroom. That is a dilemma for me and I feel she is not sensitive

towards the needs of the children. That is a problem for me because I do not know how to deal with it. Therapists can't tell teachers: "You know what, this is not right'. We shouldn't discuss this in front of the kids'. I collaborate with her but it's her classroom and I have to sensitive towards her needs too. I feel that I don't have authority and then have to give in to my ethical instincts. Then another thing, I don't know if this is related to ethical sensitivity. It relates to being dually qualified or not. I know some therapists and I also know of a specific audiologist that works as a speech therapist. She is only qualified as an audiologist though. She is clearly overstepping the boundaries of scope of practice.

AUD: That is definitely not in the best interest of the client. There are obviously some things she would be allowed to do for example basic screening. But I think some professionals do screening in their best interest and not the clients. For example do basic screening when the problem is obvious and then refer instead of referring from the start.

What do you think are currently the biggest ethical issues in your profession? What are the issues that you hear about or that are being reported to the HPCSA or other professional organizations?

OT: In our profession it is definitely the whole payment thing. What can you charge for? How much can you charge for? That is definitely one of the big things. Secondly I think it is the issue of are you competent for doing what you are doing? Like for example in some of the evaluations a therapist will do it without being experienced in that area, for example physical and psychiatry.

SLT: It is the same in our field. There are specialized areas. I feel that people that do not do it on a regular basis should not touch it. One of them will be dysphagia and maybe another will be augmentative and alternative communication (AAC). I know that in America they have a Master's degree for that. You need to be a specialist in that area.

OT: The decisions that we have to make affect the patient's whole life. With a kid it's their whole future. This cannot be taken lightly.

AUD: In audiology it is the same. In paediatric audiology for example, if you are not experienced you can misdiagnose and possibly mess up that kid's whole life. Also verification during fitting. If you do not do this you can sell a hearing aid but have a poor fitting, losing a lot of the benefit of the hearing aid just to make money. And I actually think that happens often. And only after a few years do the parents realise that their child's progress is not as expected.

AUD: The problem is that some audiologists are convinced by companies that they do not need all the equipment and still successfully fit hearing aids.

AUD: I still think it is the audiologist's responsibility. That is the purpose of continued professional development. You should stay up to date with the relevant and appropriate procedures that form part of best practice.

You are touching on something else now that is also very interesting namely continued professional development. What about ethical sensitivity in this area?

SLT: I know people swipe their cards and then leave sessions, or sit and do other work while attending a lecture just to get the points. Some even read articles and share answers to gain more points.

PT: The biggest issue I see in our profession is the coding structure. Not specifically referring to ICD10 codes but procedure codes. E.g. 72501 is used for rehabilitation and can be used when spending 30 minutes with a patient. Unfortunately what is happening is that therapists are using this code even if they've spent 10 minutes with a patient giving them some exercises to practice. There is another code which is a 305 that can also be used for a few exercises but it is about half the money of 72501 so it is not often used. It frustrates me because Medical Aids look at the billing structure and determine which procedures are more common. Procedures that are not really used are either paid less or don't receive a code. That has a major impact on the whole profession, especially those practicing ethical billing. I think some therapists feel that the systems and structures force them to bill incorrectly e.g. if they delivered a service but there is no code available they feel it is justified to just replace it with any other code.

AUD: I think that is a big problem in private. The focus is money and not always the patient. I think time management is also a problem. In order to make more money you need to see more patients and it is possible that a patient does not receive the necessary attention due to time restraints.

SLT: Another problem in speech therapy is that therapists do not always prepare well for a session. Standard programmes are used. Patients are seen directly after each other and there is literally no time to prepare before a client arrives. I'm also thinking about another issue now… at one of the schools there were two therapists with hardly any experience in medicolegal work but decided to do it because of the chargeable fee associated with it. They took on a case with traumatic brain injury (TBI) although they had no previous TBI exposure or experience. I feel that was very unethical.

AUD: It is shocking. I receive a lot of reports and some of the reports professionals write shock me and I think some of my students can actually do better. I think report writing is a big problem in our profession. A report is like an afterthought.

SLT: Yes, I find that reports are so superficial that it is not a true reflection of the session and does not convey the necessary information. I do think it is sometimes related to time limitations. Time is money. In government settings it's the same problem but for different reasons, probably overload.

AUD: I think it's worse. There are often no reports for patient. Therapists take less responsibility. In private, because patients pay there is more of an obligation to give a report. In line with this, record keeping is also a problem. I get referrals from the hospital and then the patient has been seen before but there is no record of it. This delays appropriate treatment and I believe increase depression and anxiety. In other words, just because patients are tested for free it doesn't justify repeating unnecessary tests.

OT: Talking about this, I think there is also over servicing in private. Because many of the OT's working in government might see a child once every month where in private they are seen twice a week.

OT: But is it over servicing in private or underservicing in government?

SLT: I wonder if the home programme in government is as effective as twice a week therapy in private?

OT: Well I think that depends on the parents and if they follow the home programme and not the amount of therapy.

AUD: I think it's about the therapist's motivation of why the child should come twice a week. Is it child-centred or a financial decision?

SLT: Or is it that it is just the norm. Everybody is seeing their children twice a week.

SLT: I think parents prefer twice a week cause then they make it the therapist's problem and take less responsibility.

OT: Yes I agree. It's about the reasoning behind the decision.

PT: I think another is referral. It is sometimes in the best interest of the client to see another professional as well, but therapists are reluctant to refer.

SLT: Again, this refers to best practice. Interdisciplinary teamwork is in the best interest of the client.

OT: I know of doctors who for example provide splints even though he is not trained to know what the best option would be.

PT: I know of doctors who administer corticosteroid injections instead of referring for physiotherapy.

AUD: I think professionals in all areas are scared to refer. Everybody is scared of losing their patients. There is not a lot of trust between professionals.

AUD: I think that happens a lot. You as a professional have to do what is in the best interest of your client. Even if I lose my patient, if they are referring appropriate care that should be enough. But it is about business and making.

PT: I think the problem is that patients are not informed. They should know that they can get second opinions but also that even if they are referred to someone they are allowed to choose who they want to see.

AUD: I think patient do not know that they have the right to choose.

AUD: I believe that if you deliver a good service from the beginning patients will return to you. If you build a trust relationship they will know that they can trust you even to phone you and say that they've been referred to someone else. When I was still in private I had patients that were referred to another audiologist by the ENT and they just came back to me. I believe it is because they trusted me. I think that the better the service is the better your chances of retaining your patients. Unfortunately, in most cases people go where the doctor refers them because they are too scared to go against the doctor.

SLT: I think it is also the therapist's responsibility to ask the patient if they've ever seen another therapist in the same area of practice. Then it would be the right thing to do to contact that therapist and tell them that you are now seeing that patient.

The professional ethical rules actually state that you have to give the patient the option to return to the previous therapist and then inform the previous therapist if they decide to stay with you.

AUD: Nobody is going to do that. It doesn't matter if it is in our rules or not. I'm laughing because that is not a rule that is going to be followed. Patient confidentiality and patient rights should cover that rule.

What do you think in our professions will be the biggest ethical challenge in the future? What can damage our profession or what would cause professionals to get into trouble or patients to be dissatisfied?

SLT: I think it is the claiming issue. Claiming for things that you have not done.

AUD: Yes I agree. Also because some codes are abused others are neglected and we can lose those codes. I think this can also lead to distrust from the Medical Aids and they might not want to pay us anymore.

OT: I think maybe this National Health Insurance. I think it is going to cause additional financial stress to professionals.

Any other comments? Okay then, let's move on to the next question. If you had to design a test for ethical sensitivity. If you had to test students for example before they graduate. What would you include in the test? If we wanted to test if education contributed to ethical sensitivity, also in terms of CPD what are the scenarios would you include. Your examples can be multidisciplinary or profession specific. If you had to play a scenario and they had to identify the ethical issues what kind of scenario would you include?

AUD: Definitely one of these claim ones. That is an important issue. Provide a scenario with information such as this is what you did, this is the time spent with the patient, how would you claim. So definitely billing.

SLT: I think we all agree that it comes down to money. Greediness.

OT: But do you think students would understand that?

SLT: I don't know. I just had the experience of teaching ethics to the final years. They could not understand why they should not accept the incentives being offered. From a business perspective it is fine but it is not in the best interest of the client and not in accordance with the professional ethics. Maybe a scenario for students can include simple scenario with an explanation of codes focusing more on the principle than on the specific codes.

AUD: Yes, I think there is a lot of temptation from company representatives. When you are offered nice things it is difficult to say no and it is also difficult to keep your focus on the client. It is easy to be won over especially when the company representative is an audiologist. It is hard to think that an audiologist who falls under the same ethical rules than you will offer you something unethical.

What do you think in terms of the hand out I gave you. Where is the biggest problem in our profession? Is it focus on self; or is it that we struggle to take the perspective of others; or is it a combination. Where do you perceive the biggest challenge in terms of ethical sensitivity? Where do you think the focus should be in terms of training?

SLT: I think the focus on self.

AUD: What I've seen in therapists is the focus on others, especially on clients on teammates on developing relationship with other professionals. They focus on themselves, what is good for me, what is good for my practice. They should be thinking what is best for this client. For example when I'm referring, to not focus on who I like but who is best for this client.

SLT: I think it is important to train students with scenarios from early on. Discussion is important to facilitate understanding.

AUD: I think it is important for qualified professionals as well. Sometimes you attend a workshop and receive ethical points but you cannot identify when ethics were addressed. I think ethics points should be awarded for scenario based workshops where people can reflect on things and learn in that manner.

SLT: I think case discussions in professional groups will also be very valuable to make people aware of pitfalls. And it is important that this is continuous so that you can stay up to date throughout your professional career. I also believe that the HPCSA has an obligation in terms of accreditation and training. They can provide us with mock case studies to show the practical implementation of the theoretical rules and guidelines.

OT: I am on the accreditation committee for our profession and I must admit that they are very strict when awarding ethics points. You have to prove the ethical content before the points are awarded. But it is very theoretical and I agree that the value can be limited.

A last question before we finish off. What do you think students struggle most with in terms of ethical development?

AUD: I think from what I've seen it is considering the patient and putting the patient first. Students sometimes make patients wait for hours because they forgot about an appointment or because they don't want to start early even if they are available.

PT: I think it links to the student's motivation for choosing our profession. Why did they decide to become a therapist? In most cases it was not their first choice. Some are not even sure what they have enrolled for. They are not accepted as medical students and then they apply for anything just to study. Every year I ask the students why they want to study this. Some of the answers are shocking. Some will say it is because they want to make money. Those are the students that are going to be more tempted to break the rules. It should be a calling of wanting to make a difference. Then your 'kickback' will be when the patient improves or a student suddenly gets new insight. I think we have a responsibility to increase knowledge of high school learners. If they better understand the different professions we might be able to reduce this problem.

Thank you very much for your time. I really appreciate your input. It is amazing how similar the problems in the four professions are. If you think of anything else you would have like to add please let me know. Enjoy your afternoon and travel safe.

Focus group 3:

Good day and welcome to this focus group. I'd like to thank you for taking part in this research and giving up your time. This study is about ethical sensitivity. Ethical sensitivity includes deciding if an ethical situation exists, what are the possible solutions and who might be affected. It does not include any action, in other words is the process leading up to implementing a decision. The aspect of recognising a problem is very important. In student training it very often happens that students are presented with an ethical dilemma and they are well trained on providing solutions. But very often students and professionals do not recognise the situations on their own if confronted with them. During this focus group I'm going to ask you specific questions regarding ethical sensitivity and ethics in general. The first question is: "What is currently, in your specific profession, the things that you would consider ethical issues? This includes not only actual complaint made to HPCSA, but things you hear about have witnessed for yourself. You may even discuss things that you know people are struggling with even if they are not necessarily doing it wrong at the moment".

PT: The ethical issues that I see related to physiotherapy seem to be related to the practice of the profession. It is either the problem of charging the patient. Problems related to charging patients seem to be on the rise. I mean, what do you charge for a patient, how much. That seems to be the most common problem.

SLT: In terms of speech I think that is also an issue. I think in especially your bigger practices I think there is conflict between what the boss tells you to do and the therapist serving the patients. Especially when the therapy is not necessarily appropriate the therapist doesn't know what to charge for and how much. I think this is very obvious in the profession and often reported. But I believe, for me, there is a hidden thing in our profession. I believe it is the issue that most of the speech therapists in our country is either English or Afrikaans speaking. And our clients mostly speak other languages. And ethically we are bound because we are speech therapists to actually help these clients in their main primary language and often we cannot do that. I guess for me that is an issue that people tend to ignore as if they don't see it as an ethical issue. But I think it actually is. Some therapists are working through interpreters but it doesn't always work well.

AUD: I was thinking that we see that in audiology as well. That people are denied services or a certain level of services because we as audiologists do not speak their language of the patient. That is what I have found. In think in audiology one of the biggest things though would be management that is agreed upon by the patient. So in other words informed consent first of all. And then also recognising that this person is autonomous. That is for me the biggest thing because we as audiologists often think we know what is best for the patient and we will tell them what to do without maybe giving all of the different options so that they can choose what they think is best for them. And then especially with patients that are not all that educated or don't necessarily have all the information. In such situations some audiologists would make the decision for the patient because they believe the patient cannot make a decision for themselves. Patients are definitely treated differently according to their level of education and socio-economic status. I find that in most cases with audiologists that I talk to would for example say that patients are not interested in rehabilitation, but it is more likely that the patient doesn't know what it offers or what the advantages are because it is not explained well. Also they are not given time to think about it and discuss it again. Audiologists approach patients in a more general way that in a custom patient individual manner. With regarding to private practice specifically I think overcharging is a big problem an also over servicing. This includes charging for something that was not done, charging more than what should be charged or charging for something that was done but that was not indicated or needed for that specific patient which is over servicing. I believe coding is an issue where people for instance do a screening test but

charge for diagnostic which is overcharging as well. And also professional knowledge of the practitioner, although this is not unique to private practice, where audiologists do not have the necessary knowledge to provide a service. One example is in the area of hearing aids. You are advising the patient to try out a specific hearing aid with specific features where in actual fact there might not be any evidence regarding the advantages of those features. They are not aware of the existing literature base and only believe what hearing aid companies and marketing information tell them. Audiologists also tend to believe everything spoken from a platform at a conference or look at another audiologist and believe that what they are doing is best practice or evidence based because they are respected in the field. People don't take responsibility for their learning or their knowledge despite CPD.

PT: The same relates to patient education, where the patient is ignorant of what is to be done. So whatever you do they are happy that something was done, even if it was not necessarily the right thing. They feel lucky that they've received some form of treatment. And I do believe it becomes a lot more obvious when you move into the public sector. Quality of care - that is the problem. Another problem in physiotherapy is about the scope of practice. What is the scope of practice? There are therapists in the private sector that provide other services to make extra income but it might be things that are not within their scope. They should refer but they don't.

OT: I believe we need to focus on the public sector and what is happening with ethics in the public sector. With the national health insurance we need to focus on how we are training therapists for the public sector. Are HPCSA looking after the patients in public sector? It seem like therapists are very concerned with legal protection and if they do something wrong then they just get a good lawyer. What I want to bring to the table is how students are being trained to make a difference where services are needed. In rural areas, remote rural areas or underservices areas we need to deliver services and help the communities. Then I'm very concerned about how community therapists are being trained. These home or community based care workers are not trained in rehabilitation and they are not being supervised by the therapists. And nobody is raising concern about this. This is what is relevant for our country.

PT: We need to train our students in this. And we need to sensitise our students to this. What is happening at community level does not seem to be controlled well.

OT: We need to look at the ethics of underserviced areas. How sensitive are our students and professionals to underserviced areas? I went to Springbok last week. There's no audiology or speech therapists. If you talking education employment these kids just don't get into the system. They don't have adequate language development but there's nobody at the school to help them.

PT: This is very important. This relates to the ethics of access on various levels.

This links to my second questions which is: What do you think are the issues of the future? What do you think are the things we need to focus on now to prevent certain ethical problems in the future?

SLT: I think the same issues would persist. I suppose to some extent I think how we respond to the current issues will determine the issues of the future.

AUD: I also don't think things are going to change much. I think it will be the same issues but with different technology or different patients. I think the underlying issues or principles affected would be the same. I would however like to backtrack a bit to the previous question. There is something that I believe is important but we do not really talk about it much. When you know that another therapist is providing services in an unethical manner, what do you do about it? Because if you are only turning a blind eye you are just as complicit as that person. I don't know about you but I think we are all guilty

of this. It's one thing to address it with that person but if nothing changes what do you do then? If you do not do anything about it you are also responsible for that person not receiving adequate services.

PT: This again points to sensitising students that by the time they qualify they understand their social responsibility and that they know what to do, what processes to follow, when observing unethical practice.

OT: We also need to see how sensitised students are to human rights and patient rights. I think therapists should be informing their patients about their rights but I don't think that a lot of attention is given to this.

PT: I think it is important to realise that ethics is not a set of rules that you can tick off on a checklist. Ethics is a mind-set. It's about seeing your responsibility. The thought process is what we need to focus on. That is what is important.

OT: I think we need to focus on professional reasoning as well instead of just on clinical reasoning. We are also not really training students about their obligation across sectors. Thinking about the contribution a therapist can make in the educational field as well as social development and labour. I don't think there is a sensitivity to think outside the box. If there's for example a problem with children failing school because of a drug problem the therapists in the area won't report it to the Department of Education because that is not in their job description.

The last question is: If you had to design a test for ethical sensitivity, what kind of scenarios would you definitely want in the test?

AUD: For me it is not so much about the specific situation or what someone must be able to recognise. For me it is about what you do, the action. Especially for a student going into community service where there is a power imbalance. How do you complain about the head of department? Are new graduates empowered? If we can train then to be empowered that would help.

OT: I think human and patient rights must be included in this test to determine if the person tested is aware of these rights.

SLT: I think the language issue is important for me. And I also think understanding job description and what is scope of practice and how this fits in with social responsibility.

PT: I would like to see the sense of responsibility for mentoring and guiding younger professionals as well as home or community based therapist. Is there a commitment to service and to the profession? Is there a commitment to see the profession grow?

Thank you everybody for your input today. Please feel free to email me if you think of anything that you would have liked to add. Again thank you for your time.

Focus group 4:

For every focus group I just realise that I must start off saying thank you thank you thank you for your time. I honestly thought this was going to be the easiest part of my study but everybody is busy and I realise the sacrifice of spending an hour of your time on this focus group. For my study I'm going to design an ethical test. The specific area of ethics that will be focused on is ethical sensitivity. This includes the ability of someone to identify and ethical dilemma, what are the different options available to manage it, and what is the consequences of these possible solutions. It is not about what somebody will do as it is extremely difficult to predict behaviour. Professionals are very often trained with case studies where the problem is already identified. The focus is then on problem solving. Therapists are therefore often good with problem solving but can get in trouble with HPCSA for not being able to identify an ethical dilemma.

The instrument will be valuable for testing students to determine if specific ethics outcomes have been met, but also for ethic training programme. Many programmes are presented without any proof regarding the impact thereof on the profession or the professional. Since the ethical rules and guidelines for Physiotherapists, Occupational therapists, Audiologist and speech Therapists are the same the idea is to design the test in such a way that it can be used for all of these professions.

I have four questions that I would appreciate your input on:

The first question is where do you think one would use ethical sensitivity or why would it be important for a professional?

The second question relates to the ethical issues that are currently visible in the different professions. What do you see or hear or just think are currently ethical issues that could threaten the profession.

The third question is: What do you think are the ethical issues of the future.

The last question is: If you had to test someone's ethical sensitivity, what kind of scenarios would you use. What issues do you believe are critical to be evaluated, the things that professionals should be able to identify in clinical practice.

Do you have any questions before we start?

PT: I would like to know if we have to specifically focus on a specific population e.g. children?

No. Please feel free to focus on your area of speciality or wherever you feel ethical sensitivity is most applicable.

Let's start with question 1: Where do you think ethical sensitivity is important for the therapist? Situations where they would easily miss that there is an ethical dilemma or where you think there is a risk for getting into trouble due to low ethical sensitivity?

PT: It is everywhere. It is in education, in patient care, research.

PT: I had an interesting situation yesterday with the students. They observed at my practice. I had a mother there who was upset about something regarding her child and she needed to talk to me. I actually just wanted to demonstrate something to the students but I would be 'using' the patient for education but they would not get any direct benefit as my time was limited. I decided to talk to the mother and have the students do something else. The students queried this as they felt it was okay to demonstrate something regardless of the mother's needs at that time. I had an interesting discussion with the students the next day but I feel that it is easy to miss the client's needs when we have a specific agenda for that session or day.

PT: I had a similar situation. It is important to realise that when you are using a patient for training purposes that they give full consent. If there are any language barriers you need to get an interpreter but full informed consent is not negotiable. The patient needs to understand their rights in that situation. I feel it is very easy for students to ignorantly mistreat patients. But professionals are not innocent. I find that professionals struggle to view patients in totality for example if a patient is very neglected you cannot just look at your intervention strategies and not realise the impact of the patients environment on them and on intervention. It is about how you care about the individual and the respect you show them. If they do not realise that they have rights you should teach them about autonomy and help them express their opinions. There are other patients that have access to the internet and come with their own ideas for treatment. How secure you are in who you are as a professional and a person will influence how you handle that. My conclusion with that is that ethical sensitivity is also about maturity as a person. Can you always give your best regardless of your emotional state? Ethical sensitivity for me is about professionalism.

AUD: I believe that a major problem relates to role models. Young professionals need to grow but they need role models. We need to always place the patients as the number one priority in the session and then we will encounter less ethical dilemmas.

OT: For me, ethical sensitivity goes together with your social interaction skills. Therefore it involves every situation where you are involved with people. I also want to talk about the case mentioned earlier about the students and the mother. If you are not able put yourself into someone else's shoes and imagine how they are feeling you can't make the correct decisions. I believe that low ethical sensitivity can destroy patient trust and lead to a whole lot of problems including low patient motivation, possible sanctions, etc.

SLT: I think respect is very important. We have so many people that do not speak the same language than us or maybe they are illiterate and we might not even know. Or the professional knows and then looks down on the patient and withhold certain information because they think the patient won't understand. More time should be spent on individual patients to make sure they understand what you are doing, what you are assessing, what the outcome is and what the prognosis and treatment plan is.

OT: For me professional relationships and interaction skills come in here again. And this directly again impacts on trust.

PT: Another issue for me relates to professionals towards each other. Professionals working in a team or when they get a referral from someone else easily criticize each other. We need to get the facts and if we do suspect unethical behaviour we need to follow it up with that professional and not discuss it with the patient. Saying this, I also have a responsibility to communicate clearly with team members regarding my results and treatment. We need to build trust between professionals and team members.

AUD: Another area I'm thinking about now is record keeping. To keep record of what you have said to the patient. What you have done. What your next steps are.

SLT: I think that is important to know what was said. But it is important to realise that patients are sometimes in shock or overwhelmed and they cannot remember everything that was taught to them. We need patience and be sensitive to our patient's needs.

Let's move on to question two. What are the current ethical issues in your specific fields?

PT: I think confidentiality and informed consent. In this age of technology and how easy it is to make videos or recordings it is a real danger.

PT: I agree with you. But informed consent in all areas is an issue. The patient might agree to be assessed but do they know that that mean you are going to touch them? I don't think professionals are always sensitive to this.

PT: I think proper detailed feedback of assessment is also neglected.

AUD: I think in audiology the biggest issue relates to hearing aids because there is a lot of money involved. I've seen fraud in terms of compensation where cheaper hearing aids have been supplied and the money pocketed. Then in terms of options given to people regarding hearing aids, honesty and informed autonomous choices are often issues that come up in private practice.

SLT: I think coding is also a problem in the professions. The wrong codes are used to get more money

Everybody agrees…

Let's move on to the third question, but you are welcome to come back to any of the previous questions. What do you expect to see in the future in terms of ethical issues in the different professions represented here?

OT: I think CPD is very good but I do see problems for the future. It is seen as a money making opportunity and there are situations were accreditation is not done ethically. The focus is not on training and enhancing skills but making money.

SLT: I also believe CPD is good but I think it has created a whole new minefield for unethical behaviour. Even in terms of people signing in for courses but not attending or people asking their receptionists to do CPD articles on their behalf, etc.

PT: I've also heard that receptionists sit and do articles.

AUD: It's all about integrity and it doesn't matter in what area of the profession it is relevant to we will always get it.

PT: I think people not following best or evidence based practice for various reasons is also going to become a problem. I think patients are becoming more educated and more professionals are going to be accountable for decisions they make.

AUD: I think whistle blowing is a problem. Now and for the future. We need to be responsible and protect the profession for us and the patients of the future. People's motivation for whistle blowing is wrong.

PT: The problem is the process. It gives you years of problems if you whistle blow. This is not profession specific this is a people thing. People don't report woman or child abuse.

SLT: A sense of privacy. There is a new generation developing I believe because of social media that do not respect their own privacy. Everybody is sharing intimate details on Facebook and Twitter and all these media. This might result in a generation placing less value on privacy and confidentiality. I've seen this at practices where practice staff discusses other patient's details in the office where other people can easily hear. This means students will have to be specifically trained but also staff employed by doctors and therapists.

PT: I'm concerned about sexual harassment. One of my students did a study and I was shocked. There are problems from professional to patient, patient to professional as well as within the multidisciplinary team. I don't think professionals are adequately trained on how to handle these types of situations. If you look at the world today, I believe this will not disappear soon but will probably increase.

You have mentioned various scenarios already that would be very valuable for the measuring instrument but moving on the final question. Are there any very specific scenarios that you would like to see assessed in this measuring instrument for ethical sensitivity?

PT: I think it would be good to get people who take the test to write a short reflection on the case in order to see how they think about it.

AUD: I think it would be important to have control scenarios so that not all cases have ethical issues in order to truly assess sensitivity.

SLT: In summary I think confidentiality, coding and informed consent are important issues to address in the test.

Our time is up. I would like to thank each one of you for your time and your valuable input. Thank you and enjoy the rest of your day.

Focus group 5:

Welcome. Thank you very much for your time. I don't know if you know each other. Can each of us please introduce ourselves…

The purpose of my study is to design a test for ethical sensitivity. There are so many ethical programmes and there is a lot of focus on ethical CPD points but there is nothing to measure effectiveness of such programmes. There is a general feeling amongst professionals that even though ethics points are now compulsory it is not improving the ethics of the profession. In order to design such a test I need to know what the ethical issues in the different professions represented here today are. I have a couple of question that I would like for us to discuss.

My first question is: "What are the current ethical issues in your specific profession"? This can be issues related to HPCSA complaints or things you have heard from other professionals or patients. You can give a practical example or just summarise it as a principle e.g. trust.

PT: I think one of the biggest problems relates to communication problems. I think that when there is poor communication then the parties involved make assumptions. I think that very often issues that are reported to HPCSA could have been resolved long before if effective communication was practiced. I think the problem is that professionals are not well trained in effective communication. I think most professionals will testify that they have good communication skills even if it is not true. I would love to for example attend a workshop on communication skills where someone can give practical examples of how and when communication can go wrong. I can imagine for example that if a patient is treated but they do not understand exactly what was done and they receive a huge bill there can be a lot of unhappiness. I do think therapists need to be made aware of this. I do not think it is obvious to everyone. I do believe that with practical examples showing the effect of certain actions that therapists can gain insight and improve their communication skills.

AUD: I agree that communication is extremely important. A specific issue that concerns me is that I know of cases where audiologists do not look at repairs of hearing aids but recommend new ones. Sometimes it is a minor repair that is needed but the focus is on business and making money, and in the process it also means deceiving the client.

AUD: I know of a case where a 94-year-old patient needed repairs on his hearing aids but the audiologist recommended new hearing aids to the value of R30 000 each. I believe that the audiologist abused her power in this situation thinking that the patient would just trust her because she is the professional. We helped the patient and repaired the hearing aid.

Did you ever contact the other professional to discuss it? How you handle it obviously also impacts the students?

AUD: It was a very difficult situation. The other audiologist used to work with us and we didn't want to take her on. I almost felt embarrassed for her. It was very difficult.

I realise that whistle blowing is a very sensitive topic.

AUD: Another issue that I can think of is where audiologists misrepresent themselves, e.g. claiming to be a doctor of audiology when in fact they are not.

PT: That is also very common in our field where people claim to be specialists in a specific area but they are not. We are not actually allowed to advertise ourselves as specialists.

OT: I know of a scenario where a patient needed therapy but didn't have enough funds available. She then asked the therapist to claim from her grandmother's fund. The therapist complied. She got caught and got a huge fine from HPCSA. I believe she just tried to help and felt sorry for the patient but it was still unethical. Some people might do it for money but some do it because they honestly think they are doing a good deed.

PT: What I experienced in private practice as a locum was over servicing. I sometimes felt that I only had to see a patient in the hospital once to give information but I was told to always see a patient twice a day. I felt that it was unnecessary and done with the focus on making money and not in the best interest of the patient.

What do students struggle with? What do you find are the ethical issues that they need the most guidance with?

SLT: I think they struggle with report writing and record keeping. I'm not sure if it is immaturity or lack of ethical and professional responsibility or what it is, but they do not hand in reports.

AUD: I think that is a problem in practice as well. Maybe it starts on undergraduate level.

In terms of the future, what are the ethical issues that you think will be prominent in your profession?

SLT: I think the problem we are facing is role models. People that can set the right example.

AUD: Yes, I agree. We have too many people in practice using 'short cut' techniques. It is also were easy for professionals to justify their behaviour by referring to an experienced person in the field and say 'But they do it'.

OT: I think communication is a problem for the future. I think that people use 'power communication' and abuse their position of trust.

AUD: I think communication 'out there' is the problem. What is communicated about our profession is one issue. The other is general information. Patients can get a lot of information of the internet before coming to you. They are more informed and that is going to keep audiologists on their toes.

SLT: I'm also thinking about communication in our multilingual context. I think that this might create more problems in the future.

PT: Another problem I can see for the future is the development and then overlapping of professions. I can see that there might be some conflict in the future. The guidelines for scope of practice are not clear enough to define exact boundaries. These guidelines will have to be reviewed.

AUD: This is very similar for audiologists and acousticians.

My last question is: "if you had to set up a scenario to test someone's ethical sensitivity in other words their ability to identify ethical issues, what would you include in the scenario"?

PT: I would like to include something that addresses the socio-economic gap between e.g. patient in government and private. To see that patients in private and government are treated the same.

SLT: I agree. It is important to understand that treatment in different settings should be of the same quality.

AUD: I think you need to look at the implementation of best practice. One example is the use of verification. It is accepted as best practice but it is not used in all practices. Or going to the neonatal intensive care unit (NICU) but not using a high frequency probe tone.

Thank you very much for your time and your input. Thank you to those who travelled here especially for the focus group. I really appreciate it. Enjoy the rest of your day.

Appendix D2

Verbatim transcriptions of individual in-depth interviews

Individual interview 1:

Hi, thank you for your willingness to participate in my study. I know you are very busy and I appreciate the time you have set aside to discuss ethics with me. My study is about ethical sensitivity. This happens before you make a final decision regarding an ethical situation. In other words it is about the therapist ability to recognise an ethical dilemma or possible ethical problem when in a situation or observing someone else. It then also includes the ability to determine different possible options or solutions for the ethical dilemma and understanding how each decision would impact differently on those involved. Ethical sensitivity is therefore the process that happens before ethical decision making. Therapists are often trained in decision making, where they are presented with the ethical dilemma. The process of ethical sensitivity is then skipped. If a therapist has good ethical decision making skills but poor ethical sensitivity she might not be able to recognise an ethical dilemma and therefore not be able to implement her decision making skills. There have been cases where therapists have been found guilty of unethical conduct where they truly were not aware of the ethical issues involved. Unfortunately this does not protect the therapist as HPCSA does not view ignorance as an excuse. The purpose of the study is to construct an ethical sensitivity measuring instrument for physiotherapists, occupational therapists, speech therapists and audiologists.

I love this idea. This is something that we really need in the profession, especially with CPD in the area of the ethics. How do we know that ethics training is effective? Sometimes it feels as if it is just a money making business. It almost feels as if people are getting more unethical with the implementation of CPD. People swipe their cards or sign forms but do not attend full sessions or are busy with other work and are not focused on the CPD training. I also believe it would be valuable for student training. How can we see if ethics training at varsity is effective?

Exactly. So the first step is that I need to construct scenarios in order to measure ethical sensitivity. In order to do this I need to determine the current ethical issues in the profession as well possible future ethical issues. It is also important to know what skills are needed to identify these ethical issues or dilemmas. So, the first question I would like to ask you is: "What do you think are the current ethical issues in the field of audiology?"

The first thing that comes to mind that really bothers me is that audiologists are becoming more and more money orientated and less and less patient oriented. I believe that a better balance is needed. I'm not saying that money is not important but I think we need to be much more focused on the patients' rights. We need to have a mind-set of that we are there to help and assist the patient. I believe that if this balance is achieved it would be easier to address most ethical issues and even to recognise them because we will be focused on what is in the best interest of our clients and that will in most cases help us to behave ethically. If the balance is right I believe our sensitivity for our patients and their needs and what is in their best interest will increase. I believe this balance is something that few audiologists have achieved. If you take hearing aids for example, the focus is more on how much money the patient has got available that what their specific needs are. I don't think this is fair towards our patients.

Secondly I'm concerned about student training. I believe that students during their training get a lot of information and knowledge but it is not presented in a way that students can effectively apply this information and knowledge clinically. They also lack the ability to debate or critically think about it. I feel that a lot of information is just stored away in the back of their minds and they do not realise how everything fits together to make them effective therapists one day. I think about anatomy and

physiology and how many audiologists have little understanding of this and how it fits into the bigger picture of audiology in terms of assessment and management. I believe that as therapists we have an ethical obligation to use the knowledge that we have in the best possible manner to the benefit of our clients. This includes where therapists feel they lack knowledge that they will take the responsibility to gain the relevant knowledge and apply it clinically. The reality is that we will never reach a point where we cannot learn something new. This comes to the ethical responsibility of staying up to date with the latest research and evidence in the field. All of this is about professional responsibility but links to ethics. I believe that the more knowledge we have in what we do as professionals the more insight we will have in the therapeutic process and the easier it will be to recognise ethical dilemmas. I am ethically responsible for what happens to my patient in terms of assessment and management. If you don't have the appropriate clinical knowledge it will be very easy to do something out of ignorance.

These are the two most important aspects for me, but from this I would like to add a third thing. I believe every therapist should ask themselves why they decided to do the work they are doing. What is the motivation behind your occupation for you? Is it just for money or income or is it my passion. I believe if it is your passion to help others your focus will not be on yourself but that which is in the best interest of the client. I believe that some ethical dilemmas would be better recognised if the focus was on the patient and not on the self. I'm also just suddenly thinking about something that needs new focus and I believe that some studies will also have to be done, namely confidentiality. I think this is an area where someone can easily make a mistake. I'm thinking for example about industrial testing or medico legal testing where the client might not necessarily be the person being tested but is the person ordering the testing and paying for it. This can become very confusing. Also, sometimes it is expected to fax or email results. I'm not always sure if I'm doing the right thing. If a doctor asks for results it seem so natural to send it to him and it is so easy to forget that informed consent is. I don't think audiologists realise how important confidentiality is and I think it is very easy to get into big trouble. I'm thinking how often professionals discuss patients without the patients knowledge. I don't think confidentiality is taken serious enough.

These are my four points for being ethical and increasing ethical sensitivity. Number one is confidentiality, then putting the client first, then my focus and lastly my responsibility in terms of the knowledge that I have. These things will also help to establish trust between the therapist and the patient. These things together emphasise social responsibility.

You have highlighted some were valuable points. As my second question I would like to ask you what you believe the ethical issues of the future might be.

I believe that the biggest ethical problems will relate to hearing aid and not really service delivery. With this I mean thing related to hearing aids that I do not have control over such as the Consumer protection act. This law has changed the level of responsibility an audiologist carries for a hearing aid. I believe that as patients become more informed that this is going to cause big problems for audiologists. Secondly I believe that confidentiality is going to become more difficult and greater challenges waits as everything is going more computerised. Access to information is just becoming easier and easier. I'm thinking for example when we maybe need a second opinion on results and we just export it to someone without thinking about the fact that it contains personal patient information. Then I have to mention AIDS. AIDS can affect my hearing test as well as management and if I'm not allowed to ask or know the status of the patient I might not act in his best interest. I believe that this is also going to be a major challenge for the future. This includes report writing and how to word sensitive issues in a report that will be distributed.

My next question is: "If you had the opportunity to construct a test for ethical sensitivity, what type of scenarios would you include in your test?"

I think, first of all although I don't know how you are going to test this, but I think you need to somehow test if the therapist is focused on the client, if they understand the client and if they can put themselves in the clients shoes. Are they really client centred or are they money driven or self-centred. This also includes active listening, really listening what the client is saying and showing that you care. You need to be able to 'read' your patient. I think that emotional intelligence is needed as well as empathy. I think that experience plays a big role so I think you can only really measure ethical sensitivity by establishing a baseline for everybody and then comparing them to their own baseline.

Then, although I haven't mentioned it before, I would include some scenario involving culture. Misunderstandings are very common in culture difference and it would be important to evaluate a therapist's sensitivity toward this, especially in the South African context. Cultural knowledge also needs to be assessed.

Then lastly I believe that you need to assess the therapist's level of consideration for the patient. Do they tell the patient what to expect, what is going to happen next and for example if you need to touch the patient or if you are running late or if you are going to do a test on a baby and the mother is anxious? All of this is very important and I believe if this is our attitude it will be very difficult to get into trouble in terms of ethics.

Thank you very much for your valuable input. I appreciate your time. If you think of anything you would like to add please let me know.

Thank you that I could share my thoughts with you. I really enjoyed it. Good luck with your study.

Thank you.

Individual interview 2:

Before we start with the interview I would like to thank you for your time and your willingness to take part in my study. When I spoke to you over the phone I explained to you that my study is about ethical sensitivity.

Yes, and I really think this is important for our profession. I'm glad that I can take part in this study.

Thank you. I would just like to explain what I mean with ethical sensitivity for my study. Ethical sensitivity is the process happens before a final decision regarding an ethical situation is made. In other words it is about the therapist ability to recognise an ethical dilemma or possible ethical problem when in a situation, with a client or another professional, or observing someone else. It also includes the ability to determine different possible options or solutions for the ethical dilemma and understanding how each decision would impact differently on those involved in the situation. Ethical sensitivity does not include the final decision or the execution thereof.

It makes sense that someone has to recognise that there is a problem before they can focus on making an ethical decision. I just remember that when I studied we spent a lot of time of ethical decision-making theories but not really any time on identifying issues. I don't think I was ever tested on being able to recognise an ethical issue.

That is very true. Therapists are often trained in decision making, with the use of case studies. The process of ethical sensitivity is then skipped. If a therapist has good ethical decision making skills but poor ethical sensitivity she can still act unethically because the situation is not recognised as being an ethical dilemma.

I suppose that is when therapists get into trouble and are very surprised about it. They never even realised they were in a situation that required ethical attention.

Exactly. So the purpose of my study is to construct an ethical sensitivity measuring instrument for physiotherapists, occupational therapists, speech therapists and audiologists. So the first step is that I need to construct scenarios in order to measure ethical sensitivity. In order to do this I need to determine the current ethical issues in the profession as well possible future ethical issues. So, the first question I would like to ask you is: "What do you think are the current ethical issues in the field of audiology?"

I think that most ethical issues are related to the fact that audiology has become more and more of a business over the years. There has been a shift from delivering a service to a client that needs help and expert advice to being driven by profit. This can also be seen in what is happening in employment. Private practices are paying commission to their employees for sales and some audiologists are working in hearing aid shops. Both of these situations are unethical according to the Health Act. In line with this are then issues with coding and billing. There have been instances where audiologists have submitted false claims. Medical Aids have also laid claims or charges against audiologists for submitting wrong codes or over servicing. I think this is a big problem because it gives the profession a very bad name. I think what also happens sometimes is that an audiologist will see that a co-worker or friend is doing something unethical but find it very difficult to report someone else and rather turn a blind eye. This is also a big problem in our profession or actually I think everywhere in healthcare. Whistle blowing is not something that really happens.

Another issue that I think is on the rise is competence in service delivery. I think that there are audiologists that are delivering services that they are not fully competent in. It can be that what they are doing were not covered while they were studying or that it is something that they only did in theory

but don't have any practical experience in it. I think audiologists would rather give a service that they are not really competent in that to refer. Everybody is so scared of losing a client. I think one thing that should increase competence and knowledge is CPD workshops but I think that this has just become a money making thing. The quality of many workshops is questionable. I think the problem is also that some audiologists attend some of these workshops and take everything that is said as fact. They don't get into the research or literature themselves and nobody is monitoring what is taught at these workshops. I think that audiologists do not necessarily keep up with the latest evidence. Some are still doing things in clinical practice that they were taught 20 years ago. With the public becoming more informed I believe that this is going to become a serious problem in the future. The focus must always be on best practice but I don't see what is discussed as best practice in literature filters through to clinical practice. Something like for instance hearing aid verification has been considered best practice for years and years and still only a small handful of audiologists apply it. Patients are going to start asking for it and we are going to look like incompetent professionals. If we don't apply best practice it could kill our profession. I'm even thinking of basic stuff such as the basic test battery. People take short cuts and do not value the information gained from the test battery. It is all just about selling hearing aid and not really differential diagnosis. It is then also not about rehabilitation after a hearing aid sale. Follow up services are lacking and this also gives our profession and our services a bad name. If we are patient centred and want to act in their best interest we will offer a comprehensive service from assessment to rehabilitation. Thinking about hearing aid, I think that even advice and counselling can be unethical. If you want someone to buy a hearing aid you might want to pressure them into not believing in the deaf culture or not going for an operation that could fix the hearing. Just going back to rehabilitation as well as verification. I believe that audiologists do not measure the effectiveness of their services. We need to have outcomes and be able to measure them. When outcomes are measure proper record keeping are needed. I haven't seen a lot of reports complying with medico legal standards. Very often it is clear that a report was just written because it was expected. A report must reflect a session and include outcomes. So I do think record keeping in general is something that is neglected. Then I cannot mention records without saying confidentiality. I think that confidentiality is also a problem. Patient files and information are not treated with the amount of confidentiality that it should.

Let me just think if that is all. Oh no just one more thing. Informed consent. I think audiologists sometimes neglect to get the appropriate informed consent. And with informed consent I don't mean telling a patient what is going to happen next and asking if it is okay. I mean explaining the advantages and disadvantages of a procedure and respecting the patients' choice regardless of how that affects my practice and my profits. And then lastly I think that there are some ethical issues related to community service therapists. A lot of them are placed in areas with no equipment and no supervision. This is neither fair to the audiologist nor to the patient. It should be a year to grow professionally but in some cases it is not possible. Who then is also going to take responsible for the level of service delivery?

You have highlighted some were valuable points. As my second question, I would like to ask you what you believe the ethical issues of the future might be.

I have already mentioned some of the issues but I also think that tele-audiology is going to offer very unique challenges regarding informed consent, confidentiality and comprehensive services. I believe that the issue with supervision of community service students are going to become more of an issue as well.

I agree. My next question is: "If you had the opportunity to construct a test for ethical sensitivity, what type of scenarios would you include in your test?"

I would want to include all the issues and scenarios I've mentioned but I suppose if I had to choose very specifically I would focus on evidence based client centred practice and if audiologists can recognise if this is not happening. I think you would be able to cover most issues is that is your focus.

Thank you very much. You have a good way of summarizing ethical problems and explaining ethics in the profession in a very practical way. I appreciate your input and your time. If you think of anything you would like to add please let me know.

I will thanks.

Thank you.

Individual interview 3:

Hi, thank you for your willingness to see me after hours. I really appreciate your time. I'm just going to explain what my study is about and then I'm going to ask you a couple of questions and then we're done.

That's fine.

My study is focused on ethics. I originally wanted to design an effective training programme that helps therapists to apply ethics rules and code of conduct by recognising ethical dilemmas in different areas of practice. I soon realised that there are currently no measuring instruments to measure the effectiveness of ethics programmes for therapists and therefore changed my study to first develop a measuring tool. I do believe that all the different phases of ethics need to be measured but my study focuses on the first phase namely ethical sensitivity which is about a professionals' ability to recognise an ethical dilemma or recognise when a situation can develop into an ethical dilemma. Once the dilemma or problem is recognised, the next step is to think of possible solutions to the problem including how different parties involved would be affected by different options. This is the process of ethical sensitivity. This phase is then followed by ethical decision making where one of these options are chosen and then implemented.

Okay, that makes sense. A lot of training for students and therapists focus on the decision making though. I think it is probably because it is easier to write a little scenario and present that than to make a video or let people observe real life situations with the hope that some ethical issue will occur.

I agree. The problem with this is that you can have excellent problem solving skills but if you cannot recognise that you are in a situation that needs it, it is useless to you. And this is when we see professionals are charged with unethical behaviour and they are very surprised because they did not recognise the situation as being ethically charged. The thing is just that ignorance does not count in the favour of the professional.

Oh definitely, you are accountable for your final actions and how the patient is affected. I know HPCSA doesn't really care if you knew or not.

Yes, they clearly state that ignorance is not an excuse. So in order for me to develop this measuring tool I need to construct case scenarios that can be used to identify ethical issues. In order to do this I have three questions that I would like to ask you.

Sure.

The first question is: "What do you think are currently the ethical issues in the profession of occupational therapy?"

Okay, it might be mixed up but I'm just going to talk as it comes up in my head.

No problem. Just share as you think of them.

I think, I think the one thing that is very evident in our profession, and I don't think it is context based necessarily, is that people don't always move in the domain of practice or scope of practice. And I think what is so difficult and what feeds this problem is that often students observe professionals but the role models they are observing are not behaving ethically or not practicing within the scope that they should. Role models are so important but I think therapists out there sometimes wear inappropriate clothes, use language which is not good, are not always (what is uhm, o ja) prompt.

These things reflect badly on our profession and for me it does fall in the domain of ethics as it reflects on professionalism and can directly impact on the relationship with a client.

Then, marketing is also an issue. To know what the boundaries are for promoting a service. I think therapists easily ignore the rules and do what is in their own interest.

Another thing is how therapists respect and treat each other. To remember that it is not the right thing to do when you are talking badly about another therapist. I think this is a big problem in our profession.

What else…what else…o yes… something that often bothers me is tariffs. What is ethically the right tariff to ask? There are also unwritten rules that I believe just shows respect for other therapist for example if we are in the same area we should try to use the same tariffs to protect the profession and to increase trust from the public. Then things like discounts and free services, what is allowed and what not. This goes hand in hand with billing and being honest in the codes that are used and the fees that are charged for it.

Then I also think there is ethical behaviour with clients that is an issue. For example when a client is treated but the wrong treatment is given. I'm specifically thinking of a therapist in private practice that I observed once who actually did harm with the treatment that she was giving. It was a child with cerebral palsy. His grandmother brought him in with a wheelchair. He was fast asleep in the chair. I thought she would gently approach the client to wake him up but she just told the grandmother to put the child on the bed. She started with some of the preparatory techniques while the client was still in the process of waking up. She didn't do the techniques correctly which could be a competency thing which is also an issue but the way the client and the grandmother were treated was not correct and I believe that clients should be treated with more respect. I think this was an issue where the therapist displayed poor ethical sensitivity. Another example of what I've seen is a session where resources are available for example toys and other equipment that would make the session more effective but the therapist chooses not to use it. So instead of a session that is play-orientated it becomes more of a physiotherapy session. This I believe happened due to a lack of motivation on the side of the therapist.

And then another thing, I don't know how often it happens and maybe it happens a lot and also in other professions, I'm not sure. I know or I've seen a therapist referring to other team members before it is the right time. I feel that we have to be responsible in referring. It happens so easily that clients are exploited, is that the right word? Yes, they spend money but there could have been a better or faster outcome if the OT just spent a bit more time and effort with the client. I don't think therapists have insight into this and are very hasty in referring especially if they are unsure of what to do with a client. The motivation for referring must be because it is in the best interest for the client right now. I'm especially thinking about something like medication. Giving the child medication before giving therapy a real chance is for the benefit for the therapist to make therapy easier and the not take full responsibility for the client.

Can I summarise this as being client-centred?

That is exactly what it is. Another thing I can think of now is reports, especially the quality of reports. I've seen reports with the wrong client details on, I've seen reports with very little useful information in and so I can go on and on. Something that I should add here is confidentiality. Not only with reports but in general. I don't think therapists are as focused on confidentiality as they should be. Something that is very real and I think it is quite easy to happen is when you are discussing a client with other

team members. I mean we need to do this. We need to share information in order to provide the right management but we need consent and even with consent we have to approach each case with insight and do what we believe is in the best interest of the client. We shouldn't just share everything because we can.

Thank you. Let's move onto the second question. The second question is: "What do you believe are the ethical issues of the future?"

Social media for one. It is so easy to take video clips of sessions and post things on the net. It is also easy to email or Facebook a client. And then quality. I cannot prove this but I feel like quality of services is going down. I think in terms of personality and maybe temperament and how people treat other people. I think everybody is just so rushed that we do not focus on the small things that we should. We are not as tuned into our clients. I feel like it is becoming more and more difficult for therapists to determine what the right things is to do, as if it doesn't come automatically to greet or address a client in a certain way, to be on time, to do what you promised, non-verbal behaviour and so forth. I think social skills. I think social skills are deteriorating as with that the quality of service. Listening skills are something that you cannot assume someone will be good at. The new generation of therapists seem to lack good listening skills. I think this is also the fault of social media, BBM's, WhattsApp, Facebook as so forth. This is very concerning. If you don't know how to listen as a therapist you will miss out on information that can get you into trouble.

And then something else I think might be a problem in the future is cultural differences. I'm not just talking race but culture, attitudes, ways of doing things. There are more and more cultures emerging and different cultures have different values and therefore different ethics. We will have to develop a sensitivity to people if we want to be ethical. Maybe emotional intelligence? I'm not sure. I think we need to be more flexible and not just look at fixed rules but how they need to be applied in different contexts.

Thank you. We can come back to any of the previous questions but I'm going to ask you the final question namely: "If you could design your own test for ethical sensitivity what would you include? How would you measure ethical sensitivity?"

I hope my answer is right because I'm thinking of stuff I haven't mentioned.

There are no correct or incorrect answers. Just share with me what comes to mind.

Okay, I would like to see that a therapist accepts their client unconditionally. I think you need to, empathy is a very difficult concept for me and I think it is a process of growth. Nobody is born with it but it can be easier for some that for others, but it is something that you have to have as a therapist. And I think also to be transparent and approachable. I feel like that if you are honest with your client they will be honest with you. The client must be the most important person in your life at that moment, showing passion is important. I think the things in ethics that count are the things that are not written down anywhere. I also think the ability to reflect and correct things after you reflected should also be. If you lose your ability to reflect you shouldn't be a therapist.

Thank you so much for your valuable input. Please feel free to let me know if you think of anything that you would like to add. Thank you.

Individual interview 4:

Hi, thank you for agreeing to participate in my study. I know have a very busy schedule so I do appreciate this time. As you know, my study is about ethical sensitivity. Ethical sensitivity is the things that happen before you make an ethical decision. It is about the therapist ability to recognise an ethical dilemma or possible ethical issue when they are in a situation with a client or other professional or observing someone else. Ethical sensitivity also includes the ability of the therapist to come up with different possible options or solutions for an ethical dilemma and understanding how each decision would impact differently on all involved. Ethical sensitivity therefore includes the things that happen before ethical decision making. When future therapists are trained in decision making and they are often presented with ethical dilemmas. The process of ethical sensitivity is then skipped. Good ethical decision making skills with poor ethical sensitivity may be the reason for therapists trying to act ethically to get into trouble. If you are not able to recognise an ethical dilemma you are not aware of the fact that you need to make use of your decision making skills. If a therapist does not recognise a problem she is just as guilty before HPCSA since they look at the outcome of a situation and how the client is affected. The purpose of my study is to construct an ethical sensitivity measuring instrument for physiotherapists, occupational therapists, speech therapists and audiologists and the first step I need to take is to create some scenarios in which ethical sensitivity can be measured. Do you feel that the term ethical sensitivity is clear to you?

Yes, thank you. It makes sense. I'm just surprised that I didn't learn about it while studying. So how can I help?

If you are ready, I'm going to ask you some questions that would help me construct these scenarios.

Ok, what is the first question?

Thank you, the first question I would like to ask you is: "What do you think are the current ethical issues in the field of occupational therapy?"

The first thing that comes to mind is photocopying assessments instead of ordering them. I realise that they are expensive but we need to respect the copyright laws. I suppose in this point ethics and law is mixed. I think many of us have worked in a clinic that photocopied their assessments. And I don't think anybody has ever refused to work with copied assessment. I think it is accepted because larger therapy clinics are prepared to absorb this sort of cost in their overhead, but in small private clinics, this cost obviously hurts the profit margin.

Secondly, I've seen therapists give either preferential or less preferential time slots for therapy. It may be to a friend or someone you know but I've seen that practices using a waiting list ignoring the list if it suits them or if they feel someone else is more important e.g. a celebrity's child or the teacher's child etc. I think the reason for this is that we all just human. We might owe someone a favour or feel that someone else doesn't deserve the spot e.g. they were rude over the phone or impatient for going onto the waiting list. I've even seen some cultural preferences.

Uhm, now I have to think…what else…oh yes…Seeing a child for therapy past the point of progress. At what time should the therapist call it quits? It's not just about giving the therapy, but charging for services from which the client no longer benefits. I think therapists might attempt to make goals so incredibly low or incremental that the child somehow meets a miniscule goal every 6 months or so in order to document progress. This is obviously a very controversial topic but so is everything else related to ethics. It might not be that the therapist is only after money, but because it is very hard to say that a child will never really progress further with intervention it can be a tough call to make.

I think there are also times when OT becomes more of a therapy for the parent than the child. The parent needs someone to engage with; a moment of sanity. However, is that a billable service for OT? It can also be extremely difficult for a therapist to tell a parent that their child isn't even a candidate for services.

Another sensitive issue related to training of students. I think sometimes resources are a problem and that forces students to assess or treat patients without direct supervision. I believe a qualified therapist should be within eyesight of a student at all times. Again, this is regardless of their skill level.

Can I go on or do you want to ask another question?

Please continue. I would like to hear all the ethical issues you feel are relevant to your field. The information you are giving me is very valuable.

Great, then the next thing is working on a skill that is outside of the OT scope of practice. This could happen because the therapist just wants to help the client. But sometimes the issue is that we don't really want to refer and stand a chance of losing the client. And since I'm now already talking about not wanting to lose a patient probably because of financial loss, let me tackle the issue of billing. An example would be billing for an entire session, even when the client wasn't there for the whole time. Or using incorrect codes. I think this happens a lot in our profession.

I think that's it. No, wait one more thing before you ask another question. I've heard that some therapists backdate or alter dates on paperwork. This could be to benefit the patient or the practice but it is wrong. I don't think therapists realise that it is fraud and I think it is very difficult to get into trouble.

Wow, this sounds so bad. I must say that I believe OT's are good people, but life often throws out a few curve balls, and it can be challenging to always be on the "right" side of every situation. Ok, so what's the next question?

Thank you very much. I can hear that you are very involved in ethics. My second question is: "What do you believe are the ethical issues of the future?"

I think the things I've mentioned already will still be there. Let me think…I think that it will probably be technology and access of information. In other word confidentiality, informed consent, record keeping, report writing. I think the challenge is also that with technology and internet patient are becoming more and more informed and that will keep us on our toes. I don't think the issues will change that much but I think patients are just going to be more informed and complain easier.

You've raised some important aspects here. Thank you. My next question is: "If you had the opportunity to construct a test for ethical sensitivity, what type of scenarios would you include in your test?"

Confidentiality, billing, honesty and ability to stand up to supervisors or your boss if they ask you to do something unethical. Saying that, I also think whistle blowing. Oh, yes also referral. Are therapists willing to refer and practice in the best interest of the patient? Yes, I think that's the most important things.

Thank you very much for your valuable input and your time. If you think of anything else please let me know.

I hope it helped. If you want to ask me anything else please phone me. I'm more than willing to help.

Thank you very much.

Individual interview 5:

Good morning. I'm very grateful that you have agreed to an interview and that you've set aside this time to meet with me.

No problem.

As I've explained to you over the phone, my study is about ethical sensitivity. Ethical sensitivity is a part of the ethical decision making process but it happens before you make a final decision regarding an ethical situation. It is about recognising or identifying an ethical dilemma, and then determining different possible solutions for the ethical dilemma and thinking about how these different options could have different effects on everybody that is involved or even the greater community. The purpose of the study is to construct an ethical sensitivity measuring instrument for physiotherapists, occupational therapists, speech therapists and audiologists. I need your help to identify the ethical dilemmas that are relevant to your field of practice through some questions that I'm going to ask you.

Great.

So, the first question I would like to ask you is: "What do you think are the current ethical issues in the field of physiotherapy?"

The first thing I can think of is discussing patients in front of other patients or with other people that are not part of the management team. I think confidentiality is currently a big problem, especially in the hospital setting and with ward rounds. Ethically I don't think patients want other patients to know their conditions but they do not have much choice because the wards to not allow for privacy. Then another thing that I find is a problem is therapists making false notes. For example when a patient is in ICU you might write that you treated them for a chest problem but you never did. This then results in inaccurate accounts as well. I also think the whole medico-legal field including recording keeping and report writing which link to this but in general I think therapists are not very diligent in this area. I've seen one line reports or notes which does not give any information about how the patient was treated. Nothing about consent is recorded and I don't know if consent is given. So informed consent might also be an issue.

Then something that I see a lot is inaccurate reporting of progress. A therapist can say that the patient, especially children, is doing much better or there a steady improvement but there are no proof or outcome measures. The patient is just charged month after month for therapy but there is no improvement. And every session is charged.

Then I do think there is discrimination in the field. People refer patients for the wrong reasons. Sometimes based on culture, sometimes on HIV status or other disease. I don't think it happens all the time but it does happen.

You have highlighted some were valuable points. As my second question I would like to ask you what you believe the ethical issues of the future might be.

Patient neglect due to laziness and lack of supervision. There are hospitals where therapists will tell the parents to do things but there are no hands on therapy with the child. The parents don't know any better. I do believe patient knowledge will increase and this is going to reflect very badly on our profession.

My next question is: "If you had the opportunity to put scenarios together to test for ethical sensitivity, what type of scenarios would you include in your test?"

I think confidentiality is very important as well as record keeping and note taking for good continued care. Then things like respect for patients and other professionals as well as communication and talking to someone with respect even when we are upset or have a lower post or position. We have had a lot of issues here with conflict with other therapists where we had to follow up on treatment and the other therapists became very offensive and it resulted in a very bad situation. I think there is some jealousy in terms of skills but not willing to learn from you either. Unprofessional behaviour is an issue and I think it would be valuable to include this in a test. Bad attitude. I've had therapists banging the phone in my ear. I don't want to go into specifics but I just feel this is a problem.

Thank you. Is there anything else you would like to add?

No, I think I've shared everything I can think of.

Thank you very much for your time and your valuable contribution to my study.

Individual interview 6:

Before we start I would like to thank you for your willingness to meet with me to discuss ethics. My study is about ethical sensitivity. Ethical sensitivity involves a professionals' ability to recognize that an ethical dilemma or problem exists in a particular situation. It means that they can notice a problem and describe it. They can identify those that are involved in the problem or who can be affected by the problem and or possible solutions. This includes being able to construct some possible solutions and identify how these would affect other now and in the future. Ethical sensitivity includes what happens before a final ethical decision is made or executed. Ethical sensitivity is very important since good ethical decision making skills will not benefit the therapist if he or she is not able to recognise a problem in the first place. The purpose of the study is to develop an ethical sensitivity measuring instrument for physiotherapists, occupational therapists, speech therapists and audiologists. In order to do this I need to construct ethical case scenarios in which ethical sensitivity can be measured. The first question I would like to ask you is: "What do you think are the current ethical issues in the field of physiotherapy?"

There are a couple of issues that I feel need to be addressed in physiotherapy. One issue is unnecessary service delivery especially in hospital set-ups but I think that doctors very easily refer and then services are delivered regardless of the necessity thereof. This is often a way of doing business but money is made of patients who do not need the service. It also happens when someone works under a supervisor and are told to deliver a service. It is usually very difficult for therapists to stand up to authority be that a supervisor or another professional. Another issue is informed consent on different levels. I think informed consent is especially an issue in government settings but I think consent is assumed in many cases. A therapist not only needs consent for a service but also to touch a patient or to change a treatment protocol or to get a locum in or discuss results with other professionals. Then something that links to this is confidentiality especially in the interactions with other professionals but also in student training situations. I think again that this is even a bigger issue in government settings and in training hospitals. This relates to information that we share, but also what we write in reports and who we share it with.

Then another very big issue, but I think this is in all health care professions, is the justification of appropriate fees charged for services. This includes coding. I also think maintaining clinical competence by physiotherapists is an issue. CPD has been put in place but I don't think that this necessarily means therapists stay up to date with evidence and the best practices. Those are the issues that come to mind.

Thank you. You are welcome to come back to question one at any time. The second question I would like to ask you is: "What do you believe are the ethical issues of the future?"

I'm sorry, I have thought of some things to add to question one.

No problem, let's go back to question one.

Thanks. I think that there is sometimes an issue in terms of equality in the physiotherapist-patient relationship and then the patient is not giving autonomy. I think that especially in government settings the therapist sometimes takes up a role of being superior to the patient. Also I think for physiotherapy there is a problem in terms of cultural boundaries and showing appropriate respect to patients. The therapist who try to protect the patients boundaries but lack insight into the patients interpretation of sickness, responsibility and even gender roles as well as different expressions in attitude can easily overstep boundaries without meaning to. Then there is something else, but I find it very difficult to talk about it. I have heard colleagues talking about a problem regarding sexual abuse. Apparently this

has happened to patients as well as therapists under supervision. I suppose it is because very often you have to remove some of your clothing in order to assess and manage patients. This is a big concern to me.

Okay, on a lighter note, let's move on to question two. It is a very difficult question. I think that one issue that I foresee is the issue of discriminating in employment opportunities within especially private practices. Then I also think whistle blowing. I think physiotherapist do not honour their duty to report misconduct. I think this will just get worse and worse. Then I think that the ability of therapists to define the limits of personal relationships within the professional setting is also going to become more apparent. Then I think the use of treatment techniques without research to verify the degree of effectiveness is going to become an issue, especially with technology that gives patients access to information that they previously did not have. A big problem is that I think there is a lack of knowledge about existing guidelines and laws and also an uncertainty about the interface between ethics and law. I also think that there are many therapists that do not document all their practices and since documentation is a legal necessity I think this might cause problems in the future. Then something that I believe is going to become a big problem and that is the use of social media to communicate with patients or monitor them. Patients invite therapists to be friends on Facebook. I do believe that social media can provide new opportunities to improve the profession but it is also going to test understanding of professional boundaries.

My next question is: "If you had the opportunity to construct a test for ethical sensitivity, what type of scenarios would you include in your test?"

I would definitely include scenarios assessing therapists' sensitivity to cultural issues. Then I would also include record keeping. Also informed consent and a case related to social media. I believe that these issues would give you a very good idea regarding a therapists' ethical sensitivity. Something I haven't mentioned before but what I would like to add is empathy. Really caring about a patient and being focused on them and what is good for them. Trying to understand them as an individual and not just going through the motions. I believe that would be important to assess. But maybe I wouldn't focus on specific issues. I think I would try to determine what skills are needed to behave ethically. I don't know what these are but I think it might be valuable if you look at the skills needed e.g. emotional intelligence and empathy. You really made me think. This is a very interesting topic.

Thank you very much for your valuable input and really thinking about ethics in the profession of physiotherapy. I am going to look at the specific skills related to ethical sensitivity and incorporate it into the scenarios. Please let me know if you think of anything else you would like to add.

I definitely will. Good luck with your study.

Thank you.

Individual interview 7:

It is so nice to finally do this interview with you. I know that you've been waiting for this and your support really means a lot to me. So in saying that, I would also like to thank you for your participation in my study. I know you are also very passionate about ethics and I look forward to hearing your views on this topic.

I'm very excited and I think you can make a valuable contribution to the growth of therapists in the area of ethics.

Thank you. As you know my study is about ethics. The purpose of my study is to look at ways of measuring ethical sensitivity in therapists including speech therapists, occupational therapists, physiotherapists and audiologists. The reason for using this group of therapists is because they all fall under the same ethical rules and guidelines of the HPCSA. My focus is not on problem solving or the actions of therapists in different situations since, as you know, it is very difficult to predict what someone would do if confronted with an ethical dilemma. What you think you will do now might differ from the actual behaviour. My focus is on ethical sensitivity. This is the process that occurs before the final decision is made and action follows. Ethical sensitivity is the process of identifying that an ethical dilemma exists as well as looking at different ways in which to manage the situation taking into account the effect it might have on different people. You studied with me, and you know how we were trained in ethics. We were given a case in which the ethical dilemma was pointed out to us and we were expected to use a problem solving model and motivate our decision. We were never required to identify ethical dilemmas ourselves. I do, however believe that we need to be able to recognise a situation and identify who is involved before we can make a decision that is in the best interest of our clients. So, in order for me to assess ethical sensitivity in therapists I need to construct scenarios with ethical dilemmas. This is the purpose of this interview. I need your help in identifying relevant ethical issues that can be used to assess ethical sensitivity.

Okay. The first thing that comes to mind is duration of treatment. Because I work in both the public and the private sector I can compare this and I see that in private patients tend to receive therapy for longer. I think it is a financial consideration for the practice but it could be unconscious if the pressure is not that bad or if there isn't a waiting list for services. I've also seen that for example family members request continuation of therapy even if there's no improvement in therapy. Sometimes it makes family members feel safer especially when they do not know what else to do or it might even be emotional support for them. Secondly I see that the pressure for additional assessment is a lot more in private practice. I think that it is possible to make money of people that do not necessarily need specific assessment. I think there are a lot of temptations to make money or even just to survive in private practice. That's the two major things I see as ethical dilemmas. In the hospital specifically I know that something that is a big problem is confidentiality. I don't know if it is special to this hospital because it is an academic hospital, but the term confidentiality doesn't exist. I can access any patient's data without prior consent from the patient or approval from a doctor or other type of authority. There's no control over patient records. Most of the data of patients are available electronically and I can access most information even if it has got nothing to do with me or the services I'm delivering. I mean, I'm not somebody who would do this or use it in a way that is unfair to the patient but the point is that the data is there. And it's not just employees but also students that are trained in the hospital that have access to confidential information or what is supposed to be considered confidential.

What do you think are the challenges of the future in terms of ethics?

I think case load. With the advancements in science people are living longer and longer. It is difficult to decide how much time to spend with chronic patients as well as how to prioritise case load. In the area that I am there's definitely a shortage of services and we have a waiting list for patients. I

believe that it does create an ethical dilemma and it will only get worse in the years to come. Secondly I believe that money has always been an issue and it will always be an issue. I think one major issue in my field is that time is money and if you are in private you cannot give patients the same time and care and attention you can in government. This is sad but it is a very real reality. I think that the profession might get less patient centred over time because of it. On the flip side I think that therapists in the hospital setting can for example spend more time with a patient because they care but they can also spend more time with a patient because they are lazy and don't want to see too many patients in one day. Nobody is checking up on you and you are not paid per patient or service. This is a problem. Uhm, I think that is it. I can't think of anything else now.

Thank you. The last question is: "What do you think are the most important aspects that should be covered when assessing ethical sensitivity?"

I think informed consent, confidentiality and prioritization of patients or case load. Can I let you know if I think of anything else?

Yes please. Thank you very much for your time and your input today. I appreciate it very much. I will send you a copy of this interview to ensure that I've transcribed it correctly. You are welcome to email any other ideas or comments.

My pleasure. Good luck with the rest of your study.

Thank you.

Individual interview 8:

Thank you so much for meeting me here and for your willingness to participate in my research. I know you have a keen interest in ethics and I am grateful to have your input. As you know, my study is about ethical sensitivity. Ethical sensitivity involves a professionals' ability to recognize that an ethical dilemma or problem exists in a particular situation. It also means that they can notice a problem and describe it. If you have a high level of ethical sensitivity you can identify that an ethical dilemma exists, describe those that are involved in the problem or who can be affected by the problem and or possible solutions. This includes being able to construct some possible solutions and identify how these would affect other now and in the future. Ethical sensitivity includes what happens before a final ethical decision is made or executed. Ethical sensitivity is very important since good ethical decision making skills will not benefit the therapist if he or she is not able to recognise a problem in the first place. Does this make sense?

Definitely. I actually recently read a bit on ethical sensitivity in one of my ethics books where they talk about the components of ethics. I hope I can contribute something to your study as I must admit that this area of ethics is actually quite new to me.

Well, the purpose of the study is to develop an ethical sensitivity measuring instrument for physiotherapists, occupational therapists, speech therapists and audiologists. In order to do this I need to construct ethical case scenarios in which ethical sensitivity can be measured. I need your input on what is happening in the field of speech therapy related to ethics in general.

Okay, I think I'll be able to give some input on that. Do you want my general opinion or do you have specific questions for me to answers?

I am going to ask specific questions but feel free to add anything that you feel might be valuable.

Okay no problem. Hit me with the first question.

The first question I would like to ask you is: "What do you think are the current ethical issues in the field of speech therapy?"

The first thing is competence. There are speechies out there that are fully qualified but haven't, for example ever done stuttering in children. Then one day the practice is quiet and someone refers a client. Instead of declining the therapist takes the case. This is not in the clients' best interest. So in terms of competence we are more money or self-driven than client driven. I believe that as the profession grows and technology changes and scope of practice increase, proving competency is going to become a bigger issue. I believe that you should be able to prove competence for every case you decide to include in your case load. Secondly I think billing is an issue. I think sessions are not always correctly charged and sometimes the incorrect codes are used. This again points to a less client centred way of practicing. I believe that being able to balance service and business is something that needs more focus during undergrad training. Something that is becoming an issue is scope of practice, especially with degrees being split and people not being dually qualified. Then there are speech therapists that do hearing tests that are not within their scope. There have been cases where speech therapists have not disclosed that they are not dually qualified when applying for employment. As part of scope I think therapists often have a supportive role for parents especially parents with children with disability but it is important to remember that you are not a psychologist and you always need to be able to determine when to refer but also when it is justified to charge for a session. I'm sorry if I'm talking a bit deurmekaar. I'm trying to think of all the issues but my brain is jumping all over the show.

No problem. You can discuss things as you think of it. The order is not important. You have already mentioned very important issues in the field.

Okay, so let me think. There are actually many things. Okay, okay, okay. I think copying of assessment tools or working with copied assessment tools is an issue. I think therapists are so used to it that is almost the norm. Maybe that is another ethical issue. We tend to think that something is okay if everybody is doing it. We do not take responsibility for our own actions. Okay, and definitely confidentiality. I've heard speechies discuss children in classrooms where they as well as their classmates are present. Or discussing clients with doctors or friends or receptionists and so on. I think confidentiality issues can get us into big trouble. Finally I think some therapists just go on with therapy forever without being able to prove improvement which brings me to another point namely not giving therapy that has been proven to be effective. Okay, next question.

Great, you have highlighted some were valuable points. As my second question I would like to ask you what you believe the ethical issues of the future might be.

I'm not sure. I suppose the same issues as we are currently experiencing because I don't think they've really changed over the last 10 years. The only think I'd like to add is that with clients becoming more informed we have to be very careful of losing the trust of our clients. We need to be honest with them and make sure that we know what informed consent is.

I agree. My next question is: "If you had the opportunity to construct a test for ethical sensitivity, what type of scenarios would you include in your test?"

Now you make me wish that I could make my own tests. Let me see. I would take a scenario where a therapist delivers a service in government, then in education and then in private. I would then address the different issues in each area. I think issues such as confidentiality, record keeping, informed consent and autonomy I would include under government. Then I would put issues such as billing and over servicing under private. Thinking about it now I actually think you can cover all the issues in these two settings. Maybe I would also include a scenario where someone is trying to gain more experience and trying to increase competency but struggling to get support from more experienced therapists. I think this is a very real reality in the private setting.

I've really enjoyed listening to you. Thank you very much for your valuable input. I appreciate your time. If you think of anything you would like to add please let me know.

Thank you for doing this for the profession. I believe that we need a way to measure all the different aspects of ethics. Good luck with your study.

Appendix E

Forms used during expert panel review

Interview guide

Ask experts to read each vignette and choose which of the constructs in the table are most applicable.

Ask experts to discuss their thought process with you (motivation for choice).

Ask experts to assign a specific level of difficulty to each vignette.

Ethical principles	Ethical sensitivity skills	Other
Autonomy *Individual's right to make his/her own decisions.* *Respecting privacy and confidentiality* *To disclose all information that a client needs to make a decision, not to tell lies about care and treatment, and, when asked questions, to answer those truthfully.*	Effective verbal and non-verbal communication *Implies that a person can adapt to various contexts of communication as well as cultural context and apply specific skills such as listening, speaking, writing and non-verbal communication.*	Practice management Involves decisions, actions and resource allocation to enable the provision of professional services. Requires understanding of the needs of the health professionals, clients, nonmedical staff and the community. Management processes involve planning, finance, technology application, information and, most importantly, people.
Beneficence *Actively bringing about positive actions or interventions by promoting individual well-being as well as group welfare through kindness and empathy with the clients best interest in mind.*	Controlling social bias *Involves understanding, recognising and dynamically opposing preconceived judgments towards people because of personal characteristics or group membership e.g. disability, sexuality, race etc.*	Infection control Infection prevention and control measures aimed to ensure the protection of those who might be vulnerable to acquiring an infection.
Justice *Refers to what society's expectations are of what is fair and right. It corresponds to the virtue of benevolence (goodwill), of avoiding doing harm and fairness.* *Concerned with the equitable allocation of resources.*	Relating to others *To competently and skilfully support clients by showing concern for them while understanding what is important to them by assessing their emotions, motivations, desires and intentions.*	Early intervention Early intervention is a system of coordinated services that promotes the child's age-appropriate growth and development and supports families during the critical early years.
Non-maleficence *Duty of care to actively prevent harm as well as the risk of harm.*	Perspective taking *Refers to our ability to perceive someone else's thoughts, feelings and motivations. Our ability to empathize with someone else and see things from their perspective.*	
	Understanding emotional expression *Identify and respond appropriately to the emotional cues from others.*	
	Perceiving and responding to diversity *Understanding how cultural groups differ and how differences can lead to conflict and misunderstanding and how to get along with differences.*	
	Interpreting ethics in a situation *The ability to generate numerous interpretations of a situation and considering alternatives for dealing with it.*	

1	2	3	4	5	6	7	8
Easy		*Hard*		*Complex*		*Extremely difficult*	

Original twenty vignettes:

1. Mrs. A brings her 18-month-old son to a therapy practice for an assessment. The week before the assessment, the therapist received comprehensive training in a new assessment technique that she feels would be beneficial for this child. . The problem is that because it is a new technique, there is no code to bill the medical aid. The therapist discusses this with Mrs. A, explaining the benefit of the assessment as well as the costs involved. Mrs. A asks the therapist if there is another code that would add up to the same amount in order for the therapist to still claim from the medical aid. Mrs. A really wants the best for her child but she does not have money to pay for the test. The therapist offers the option of paying for the assessment over a period of 3 months, but on her current budget, Mrs. A cannot afford to do so. The therapist believes in the value of this assessment in determining appropriate management of this child. There is another code that adds up to the same amount and the therapist discusses it with Mrs. A explaining that the medical aid will pay the amount but the procedure on the statement would have a different description. Mrs. A requests the therapist to use the alternative code and to perform the assessment.

2. Mr. B is currently a client of a therapist in private practice. He has been receiving therapy for the past six months. He has a very good relationship with his therapist. During one session, he asks her out to dinner. The therapist likes her client a lot but knows that she is not allowed to get involved with clients. She declines the invitation by explaining the HPCSA rules regarding therapist-client relationship regulations. During the next session, he gives her a hug at arrival of the session. She does not want to hurt his feelings but explains in a calm way that his behaviour could have serious implications for her professional future as well as their professional relationship in the future. He would like to continue therapy with this specific therapist but admits that he finds her irresistible. Not wanting to disappoint the client as he is doing very well in therapy, but wanting to protect both of them she suggests to him that they invite an assistant therapist to join in during sessions to ensure that therapy can continue in a professional manner. He consents for therapy to continue in this manner.

3. Mr. C is a very influential man in the community. He phones a private practice for an assessment of his father. It could be advantageous for the practice to have him (or his father) as a client. Mr. C states that as he travels a lot he can only bring his father that same afternoon at 14:00. Unfortunately, Mrs X has already made an appointment for that timeslot. The therapist knows Mrs X and is aware of the fact that she has had to put in unpaid leave to come for therapy. Mrs X struggles financially and might not be able to attend therapy for much longer. The therapist considers the advantages of cancelling Mrs X, but in the end explains the situation to Mr. C and provides him with the names of two other therapists in the area.

4. Mrs. D has been under the care of a therapist for approximately two years. The family of Mrs. L has also received guidance and counselling from this therapist in terms of management at home. The therapist feels that she has reached therapy outcomes and that Mrs. L won't benefit from additional therapy. She discusses this with Mrs. L who is very upset as she feels that she and the therapist have developed a relationship that she is not willing to let go of yet. She also asks her daughter to phone the therapist to explain that the medical aid will cover therapy and that they don't mind if it is not official therapy, but just a visit as long as they don't have to deal with the emotional upset of Mrs. L relating to the ending of therapy. The therapist suggests a referral to the psychologist to help Mrs. L but the family together with Mrs. L insist on continuing regular visits to the therapist. Due to this special request from the family as well as the availability of funds from the medical aid the therapist agrees. The family is very relieved and thankful.

5. A therapist is working in a pharmacy, providing assessment as well as rehabilitation. In line with his contract with the pharmacist, therapy services are exclusively available to pharmacy club members. There is a fee to belong to the club which includes different benefits according to certain criteria. Mr. E with an 8 month old baby comes in to the pharmacy to make an appointment with the therapist for some parent education on age appropriate stimulation for this baby. He is not a club member. He is a single parent and feels that he needs guidance. He got the therapist's information from a friend who is a club member and currently receiving rehabilitation at her practice. The practice has never before allowed non-club members access to services but the therapist feels sorry for him and since her brother is a also a single parent she specifically feel empathy for him and feels the need to help Mr E. The therapist discusses the option of club-membership with Mr. E but he is not financially able to commit to this. The therapist contacts the pharmacist and discusses the situation with him. She asks for a personal favour but agrees to not allow non-members access to services again. The therapist allows Mr. E to make an appointment for parent guidance.

6. A final year student, with permission from a lecturer at the University, copies assessment tests and tools to use during his community service year as he is not sure if the hospital he is going to work at has any assessment tools available or that the ones they have will not be the ones he feels competent in. He also plans to open a private practice after his community service and will need the material to be able to assess his future clients.

7. Mr. G is assessed by a therapist. After the basic test battery the therapist explains to him that he will need further specialised tests to determine what kind of rehabilitation he would benefit the most. Since he is not on a medical aid he declines and explains that he will have to come back at another time when he's got the money to pay for these tests. He has a mother whom is receiving frail care and he needs to prioritise his finances. The therapist feels that it is essential for the client receives further assessment and explains the advantages and disadvantages of testing now versus in the future. He indicates that he understands but that his situation just doesn't allow him to continue at this point. The therapist decides to offer him the option to pay for the additional tests over a month period since she wants to help him in his current situation. He decides to think about it and let the therapist know before the end of the week.

8. Mr. H is a 34-year-old client who makes an appointment for an assessment at a therapy practice. During the case history, he tells the therapist that he has been diagnosed with TB but did not go to the hospital for admission. He says that his wife will leave him if she finds out and that he will lose his job. They recently had a baby and his family is relying on him for financial support. The therapist explains to him the impact of his diagnosis on others and that he will have to be admitted to the hospital and that his family will have to be notified so that they can also be tested. During the assessment the therapist ensure adequate ventilation in the room and both the therapist and Mr. H wear face masks. The therapist uses disinfectant sprays in the consultation rooms as standard practice. The therapist examines the client and refers him to the hospital where he should be admitted. Mr. H tells the therapist that he is going home and that nobody can make him go to the hospital. The therapist feels sorry for him but also realise that it is his decision to make. The therapist ends the session by asking him to contact the practice should his symptoms get worse.

9. Mrs. I requires an assessment from a therapist. She is on a medical aid but her son has recently been in an accident and they need all the funds they can get. Since it is only February and the medical aid gives a 3 month grace period for submitting claims, she asks if you can please provide the needed services, but if you can change the date on the account to December instead of February. It is no effort on your part to change the date and since she's

got funds available from last year you agree to do this for her. You also feel that it is wise to keep the current funds for her son who is in hospital. You can literally see her body relax and feel that you are going to work well together as a team.

10. An 8 year old is referred to you for an assessment by his teacher at the school. Mr. and Mrs. J arrive with their son for the first consultation. The father seems very relaxed and is very talkative during the assessment. The mother seems very tense. She has her arms folded tight and the therapist notices Mrs. J is grinding her teeth. Mr. J answers most of the questions during the case history. After the assessment, the therapist's assistant takes the child to play in the room next door. As soon as the therapist starts the feedback session she hears the mother catching her breath. Mrs. J avoids eye contact. The therapist decides that although Mr. J is open and ready for feedback, the therapist needs more time to assess the situation with Mrs. J. The therapist decides that the feedback will not be effective if she does not have Mrs. J's trust or if she doesn't understand the situation better. The therapist has a full schedule for the day and has limited time for feedback. The therapist decides to tell the parents that she needs time to analyse the data and that she would like to schedule a feedback session. With the remaining time she decides to focus on Mrs. J. The therapist hardly finishes her first question when Mrs. J starts to cry and say that she is so tired of everybody telling her there is something wrong with her kid and that she loves him but professionals are making her feel so helpless because they've been for countless assessments and she cannot handle it emotionally any more. The therapist gently introduces the idea of referring Mrs. J to a psychologist for support and schedules an appointment for the assessment feedback session. As they walk out Mrs. J gives the therapist a hug and thank her for caring.

11. Mrs. K is referred to a therapist at the Government Hospital. Mrs. K is not on a medical aid and needs assistive devices for rehabilitation. There is a long waiting list for devices and the therapist puts the Mrs. K on the waiting list. A couple of months later the hospital receives a donation of 10 assistive devices. There is not enough stock for everybody on the waiting list. Mrs. K is number 9 on the waiting list. The therapist decides to exchange Mrs. K with someone who is number 11 as he feel that Mrs. K, due to her ethnicity, should be able to raise some money for an assistive device, and that number 11 is has greater financial need. The hospital is expecting another 10 devices to be donated but he decides that he is going to ask Mrs. K for a deposit in order to keep her spot on the waiting list.

12. After a full assessment at a therapy practice three days earlier, Mr. L phones the practice as he feels that he left out valuable information during the case history. He phones the practice and asks to speak to the therapist. The receptionist explains to him that the therapist cannot take calls while she is consulting but that he is welcome to leave a message. After the therapist's last consultation she receives the message to phone Mr. L but she is in a hurry to get home and decides to just make a note to phone him the next day. The next day the therapist's child is sick and she is not in the office. The practice receptionist phones the therapist, explaining that Mr. L is at the practice and insists on talking to her as he is concerned that the information he left out from the case history could affect his treatment. The therapist tells the receptionist that she must explain to Mr. L that she is not available but if he is that concerned he must contact the referring doctor. The therapist feels upset that the client does not respect the fact that her family responsibilities come first and she does not feel that any information Mr. L wants to share could be that urgent. the therapist asks the receptionist to explain to Mr. L that, she will contact him as soon as she is back at the office. Alternatively he could send her an email.

13. A 3 year old is referred to a therapy practice for an assessment. The therapist does not have a paediatric practice and refers all clients under the age of 3 years to a practice that specialised in early intervention. The therapist has, however, previously provided therapy to the referred client's 8 year old brother. The mother was extremely happy with the outcome of her other child's therapy and does not want to go to another therapist. The therapist personally explains to Mrs. M that it would be in the best interest of her child if they consult with a therapist who has got experience with young children. The therapist explains to Mrs. M in detail that working with young children is a specialised field and that she does not feel comfortable assessing children under the age of three. Mrs. M sounds anxious and explains to the therapist that she really needs somebody whom she can trust and that she does not want to take her child to someone else. The therapist feels sorry for Mrs. M and agrees to assess the child, but she feels very anxious as she is not experienced in the area.

14. A young mother, Mrs. N, brings her 24 month old daughter for therapy. She is very concerned about the financial implications of long term early intervention. She questions the therapist regarding the financial implications of therapy and indicates that she has limited funds available. The therapist feels sorry for the mother and does not want to add to her concerns by discussing all the costing. The therapist is also concerned that the mother might decide not to bring the child for therapy, which is not in the best interests of the child. She responds to the mother's questions by asking the receptionist to do a quote for the current session and tells the mother not worry and that they will sort the rest of the costs out later. The mother feels relaxed and therapy continues.

15. A therapist is attending a congress hosted at Sun City. She specifically decided to attend the congress because she is in desperate need of some CPD points. There is a specific session on a new therapy technique which she thinks is very applicable to her specific work setting and she wants to learn more about it as it could have positive implications for her clients. Just after tea time some of the therapist's friends (colleagues) invite her to go for a swim with them at the valley of the waves at Sun City. She has already signed in for the day so she will get her CPD points, but she will miss out on the session that could specifically benefit clients in her case load. The therapist decides to go for a swim and try to get the information from the session from some of her other colleagues that will be attending the session.

16. Ms. P is a 21-year-old client whom receives rehabilitation from the government hospital therapy department. The client lives at home with her parents. The therapist at the hospital receives an email from Ms. P's mother regarding her daughter. She is concerned about her daughter. The mother shares information with her about Ms. P's status at home as well as details about her relationship with her boyfriend. The mother asks for specifics regarding her daughter's progress during therapy as well as details regarding underlying causes for her problem. The therapist wants to set the mother at ease since the therapist is a mother herself and she believes that the mother is overanxious. The therapist does not however want to break the confidence she has with Ms. P. During the following session the therapist decide to ask Ms. P if she would mind if the therapist shares therapy outcomes and progress with her parents. The therapist decides not to say anything about the mother's email. Ms. P clearly instructs the therapist not to discuss any information with her parents. The therapist responds to the mother's email explaining that the information is confidential and that she is legally bound not to share the information.

17. A therapist in private practice also presents lectures at the university as part of student training. It is not very often that the opportunity arises to demonstrate to the students how to assess a 7-month old baby. The therapist notices that there is a 7 month old baby booked for assessment the following day. The therapist decides to videotape the session for student

training purposes only. When the mother arrives the next day the therapist introduces herself and explains exactly what Mrs. Q can expect during the assessment of her baby. The therapist explains to Mrs. Q that she would like to record the session so that she can look at the results afterwards to ensure that she doesn't miss out on any vital information during the assessment, to which the mother consents. The therapist consider discussing the possible use of the video for training purposes but decides not to waste time because the consultation time is charged per hour and she feels that it cannot cause any harm, on the contrary it can only improve training which in future would produce more competent therapists. During the lecture at the university on this topic, the therapist explains the full assessment procedure to the students and then emails the video to them in order for them to look at it a couple of times. They would have to perform the assessment as part of an examination process in order to pass the course.

18. Mr. R is referred for therapy by a general physician for rehabilitation. The therapist at the practice was trained to do this type of treatment during her degree but she has never done it herself. The therapist knows of another therapist that does it on a regular basis but she is scared that if she refers to the other practice, the physician will refer there in future. The other therapist is also quite busy and Mr. R will be able to start with therapy earlier. From what the therapist can remember regarding the therapy, she feels that it cannot be that difficult to apply the treatment and she needs to increase her client base. The therapist phones the client to make an appointment for the next day to start treatment. The therapist explains the terms and conditions of treatment and payment.

19. Mr. S, a 58 year old man makes an appointment for an initial consultation at a therapy practice. During the case history the therapist realises that Mr. S recently visited another therapist. He explains to the therapist what assessments were performed as well as what the recommendations were. The reason for his visit is that his son wants a second opinion just to ensure that the best treatment options will be provided to his father. After the assessment the therapist realises that the initial therapist, who is a well-respected therapist in the community, performed a more extensive assessment protocol than would be considered best practice as well as charging inappropriate codes. Mr. S is not on a medical aid and had to borrow money from his son to settle the account. He feels embarrassed and emotional sharing this with the therapist. He also states that he feels anxious about a second opinion because if the outcomes are the same he wasted money. The therapist tries to change the subject to help him feel less embarrassed. In the second therapist's opinion, the initial recommendations were also based on highest profit to the practice. The second therapist does not discuss this with the client as she feels it could lead to unnecessary negative feelings towards the previous therapist which could harm the reputation of therapists in her profession. The therapist does, however, give extensive feedback to the client on her assessment findings and recommendations based on the latest research. After answering all his questions, the client decides to continue therapy with the second therapist. A couple of weeks later the two therapists meet at a workshop, but the second therapist decides not to discuss the incident with the initial therapist nor with anybody else.

20. Mr. F, a final year student, approaches a therapist for observation as part of his degree requirements. The therapist agrees that he can observe therapy, but that he will have to sit behind the one way mirror. He is welcome to ask any questions after a session but as the clients will not know that they are being observed he shouldn't enter the session. He will also have to sign a confidentiality document before observation.

Five control vignettes:

1. The therapist of a busy therapy practice is in a motor vehicle accident on her way to work. She realise that her car is going to have to be towed away and that she will not be on time for her first client that morning. She phones her receptionist and asks her to contact the client (Mr. U) and explain the situation. The receptionist tried to get hold of the client but the client's phone was on voicemail and could not be reached before they arrived for the appointment. As the client arrives at the practice the receptionist meets him at the door and explained the situation to him in detail and apologises for any inconvenience caused. She asks him if he would like to reschedule or wait one hour after which the therapist will be at the practice. Mr. U loses his temper since he had to put in special leave at work. He leaves the practice disappointed in the service and says he would prefer to find another practice to assist him.

2. Mrs. V had been bringing her 24-month-old girl for therapy for the last 6 months. During a session she asked the therapist if she sold the therapy tools used during therapy. The therapist explained that the practice had a 'toolkit' that was available for parents but it would be cheaper if she bought the individual items at an educational toy store. Most parents were happy to pay for the 'toolkit' due to the convenience factor. Mrs. V bought the 'toolkit' and the therapist decided to also give her an additional home stimulation program designed as part of the toolkit at no additional cost. The therapist was extremely excited that Mrs. V's daughter received the additional home stimulation program apart from the regular home program since they stayed far away and could only come for therapy twice a month. Four days later Mrs. C phoned the practice. She was very upset as she had seen some of the objects in a store and felt that the mark-up was unreasonable. The therapist again explained to her that it was offered to parents as a convenience option and that the practice purchased it from therapy equipment providers which increased the price of the individual products. Mrs. V said that she was going to return the product but insisted that the practice cover her transport costs. The therapist agreed to give her a refund but explained that the practice could not cover her transport costs. Mrs. V was upset, and asked the therapist to cancel all therapy sessions made and said she was going to find another therapist. The therapist was upset because she had seen the positive effect of therapy in the last 6 months. The therapist asked the mother to reconsider but if she would prefer to see another therapist she was welcome to collect her daughter's file from the practice. Mrs. V didn't reply and disconnected the call.

3. Mr. W phones the private practice of a therapist 24 hours after vising the practice with his daughter. He informs the therapist that his daughter was diagnosed with German measles the previous evening. The therapist follows a standard universal infection control standard of practice so all equipment and touch surfaces are disinfected and sterilized after each client visit. She asks her receptionist, however, to phone all the patients from the previous day to inform them that if they are pregnant or if they have small children that they should be alert for any symptoms relating to the disease.

4. During the past 6 months a specific private practice has received a lot of referrals for assistive devices or therapy aids from one of the nearby hospitals. Tracking orders and estimating the time of delivery in order for clients to make appointments in advance, takes up a lot of time. Due to the many tasks of the receptionist, she sometimes does not have the time to follow up on an order and this reflects poorly on the office which could be seen as a lack of professionalism. Clients are disappointed, frustrated and angry if an appointment must be rescheduled. The therapist decides to invest in a software management solution that would assist in the process to solve the problems she's currently faced with.

5. Mrs. Y has been a client of a therapy practice for more than five years. She is extremely satisfied with the level of professionalism and service she's been receiving. She refers her best friend to the practice for assessment. After the initial interview the therapist asks her receptionist to phone Mrs. Y and thank her personally for the referral. The therapist feels that this could give Mrs. Y a sense of appreciation and enhance her positive feeling about the practice. She might even in future be inclined to refer others to the practice.

Fifteen remaining vignettes:

1. (1) Mrs. A brings her 18-month-old son to a therapy practice for an assessment. The week prior to the assessment the therapist received comprehensive training in a new assessment technique that she feels would be beneficial for this child. The problem is that because it is a new technique there is no code to bill the Medical Aid. The therapist discusses this with Mrs. A, explaining the benefit of the assessment technique as well as the costs involved. Mrs. A asks the therapist if there is another code that would add up to the same amount in order for the therapist to still claim from the Medical Aid. Mrs. A really wants the best for her child but she does not have money to pay for the test. The therapist offers the option of paying for the assessment over a period of 3 months, but on her current budget Mrs. A cannot afford to do so. The therapist believes in the value of this assessment in determining appropriate management of this child. There is another code that adds up to the same amount and the therapist discusses it with Mrs. A explaining that the Medical Aid will pay the amount but the procedure on the statement would have a different description. Mrs. A requests the therapist to use the alternative code and to perform the assessment.

2. (2) Mr. B is currently a client of a therapist in private practice. He has been receiving therapy for the past six months. He has a very good relationship with his therapist. During one session he asks her out to dinner. The therapist likes her client a lot but knows that she is not allowed to get involved with clients. She declines the invitation by explaining the HPCSA rules regarding therapist-client relationship regulations. During the next session he gives her a hug at arrival of the session. She does not want to hurt his feelings but explains in a calm way that his behaviour could have serious implications for her professional future as well as their professional relationship in the future. He would like to continue therapy with this specific therapist but admits that he finds her irresistible. Not wanting to disappoint the client as he is doing very well in therapy, but wanting to protect both of them she suggests to him that they invite an assistant therapist to join in during sessions to ensure that therapy can continue in a professional manner. He consents for therapy to continue in this manner.

3. (8) Mr. H is a 34-year-old client who makes an appointment for an assessment at a therapy practice. During the case history he tells the therapist that he has been diagnosed with TB but did not go to the hospital for admission. He says that his wife will leave him if she finds out and that he will also lose his job. They recently had a baby and his family is relying on him for financial support. The therapist explains to him what the impact of his diagnosis is on others and that he will have to be admitted to the hospital and that his family will have to be notified so that they can also be tested. During the assessment the therapist ensure adequate ventilation in the room and both the therapist and Mr. H wears face masks. The therapist uses disinfectant sprays in the consultation rooms as standard practice. The therapist examines the client and refers him to the hospital where he should be admitted. Mr. H tells the therapist that he is going home and that nobody can make him go to the hospital. The therapist feels sorry for him but also realise that it is his decision to make. The therapist ends the session by asking him to contact the practice should his symptoms get worse.

4. (9) Mrs. I requires an assessment from a therapist. She has Medical Aid but her son has recently been in an accident and they need all the funds they can get. Since it is only February and the Medical Aid gives a 3-month grace period for submitting claims she asks if you can please provide the needed services but if you can change the date on the account to December instead of February. It is no effort on your part to change the date and since she's got funds available from last year you agree to do this for her. You also feel that it is wise to keep the current funds for her son who is in hospital. You can literally see her body relax and feel that you are going to work well together as a team.

5. (10) An 8-year-old is referred to you for an assessment by his teacher at the school. Mr. and Mrs. J arrive with their son for the first consultation. The father seems very relaxed and is very talkative during the assessment. The mother seems very tense. She has her arms folded tight and the therapist notices Mrs. J is grinding her teeth. Mr. J answers most of the questions during the case history. After the assessment the therapist's assistant takes the child to play in the room next door. As soon as the therapist starts the feedback session she hears the mother catching her breath. Mrs. J avoids eye contact. The therapist decides that although Mr. J is open and ready for feedback, the therapist needs more time to assess the situation with Mrs. J. The therapist decides that the feedback will not be effective if she does not have Mrs. J's trust or if she doesn't understand the situation better. The therapist has a full schedule for the day and has limited time for feedback. The therapist decides to tell the parents that she needs time to analyse the data and that she would like to schedule a feedback session. With the remaining time she decides to focus on Mrs. J. The therapist hardly finishes her first question when Mrs. J starts to cry and say that she is so tired of everybody telling her there is something wrong with her child and that she loves him but professionals are making her feel so helpless because they've been for countless assessments and she cannot handle it emotionally any more. The therapist gently introduces the idea of referring Mrs. J to a psychologist for support and schedules an appointment for the assessment feedback session. As they walk out Mrs. J gives the therapist a hug and thank her for caring.

6. (11) Mrs. K is referred to a therapist at the Government Hospital. Mrs. K does not have a Medical Aid and needs assistive devices for rehabilitation. There is a long waiting list for devices and the therapist puts the Mrs. K on the waiting list. A couple of months later the hospital receives a donation of 10 assistive devices. There is not enough stock for everybody on the waiting list. Mrs. K is number 9 on the waiting list. The therapist decides to exchange Mrs. K with someone who is number 11 as he feel that Mrs. K, due to her ethnicity should be able to raise some money for an assistive device and that number 11 has greater financial need. The hospital is expecting another 10 devices to be donated but he decides that he is going to ask Mrs. K for a deposit in order to keep her spot on the waiting list.

7. (14) A young mother, Mrs. N, brings her 24-month-old daughter for therapy. She is very concerned about the financial implications of long term early intervention. She questions the therapist regarding the financial implications of therapy and indicates that she has limited funds available. The therapist feels sorry for the mother and does not want to add to her concerns by discussing all the costing. The therapist is also concerned that the mother might decide not to bring the child for therapy which is not in the best interest of the child. She responds to the mother's questions by asking the receptionist to do a quote for the current session and tells the mother not worry and that they will sort the rest of the costs out later. The mother feels relaxed and therapy continues.

8. (16) Ms. P is a 21-year-old client whom receives rehabilitation from the Government Hospital therapy department. The client lives at home with her parents. The therapist at the hospital

receives an email from Ms. P's mother regarding her daughter. She is concerned about her daughter. The mother shares information with her about Ms. P's status at home as well as details about her relationship with her boyfriend. The mother asks for specifics regarding her daughter's progress during therapy as well as details regarding underlying causes for her problem. The therapist wants to set the mother at ease since the therapist is a mother herself and she believes that the mother is overanxious. The therapist does not, however, want to break the confidence she has with Ms. P. During the following session the therapist decides to ask Ms. P if she would mind if the therapist shares therapy outcomes and progress with her parents. The therapist decides not to say anything about the mother's email. Ms. P clearly instructs the therapist not to discuss any information with her parents. The therapist responds to the mother's email explaining that the information is confidential and that she is legally bound to not share the information.

9. (18) Mr. R is referred for therapy by a general physician for rehabilitation. The therapist at the practice was trained to do this type of treatment during her degree training but she has never done it herself. The therapist knows of another therapist who does it on a regular basis but she is scared that if she refers to the other practice, the physician will refer there in future. The other therapist is also quite busy and Mr. R will be able to start with therapy earlier. From what the therapist can remember regarding the therapy, she feels that it cannot be that difficult to apply the treatment and she needs to increase her client base. The therapist phones the client to make an appointment for the next day to start treatment. The therapist explains the terms and conditions of treatment and payment.

10. (19) Mr. S, a 58-year-old man makes an appointment for an initial consultation at a therapy practice. During the case history the therapist realises that Mr. S recently visited another therapist. He explains to the therapist what assessments were performed as well as what the recommendations were. The reason for his visit is that his son wants a second opinion just to ensure that the best treatment options will be provided to his father. After the assessment the therapist realises that the initial therapist, who is a well-respected therapist in the community, performed a more extensive assessment protocol than would be considered best practice as well as charging inappropriate codes. Mr. S does not have a Medical Aid and had to borrow money from his son to settle the account. He feels embarrassed and emotional sharing this with the therapist. He also states that he feels anxious about a second opinion because if the outcomes are the same he wasted money. The therapist tries to change the subject to help him feel less embarrassed. In the second therapist's opinion, the initial recommendations were also based on highest profit to the practice. The second therapist does not discuss this with the client as she feels it could lead to unnecessary negative feelings towards the previous therapist which could harm the reputation of therapists in her profession. The therapist does, however, give extensive feedback to the client on her assessment findings and recommendations based on the latest research. After answering all his questions, the client decides to continue therapy with the second therapist. A couple of weeks later the two therapists meet at a workshop, but the second therapist decides not to discuss the incident with the initial therapist nor with anybody else.

11. (20) A final year student, with permission from a lecturer at the University, copies assessment tests and tools to use during his community service year as he is not sure if the hospital he is going to work at, has any assessment tools available or that the ones they have will not be the ones he feels competent in. He also plans to open a private practice after his community service and will need the material to be able to assess his future clients.

12. (26) Mr. Y, a therapist in private practice has received many enquiries from patients in the community who are disabled and in wheelchairs. None of the therapy practices in the vicinity are wheelchair friendly. He decides that therapy should be accessible to all and contacts an architect to help him make the necessary changes to his practice to accommodate people in wheelchairs. He is fully aware that people with disabilities require special care during therapy and he attends a training course in order to equip himself with the knowledge of which therapy techniques would be most useful. His receptionist contacts all the doctors in the surrounding area to let them know that the practice is wheelchair friendly. Mr. Y instructs his receptionist to tell such patients that they must be accompanied by someone who can be trained to help with the home program. When his receptionist asks him why this is not required for other patients he explains that people with disabilities are usually less competent in understanding and managing the home program and that they need special care. People with disabilities cannot manage the responsibility of following a home program by themselves and therapy without a home program is not an option.

13. (21) The therapist of a busy therapy practice is in a motor vehicle accident on her way to work. She realises that her car is going to have to be towed away and that she will not be on time for her first client that morning. She phones her receptionist and asks her to contact the client (Mr. U) and explain the situation. The receptionist tries to get hold of the client but the client's phone is on voicemail and cannot be reached before they arrived for the appointment. As the client arrives at the practice the receptionist meets him at the door and explains the situation to him in detail and apologises for any inconvenience caused. She asks him if he would like to reschedule or wait one hour after which the therapist will be at the practice. Mr. U loses his temper since he has had to put in special leave at work. He leaves the practice disappointed in the service and says he would prefer to find another practice to assist him.

14. (23) Mr. W phones the private practice of a therapist 24 hours after vising the practice with his daughter. He informs the therapist that his daughter was diagnosed with German measles the previous evening. The therapist follows a standard universal infection control standard of practice so all equipment and touch surfaces are disinfected and sterilized after each client visit. She asks her receptionist, however, to phone all the patients from the previous day to inform them that if they are pregnant or if they have small children that they should be alert for any symptoms relating to the disease.

15. (24) During the past 6 months a specific private practice has received a lot of referrals for assistive devices or therapy aids from one of the nearby hospitals. Tracking orders and estimating the time of delivery in order for clients to make appointments in advance takes up a lot of time. Due to the many tasks of the receptionist, she sometimes does not have the time to follow up on an order and this reflects poorly on the practice which could be seen as a lack of professionalism. Clients are disappointed, frustrated and angry if an appointment must be rescheduled. The therapist decides to invest in a software management solution that would assist in the process to solve the problems she's currently faced with.

Appendix F

Coding

Atlas 1: Coding of ethical principles
Generator: ATLAS.ti WIN 7.1 (Build 5)
Date: 2013/10/20 03:13:07 PM
Original ATLAS.ti project:atlas.atlcb

Table of Contents

Primary Documents

P 1: AUD1 individual interview
29 quotations, Codes (13) Autonomy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Respect of the law, Justice: Rights, Non-Maleficence

P 2: AUD2 individual interview
20 quotations, Codes (15) Autonomy, Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Respect of the law, Justice: Retributive justice, Justice: Rights, Non-Maleficence

P 3: OT 2 individual interview
19 quotations, Codes (14) Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Distributive justice, Justice: Respect of the law, Justice: Rights, Non-Maleficence

P 4: OT1 individual interview
11 quotations, Codes (14) Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Distributive justice, Justice: Respect of the law, Justice: Rights, Non-Maleficence

P 5: PT1 individual interview
11 quotations, Codes (13) Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Records,

Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Distributive justice, Justice: Respect of the law, Justice: Rights, Non-Maleficence

P 6: PT2 individual interview
19 quotations, Codes (14) Autonomy, Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Respect of the law, Justice: Rights, Non-Maleficence

P 7: SLT1 individual interview
8 quotations, Codes (11) Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Distributive justice, Justice: Rights
Memos (0)

P 8: SLT2 individual interview
14 quotations, Codes (14) Autonomy, Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Respect of the law, Justice: Rights, Non-Maleficence

P 9: University 1 focus group
31 quotations, Codes (15) Autonomy, Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Distributive justice, Justice: Respect of the law, Justice: Rights, Non-Maleficence

P10: University 2 focus group
51 quotations, Codes (12) Autonomy, Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Respect of the law, Justice: Rights, Non-Maleficence

P11: University 3 focus group
22 quotations, Codes (13) Autonomy, Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Distributive justice, Justice: Respect of the law, Justice: Retributive justice, Justice: Rights, Non-Maleficence

P12: University 4 focus group
31 quotations, Codes (15) Autonomy, Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Respect of the law, Justice: Retributive justice, Justice: Rights, Non-Maleficence

P13: University 5 focus group
18 quotations, Codes (13) Autonomy, Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity, Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care, Justice, Justice: Distributive justice, Justice: Respect of the law, Justice: Retributive justice, Justice: Rights, Non-Maleficence

Codes Summary
All codes used: Autonomy {20-4}~ , Autonomy: Privacy and confidentiality: Decisional privacy {39-0}~, Autonomy: Privacy and confidentiality: Disclosing Information {23-1}~, Autonomy: Privacy and confidentiality: Proprietary privacy {16-0}~, Autonomy: Privacy and confidentiality: Records {17-0}~, Autonomy: Veracity: Disclosing Information {94-2}~, Autonomy: Veracity: Fidelity {136-1}~, Beneficence {69-5}~, Beneficence: Social responsibility: CPD and student training {43-1}~, Beneficence: Social responsibility: Patient centered care {156-1}~, Justice {178-2}~, Justice: Distributive justice {15-0}~, Justice: Respect of the law {48-0}~, Justice: Retributive justice {9-0}~, Justice: Rights {62-0}~, Non-Maleficence {75-1}~

Commented Codes only:

Autonomy {20-4}~
Individual's right to make his/her own decisions

Autonomy: Privacy and confidentiality: Decisional privacy {39-0}~
Respecting the right of a patient to make decisions autonomously

Autonomy: Privacy and confidentiality: Disclosing Information {23-1}~
Privacy and confidentiality: Refrain from disclosing information from clients to others (ethics in clinical practice textbook)

Autonomy: Privacy and confidentiality: Proprietary privacy {16-0}~
Respect for the patient's ownership of generic material, test results etc.

Autonomy: Privacy and confidentiality: Records {17-0}~
Privacy and confidentiality: Ensure records of patients remain confidential (ethics in clinical practice textbook)

Autonomy: Veracity: Disclosing Information {94-2}~
To be honest, straightforward and truthful. To disclose all information that a client needs to make a decision, not to tell lies about care and treatment, and, when asked questions, to answer those truthfully. Issues of truth telling must be handled sensitively (ethics in clinical practice:82)

Autonomy: Veracity: Fidelity {136-1}~
Fidelity to patients includes the moral requirement that they should never be treated solely as a means to an end but always as an end in themselves. This includes implied promises such as keeping information private and undertaking duties with the required degree of skill and care.

Beneficence {69-5}~
Actively bringing about positive actions or interventions by promoting individual well-being as well as group welfare through kindness and empathy with the clients best interest in mind

Beneficence: Social responsibility: CPD and student training {43-1}~
Take actions such as ensuring adequate level of skill and training in order to protect and improve the welfare of society as a whole

Beneficence: Social responsibility: Patient centered care {156-1}~
Actively bringing about positive changes that is in the best interest of the individual client

Justice {178-2}~
Justice refers to what society's expectations are of what is fair and right. It corresponds to the virtue of benevolence (goodwill), of avoiding doing harm and fairness.

Justice: Distributive justice {15-0}~
Concerned with the equitable allocation of resources

Justice: Respect of the law {48-0}~
Refers to whether an act is against the law or not

Justice: Retributive justice {9-0}~
Refers to making right when a wrong has been perpetrated

Justice: Rights {62-0}~
Considered to be special advantages with correlative duties to provide them

Non-Maleficence {75-1}~
Duty of care to actively prevent harm as well as the risk of harm

---

Code Families

Autonomy
Codes(7): Autonomy, Autonomy: Privacy and confidentiality: Decisional privacy, Autonomy: Privacy and confidentiality: Disclosing Information, Autonomy: Privacy and confidentiality: Proprietary privacy, Autonomy: Privacy and confidentiality: Records, Autonomy: Veracity: Disclosing Information, Autonomy: Veracity: Fidelity

Beneficence
Codes(3): Beneficence, Beneficence: Social responsibility: CPD and student training, Beneficence: Social responsibility: Patient centered care

Justice
Codes(5): Justice, Justice: Distributive justice, Justice: Respect of the law, Justice: Retributive justice, Justice: Rights

Non-Maleficence
Codes(1): Non-Maleficence

Memo Families

Network Views
Nodes are prefixed with a single letter denoting its type: C= Code, M = Memo, Q = Quotation, P = Primary Document

Principles

Nodes (16): COT:Justice: Rights {62-0}~, COT:Non-Maleficence {75-1}~, COT:Justice: Respect of the law {48-0}~, COT:Justice: Retributive justice {9-0}~, COT:Autonomy: Privacy and confidentiality: Decisional privacy {39-0}~, COT:Autonomy: Privacy and confidentiality: Proprietary privacy {16-0}~, COT:Autonomy: Privacy and confidentiality: Records {17-0}~, COT:Justice {178-2}~, COT:Autonomy: Veracity: Disclosing Information {94-2}~, COT:Autonomy: Veracity: Fidelity {136-1}~, COT:Autonomy {20-4}~, COT:Autonomy: Privacy and confidentiality: Disclosing Information {23-1}~, COT:Beneficence: Social responsibility: Patient centered care {156-1}~, COT:Justice: Distributive justice {15-0}~, COT:Beneficence {69-5}~, COT:Beneficence: Social responsibility: CPD and student training {43-1}~

Code Neighbors List (Thesaurus)
The following is a thesaurus-style alphabetic list of all codes with their relations to other codes.

Each code-code relations is displayed in text form as a simple two argument proposition:

CODE_A < relation > CODE_B.

Autonomy
<*is linked to*> **Autonomy: Veracity: Disclosing Information**
<*is balanced by*> **Justice**
Autonomy: Privacy and confidentiality: Disclosing Information <*versions of*> **Autonomy**
Beneficence <*serve as mutual checks*> **Autonomy**
Autonomy: Privacy and confidentiality: Decisional privacy
Autonomy: Privacy and confidentiality: Disclosing Information
<*versions of*> **Autonomy**
Autonomy: Privacy and confidentiality: Proprietary privacy
Autonomy: Privacy and confidentiality: Records
Autonomy: Veracity: Disclosing Information
Autonomy <*is linked to*> **Autonomy: Veracity: Disclosing Information**
Autonomy: Veracity: Fidelity <*is linked to*> **Autonomy: Veracity: Disclosing Information**
Autonomy: Veracity: Fidelity
<*is linked to*> **Autonomy: Veracity: Disclosing Information**
Beneficence
<*serve as mutual checks*> **Autonomy**
<*reflects*> **Justice**
<*is balanced by*> **Non-Maleficence**
Beneficence: Social responsibility: CPD and student training <*is linked to*> **Beneficence**
Beneficence: Social responsibility: Patient centered care <*is linked to*> **Beneficence**
Beneficence: Social responsibility: CPD and student training
<*is linked to*> **Beneficence**
Beneficence: Social responsibility: Patient centered care
<*is linked to*> **Beneficence**
Justice
Autonomy <*is balanced by*> **Justice**
Beneficence <*reflects*> **Justice**
Justice: Distributive justice
Justice: Respect of the law
Justice: Retributive justice
Justice: Rights

Non-Maleficence
Beneficence <*is balanced by*> **Non-Maleficence**

Code Hierarchy
Autonomy <*is*> Root
Autonomy: Privacy and confidentiality: Disclosing Information <*versions of*> Autonomy
Autonomy: Privacy and confidentiality: Decisional privacy <*is*> Root
Autonomy: Privacy and confidentiality: Disclosing Information <*is*> Root
Autonomy: Privacy and confidentiality: Proprietary privacy <*is*> Root
Autonomy: Privacy and confidentiality: Records <*is*> Root
Autonomy: Veracity: Disclosing Information <*is*> Root
Autonomy <*is linked to*> Autonomy: Veracity: Disclosing Information
Autonomy: Privacy and confidentiality: Disclosing Information <*versions of*> Autonomy
Autonomy: Veracity: Fidelity <*is*> Root
Beneficence <*is*> Root
Beneficence: Social responsibility: CPD and student training <*is linked to*> Beneficence
Beneficence: Social responsibility: CPD and student training <*is*> Root
Beneficence: Social responsibility: Patient centered care <*is*> Root
Justice <*is*> Root
Autonomy <*is balanced by*> Justice
Autonomy: Privacy and confidentiality: Disclosing Information <*versions of*> Autonomy
Justice: Distributive justice <*is*> Root
Justice: Respect of the law <*is*> Root
Justice: Retributive justice <*is*> Root
Justice: Rights <*is*> Root
Non-Maleficence <*is*> Root
Beneficence <*is balanced by*> Non-Maleficence
Beneficence: Social responsibility: CPD and student training <*is linked to*> Beneficence

ATLAS 2: CODING FOR ETHICAL SENSITIVITY SKILLS
Generator: ATLAS.ti WIN 7.1 (Build 5)
Date: 2013/10/20 07:57:08 PM
Original ATLAS.ti project:atlas.atlcb

Table of Contents

Primary Documents

P 1: AUD1 individual interview
8 quotations, Codes (7) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others, Understanding emotional expression

P 2: AUD2 individual interview
8 quotations, Codes (6) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others

P 3: OT1 individual interview
8 quotations, Codes (4) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity

P 4: OT2 individual interview
13 quotations, Codes (7) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others, Understanding emotional expression

P 5: PT1 individual interview
7 quotations, Codes (7) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others, Understanding emotional expression

P 6: PT2 individual interview
15 quotations, Codes (7) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others, Understanding emotional expression

P 7: SLT1 individual interview
5 quotations, Codes (3) Interpreting ethics in a situation, Relating / connecting to others, Taking the perspective of others

P 8: SLT2 individual interview
7 quotations, Codes (4) Effective verbal and non-verbal communication, Interpreting ethics in a situation, Relating / connecting to others, Taking the perspective of others

P 9: University1 focus group
25 quotations, Codes (7) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others, Understanding emotional expression

P10: University2 focus group
37 quotations, Codes (7) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others, Understanding emotional expression

P11: University3 focus group
18 quotations, Codes (7) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others, Understanding emotional expression

P12: University4 focus group
24 quotations, Codes (7) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others, Understanding emotional expression

P13: University5 focus group
15 quotations, Codes (6) Controlling social bias, Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Relating / connecting to others, Taking the perspective of others

Codes Summary
All codes used: Controlling social bias {21-0}~ , Effective verbal and non-verbal communication {61-0}~, Interpreting ethics in a situation {152-0}~, Perceiving and responding to diversity {25-0}~, Relating / connecting to others {93-0}~, Taking the perspective of others {96-0}~, Understanding emotional expression {13-0}~

Commented Codes only:

Controlling social bias {21-0}~
Focus on self: Involves understanding, recognising and dynamically opposing preconceived judgments towards people because of personal characteristics or group membership e.g. disability, sexuality, race etc.

Effective verbal and non-verbal communication {61-0}~
Focus on self and others: Implies that a person can adapt to various contexts of communication as well as cultural context and apply specific skills such as listening, speaking, writing and non-verbal communication.

Interpreting ethics in a situation {152-0}~
Focus on self and others: The ability to generate numerous interpretations of a situation and considering alternatives for dealing with it.

Perceiving and responding to diversity {25-0}~
Focus on self and others: Understanding how cultural groups differ and how differences can lead to conflict and misunderstanding and how to get along with differences.

Relating / connecting to others {93-0}~
Focus on others: To competently and skilfully support patients by showing concern for them while understanding what is important to them by assessing their emotions, motivations, desires and intentions.

Taking the perspective of others {96-0}~
Focus on others: Refers to our ability to perceive someone else's thoughts, feelings, and motivations. Our ability to empathize with someone else and see things from their perspective.

Understanding emotional expression {13-0}~
Focus on self and others: Identify and respond appropriately to the emotional cues from others.

Code Families

Focus on others (Skill 2-3)
Codes(2): Relating / connecting to others, Taking the perspective of others

Focus on self (Skill 1)
Codes(1): Controlling social bias

Focus on self and others (Skill 4-7)
Codes(4): Effective verbal and non-verbal communication, Interpreting ethics in a situation, Perceiving and responding to diversity, Understanding emotional expression

---

Code Hierarchy
Controlling social bias <*is*> Root
Effective verbal and non-verbal communication <*is*> Root
Interpreting ethics in a situation <*is*> Root
Perceiving and responding to diversity <*is*> Root
Relating / connecting to others <*is*> Root
Taking the perspective of others <*is*> Root
Understanding emotional expression <*is*> Root

ATLAS 3: CODING OF SCENARIOS/THEMES
Date: 2013/10/20 07:59:48 PM
Original ATLAS.ti project:atlas 3.atlcb

Table of Contents

Primary Documents

P 1: AUD1 individual interview
10 quotations, Codes (4) Confidentiality, Informed Consent and record keeping, Hearing aids, Relationships, Student training and continued professional development

P 2: AUD2 individual interview
11 quotations, Codes (5) Confidentiality, Informed Consent and record keeping, Marketing of services and place of work, Money, Student training and continued professional development, Whistle blowing

P 3: OT1 individual interview
11 quotations, Codes (6) Confidentiality, Informed Consent and record keeping, Copyright, Money, Relationships, Student training and continued professional development, Whistle blowing

P 4: OT2 individual interview
11 quotations, Codes (5) Confidentiality, Informed Consent and record keeping, Marketing of services and place of work, Money, Relationships, Student training and continued professional development

P 5: PT1 individual interview
6 quotations, Codes (4) Confidentiality, Informed Consent and record keeping, Money, Relationships, Student training and continued professional development

P 6: PT2 individual interview
16 quotations, Codes (5) Confidentiality, Informed Consent and record keeping, Money, Relationships, Student training and continued professional development, Whistle blowing

P 7: SLT1 individual interview
4 quotations, Codes (3) Confidentiality, Informed Consent and record keeping, Money, Relationships

P 8: SLT2 individual interview
9 quotations, Codes (4) Confidentiality, Informed Consent and record keeping, Copyright, Money, Student training and continued professional development

P 9: University1 focus group
25 quotations, Codes (6) Confidentiality, Informed Consent and record keeping, Marketing of services and place of work, Money, Relationships, Student training and continued professional development, Whistle blowing

P10: University2 focus group
36 quotations, Codes (4) Confidentiality, Informed Consent and record keeping, Money, Relationships, Student training and continued professional development

P11: University3 focus group
14 quotations, Codes (5) Confidentiality, Informed Consent and record keeping, Money, Relationships, Student training and continued professional development, Whistle blowing

P12: University4 focus group
21 quotations, Codes (5) Confidentiality, Informed Consent and record keeping, Hearing aids, Relationships, Student training and continued professional development, Whistle blowing

P13: University5 focus group
13 quotations, Codes (4) Hearing aids, Money, Relationships, Student training and continued professional development

Codes Summary
All codes used: Confidentiality, Informed Consent and record keeping {36-0}~ , Copyright {2-0}, Hearing aids {5-0}~, Marketing of services and place of work {3-0}, Money {27-0}~, Relationships {59-0}~, Student training and continued professional development {64-0}~, Whistle blowing {7-0}~

Commented Codes only:

Confidentiality, Informed Consent and record keeping {36-0}~
** Merged Comment from: Confidentiality and record keeping **
Report writing
Recording results
Keeping detailed records
Keeping data safe
Not discussing results without informed consent
Giving information for informed consent

Hearing aids {5-0}~*Services*
Patient rights
Law

Money {27-0}~
Coding
Billing
Commission
Unethical choices for financial gain
Over-servicing

Relationships {59-0}~
Inter/intraprofessional relationships
Empathy
Trust
Respect
Patient relationships
Harassment
** Merged Comment from: Fair management**
Cultural knowledge/sensitivity
Preferential treatment
Discrimination
Service delivery options
Resources
Patient centred management
Over-servicing

Student training and continued professional development {64-0}~
** Merged Comment from: Continued professional development **
CPD courses and training
Evidence based client centred practice
Competency
Scope of practice and referral
Role models

Whistle blowing {7-0}~
Reporting another professional
Standing up to authority (e.g. boss)

Code Hierarchy
Confidentiality, Informed Consent and record keeping <*is*> Root
Copyright <*is*> Root
Hearing aids <*is*> Root
Marketing of services and place of work <*is*> Root
Money <*is*> Root
Relationships <*is*> Root
Student training and continued professional development <*is*> Root
Whistle blowing <*is*> Root

Appendix G

Word frequency list

WORDS	Length	P 1	P 2	P 3	P 4	P 5	P 6	P 7	P 8	P 9	P 10	P 11	P 12	P 13	Total Count
aac	3	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ability	7	1	0	2	1	0	1	0	0	0	0	0	0	0	5
able	4	1	2	0	0	0	0	0	4	0	1	1	1	0	10
about	5	7	3	2	2	2	5	0	1	3	11	15	12	2	65
absorb	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
abuse	5	0	0	0	0	0	1	0	0	0	0	0	1	1	3
abused	6	0	0	0	0	0	0	0	0	0	1	0	0	1	2
academical	10	0	0	0	0	0	0	1	0	0	0	0	0	0	1
accept	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
acceptable	10	0	0	0	0	0	0	0	0	1	0	0	0	0	1
accepted	8	0	0	0	1	0	0	0	0	0	1	0	0	1	3
accepts	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
access	6	1	0	0	1	0	1	3	0	3	1	1	1	0	12
accordance	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
according	9	0	1	0	0	0	0	0	0	0	1	1	0	0	3
accountable	11	0	0	0	0	0	0	0	0	0	0	0	1	0	1
accounts	8	0	0	0	0	1	0	0	0	0	0	0	0	0	1
accreditation	13	0	0	0	0	0	0	0	0	0	2	0	1	0	3
achieved	8	2	0	0	0	0	0	0	0	0	0	0	0	0	2
acknowledge	11	0	0	0	0	0	0	0	0	1	0	0	0	0	1
acousticians	12	0	0	0	0	0	0	0	0	0	0	0	0	1	1
across	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
act	3	2	2	0	0	0	0	0	0	0	0	0	0	0	4
acting	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
action	6	0	0	0	0	0	0	0	0	0	1	1	0	0	2
actions	7	0	0	0	0	0	0	0	1	0	0	0	0	1	2
active	6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
actual	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
actually	8	0	1	1	0	0	0	0	2	0	2	2	1	1	10
add	3	1	0	1	0	0	1	0	1	0	0	0	0	0	4
additional	10	0	0	0	0	0	0	1	0	0	1	0	0	0	2
address	7	1	0	1	0	0	0	0	1	0	0	1	1	0	5
addressed	9	0	0	0	0	0	1	0	0	0	1	0	0	0	2
addresses	9	0	0	0	0	0	0	0	0	0	0	0	0	1	1
adequate	8	0	0	0	0	0	0	0	0	0	0	2	0	0	2
adequately	10	0	0	0	0	0	0	0	0	0	0	0	1	0	1
administer	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
admit	5	0	0	0	0	0	0	0	0	0	2	0	0	0	2
advancements	12	0	0	0	0	0	0	1	0	0	0	0	0	0	1
advantages	10	0	1	0	0	0	0	0	0	0	0	2	0	0	3
advertise	9	0	0	0	0	0	0	0	0	0	0	0	0	1	1

advice	6	0	2	0	0	0	0	0	0	0	0	0	0	0	2
advising	8	0	0	0	0	0	0	0	0	0	0	1	0	0	1
affect	6	1	0	0	0	0	0	0	0	0	1	0	0	0	2
affected	8	0	0	0	0	0	0	0	0	0	0	1	0	0	1
affects	7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
african	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
afrikaans	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
after	5	0	1	1	1	1	0	0	0	0	2	1	0	0	7
afterthought	12	0	0	0	0	0	0	0	0	0	1	0	0	0	1
afterwards	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
again	5	0	0	0	1	0	1	0	1	1	1	2	2	0	9
against	7	0	1	0	0	0	0	0	0	0	1	0	0	0	2
age	3	0	0	0	0	0	0	0	0	0	0	0	1	0	1
agenda	6	0	0	0	0	0	0	0	0	0	0	0	1	0	1
ago	3	0	1	0	0	0	0	0	0	0	0	0	0	0	1
agree	5	0	0	0	0	0	0	0	0	1	5	0	2	3	11
agreed	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
aid	3	2	5	0	0	0	0	0	0	1	2	2	0	1	13
aids	4	4	2	0	0	0	0	0	0	1	3	1	3	3	17
all	3	3	3	0	2	1	2	0	3	1	5	5	4	1	30
allow	5	0	0	0	0	1	0	0	0	0	0	0	0	0	1
allowed	7	1	0	1	0	0	0	0	0	0	2	0	0	1	5
almost	6	1	0	0	0	0	0	0	1	0	0	0	0	1	3
already	7	0	1	0	2	0	0	0	0	0	0	0	0	1	4
also	4	9	10	10	5	2	13	3	2	12	17	11	9	4	107
alter	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
although	8	2	0	0	0	0	0	0	0	1	1	1	0	0	5
always	6	1	1	2	1	0	0	2	2	0	3	1	4	1	18
am	2	1	0	0	0	0	0	1	0	0	1	0	0	0	3
america	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
amount	6	0	1	0	0	0	0	0	0	0	1	0	0	0	2
anatomy	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
and	3	42	30	41	14	12	20	14	14	44	67	32	43	20	393
another	7	0	1	5	3	1	3	0	2	2	9	3	2	2	33
answers	7	0	0	0	0	0	0	0	0	0	2	0	0	0	2
anxiety	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
anxious	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
any	3	0	1	0	0	2	0	1	0	0	2	1	2	0	9
anybody	7	0	0	0	1	0	0	0	0	0	0	0	0	0	1
anymore	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
anything	8	0	0	0	0	0	0	2	0	0	1	1	0	0	4
anywhere	8	0	0	1	0	0	0	0	0	0	0	0	0	0	1
apparent	8	0	0	0	0	0	1	0	0	0	0	0	0	0	1
apparently	10	0	0	0	0	0	1	0	0	0	0	0	0	0	1
applied	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
apply	5	2	2	0	0	0	0	0	0	0	1	0	0	0	5

applying	8	0	0	0	0	0	0	0	1	0	0	0	0	0	1
appointment	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
approach	8	0	0	2	0	0	0	0	0	0	0	1	0	0	3
approachable	12	0	0	1	0	0	0	0	0	0	0	0	0	0	1
appropriate	11	1	1	0	0	0	2	0	0	0	3	1	0	0	8
approval	8	0	0	0	0	0	0	1	0	0	0	0	0	0	1
are	3	15	21	23	8	6	7	7	13	31	49	33	24	10	247
area	4	2	0	1	0	1	0	1	1	0	3	2	2	1	14
areas	5	0	1	0	0	0	0	0	0	0	2	5	1	0	9
around	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
arrives	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
articles	8	0	0	0	0	0	0	0	0	0	1	0	2	0	3
as	2	11	6	9	0	5	5	3	7	14	15	13	8	4	100
ask	3	2	0	1	3	0	0	0	0	0	4	0	0	0	10
asked	5	0	0	0	0	0	0	0	0	1	1	0	0	1	3
asking	6	0	2	0	0	0	0	0	0	1	0	0	1	0	4
asks	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
asleep	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
aspects	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
assess	6	1	0	0	1	0	2	0	0	0	0	0	1	0	5
assessed	8	1	0	0	0	0	0	0	0	0	0	0	1	0	2
assessing	9	0	0	0	0	0	1	0	0	0	0	0	1	0	2
assessment	10	2	1	0	1	0	0	2	2	4	2	0	1	0	15
assessments	11	0	0	0	2	0	0	0	0	0	0	0	0	0	2
assist	6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
associated	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
assume	6	0	0	1	0	0	0	0	0	2	0	0	0	0	3
assumed	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1
assumptions	11	0	0	0	0	0	0	0	0	0	0	0	0	1	1
at	2	1	1	3	2	0	1	0	0	1	6	5	5	2	27
attempt	7	0	0	0	1	0	0	0	0	0	0	0	0	0	1
attend	6	1	1	0	0	0	0	0	0	0	1	0	0	1	4
attending	9	0	0	0	0	0	0	0	0	0	1	0	1	0	2
attention	9	0	0	0	0	0	0	1	0	0	1	1	0	0	3
attitude	8	1	0	0	0	1	1	0	0	0	1	0	0	0	4
attitudes	9	0	0	1	0	0	0	0	0	0	0	0	0	0	1
aud	3	9	5	0	0	0	0	0	0	2	0	1	0	2	19
audiologist	11	1	2	0	0	0	0	0	0	0	6	1	0	3	13
audiologists	12	5	11	0	0	0	0	0	0	3	1	7	0	4	31
audiology	9	1	2	0	0	0	0	0	0	1	2	3	1	1	11
authority	9	0	0	0	0	0	1	1	0	0	1	0	0	0	3
automatically	13	0	0	1	0	0	0	0	0	0	0	0	0	0	1
autonomous	10	0	0	0	0	0	0	0	0	0	0	1	1	0	2
autonomy	8	0	0	0	0	0	1	0	1	2	0	0	1	0	5
available	9	1	0	1	0	0	0	1	0	0	2	0	0	1	6
awarded	7	0	0	0	0	0	0	0	0	0	2	0	0	0	2

awarding	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
aware	5	0	0	0	0	0	0	0	0	2	2	2	0	1	7
away	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
baby	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
back	4	1	1	0	0	0	0	0	0	0	1	0	0	0	3
backdate	8	0	0	0	1	0	0	0	0	0	0	0	0	0	1
backtrack	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
bad	3	0	2	0	1	2	0	1	0	1	0	0	0	0	7
badly	5	0	0	2	0	1	0	0	0	0	0	0	0	0	3
balance	7	4	0	0	0	0	0	0	1	0	0	0	0	0	5
balls	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
banging	7	0	0	0	0	1	0	0	0	0	0	0	0	0	1
barrier	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
barriers	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
base	4	0	0	0	0	0	0	0	0	0	0	1	0	0	1
based	5	0	1	1	0	1	0	0	0	0	1	3	1	0	8
baseline	8	2	0	0	0	0	0	0	0	0	0	0	0	0	2
basic	5	0	2	0	0	0	0	0	0	0	2	0	0	0	4
basis	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
battery	7	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Be	2	16	7	17	12	2	5	4	5	11	25	15	9	7	135
became	6	0	0	0	0	1	0	0	0	0	0	0	0	0	1
because	7	1	1	2	4	1	1	5	1	5	18	9	3	2	53
become	6	3	4	0	0	0	3	0	1	2	1	0	1	0	15
becomes	7	0	0	1	1	0	0	0	0	0	0	1	0	0	3
becoming	8	2	1	1	1	0	0	0	2	1	0	0	1	0	9
bed	3	0	0	1	0	0	0	0	0	0	0	0	0	0	1
been	4	0	3	1	0	0	1	1	2	0	2	0	1	1	12
before	6	1	0	2	1	0	1	0	0	0	4	0	0	2	11
beginning	9	0	0	0	0	0	0	0	0	1	1	0	0	0	2
behalf	6	0	0	0	0	0	0	0	0	0	0	0	1	0	1
behave	6	1	0	0	0	0	1	0	0	0	0	0	0	0	2
behaving	8	0	0	1	0	0	0	0	0	0	0	0	0	0	1
behaviour	9	0	0	2	0	1	0	0	0	0	0	0	2	1	6
behind	6	1	0	0	0	0	0	0	0	1	1	0	0	0	3
being	5	2	1	1	0	0	2	0	4	1	4	3	0	0	18
believe	7	18	3	4	2	1	4	2	3	2	4	10	5	3	61
believing	9	0	1	0	0	0	0	0	0	0	0	0	0	0	1
benefit	7	1	0	1	1	0	0	0	0	1	1	0	1	0	6
benefits	8	0	0	0	1	0	0	0	0	0	0	0	0	0	1
best	4	5	5	2	1	0	1	0	1	2	14	3	2	3	39
better	6	2	0	1	0	2	0	0	0	2	5	0	0	0	12
between	7	1	0	0	0	0	1	0	0	1	1	1	1	1	7
big	3	3	2	1	0	1	4	1	1	5	3	1	0	0	22
bigger	6	1	0	0	0	0	1	0	1	1	0	1	0	0	5
biggest	7	1	0	0	0	0	0	0	0	1	1	2	1	1	7

bill	4	0	0	0	0	0	0	0	0	1	1	0	0	1	3
billable	8	0	0	0	1	0	0	0	0	0	0	0	0	0	1
billing	7	0	1	1	3	0	0	0	2	0	3	0	0	0	10
Bit	3	0	0	1	0	0	0	0	1	0	1	1	0	0	4
blind	5	0	1	0	0	0	0	0	0	0	0	1	0	0	2
blow	4	0	0	0	0	0	0	0	0	0	0	0	1	0	1
blowing	7	0	1	0	1	0	1	0	0	0	0	0	2	0	5
born	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1
boss	4	0	0	0	1	0	0	0	0	0	0	1	0	0	2
both	4	0	1	0	0	0	0	1	0	0	0	0	0	0	2
bothers	7	1	0	1	0	0	0	0	0	0	0	0	0	0	2
bound	5	0	0	0	0	0	0	0	0	0	0	1	0	0	1
boundaries	10	0	0	1	0	0	4	0	0	2	1	0	0	1	9
box	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1
brace	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1
brain	5	0	0	0	0	0	0	0	1	0	0	0	0	0	1
break	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
bring	5	0	0	0	0	0	0	0	0	1	0	1	0	0	2
brings	6	0	0	0	0	0	0	0	1	0	0	0	0	0	1
brought	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
build	5	0	0	0	0	0	0	0	0	0	1	0	1	0	2
business	8	1	1	0	0	0	1	0	1	1	3	0	0	1	9
busy	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
but	3	8	7	14	10	9	14	6	5	13	26	14	15	13	154
buy	3	0	1	0	0	0	0	0	0	0	0	0	0	0	1
By	2	1	1	0	0	0	1	0	0	1	2	3	1	1	11
call	4	0	0	0	2	0	0	0	0	1	1	0	0	0	4
calling	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
came	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
can	3	7	4	6	4	2	2	7	2	3	21	4	3	10	75
candidate	9	0	0	0	1	0	0	0	0	0	0	0	0	0	1
cannot	6	1	1	2	0	0	0	1	0	5	2	2	2	0	16
cards	5	1	0	0	0	0	0	0	0	0	1	0	0	0	2
care	4	1	0	0	0	1	1	2	0	3	1	2	2	0	13
career	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
careful	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1
caring	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
carries	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
carry	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1
case	4	0	0	1	0	0	1	3	3	1	6	0	2	1	18
cases	5	1	1	0	0	0	1	0	1	0	2	1	1	1	9
caught	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1
cause	5	1	1	0	0	0	1	0	0	0	2	0	0	0	5
centred	7	2	2	0	0	0	0	1	1	0	1	0	0	0	7
centres	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
cerebral	8	0	0	1	0	0	0	0	0	0	0	0	0	0	1

certain	7	0	0	1	0	0	0	0	0	0	0	1	1	1	4
chair	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
challenge	9	1	0	0	1	0	0	0	0	1	0	0	0	0	3
challenges	10	1	1	0	0	0	0	0	0	0	0	0	0	0	2
challenging	11	0	0	0	1	0	0	0	0	0	0	0	0	0	1
chance	6	0	0	1	1	0	0	0	0	0	0	0	0	0	2
chances	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
change	6	0	0	0	1	0	1	0	0	0	0	1	0	0	3
changed	7	1	0	0	0	0	0	0	1	0	0	0	0	0	2
changes	7	0	0	0	0	0	0	0	1	0	0	1	0	0	2
charge	6	0	0	0	0	0	0	0	1	0	2	3	0	0	6
chargeable	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
charged	7	0	0	1	0	2	1	0	1	0	1	1	0	0	7
charges	7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
charging	8	0	0	0	1	0	0	0	0	0	0	5	0	0	6
cheaper	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
checking	8	0	0	0	0	0	0	1	0	0	0	0	0	0	1
checklist	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
chest	5	0	0	0	0	1	0	0	0	1	0	0	0	0	2
child	5	0	0	3	7	1	0	0	0	0	3	0	2	0	16
children	8	0	0	0	0	1	0	0	3	1	5	1	0	0	11
choice	6	0	1	0	0	1	0	0	0	0	1	0	0	0	3
choices	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
choose	6	0	1	0	0	0	0	0	0	0	2	1	0	0	4
chooses	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
choosing	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
chronic	7	0	0	0	0	0	0	1	0	0	0	0	0	0	1
claim	5	0	0	0	0	0	0	0	0	0	2	0	0	2	4
claiming	8	0	0	0	0	0	0	0	0	0	2	0	0	1	3
claims	6	0	2	0	0	0	0	0	0	0	0	0	0	0	2
class	5	0	0	0	0	0	0	0	0	0	2	0	0	0	2
classmates	10	0	0	0	0	0	0	0	1	0	0	0	0	0	1
classroom	9	0	0	0	0	0	0	0	0	0	7	0	0	0	7
classrooms	10	0	0	0	0	0	0	0	1	0	0	0	0	0	1
clear	5	0	1	0	0	0	0	0	0	3	0	0	0	1	5
clearly	7	0	0	0	0	0	0	0	0	0	1	0	1	0	2
client	6	7	3	17	4	0	0	0	3	1	9	0	0	1	45
clients	7	3	0	4	0	0	0	0	4	2	2	2	0	0	17
clinic	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
clinical	8	1	2	0	0	0	1	0	0	0	0	1	0	0	5
clinically	10	2	0	0	0	0	0	0	0	0	0	0	0	0	2
clinics	7	0	0	0	2	0	0	0	0	0	0	0	0	0	2
clips	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
close	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
clothes	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
clothing	8	0	0	0	0	0	1	0	0	0	0	0	0	0	1

co	2	0	1	0	0	0	0	0	0	0	0	0	0	0	1
code	4	0	0	0	0	0	0	0	0	0	5	0	0	0	5
codes	5	0	1	1	1	0	0	0	1	0	6	0	1	0	11
coding	6	0	1	0	0	0	1	0	0	0	1	1	2	0	6
collaborate	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
colleagues	10	0	0	0	0	0	1	0	0	0	0	0	0	0	1
come	4	0	0	1	0	0	1	1	0	1	1	0	3	0	8
comes	5	2	0	0	1	0	0	1	0	0	1	0	0	0	5
coming	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1
commission	10	0	1	0	0	0	0	0	0	0	0	0	0	0	1
commitment	10	0	0	0	0	0	0	0	0	0	0	2	0	0	2
committee	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
common	6	1	0	0	0	0	0	0	0	0	1	1	0	1	4
communicate	11	0	0	0	0	0	1	0	0	0	0	0	1	0	2
communicated	12	0	0	0	0	0	0	0	0	0	0	0	0	1	1
communication	13	0	0	0	0	1	0	0	0	2	1	0	0	13	17
communities	11	0	0	0	0	0	0	0	0	0	0	1	0	0	1
community	9	0	2	0	0	0	0	0	0	0	0	5	0	0	7
companies	9	0	0	0	0	0	0	0	0	0	1	1	0	0	2
company	7	0	0	0	0	0	0	0	0	0	2	0	0	0	2
compare	7	0	0	0	0	0	0	1	0	0	0	0	0	0	1
comparing	9	1	0	0	0	0	0	0	0	0	0	0	0	0	1
compensation	12	0	0	0	0	0	0	0	0	0	0	0	1	0	1
competence	10	0	2	0	0	0	1	0	3	1	0	0	0	0	7
competency	10	0	0	1	0	0	0	0	2	1	0	0	0	0	4
competent	9	0	2	0	0	0	0	0	0	1	1	0	0	0	4
complain	8	0	0	0	1	0	0	0	0	0	0	1	0	0	2
complete	8	0	0	0	0	0	0	0	0	1	0	0	0	0	1
complicit	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
complied	8	0	0	0	0	0	0	0	0	0	0	0	0	1	1
comply	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
complying	9	0	1	0	0	0	0	0	0	0	0	0	0	0	1
comprehensive	13	0	2	0	0	0	0	0	0	0	0	0	0	0	2
computerised	12	1	0	0	0	0	0	0	0	0	0	0	0	0	1
concept	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
concern	7	0	0	0	0	0	1	0	0	0	0	1	0	0	2
concerned	9	1	0	0	0	0	0	0	0	0	0	2	1	0	4
concerning	10	0	0	1	0	0	0	0	0	0	0	0	0	0	1
concerns	8	0	0	0	0	0	0	0	0	0	0	0	0	1	1
conclusion	10	0	0	0	0	0	0	0	0	0	0	0	1	0	1
conclusions	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
conditions	10	0	0	0	0	1	0	0	0	0	0	0	0	0	1
conference	10	0	0	0	0	0	0	0	0	0	0	1	0	0	1
confidence	10	0	0	0	0	0	0	0	0	1	0	0	0	0	1
confidential	12	0	0	0	0	0	0	2	0	1	0	0	0	0	3
confidentiality	15	5	4	2	2	2	1	3	3	4	1	0	3	0	30

conflict	8	0	0	0	0	1	0	0	0	0	0	1	0	2	4
conform	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
confused	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
confusing	9	1	0	0	0	0	0	0	0	0	0	0	0	0	1
consent	7	1	4	2	1	3	5	2	2	1	0	1	5	0	27
consideration	13	1	0	0	0	0	0	1	0	0	0	0	0	0	2
considered	10	0	1	0	0	0	0	1	0	0	0	0	0	0	2
considering	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
consumer	8	1	0	0	0	0	0	0	0	0	0	0	0	0	1
contact	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
contains	8	1	0	0	0	0	0	0	0	0	0	0	0	0	1
content	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
context	7	1	0	1	0	0	0	0	0	0	0	0	0	1	3
contexts	8	0	0	1	0	0	0	0	0	0	0	0	0	0	1
continuation	12	0	0	0	0	0	0	1	0	0	0	0	0	0	1
continue	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
continued	9	0	0	0	0	1	0	0	0	0	1	0	0	0	2
continuous	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
contribution	12	0	0	0	0	0	0	0	0	0	0	1	0	0	1
control	7	1	0	0	0	0	0	1	0	0	0	0	1	0	3
controlled	10	0	0	0	0	0	0	0	0	0	0	1	0	0	1
controversial	13	0	0	0	1	0	0	0	0	0	0	0	0	0	1
conversations	13	0	0	0	0	0	0	0	0	0	1	0	0	0	1
convey	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
convinced	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
copied	6	0	0	0	1	0	0	0	1	0	0	0	0	0	2
copying	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1
copyright	9	0	0	0	1	0	0	0	0	0	0	0	0	0	1
correct	7	0	0	2	0	0	0	0	0	0	1	0	1	0	4
correctly	9	0	0	1	0	0	0	0	1	0	0	0	0	0	2
corridors	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
corticosteroid	14	0	0	0	0	0	0	0	0	0	1	0	0	0	1
cost	4	0	0	0	2	0	0	0	0	0	0	0	0	0	2
could	5	0	2	2	2	0	0	1	1	0	2	0	0	1	11
counselling	11	0	1	0	0	0	0	0	0	4	1	0	0	0	6
count	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
country	7	0	0	0	0	0	0	0	0	0	0	2	0	0	2
couple	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
courses	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
cover	5	0	1	0	0	0	0	0	1	0	1	0	0	0	3
covered	7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
cpd	3	3	1	0	0	0	1	0	0	1	0	1	3	0	10
create	6	0	0	0	0	0	0	1	0	0	0	0	0	1	2
created	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
cringe	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
critically	10	1	0	0	0	0	0	0	0	0	0	0	0	0	1

criticize	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
cultural	8	1	0	1	1	0	2	0	0	1	0	0	0	0	6
culture	7	2	1	1	0	1	0	0	0	0	0	0	0	0	5
cultures	8	0	0	2	0	0	0	0	0	0	0	0	0	0	2
current	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
currently	9	0	0	0	0	1	0	0	1	2	0	0	0	0	4
curve	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
custom	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
cut	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1
cuts	4	0	1	0	0	0	0	0	0	0	0	0	0	0	1
danger	6	0	0	0	0	0	0	0	0	0	0	0	1	0	1
data	4	0	0	0	0	0	0	3	0	0	0	0	0	0	3
date	4	1	0	0	0	0	1	0	0	0	2	0	0	0	4
dates	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
day	3	1	0	0	0	0	0	1	1	0	0	0	2	1	6
deaf	4	0	1	0	0	0	0	0	0	0	0	0	0	0	1
deal	4	0	0	0	0	0	0	0	0	1	1	0	0	0	2
dealt	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
debate	6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
deceiving	9	0	0	0	0	0	0	0	0	0	0	0	0	1	1
decide	6	0	0	0	0	0	0	1	1	1	1	0	0	0	4
decided	7	1	0	0	0	0	0	0	0	0	1	0	1	0	3
decision	8	0	0	0	0	0	0	0	0	0	2	2	0	0	4
decisions	9	0	0	0	0	0	0	0	0	1	1	0	2	0	4
declining	9	0	0	0	0	0	0	0	1	0	0	0	0	0	1
deed	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1
define	6	0	0	0	0	0	1	0	0	0	0	0	0	1	2
definitely	10	0	0	0	0	0	1	1	1	0	5	1	0	0	9
degree	6	0	0	0	0	0	1	0	0	1	1	0	0	0	3
degrees	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1
delays	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
deliver	7	0	0	0	0	0	1	0	0	0	1	1	0	0	3
delivered	9	0	0	0	0	0	1	0	0	0	1	0	0	0	2
delivering	10	0	2	0	0	0	0	1	0	0	1	0	0	0	4
delivers	8	0	0	0	0	0	0	0	1	0	0	0	0	0	1
delivery	8	1	2	0	0	0	1	0	0	0	0	0	0	0	4
demonstrate	11	0	0	0	0	0	0	0	0	0	0	0	2	0	2
denied	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
department	10	0	0	0	0	0	0	0	0	0	0	2	0	0	2
depends	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
depression	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
describe	8	0	0	0	0	0	0	0	0	1	0	0	0	0	1
description	11	0	0	0	0	0	0	0	0	1	0	2	0	0	3
deserve	7	0	0	0	1	0	0	0	0	1	0	0	0	0	2
despite	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
despondent	10	0	0	0	0	0	0	0	0	1	0	0	0	0	1

destroy	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
detail	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
detailed	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
details	7	0	0	1	0	0	0	0	0	0	0	0	2	0	3
deteriorating	13	0	0	1	0	0	0	0	0	0	0	0	0	0	1
determine	9	0	0	1	0	0	1	0	1	1	1	2	0	0	7
deurmekaar	10	0	0	0	0	0	0	0	1	0	0	0	0	0	1
develop	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
developing	10	0	0	0	0	0	0	0	0	0	1	0	1	0	2
development	11	0	0	0	0	0	0	0	0	0	1	2	0	1	4
diagnosis	9	0	1	0	0	0	0	0	0	0	0	0	0	0	1
diagnostic	10	0	0	0	0	0	0	0	0	0	0	1	0	0	1
did	3	0	1	1	0	1	1	0	0	0	3	0	1	0	8
difference	10	1	0	0	0	0	0	0	0	0	1	1	0	0	3
differences	11	0	0	1	0	0	0	0	0	0	0	0	0	0	1
different	9	0	0	4	0	0	2	0	1	2	3	3	0	1	16
differential	12	0	1	0	0	0	0	0	0	0	0	0	0	0	1
differently	11	0	0	0	0	0	0	0	0	0	0	1	0	0	1
difficult	9	2	1	3	2	0	3	1	0	0	3	0	0	2	17
dignity	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
dilemma	7	0	0	0	0	0	0	1	0	0	1	0	0	0	2
dilemmas	8	2	0	0	0	0	0	1	0	0	0	0	1	0	4
diligent	8	0	0	0	0	1	0	0	0	0	0	0	0	0	1
direct	6	0	0	0	1	0	0	0	0	0	0	0	1	0	2
directly	8	0	0	1	0	0	0	0	0	0	1	0	1	0	3
disability	10	0	0	0	0	0	0	0	1	0	0	0	0	0	1
disadvantages	13	0	1	0	0	0	0	0	0	0	0	0	0	0	1
disappear	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
discharged	10	0	0	0	0	0	0	0	0	3	0	0	0	0	3
disclosed	9	0	0	0	0	0	0	0	1	0	0	0	0	0	1
discounts	9	0	0	1	0	0	0	0	0	0	0	0	0	0	1
discriminating	14	0	0	0	0	0	1	0	0	0	0	0	0	0	1
discrimination	14	0	0	0	0	1	0	0	0	0	0	0	0	0	1
discuss	7	1	0	0	0	0	1	0	1	0	3	1	1	0	8
discussed	9	0	1	0	0	0	0	0	0	0	2	0	0	0	3
discusses	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
discussing	10	0	0	1	0	1	0	0	1	1	1	0	0	0	5
discussion	10	0	0	0	0	0	0	0	0	0	1	0	1	0	2
discussions	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
disease	7	0	0	0	0	1	0	0	0	0	0	0	0	0	1
displayed	9	0	0	1	0	0	0	0	0	0	0	0	0	0	1
distributed	11	1	0	0	0	0	0	0	0	0	0	0	0	0	1
distrust	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
do	2	9	4	10	2	4	4	5	2	16	25	20	9	9	119
doctor	6	1	0	0	0	0	0	1	0	1	2	0	0	1	6
doctors	7	0	0	0	0	0	1	0	1	1	2	0	1	0	6

document	8	0	0	0	1	0	1	0	0	1	0	0	0	0	3
documentation	13	0	0	0	0	0	1	0	0	0	0	0	0	0	1
documented	10	0	0	0	0	0	0	0	0	1	0	0	0	0	1
documents	9	0	0	0	0	0	0	0	0	1	0	0	0	0	1
does	4	0	0	1	0	2	0	1	0	0	2	1	0	0	7
doing	5	2	3	1	0	1	1	0	1	1	3	1	1	1	16
domain	6	0	0	2	0	0	0	0	0	0	0	0	0	0	2
done	4	1	0	0	0	0	0	0	1	0	2	4	2	2	12
door	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
down	4	0	0	2	0	0	0	0	0	0	1	0	1	0	4
driven	6	1	1	0	0	0	0	0	2	0	0	0	0	0	4
drug	4	0	0	0	0	0	0	0	0	0	0	1	0	0	1
dually	6	0	0	0	0	0	0	0	2	0	1	0	0	0	3
due	3	0	0	0	0	1	0	0	0	1	1	0	0	0	3
duration	8	0	0	0	0	0	0	1	0	0	0	0	0	0	1
during	6	1	0	0	0	0	0	0	1	0	2	0	0	0	4
duty	4	0	0	0	0	0	1	0	0	1	0	0	0	0	2
dysphagia	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
each	4	0	0	2	0	0	0	0	1	0	1	0	2	1	7
ear	3	0	0	0	0	1	0	0	0	0	0	0	0	0	1
earlier	7	0	0	0	0	0	0	0	0	1	0	0	1	0	2
early	5	0	0	0	0	0	0	0	0	0	2	0	0	0	2
easier	6	4	0	2	1	0	0	0	0	0	0	0	0	0	7
easily	6	1	0	2	0	0	2	0	0	0	0	0	2	0	7
easy	4	3	0	3	0	0	0	0	0	0	1	0	3	1	11
economic	8	0	0	0	0	0	0	0	0	0	0	1	0	1	2
educated	8	0	0	0	0	0	0	0	0	0	0	1	1	0	2
education	9	0	0	0	0	0	0	0	1	1	0	4	2	0	8
educational	11	0	0	0	0	0	0	0	0	0	0	1	0	0	1
effect	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1
effective	9	3	0	1	0	0	0	0	1	0	1	0	0	2	8
effectively	11	1	0	0	0	0	0	0	0	0	0	0	0	0	1
effectiveness	13	0	1	0	0	0	1	0	0	0	0	0	0	0	2
effort	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
either	6	0	0	0	1	1	0	0	0	0	1	2	0	0	5
elaborate	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
elderly	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
electronically	14	0	0	0	0	0	0	1	0	0	0	0	0	0	1
else	4	0	1	3	4	0	1	3	0	1	1	0	2	0	16
email	5	1	0	1	0	0	0	0	0	0	0	0	0	0	2
embarrassed	11	0	0	0	0	0	0	0	0	0	0	0	0	1	1
emerging	8	0	0	1	0	0	0	0	0	0	0	0	0	0	1
emotional	9	1	0	1	0	0	1	1	0	0	0	0	1	0	5
empathy	7	1	0	1	0	0	2	0	0	0	0	0	0	0	4
emphasise	9	1	0	0	0	0	0	0	0	0	0	0	0	0	1
employed	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1

employees	9	0	1	0	0	0	0	1	0	0	0	0	0	0	2
employment	10	0	1	0	0	0	1	0	1	0	0	1	0	0	4
empowered	9	0	0	0	0	0	0	0	0	0	0	2	0	0	2
encounter	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
end	3	0	0	0	0	0	0	0	0	1	1	0	0	0	2
engage	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
english	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
enhancing	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
enough	6	1	0	0	0	0	0	0	0	5	1	0	0	2	9
enrolled	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ent	3	0	0	0	0	0	0	0	0	1	1	0	0	0	2
entire	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
environment	11	0	0	0	0	0	0	0	0	0	0	0	1	0	1
equality	8	0	0	0	0	0	1	0	0	0	0	0	0	0	1
equipment	9	0	1	1	0	0	0	0	0	0	1	0	0	0	3
especially	10	2	0	3	0	2	6	1	2	3	3	4	0	0	26
establish	9	1	0	0	0	0	0	0	0	0	0	0	0	0	1
establishing	12	1	0	0	0	0	0	0	0	0	0	0	0	0	1
etc	3	0	0	0	1	0	0	0	0	0	1	0	2	0	4
ethical	7	9	2	3	0	0	1	2	1	1	9	2	6	1	37
ethically	9	2	0	2	0	1	1	0	0	0	0	1	1	0	8
ethics	6	5	0	3	2	0	1	0	0	0	6	5	0	0	22
evaluate	8	1	0	0	0	0	0	0	0	0	0	0	0	0	1
evaluations	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
even	4	1	2	1	3	1	2	4	0	1	9	1	2	1	28
ever	4	0	0	0	1	0	0	0	1	0	1	0	0	0	3
every	5	1	0	0	2	1	0	0	1	0	2	0	1	0	8
everybody	9	1	1	1	0	0	0	0	1	0	2	0	1	0	7
everyone	8	0	0	0	0	0	0	0	0	0	0	0	0	1	1
everything	10	2	1	1	1	0	0	0	0	0	0	1	1	0	7
everywhere	10	0	1	0	0	0	0	0	0	0	0	0	1	0	2
evidence	8	1	2	0	0	0	1	0	0	0	0	2	1	0	7
evident	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
exact	5	0	0	0	0	0	0	0	0	0	0	0	0	1	1
exactly	7	0	0	1	0	0	0	0	0	0	0	0	0	1	2
example	7	4	0	4	1	1	0	2	1	8	5	3	1	4	34
examples	8	0	0	0	0	0	0	0	0	0	0	0	0	2	2
excuse	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
exercises	9	0	0	0	0	0	0	0	0	0	2	0	0	0	2
exist	5	0	0	0	0	0	0	1	0	0	0	0	0	0	1
existing	8	0	0	0	0	0	1	0	0	0	0	1	0	0	2
expect	6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
expected	8	1	1	0	0	0	0	0	0	3	1	0	0	0	6
expecting	9	0	0	0	0	0	0	0	0	1	0	0	0	0	1
expensive	9	0	0	0	1	0	0	0	0	0	0	0	0	0	1
experience	10	1	1	0	0	0	0	0	1	2	4	0	0	0	9

experienced	11	0	0	0	0	0	0	0	1	0	2	0	0	2	5
experiencing	12	0	0	0	0	0	0	0	1	0	0	0	0	0	1
expert	6	0	1	0	0	0	0	0	0	0	0	0	0	0	1
explain	7	0	0	0	0	0	0	0	0	1	2	0	0	0	3
explained	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
explaining	10	0	1	0	0	0	0	0	0	0	1	0	0	0	2
explanation	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
exploited	9	0	0	1	0	0	0	0	0	0	0	0	0	0	1
export	6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
exposure	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
express	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
expressions	11	0	0	0	0	0	1	0	0	0	0	0	0	0	1
extent	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
extra	5	0	0	0	0	0	0	0	0	1	0	1	0	0	2
extremely	9	0	0	0	1	0	0	0	0	0	0	0	0	1	2
eye	3	0	1	0	0	0	0	0	0	0	0	1	0	0	2
eyesight	8	0	0	0	1	0	0	0	0	0	0	0	0	0	1
facebook	8	0	0	2	0	0	1	0	0	0	0	0	1	0	4
facilitate	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
facing	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1
fact	4	1	2	0	0	0	0	0	0	0	0	1	0	1	5
facts	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
failing	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
fair	4	1	1	0	0	0	0	0	0	0	0	0	0	0	2
fall	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1
falls	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
false	5	0	1	0	0	1	0	0	0	0	0	0	0	0	2
family	6	0	0	0	0	0	0	2	0	0	0	0	0	0	2
fast	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1
faster	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
fault	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
favour	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
fax	3	1	0	0	0	0	0	0	0	0	0	0	0	0	1
features	8	0	0	0	0	0	0	0	0	0	0	2	0	0	2
fee	3	0	0	0	0	0	0	0	0	0	1	0	0	0	1
feedback	8	0	0	0	0	0	0	0	0	0	3	0	1	0	4
feeds	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
feel	4	2	0	4	2	1	1	1	0	1	10	1	2	0	25
feeling	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
feels	5	2	0	0	0	0	0	0	0	0	0	0	0	0	2
fees	4	0	0	1	0	0	1	0	0	0	0	0	0	0	2
felt	4	0	0	0	0	0	0	0	0	0	1	0	1	4	6
few	3	1	0	0	1	0	0	0	0	0	2	0	0	0	4
field	5	1	0	0	0	2	0	1	0	1	2	2	0	2	11
files	5	0	1	0	0	0	0	0	0	0	0	0	0	0	1
filters	7	0	1	0	0	0	0	0	0	0	0	0	0	0	1

final	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
finally	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1
financial	9	0	0	0	1	0	0	1	0	0	2	0	0	0	4
find	4	0	1	0	0	1	1	0	0	0	3	1	1	0	8
fine	4	0	0	0	0	0	0	0	0	0	1	0	0	1	2
finer	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
first	5	3	0	0	1	1	0	1	1	1	3	1	0	0	12
fit	3	0	0	0	0	0	0	0	0	1	1	0	0	0	2
fits	4	2	0	0	0	0	0	0	0	0	0	1	0	0	3
fitted	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
fitting	7	0	0	0	0	0	0	0	0	1	2	0	0	0	3
fix	3	0	1	0	0	0	0	0	0	0	1	0	0	0	2
fixed	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
fixing	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
flexible	8	0	0	1	0	0	0	0	0	0	0	0	0	0	1
flip	4	0	0	0	0	0	0	1	0	0	0	0	0	0	1
focus	5	5	3	1	0	0	1	0	1	3	6	4	1	2	27
focused	7	4	0	1	0	0	1	0	0	0	1	0	0	0	7
focusing	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
follow	6	0	1	0	0	1	0	0	0	2	1	1	1	0	7
followed	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
following	9	0	0	0	0	0	0	0	0	0	1	0	1	0	2
for	3	18	7	17	11	7	5	8	6	15	35	25	18	10	182
force	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
forces	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
foresee	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1
forever	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1
forget	6	1	0	0	0	0	0	0	0	0	2	0	0	0	3
forgetting	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
forgot	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
forgotten	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
form	4	0	0	0	0	0	0	0	0	0	1	1	0	0	2
forms	5	1	0	0	0	0	0	0	0	0	0	0	0	0	1
forth	5	0	0	2	0	0	0	0	0	0	0	0	0	0	2
found	5	0	0	0	0	0	0	0	0	0	0	1	0	0	1
four	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
fraud	5	0	0	0	1	0	0	0	0	0	0	0	1	0	2
free	4	0	0	1	0	0	0	0	0	0	1	0	0	0	2
frequency	9	0	0	0	0	0	0	0	0	0	0	0	0	1	1
friend	6	0	1	0	1	0	0	0	0	0	0	0	0	0	2
friends	7	0	0	0	0	0	1	0	1	1	0	0	0	0	3
from	4	1	3	1	1	1	0	2	1	9	10	1	2	2	34
front	5	0	0	0	0	1	0	0	0	2	3	0	0	0	6
frustrates	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
full	4	1	0	1	0	0	0	0	0	5	0	0	2	0	9
fully	5	0	1	0	0	0	0	0	1	0	0	0	0	0	2

fund	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1
funds	5	0	0	0	0	0	0	0	0	0	0	0	0	1	1
further	7	0	0	0	1	0	0	0	0	0	0	0	0	0	1
future	6	1	1	1	0	0	1	0	0	1	2	1	3	4	15
gain	4	1	0	0	0	0	0	0	1	0	2	0	0	1	5
gained	6	0	1	0	0	0	0	0	0	0	0	0	0	0	1
gap	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1
gender	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
general	7	0	1	1	0	1	0	0	0	0	0	1	0	1	5
generation	10	0	0	1	0	0	0	0	0	0	0	0	2	0	3
gently	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
get	3	3	2	1	1	0	2	2	2	2	7	2	7	1	32
gets	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
getting	7	1	0	0	0	0	0	0	0	1	0	0	0	0	2
give	4	0	1	0	1	1	1	1	0	0	3	0	2	2	12
given	5	0	0	1	0	1	0	0	0	0	1	2	1	0	6
gives	5	0	2	0	0	0	1	0	0	0	0	0	1	0	4
giving	6	0	0	3	1	0	1	0	1	1	2	1	0	0	10
go	2	0	0	1	1	1	0	0	1	1	7	0	0	1	13
goal	4	0	0	0	1	0	0	0	0	0	1	0	0	0	2
goals	5	0	0	0	1	0	0	0	0	1	0	0	0	0	2
goes	4	0	0	1	0	0	0	0	0	0	0	0	1	0	2
going	5	7	9	1	2	1	5	0	1	2	5	2	3	2	40
good	4	0	0	3	1	1	2	0	0	1	3	1	3	2	17
got	3	1	0	0	0	0	0	1	0	1	0	0	0	2	5
government	10	0	0	0	0	0	3	1	2	0	7	0	0	2	15
graduates	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
grandmother	11	0	0	3	0	0	0	0	0	0	0	0	0	0	3
great	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
greater	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
greed	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1
greediness	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
greet	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
groups	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
grow	4	0	1	0	0	0	0	0	0	0	0	1	1	0	3
grows	5	0	0	0	0	0	0	0	1	0	0	0	0	0	1
growth	6	0	0	1	0	0	0	0	0	1	0	0	0	0	2
guess	5	0	0	0	0	0	0	0	0	0	0	1	0	0	1
guidelines	10	0	0	0	0	0	1	0	0	0	1	0	0	2	4
guiding	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
guilty	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
had	3	0	1	0	0	3	0	0	0	0	3	0	4	1	12
half	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
hand	4	0	0	2	0	0	0	0	0	0	2	0	0	1	5
handful	7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
handle	6	0	0	0	0	0	0	0	0	1	0	0	2	0	3

hands	5	0	0	0	0	1	0	0	0	0	0	0	0	0	1
happen	6	1	1	1	1	1	0	0	0	1	2	0	0	0	8
happened	8	0	0	1	0	0	1	0	0	0	1	0	0	0	3
happening	9	0	2	0	0	0	0	0	0	0	1	2	0	0	5
happens	7	1	2	3	1	1	1	0	0	1	2	0	0	0	12
happy	5	0	0	0	0	0	0	0	0	0	0	1	0	0	1
harassment	10	0	0	0	0	0	0	0	0	0	0	0	1	0	1
hard	4	0	0	0	1	0	0	0	0	0	1	0	0	0	2
hardly	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
harm	4	0	0	1	0	0	0	0	0	1	0	0	0	0	2
has	3	2	4	0	1	0	2	2	1	1	3	0	1	0	17
hasty	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
have	4	12	6	8	2	3	3	2	4	6	18	4	12	5	85
he	2	0	0	1	0	0	0	0	0	0	1	0	0	0	2
head	4	0	0	0	0	0	0	0	0	0	0	1	0	0	1
health	6	0	1	0	0	0	1	0	0	0	1	1	0	0	4
healthcare	10	0	1	0	0	0	0	0	0	0	0	0	0	0	1
hear	4	0	0	0	0	0	0	0	0	0	3	0	1	0	4
heard	5	0	0	0	1	0	1	0	1	0	1	0	1	0	5
hearing	7	5	7	0	0	0	0	0	1	3	3	3	3	4	29
help	4	4	1	0	1	0	0	0	0	2	0	4	1	1	14
helped	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1
her	3	0	0	0	0	0	0	0	0	0	3	0	1	5	9
here	4	0	0	1	0	1	0	0	0	0	0	0	1	0	3
hidden	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
high	4	0	0	0	0	0	0	0	0	0	1	0	0	1	2
him	3	1	0	2	0	0	0	0	0	0	0	0	0	0	3
his	3	1	0	1	0	0	0	0	0	0	0	0	0	1	3
history	7	0	0	0	0	0	0	0	0	0	3	0	0	0	3
hiv	3	0	0	0	0	1	0	0	0	1	0	0	0	0	2
home	4	0	0	0	0	0	0	0	0	0	2	2	0	0	4
honest	6	0	0	3	0	0	0	0	1	0	0	0	0	0	4
honestly	8	0	0	0	0	0	0	0	0	0	0	0	0	1	1
honesty	7	0	0	0	1	0	0	0	0	1	0	0	1	0	3
honour	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
hospital	8	0	0	0	0	1	1	5	0	2	2	0	0	1	12
hospitals	9	0	0	0	0	1	1	0	0	4	0	0	0	0	6
hours	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
how	3	10	1	5	0	1	0	2	0	6	3	10	7	1	46
however	7	0	0	0	1	0	0	0	0	0	0	1	0	0	2
hpcsa	5	0	0	0	0	0	0	0	0	0	1	1	0	2	4
huge	4	0	0	0	0	0	0	0	0	1	0	0	0	2	3
human	5	0	0	0	1	0	0	0	0	0	0	2	0	0	3
hurts	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
icu	3	0	0	0	0	1	0	0	0	0	0	0	0	0	1
idea	4	1	0	0	0	0	1	0	0	0	0	0	0	0	2

ideas	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
identify	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
if	2	19	8	8	3	1	1	7	2	9	21	10	7	4	100
ignorance	9	1	0	0	0	0	0	0	0	0	0	0	0	0	1
ignorant	8	0	0	0	0	0	0	0	0	0	0	1	0	0	1
ignorantly	10	0	0	0	0	0	0	0	0	0	0	0	1	0	1
ignore	6	0	0	1	0	0	0	0	0	0	0	1	0	0	2
ignoring	8	0	0	0	1	0	0	0	0	0	0	0	0	0	1
illiterate	10	0	0	0	0	0	0	0	0	0	0	0	1	0	1
imagine	7	0	0	0	0	0	0	0	0	0	0	0	1	1	2
imbalance	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
immaturity	10	0	0	0	0	0	0	0	0	0	0	0	0	1	1
immediately	11	0	0	0	0	0	0	0	0	1	0	0	0	0	1
impact	6	0	0	1	0	0	0	0	0	0	1	0	1	0	3
impacts	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
impatient	9	0	0	0	1	0	0	0	0	0	0	0	0	0	1
implement	9	0	0	0	0	0	0	0	0	1	0	0	0	0	1
implementation	14	1	0	0	0	0	0	0	0	0	1	0	0	1	3
implications	12	0	0	0	0	0	0	0	0	0	1	0	0	0	1
importance	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
important	9	5	0	3	2	1	1	0	1	4	6	5	6	2	36
improve	7	0	0	0	0	0	1	0	0	0	0	0	0	1	2
improvement	11	0	0	0	0	2	0	1	1	0	0	0	0	0	4
improves	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
in	2	21	20	26	8	11	20	16	10	26	62	30	25	21	296
inaccurate	10	0	0	0	0	2	0	0	0	0	0	0	0	0	2
inappropriate	13	0	0	1	0	0	0	0	0	0	0	0	0	0	1
incentives	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
include	7	1	2	0	0	1	2	0	3	1	1	0	0	1	12
included	8	0	0	0	0	0	0	0	0	0	0	1	0	0	1
includes	8	3	0	0	0	0	1	0	0	0	0	1	0	0	5
including	9	0	0	0	0	1	0	0	0	0	0	0	1	0	2
income	6	1	0	0	0	0	0	0	0	0	0	1	0	0	2
incompetent	11	0	1	0	0	0	0	0	0	0	0	0	0	0	1
incomplete	10	0	0	0	0	0	0	0	0	1	0	0	0	0	1
incorporate	11	0	0	0	0	0	0	0	0	1	0	0	0	0	1
incorrect	9	0	0	0	1	0	0	0	1	0	0	0	0	0	2
incorrectly	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
increase	8	1	1	1	0	1	0	0	2	1	2	0	1	0	10
increasing	10	1	0	0	0	0	0	0	0	0	0	0	0	0	1
incredibly	10	0	0	0	1	0	0	0	0	0	0	0	0	0	1
incremental	11	0	0	0	1	0	0	0	0	0	0	0	0	0	1
indicated	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
indication	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
individual	10	0	0	0	0	0	1	0	0	1	0	1	2	0	5
industrial	10	1	0	0	0	0	0	0	0	0	0	0	0	0	1

influence	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
information	11	5	2	3	1	1	2	2	0	0	6	2	1	3	28
informed	8	2	5	0	3	1	3	1	3	3	2	1	5	1	30
informing	9	0	0	0	0	0	0	0	0	2	0	1	0	0	3
injections	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
innocent	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
input	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1
insensitive	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
insensitivity	13	0	0	0	0	0	0	0	0	0	1	0	0	0	1
insight	7	1	0	2	0	0	1	0	0	0	1	0	0	1	6
instance	8	0	1	0	0	0	0	0	0	0	0	1	0	0	2
instances	9	0	1	0	0	0	0	0	0	0	0	0	0	0	1
instead	7	0	0	1	1	0	0	0	1	0	2	1	0	0	6
instincts	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
insurance	9	0	0	0	0	0	0	0	0	0	1	1	0	0	2
integrity	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
intelligence	12	1	0	1	0	0	1	0	0	0	0	0	0	0	3
interaction	11	0	0	0	0	0	0	0	0	0	0	0	2	0	2
interactions	12	0	0	0	0	0	1	0	0	0	0	0	0	0	1
interdisciplinary	17	0	0	0	0	0	0	0	0	0	1	0	0	0	1
interest	8	4	1	3	1	0	0	0	1	0	6	0	0	1	17
interested	10	0	0	0	0	0	0	0	0	0	0	1	0	0	1
interesting	11	0	0	0	0	0	1	0	0	0	0	0	2	0	3
interface	9	0	0	0	0	0	1	0	0	0	0	0	0	0	1
internet	8	0	0	0	1	0	0	0	0	1	1	0	1	1	5
interpretation	14	0	0	0	0	0	1	0	0	0	0	0	0	0	1
interpreter	11	0	0	0	0	0	0	0	0	0	0	0	1	0	1
interpreters	12	0	0	0	0	0	0	0	0	0	0	1	0	0	1
intervention	12	0	0	0	1	0	0	0	0	0	0	0	2	0	3
intimate	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
into	4	3	2	3	1	1	1	0	1	3	3	3	1	0	22
introduce	9	0	0	0	0	0	0	0	0	1	0	0	0	0	1
invite	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
involved	8	0	0	0	0	0	0	0	0	0	0	0	2	1	3
involves	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
involving	9	1	0	0	0	0	0	0	0	0	0	0	0	0	1
is	2	44	34	48	18	18	31	21	20	52	115	57	37	31	526
issue	5	0	3	4	3	2	10	3	5	14	6	6	3	3	62
issues	6	2	6	0	1	1	5	0	7	0	2	6	3	1	34
ja	2	0	0	1	0	0	0	0	0	0	0	0	0	0	1
jealousy	8	0	0	0	0	1	0	0	0	0	0	0	0	0	1
job	3	0	0	0	0	0	0	0	0	2	0	2	0	0	4
jumping	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1
just	4	6	6	7	4	2	2	2	1	1	9	4	2	2	48
justification	13	0	0	0	0	0	1	0	0	0	0	0	0	0	1
justified	9	0	0	0	0	0	0	0	1	0	1	0	0	0	2

justify	7	0	0	0	0	0	0	0	0	0	1	0	0	1	2
keep	4	0	1	0	1	0	0	0	0	0	1	0	1	1	5
keeping	7	0	2	0	1	2	1	0	1	0	1	0	1	1	10
kickback	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
kid	3	0	0	0	0	0	0	0	0	0	1	0	0	0	1
kids	4	0	0	0	0	0	0	0	0	0	1	1	0	0	2
kill	4	0	1	0	0	0	0	0	0	0	0	0	0	0	1
know	4	3	0	4	1	3	1	4	1	3	17	6	3	3	49
knowing	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
knowledge	9	10	1	0	0	1	1	0	0	3	2	3	0	0	21
knows	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
labour	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
lack	4	2	0	2	0	1	2	0	0	9	0	0	0	1	17
lacking	7	0	1	0	0	0	0	0	0	1	0	0	0	0	2
laid	4	0	1	0	0	0	0	0	0	0	0	0	0	0	1
language	8	0	0	1	0	0	0	0	0	0	0	4	2	0	7
languages	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
larger	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
laryngectomy	12	0	0	0	0	0	0	0	0	1	0	0	0	0	1
last	4	0	0	0	0	0	0	0	1	0	1	1	0	0	3
lastly	6	2	1	0	0	0	0	0	0	0	0	0	0	0	3
late	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
latest	6	1	1	0	0	0	0	0	0	0	0	0	0	0	2
laughing	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
law	3	1	0	0	1	0	1	0	0	0	0	0	0	0	3
laws	4	0	0	0	1	0	1	0	0	0	0	0	0	0	2
lawyer	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
laziness	8	0	0	0	0	1	0	0	0	0	0	0	0	0	1
lazy	4	0	0	0	0	0	0	1	0	0	0	0	0	0	1
lead	4	0	0	0	0	0	0	0	0	0	1	0	1	0	2
learn	5	1	0	0	0	1	0	0	0	1	1	0	0	0	4
learners	8	0	0	0	0	0	0	0	0	0	2	0	0	0	2
learning	8	0	0	0	0	0	0	0	0	0	0	1	0	0	1
leave	5	0	0	0	0	0	0	0	0	1	2	0	0	0	3
lecture	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
left	4	0	0	0	0	0	0	0	0	1	0	0	0	0	1
legal	5	1	1	0	0	1	1	0	0	0	0	1	0	0	5
length	6	0	0	0	0	0	0	0	0	2	0	0	0	0	2
less	4	2	0	0	1	0	0	1	1	0	3	0	2	0	10
let	3	0	1	0	2	0	0	1	2	1	0	0	0	0	7
level	5	2	1	0	1	0	0	0	0	1	0	3	0	1	9
levels	6	0	0	0	0	0	1	0	0	0	0	1	0	0	2
lie	3	0	0	0	0	0	0	0	0	1	0	0	0	0	1
life	4	0	0	1	1	0	0	0	0	1	2	0	0	0	5
lighter	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1
lightly	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1

like	4	1	2	6	0	1	1	0	1	2	6	3	0	1	24
likely	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
limitations	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
limited	7	0	0	0	0	0	0	0	0	0	1	0	1	0	2
limits	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
line	4	0	1	0	0	1	0	0	0	0	1	0	0	0	3
link	4	0	0	0	0	1	0	0	0	0	0	0	0	0	1
linking	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
links	5	1	0	0	0	0	1	0	0	3	1	0	0	0	6
list	4	0	0	0	3	0	0	2	0	0	0	0	0	0	5
listen	6	0	0	1	0	0	0	0	0	1	0	0	0	0	2
listening	9	2	0	2	0	0	0	0	0	0	0	0	0	0	4
lists	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1
literally	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
literature	10	0	2	0	0	0	0	0	0	1	0	1	0	0	4
little	6	1	0	1	0	0	0	0	0	0	0	0	0	0	2
living	6	0	0	0	0	0	0	1	0	0	0	0	0	0	1
load	4	0	0	0	0	0	0	3	1	1	0	0	0	0	5
locum	5	0	0	0	0	0	1	0	0	0	0	0	0	1	2
long	4	0	0	0	0	0	0	0	0	1	0	0	0	1	2
longer	6	0	0	0	1	0	0	3	0	0	0	0	0	0	4
look	4	0	1	1	0	0	1	0	0	1	1	2	3	2	12
looking	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
lose	4	0	0	1	1	0	0	0	0	0	2	0	0	0	4
losing	6	0	1	0	1	0	0	0	1	0	2	0	0	0	5
loss	4	0	0	0	1	0	0	0	0	0	0	0	0	0	1
lot	3	2	2	1	1	2	0	2	0	7	5	2	2	2	28
love	4	1	0	0	0	0	0	0	0	0	0	0	0	1	2
low	3	0	0	0	1	0	0	0	0	1	0	0	2	0	4
lower	5	0	0	0	0	1	0	0	0	0	0	0	0	0	1
lucky	5	0	0	0	0	0	0	0	0	0	0	1	0	0	1
made	4	0	0	0	0	0	2	0	0	0	0	0	0	1	3
main	4	0	0	0	0	0	0	0	0	0	0	1	0	0	1
maintaining	11	0	0	0	0	0	1	0	0	0	0	0	0	0	1
major	5	1	0	0	0	0	0	2	0	0	1	0	1	0	5
make	4	2	0	2	2	0	0	2	3	5	9	5	4	1	35
makes	5	0	0	0	0	0	0	1	0	0	0	0	0	0	1
making	6	1	1	0	0	1	0	0	0	0	1	0	2	2	8
manage	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
management	10	3	0	1	0	1	0	0	0	3	1	1	0	0	10
manner	6	1	0	0	0	0	0	0	0	0	2	2	0	0	5
many	4	1	1	0	1	0	2	1	1	3	3	0	1	1	15
margin	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
marketing	9	0	0	1	0	0	0	0	0	0	0	1	0	0	2
matter	6	0	0	0	0	0	0	0	0	0	2	0	1	0	3
maturity	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1

may	3	0	0	0	1	0	0	0	0	0	2	0	0	0	3
maybe	5	1	0	3	0	0	1	0	2	3	6	1	1	1	19
me	2	2	1	3	2	0	2	1	4	2	10	6	5	1	39
mean	4	1	2	1	0	0	0	1	0	0	0	1	1	0	7
meaning	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1
means	5	0	0	0	0	0	1	0	0	0	1	0	1	1	4
measure	7	1	3	0	0	0	0	0	0	0	0	0	0	0	4
measured	8	0	0	1	0	0	0	0	0	0	0	0	0	0	1
measures	8	0	0	0	0	1	0	0	0	0	0	0	0	0	1
media	5	0	0	2	0	0	3	0	0	0	0	0	2	0	7
medical	7	0	1	0	0	0	0	0	0	0	3	0	0	0	4
medication	10	0	0	2	0	0	0	0	0	0	0	0	0	0	2
medico	6	1	1	0	0	1	0	0	0	0	0	0	0	0	3
medicolegal	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
meets	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
members	7	0	0	2	0	0	0	2	0	1	0	0	2	0	7
mention	7	1	1	0	0	0	0	0	0	0	1	0	0	0	3
mentioned	9	1	2	0	1	0	1	0	0	0	0	0	1	0	6
mentoring	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
mess	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
might	5	2	1	1	3	2	2	2	0	2	3	2	3	3	26
min	3	0	0	0	0	0	0	0	0	2	0	0	0	0	2
mind	4	2	0	0	1	0	1	1	0	0	0	1	0	0	6
minds	5	1	0	0	0	0	0	0	0	0	0	0	0	0	1
minefield	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
miniscule	9	0	0	0	1	0	0	0	0	0	0	0	0	0	1
minor	5	0	0	0	0	0	0	0	0	0	0	0	0	1	1
minutes	7	0	0	0	0	0	0	0	0	0	2	0	0	0	2
misconduct	10	0	0	0	0	0	1	0	0	0	0	0	0	0	1
misdiagnose	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
misrepresent	12	0	0	0	0	0	0	0	0	0	0	0	0	1	1
miss	4	0	0	1	0	0	0	0	0	0	0	0	1	0	2
mistake	7	1	0	0	0	0	0	0	0	1	0	0	0	0	2
mistreat	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
misunderstandings	17	1	0	0	0	0	0	0	0	0	0	0	0	0	1
mixed	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
mock	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
modelling	9	0	0	0	0	0	0	0	0	1	0	0	0	0	1
models	6	0	0	2	0	0	0	0	0	1	0	0	2	1	6
moment	6	0	0	1	1	0	0	0	0	0	0	0	0	0	2
money	5	6	1	1	1	0	1	4	1	3	9	0	5	3	35
monitor	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1
monitoring	10	0	1	0	0	0	0	0	0	0	0	0	0	0	1
month	5	0	0	0	0	2	0	0	0	0	2	0	0	0	4
months	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
more	4	10	5	9	6	0	1	3	5	11	15	4	4	2	75

most	4	3	2	1	1	0	0	2	0	1	2	3	0	1	16
mostly	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
mother	6	1	0	0	0	0	0	0	0	0	1	0	3	0	5
motions	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1
motivation	10	1	0	2	0	0	0	0	0	0	2	0	2	0	7
move	4	0	0	1	0	0	1	0	0	0	0	1	0	0	3
much	4	2	0	0	1	2	0	1	0	0	1	5	0	0	12
multidisciplinary	17	0	0	0	0	0	0	0	0	0	0	0	1	0	1
multilingual	12	0	0	0	0	0	0	0	0	0	0	0	0	1	1
must	4	0	2	2	1	0	0	0	0	1	2	2	0	0	10
my	2	6	2	0	0	1	0	1	2	1	7	0	5	0	25
name	4	0	2	0	0	0	0	0	0	0	0	0	0	0	2
namely	6	1	0	0	0	0	0	0	1	0	0	0	0	0	2
national	8	0	0	0	0	0	0	0	0	0	1	1	0	0	2
natural	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
necessarily	11	1	1	1	0	0	1	1	0	2	0	3	0	0	10
necessary	9	0	0	0	0	0	0	0	0	0	2	1	0	0	3
necessity	9	0	0	0	0	0	2	0	0	0	0	0	0	0	2
need	4	8	1	6	1	0	2	1	2	3	6	9	9	2	50
needed	6	3	1	0	0	0	2	0	0	0	0	2	1	3	12
needs	5	5	1	0	1	0	1	0	1	0	3	0	4	0	16
neglect	7	0	1	0	0	1	0	0	0	0	0	0	0	0	2
neglected	9	0	1	0	0	0	0	0	0	0	1	0	2	0	4
negotiable	10	0	0	0	0	0	0	0	0	0	0	0	1	0	1
neither	7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
net	3	0	0	1	0	0	0	0	0	0	0	0	0	0	1
never	5	1	0	0	1	1	0	0	0	0	0	0	0	0	3
new	3	2	0	1	0	0	1	0	0	0	1	1	2	2	10
next	4	1	1	0	2	0	0	0	1	0	0	0	2	0	7
nice	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
nicu	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1
no	2	0	3	0	2	3	0	2	0	0	6	1	0	0	17
nobody	6	0	1	1	0	0	0	1	0	1	1	2	0	0	7
non	3	0	0	1	0	0	0	0	0	0	0	0	0	0	1
nor	3	0	1	0	0	0	0	0	0	0	0	0	0	0	1
norm	4	0	0	0	0	0	0	0	1	0	1	0	0	0	2
not	3	14	14	17	3	6	7	6	10	27	43	24	17	14	202
note	4	0	0	0	0	1	1	0	0	0	0	0	0	0	2
notes	5	0	0	0	0	2	0	0	0	0	0	0	0	0	2
nothing	7	0	0	0	0	1	0	1	0	0	0	1	0	0	3
noticed	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
now	3	0	0	2	2	0	0	1	2	0	4	0	2	0	13
nowadays	8	0	0	0	0	0	0	0	0	1	0	0	0	0	1
number	6	1	0	0	0	0	0	0	0	0	0	0	1	0	2
object	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
obligation	10	1	0	0	0	0	0	0	0	0	2	1	0	0	4

observe	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
observed	8	0	0	1	0	0	0	0	0	1	0	0	1	0	3
observing	9	0	0	1	0	0	0	0	0	0	0	1	0	0	2
obvious	7	0	0	0	0	0	0	0	0	0	1	2	0	1	4
obviously	9	0	0	0	2	0	0	0	0	1	1	0	0	0	4
occupation	10	1	0	0	0	0	0	0	0	0	0	0	0	0	1
of	2	23	16	23	17	7	18	12	10	43	66	32	18	23	308
off	3	0	0	0	0	0	0	0	0	0	0	1	0	0	1
offensive	9	0	0	0	0	1	0	0	0	0	0	0	0	0	1
offer	5	0	2	0	0	0	0	0	0	1	1	0	0	0	4
offered	7	0	0	0	0	0	0	0	0	0	2	0	0	0	2
offers	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
office	6	0	0	0	0	0	0	0	0	0	1	0	1	0	2
often	5	1	1	3	1	0	2	0	1	3	4	3	1	1	21
oh	2	0	1	0	2	0	0	0	0	0	0	0	0	0	3
ok	2	0	0	0	1	0	0	0	0	0	0	0	0	0	1
okay	4	0	1	1	0	0	1	1	7	0	0	0	1	0	12
old	3	0	0	0	0	0	0	0	0	0	0	0	0	1	1
on	2	10	3	13	5	5	6	2	3	5	21	8	11	7	99
once	4	0	0	1	0	0	0	0	0	0	1	0	0	1	3
one	3	2	2	2	1	1	2	2	1	4	5	3	2	3	30
ones	4	0	0	0	0	0	0	0	0	0	1	0	0	1	2
only	4	1	2	1	1	0	1	1	1	0	5	2	0	1	16
onto	4	0	0	0	1	0	0	0	0	0	0	0	0	0	1
operation	9	0	1	0	0	0	0	0	0	0	0	0	0	0	1
opinion	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
opinions	8	0	0	0	0	0	0	0	0	1	1	0	1	0	3
opportunities	13	0	0	0	0	0	2	0	0	0	0	0	0	0	2
opportunity	11	0	0	0	0	0	0	0	0	0	0	0	1	0	1
option	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
options	7	0	0	0	0	0	0	0	0	0	0	1	1	0	2
or	2	12	7	6	14	7	5	10	5	9	13	16	9	3	116
order	5	0	0	1	1	0	1	0	0	0	2	0	2	0	7
ordering	8	1	0	0	1	0	0	0	0	0	0	0	0	0	2
orientated	10	1	0	1	0	0	0	0	0	0	0	0	0	0	2
oriented	8	1	0	0	0	0	0	0	0	0	0	0	0	0	1
ot	2	0	0	1	3	0	0	0	0	5	2	0	0	1	12
other	5	1	0	7	1	7	2	1	0	8	8	3	5	2	45
others	6	1	0	1	0	0	0	0	0	0	2	0	0	0	4
our	3	6	4	4	2	1	0	0	2	9	8	7	1	3	47
ourselves	9	0	0	0	0	0	0	0	0	1	0	0	0	1	2
out	3	1	0	2	1	0	0	0	1	1	0	1	0	1	8
outcome	7	0	0	1	0	1	0	0	0	0	0	0	1	0	3
outcomes	8	0	3	0	0	0	0	0	0	0	0	0	0	0	3
outside	7	0	0	0	1	0	0	0	0	1	2	1	0	0	5
over	4	1	2	0	1	0	0	2	3	1	3	2	0	1	16

overcharging	12	0	0	0	0	0	0	0	0	0	0	2	0	0	2
overhead	8	0	0	0	1	0	0	0	0	0	0	0	0	0	1
overlap	7	0	0	0	0	0	0	0	0	0	0	0	0	1	1
overlapping	11	0	0	0	0	0	0	0	0	0	0	0	0	1	1
overload	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
overstep	8	0	0	0	0	0	1	0	0	1	0	0	0	0	2
overstepping	12	0	0	0	0	0	0	0	0	0	1	0	0	0	1
overwhelmed	11	0	0	0	0	0	0	0	0	0	0	0	1	0	1
owe	3	0	0	0	1	0	0	0	0	0	0	0	0	0	1
own	3	1	0	1	0	0	0	0	2	1	1	0	2	0	8
paediatric	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
paid	4	0	0	0	0	0	0	1	0	1	1	0	0	0	3
palsy	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
paperwork	9	0	0	0	1	0	0	0	0	0	0	0	0	0	1
parent	6	0	0	0	3	0	0	0	0	0	0	0	0	0	3
parents	7	0	0	0	0	2	0	0	2	1	5	0	0	0	10
part	4	0	0	0	0	1	0	0	1	5	2	0	0	0	9
parties	7	0	0	0	0	0	0	0	0	0	0	0	0	1	1
pass	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
passion	7	2	0	1	0	0	0	0	0	0	0	0	0	0	3
past	4	0	0	0	1	0	0	0	0	0	0	0	0	0	1
patience	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
patient	7	12	4	0	4	6	5	8	0	12	24	15	17	10	117
patients	8	6	2	0	2	6	9	7	0	20	14	9	8	2	85
pay	3	0	0	0	0	0	0	0	0	0	3	0	0	0	3
paying	6	1	1	0	0	0	0	0	0	0	1	0	0	0	3
payment	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
penny	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1
people	6	2	1	4	1	2	0	2	1	1	7	4	10	5	40
per	3	0	0	0	0	0	0	1	0	0	0	0	0	0	1
persist	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
person	6	2	0	1	0	0	0	0	0	0	0	5	2	1	11
personal	8	1	0	0	0	0	1	0	0	0	0	0	0	0	2
personality	11	0	0	1	0	0	0	0	0	0	0	0	0	0	1
personally	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
perspective	11	0	0	0	0	0	0	0	0	0	2	0	0	0	2
pharmacies	10	0	0	0	0	0	0	0	0	1	0	0	0	0	1
phone	5	0	0	0	1	1	0	0	0	0	1	0	0	0	3
photocopied	11	0	0	0	1	0	0	0	0	0	0	0	0	0	1
photocopying	12	0	0	0	1	0	0	0	0	0	0	0	0	0	1
physical	8	0	0	0	0	0	1	0	0	0	1	0	0	0	2
physio	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
physiology	10	1	0	0	0	0	0	0	0	0	0	0	0	0	1
physiotherapist	15	0	0	0	0	0	1	0	0	1	0	0	0	0	2
physiotherapists	16	0	0	0	0	0	1	0	0	0	0	0	0	0	1
physiotherapy	13	0	0	1	0	0	2	0	0	1	1	2	0	0	7

pick	4	0	0	0	0	0	0	0	0	1	0	0	0	0	1
picture	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
pitfalls	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
place	5	0	0	0	0	0	1	0	0	0	1	0	1	0	3
placed	6	0	1	0	0	0	0	0	0	0	0	0	0	0	1
places	6	0	0	0	0	0	0	0	0	1	1	0	0	0	2
placing	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
plan	4	0	0	0	0	0	0	0	0	2	1	0	1	0	4
platform	8	0	0	0	0	0	0	0	0	0	0	1	0	0	1
play	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1
plays	5	1	0	0	0	0	0	0	0	0	0	0	0	0	1
pocketed	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
point	5	1	0	0	2	0	0	1	1	0	0	0	0	0	5
points	6	1	0	0	0	0	0	0	1	0	6	1	0	0	9
poor	4	0	0	1	0	0	0	0	0	1	2	0	0	1	5
position	8	0	0	0	0	1	0	0	0	0	0	0	0	1	2
possible	8	1	1	0	0	0	0	1	0	1	2	0	1	0	7
possibly	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
post	4	0	0	1	0	1	0	0	0	0	0	0	0	0	2
power	5	0	0	0	0	0	0	0	0	0	0	1	0	2	3
practical	9	0	1	0	0	0	0	0	0	0	1	0	0	2	4
practice	8	0	8	3	3	0	0	3	3	7	10	8	4	7	56
practiced	9	0	0	0	0	0	0	0	0	0	0	0	0	1	1
practices	9	0	1	0	1	0	3	0	0	1	0	1	1	1	9
practicing	10	0	0	1	0	0	0	0	1	0	1	0	0	0	3
practitioner	12	0	0	0	0	0	0	0	0	0	0	1	0	0	1
prefer	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
preferences	11	0	0	0	1	0	0	0	0	0	0	0	0	0	1
preferential	12	0	0	0	2	0	0	0	0	0	0	0	0	0	2
preparatory	11	0	0	1	0	0	0	0	0	0	0	0	0	0	1
prepare	7	0	0	0	0	0	0	0	0	0	2	0	0	0	2
prepared	8	0	0	0	1	0	0	0	0	0	0	0	0	0	1
present	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1
presented	9	1	0	0	0	0	0	0	0	0	0	0	0	0	1
pressure	8	0	1	0	0	0	0	2	0	0	0	0	0	0	3
previous	8	0	0	0	0	0	0	0	0	0	1	1	0	0	2
previously	10	0	0	0	0	0	1	0	0	0	0	0	0	0	1
primary	7	0	0	0	0	0	0	0	0	0	1	1	0	0	2
principle	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
principles	10	0	0	0	0	0	0	0	0	0	0	1	0	0	1
prior	5	0	0	0	0	0	0	1	0	0	0	0	0	0	1
prioritise	10	0	0	0	0	0	0	1	0	1	0	0	0	0	2
prioritization	14	0	0	0	0	0	0	1	0	0	0	0	0	0	1
priority	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
privacy	7	0	0	0	0	1	0	0	0	1	0	0	3	0	5
private	7	0	1	1	1	0	1	5	3	4	10	3	1	3	33

probably	8	0	0	0	2	0	0	0	0	0	1	0	1	0	4
probe	5	0	0	0	0	0	0	0	0	0	0	0	0	1	1
problem	7	0	5	3	1	4	4	2	0	11	15	7	5	6	63
problems	8	2	0	0	0	0	1	0	0	0	1	1	4	3	12
procedure	9	0	1	0	0	0	0	0	0	0	1	0	0	0	2
procedures	10	0	0	0	0	0	0	0	0	0	3	0	0	0	3
process	7	1	0	2	0	0	0	0	0	0	0	1	1	1	6
processes	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
profession	10	1	4	5	1	1	1	1	1	0	6	5	3	1	30
professional	12	1	0	0	0	0	3	0	0	4	7	2	6	2	25
professionalism	15	0	0	1	0	0	0	0	0	0	0	0	1	0	2
professionally	14	0	1	0	0	0	0	0	0	0	0	0	0	0	1
professionals	13	2	1	1	0	1	2	0	0	15	9	2	9	3	45
professions	11	0	0	0	0	0	1	0	0	0	2	0	1	1	5
profit	6	0	1	0	1	0	0	0	0	0	0	0	0	0	2
profits	7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
prognosis	9	0	0	0	0	0	0	0	0	3	0	0	1	0	4
programme	9	0	0	0	0	0	0	0	0	0	2	0	0	0	2
programmes	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
progress	8	0	0	0	3	1	0	0	0	0	1	0	0	0	5
prominent	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
promised	8	0	0	1	0	0	0	0	0	0	0	0	0	0	1
promoting	9	0	0	1	0	0	0	0	0	0	0	0	0	0	1
prompt	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
proof	5	0	0	0	0	1	0	0	0	0	0	0	0	0	1
proper	6	0	1	0	0	0	0	0	0	1	1	0	1	0	4
prostheses	10	0	0	0	0	0	0	0	0	1	0	0	0	0	1
protect	7	0	0	1	0	0	1	0	0	0	0	0	1	0	3
protection	10	1	0	0	0	0	0	0	0	0	0	1	0	0	2
protocol	8	0	0	0	0	0	1	0	0	1	0	0	0	0	2
prove	5	0	0	1	0	0	0	0	2	0	1	0	0	0	4
proven	6	0	0	0	0	0	0	0	1	0	0	0	0	0	1
provide	7	0	0	1	0	0	1	0	0	0	4	2	0	0	8
providing	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
proving	7	0	0	0	0	0	0	0	1	0	0	0	0	0	1
psychiatric	11	0	0	0	0	0	0	0	0	1	0	0	0	0	1
psychiatry	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
psychologist	12	0	0	0	0	0	0	0	1	0	0	0	0	0	1
pt	2	0	0	0	0	0	0	0	0	0	1	0	0	3	4
public	6	0	1	1	0	0	0	1	0	3	0	5	0	0	11
purpose	7	0	0	0	0	0	0	0	0	1	2	0	0	0	3
purposes	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
put	3	1	0	1	0	0	1	0	1	0	1	0	1	0	6
putting	7	1	0	0	0	0	0	0	0	0	1	0	0	0	2
qualified	9	0	0	0	1	0	0	0	3	1	3	0	0	0	8
qualify	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1

quality	7	0	1	4	0	0	0	0	0	0	1	1	0	1	8
queried	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
question	8	0	0	0	3	0	2	0	1	0	0	1	0	0	7
questionable	12	0	1	0	0	0	0	0	0	1	0	0	0	0	2
questions	9	0	0	0	0	0	0	0	0	2	1	0	0	0	3
quiet	5	0	0	0	0	0	0	0	1	0	0	0	0	0	1
quite	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
quits	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
race	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1
raising	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
rather	6	0	2	0	0	0	0	0	0	0	0	0	0	0	2
ray	3	0	0	0	0	0	0	0	0	1	0	0	0	0	1
reach	5	1	0	0	0	0	0	0	0	0	0	0	0	0	1
read	4	1	0	0	0	0	0	0	0	0	1	0	0	0	2
real	4	0	0	2	0	0	0	1	1	0	1	0	1	0	6
realise	7	2	0	0	2	0	0	0	0	0	1	1	4	0	10
reality	7	1	0	0	0	0	0	1	1	1	0	0	0	0	4
really	6	6	3	0	2	0	2	0	1	1	2	2	0	0	19
reason	6	0	0	0	1	0	0	0	0	1	1	0	0	0	3
reasoning	9	0	0	0	0	0	0	0	0	0	1	2	0	0	3
reasons	7	0	0	0	0	1	0	0	0	0	1	0	1	0	3
receive	7	0	0	0	0	0	0	1	0	2	4	0	0	1	8
received	8	0	0	0	0	0	0	0	0	0	0	1	0	0	1
receiving	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
receptionists	13	0	0	0	0	0	0	0	1	0	0	0	2	0	3
recognise	9	2	1	0	0	0	0	0	0	0	0	1	0	0	4
recognised	10	1	0	0	0	0	0	0	0	0	0	0	0	0	1
recognising	11	0	0	0	0	0	0	0	0	0	0	1	0	0	1
recommend	9	0	0	0	0	0	0	0	0	0	0	0	0	1	1
recommended	11	0	0	0	0	0	0	0	0	0	0	0	0	1	1
record	6	0	2	0	1	1	1	0	1	0	2	0	2	1	11
recorded	8	0	0	0	0	1	0	0	0	0	0	0	0	0	1
recording	9	0	0	0	0	1	0	0	0	0	0	0	0	0	1
recordings	10	0	0	0	0	0	0	0	0	0	0	0	1	0	1
records	7	0	1	0	0	0	0	1	0	0	0	0	0	0	2
reduce	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
refer	5	0	1	0	2	1	1	0	1	2	3	1	0	0	12
referral	8	0	0	0	1	0	0	0	0	1	1	0	1	0	4
referrals	9	0	0	0	0	0	0	0	0	2	1	0	0	0	3
referred	8	0	0	0	0	0	0	0	0	1	3	0	0	0	4
referring	9	0	0	4	0	0	0	0	0	1	5	0	0	1	11
refers	6	0	0	0	0	0	0	0	1	0	2	0	0	0	3
reflect	7	0	1	3	0	1	0	0	0	0	1	0	0	0	6
reflected	9	0	0	1	0	0	0	0	0	0	0	0	0	0	1
reflection	10	0	0	0	0	0	0	0	0	0	1	0	1	0	2
reflects	8	0	0	1	0	0	0	0	0	0	0	0	0	0	1

refused	7	0	0	0	1	0	0	0	0	0	0	0	0	0	1
regarding	9	0	1	0	0	0	2	0	0	2	0	2	3	1	11
regardless	10	0	1	0	1	0	1	0	0	1	2	0	2	0	8
regular	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rehab	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1
rehabilitation	14	0	3	0	0	0	0	0	0	0	1	2	0	0	6
relate	6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
related	7	1	2	0	2	0	1	0	0	0	3	3	0	0	12
relates	7	0	0	0	0	0	1	0	0	1	1	2	3	1	9
relationship	12	0	0	1	0	0	1	0	0	0	2	0	0	0	4
relationships	13	0	0	0	0	0	1	0	0	0	0	0	1	0	2
relevant	8	1	0	0	0	0	0	0	0	0	1	1	1	0	4
reluctant	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
remain	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
remember	8	0	0	1	0	0	0	0	1	0	0	0	1	0	3
remote	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
remove	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
remunerated	11	0	0	0	0	0	0	0	0	1	0	0	0	0	1
repair	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1
repaired	8	0	0	0	0	0	0	0	0	0	0	0	0	1	1
repairs	7	0	0	0	0	0	0	0	0	0	0	0	0	2	2
repeating	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
replace	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
report	6	2	3	0	1	1	1	0	0	0	3	1	1	1	14
reported	8	0	0	0	0	0	0	0	0	0	0	1	0	1	2
reporting	9	0	0	0	0	1	0	0	0	0	0	0	0	0	1
reports	7	0	1	5	0	1	1	0	0	0	4	0	0	1	13
representative	14	0	0	0	0	0	0	0	0	0	1	0	0	0	1
representatives	15	0	0	0	0	0	0	0	0	0	1	0	0	0	1
request	7	0	0	0	0	0	0	1	0	0	0	0	0	0	1
research	8	1	1	0	0	0	1	0	0	0	0	0	1	0	4
resolved	8	0	0	0	0	0	0	0	0	0	0	0	0	1	1
resources	9	0	0	1	1	0	0	0	0	2	1	0	0	0	5
respect	7	0	0	3	1	2	1	0	0	2	0	0	3	0	12
respected	9	0	0	0	0	0	0	0	0	1	0	1	0	0	2
respecting	10	0	1	0	0	0	0	0	0	0	0	0	0	0	1
respond	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
responsibility	14	6	0	1	0	0	1	0	1	2	5	5	1	1	23
responsible	11	1	1	1	0	0	0	0	0	0	0	1	1	0	5
responsiveness	14	0	0	0	0	0	0	0	0	1	0	0	0	0	1
restraints	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
result	6	0	0	0	0	0	0	0	0	0	0	0	1	0	1
resulted	8	0	0	0	0	1	0	0	0	0	0	0	0	0	1
results	7	3	0	0	0	1	1	0	0	2	0	0	1	0	8
retaining	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
return	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1

reviewed	8	0	0	0	0	0	0	0	0	0	0	0	0	1	1
right	5	2	0	7	1	0	0	0	0	2	4	1	0	1	18
rights	6	1	0	0	0	0	0	0	0	2	1	5	2	0	11
rise	4	0	1	0	0	0	0	0	0	0	0	1	0	0	2
role	4	1	0	2	0	0	1	0	1	3	0	0	2	1	11
roles	5	0	0	0	0	0	1	0	0	0	0	0	0	0	1
round	5	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rounds	6	0	0	0	0	1	0	0	0	0	0	0	0	0	1
rude	4	0	0	0	1	0	0	0	0	0	0	0	0	0	1
rule	4	0	0	0	0	0	0	0	0	0	2	0	0	0	2
rules	5	0	0	3	0	0	0	0	0	0	4	1	0	0	8
running	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
rural	5	0	0	0	0	0	0	0	0	0	0	2	0	0	2
rushed	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
sad	3	0	0	0	0	0	0	1	0	1	0	0	0	0	2
safer	5	0	0	0	0	0	0	1	0	0	0	0	0	0	1
said	4	0	1	0	0	0	0	0	0	0	0	0	2	0	3
salary	6	0	0	0	0	0	0	0	0	0	3	0	0	0	3
sale	4	0	1	0	0	0	0	0	0	0	0	0	0	0	1
sales	5	0	1	0	0	0	0	0	0	0	0	0	0	0	1
same	4	0	0	2	0	0	0	1	1	0	6	4	1	2	17
sanctions	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
sanity	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
satisfied	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
say	3	0	0	0	2	1	0	0	0	0	6	1	0	1	11
saying	6	2	1	0	1	0	0	0	0	0	0	0	1	0	5
scared	6	0	1	0	0	0	0	0	0	0	3	0	0	0	4
scenario	8	1	0	0	0	0	0	0	2	0	5	0	0	1	9
scenarios	9	0	1	0	0	0	1	0	0	1	1	0	1	0	5
school	6	0	0	0	0	0	0	0	0	0	2	2	0	0	4
schools	7	0	0	0	0	0	0	0	0	0	2	0	0	0	2
science	7	0	0	0	0	0	0	1	0	0	0	0	0	0	1
scope	5	0	0	2	1	0	0	0	4	2	1	4	0	2	16
screening	9	0	0	0	0	0	0	0	0	0	3	1	0	0	4
second	6	1	0	0	0	0	0	0	0	1	1	0	0	0	3
secondly	8	2	0	0	1	0	0	2	1	0	2	0	0	0	8
sector	6	0	0	0	0	0	0	1	0	2	0	6	0	0	9
sectors	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
secure	6	0	0	0	0	0	0	0	0	0	1	0	1	0	2
see	3	1	2	1	0	1	0	4	1	3	6	6	2	5	32
seeing	6	0	0	0	1	0	0	0	0	0	2	1	0	0	4
seem	4	1	0	1	0	0	0	0	0	1	1	4	0	0	8
seems	5	0	0	0	0	0	0	0	0	1	1	1	0	0	3
seen	4	0	2	4	3	1	0	1	0	2	6	0	3	0	22
self	4	2	0	0	0	0	0	0	1	0	1	0	0	0	4
sell	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1

selling	7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
send	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
sense	5	0	0	0	0	0	0	0	0	0	0	1	1	0	2
sensitise	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
sensitised	10	0	0	0	0	0	0	0	0	0	0	1	0	0	1
sensitising	11	0	0	0	0	0	0	0	0	0	0	1	0	0	1
sensitive	9	1	0	0	1	0	0	0	0	1	7	1	2	0	13
sensitivity	11	4	0	2	0	0	2	0	0	3	1	1	5	0	18
serious	7	1	1	0	0	0	0	0	0	0	0	0	0	0	2
seriously	9	0	0	0	0	0	0	0	0	1	0	0	0	0	1
service	7	1	7	2	1	0	4	1	2	0	6	3	0	0	27
services	8	0	5	2	2	0	2	3	0	1	0	7	0	0	22
servicing	9	0	1	0	0	0	0	0	1	0	2	2	0	1	7
serving	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
session	7	0	1	4	1	1	0	0	1	0	2	0	2	0	12
sessions	8	1	0	1	0	0	0	0	1	1	1	0	0	0	5
set	3	1	0	0	0	0	1	0	0	0	0	2	0	1	5
setting	7	0	0	0	0	1	1	1	1	0	3	0	0	0	7
settings	8	0	0	0	0	0	3	0	1	0	2	0	0	1	7
sexual	6	0	0	0	0	0	1	0	0	0	0	0	1	0	2
share	5	0	0	2	0	0	2	0	0	0	1	0	0	0	5
sharing	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
she	3	0	0	5	0	0	0	0	0	0	5	0	1	4	15
shift	5	0	1	0	0	0	0	0	0	0	0	0	0	0	1
shock	5	0	0	0	0	0	0	0	0	0	1	0	1	0	2
shocked	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
shocking	8	0	0	0	0	0	0	0	0	0	2	0	0	0	2
shoes	5	1	0	0	0	0	0	0	0	0	0	0	1	0	2
shopping	8	0	0	0	0	0	0	0	0	1	1	0	0	0	2
shops	5	0	1	0	0	0	0	0	0	0	0	0	0	0	1
short	5	0	1	0	0	0	0	0	0	0	0	0	1	1	3
shortage	8	0	0	0	0	0	0	1	0	0	0	0	0	0	1
should	6	1	3	7	2	0	0	0	1	1	12	3	2	1	33
shouldn	7	0	0	2	0	0	0	0	0	0	1	0	0	0	3
show	4	0	0	0	0	0	0	0	1	1	1	0	1	0	4
showing	7	1	0	1	0	0	1	0	0	0	0	0	0	1	4
shows	5	0	0	1	0	0	0	0	0	1	0	0	0	0	2
sickness	8	0	0	0	0	0	1	0	0	0	0	0	0	0	1
side	4	0	0	1	1	0	0	1	0	1	0	0	0	0	4
sign	4	1	0	0	0	0	0	0	0	0	0	0	0	0	1
signing	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
similar	7	0	0	0	0	0	0	0	0	0	0	0	1	1	2
simple	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
since	5	0	0	0	1	0	1	0	0	0	0	0	0	0	2
sit	3	0	0	0	0	0	0	0	0	0	2	0	1	0	3
sitting	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1

situation	9	0	0	0	1	1	0	0	0	0	2	1	4	2	11
situations	10	0	1	0	0	0	1	0	0	0	0	1	2	0	5
skill	5	0	0	0	2	0	0	0	0	3	0	0	0	0	5
skills	6	0	0	4	0	1	2	0	0	0	0	0	3	3	13
slots	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
slt	3	0	0	0	0	0	0	0	0	5	1	1	0	1	8
small	5	0	1	1	1	0	0	0	0	0	0	0	0	0	3
so	2	3	2	9	5	1	0	0	4	0	6	4	2	0	36
social	6	1	0	4	0	0	3	0	0	0	0	3	2	0	13
society	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
socio	5	0	0	0	0	0	0	0	0	0	0	1	0	1	2
some	4	3	7	2	2	1	1	0	1	3	16	4	0	3	43
somebody	8	0	0	0	0	0	0	1	0	0	0	0	0	0	1
somehow	7	1	0	0	1	0	0	0	0	0	0	0	0	0	2
someone	7	2	2	1	5	1	1	0	2	4	2	1	2	1	24
something	9	5	5	7	1	1	4	1	3	3	1	5	4	1	41
sometimes	9	2	2	1	2	2	2	1	1	5	9	0	1	2	30
soon	4	0	0	0	0	0	0	0	0	1	0	0	1	0	2
sorry	5	0	0	0	0	0	0	0	1	0	0	0	0	1	2
sort	4	0	0	0	1	0	0	0	0	0	0	0	0	0	1
sounds	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
south	5	1	0	0	0	0	0	0	0	0	0	0	0	0	1
space	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1
speak	5	0	0	0	0	0	0	0	0	0	2	2	1	0	5
speaking	8	0	0	0	0	0	0	0	0	0	0	1	0	0	1
special	7	0	0	0	0	0	0	1	0	0	0	0	0	0	1
specialist	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
specialists	11	0	0	0	0	0	0	0	0	0	0	0	0	2	2
specialized	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
specific	8	1	0	0	0	0	1	1	0	0	2	4	2	2	13
specifically	12	0	1	1	0	0	0	1	0	0	2	1	1	0	7
specifics	9	0	0	0	0	1	0	0	0	0	0	0	0	0	1
speech	6	0	0	0	0	0	0	0	2	3	3	4	0	0	12
speechies	9	0	0	0	0	0	0	0	2	0	0	0	0	0	2
spend	5	0	0	1	0	0	0	3	0	2	0	0	0	0	6
spending	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
spent	5	0	0	1	0	0	0	0	0	0	2	0	1	0	4
splints	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
split	5	0	0	0	0	0	0	0	1	1	0	0	0	0	2
spoken	6	0	0	0	0	0	0	0	0	0	0	1	0	0	1
spot	4	0	0	0	1	0	0	0	0	0	0	0	0	0	1
springbok	9	0	0	0	0	0	0	0	0	0	0	1	0	0	1
staff	5	0	0	0	0	0	0	0	0	0	0	0	2	0	2
stand	5	0	0	0	2	0	1	0	0	0	1	0	0	0	4
standards	9	0	1	0	0	0	0	0	0	0	1	0	0	0	2
start	5	0	1	0	0	0	0	0	0	0	3	0	0	0	4

started	7	0	0	1	0	0	0	0	0	0	0	0	0	0	1
starts	6	0	0	0	0	0	0	0	0	0	0	0	0	1	1
state	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
status	6	1	0	0	0	1	0	0	0	1	0	1	0	0	4
stay	4	0	0	0	0	0	1	0	0	1	2	0	0	0	4
staying	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
steady	6	0	0	0	0	1	0	0	0	0	0	0	0	0	1
step	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
steps	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
still	5	0	2	1	1	0	0	0	0	0	5	0	0	1	10
stop	4	0	0	0	0	0	0	0	0	1	0	0	0	0	1
stored	6	1	0	0	0	0	0	0	0	0	0	0	0	0	1
strange	7	0	0	0	0	0	0	0	0	1	0	0	0	0	1
strategies	10	0	0	0	0	0	0	0	0	0	0	0	1	0	1
stress	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
stressing	9	0	0	0	0	0	0	0	0	1	0	0	0	0	1
strict	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
structure	9	0	0	0	0	0	0	0	0	0	2	0	0	0	2
structures	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
struggle	8	0	0	0	0	0	0	0	0	1	0	0	1	1	3
struggling	10	0	0	0	0	0	0	0	1	0	0	0	0	0	1
student	7	2	1	0	1	0	1	0	0	1	2	1	0	0	9
students	8	2	0	1	2	0	0	1	0	10	9	7	9	0	41
studies	7	1	0	0	0	0	0	0	0	0	1	0	0	0	2
study	5	0	0	0	0	0	0	0	0	0	2	0	1	0	3
studying	8	0	1	0	0	0	0	0	0	0	0	0	0	0	1
stuff	5	0	1	0	0	0	0	0	0	0	0	0	0	0	1
stupid	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
stuttering	10	0	0	0	0	0	0	0	1	0	0	0	0	0	1
submitted	9	0	1	0	0	0	0	0	0	0	0	0	0	0	1
submitting	10	0	1	0	0	0	0	0	0	0	0	0	0	0	1
successful	10	0	0	0	0	0	0	0	0	1	0	0	0	0	1
successfully	12	0	0	0	0	0	0	0	0	0	1	0	0	0	1
such	4	1	1	0	0	0	0	0	2	0	2	1	0	0	7
suddenly	8	1	0	0	0	0	0	0	0	0	1	0	0	0	2
suits	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
summary	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
superficial	11	0	0	0	0	0	0	0	0	0	1	0	0	0	1
superior	8	0	0	0	0	0	1	0	0	0	0	0	0	0	1
supervise	9	0	0	0	0	0	0	0	0	1	0	0	0	0	1
supervised	10	0	0	0	0	0	0	0	0	0	0	1	0	0	1
supervision	11	0	2	0	1	1	1	0	0	0	0	0	0	0	5
supervisor	10	0	0	0	0	0	2	0	0	0	0	0	0	0	2
supervisors	11	0	0	0	1	0	0	0	0	0	0	0	0	0	1
supplied	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
support	7	0	0	0	0	0	0	1	1	0	0	0	0	0	2

supportive	10	0	0	0	0	0	0	0	1	0	0	0	0	0	1
suppose	7	0	1	0	1	0	1	0	1	0	0	1	0	0	5
supposed	8	0	0	0	0	0	0	1	0	0	0	0	0	0	1
sure	4	1	0	2	0	0	0	0	2	1	1	0	1	1	9
surprised	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
survive	7	0	0	0	0	0	0	1	0	0	0	0	0	0	1
suspect	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
swipe	5	1	0	0	0	0	0	0	0	0	1	0	0	0	2
system	6	0	0	0	0	0	0	0	0	1	0	1	0	0	2
systems	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
table	5	0	0	0	0	0	0	0	0	1	0	1	0	0	2
tackle	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
take	4	2	3	2	0	0	0	0	2	3	2	1	1	1	17
taken	5	1	0	0	0	0	0	0	0	0	1	0	0	0	2
takes	5	0	0	0	0	0	1	0	1	0	0	0	0	0	2
taking	6	0	0	0	0	1	0	0	0	0	0	0	0	0	1
talk	4	0	0	0	0	0	1	0	0	1	0	2	3	0	7
talking	7	0	0	2	1	1	1	0	1	0	1	1	0	0	8
tariff	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
tariffs	7	0	0	2	0	0	0	0	0	0	0	0	0	0	2
taught	6	0	2	0	0	0	0	0	0	1	0	0	1	0	4
tbi	3	0	0	0	0	0	0	0	0	0	2	0	0	0	2
teach	5	0	0	0	0	0	0	0	0	2	0	0	1	0	3
teacher	7	0	0	0	1	0	0	0	0	0	3	0	0	0	4
teachers	8	0	0	0	0	0	0	0	0	0	5	0	0	0	5
teaching	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
team	4	0	0	2	0	1	0	0	0	3	0	0	4	0	10
teammates	9	0	0	0	0	0	0	0	0	0	1	0	0	0	1
teamwork	8	0	0	0	0	0	0	0	0	0	1	0	0	0	1
techniques	10	0	0	2	0	0	1	0	0	0	0	0	0	1	4
technology	10	0	0	0	2	0	1	0	1	0	0	1	1	0	6
tele	4	0	1	0	0	0	0	0	0	0	0	0	0	0	1
tell	4	1	0	0	1	1	0	0	0	3	3	2	0	0	11
telling	7	0	1	0	0	0	0	0	0	0	0	0	0	0	1
tells	5	0	0	0	0	0	0	0	0	0	0	1	0	0	1
temperament	11	0	0	1	0	0	0	0	0	0	0	0	0	0	1
temptation	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
temptations	11	0	0	0	0	0	0	1	0	0	0	0	0	0	1
tempted	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
tend	4	0	0	0	0	0	0	1	1	0	0	2	0	0	4
term	4	0	0	0	0	0	0	1	0	0	0	0	0	0	1
terms	5	4	0	1	0	1	2	0	1	0	1	1	3	0	14
test	4	4	2	0	0	1	1	0	0	0	0	2	2	0	12
tested	6	1	0	0	0	0	0	0	0	0	1	1	0	0	3
testify	7	0	0	0	0	0	0	0	0	0	0	0	0	1	1
testing	7	3	0	0	0	0	0	0	0	0	1	0	0	0	4

tests	5	0	0	0	0	0	0	0	2	2	1	0	0	0	5
than	4	0	0	1	1	0	0	0	1	1	5	1	1	0	11
thanks	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
that	4	38	35	32	22	5	23	20	17	32	82	45	25	27	403
the	3	65	28	64	37	16	25	23	17	63	157	78	52	39	664
their	5	8	3	2	4	1	2	0	2	9	9	10	6	4	60
them	4	3	3	0	2	1	4	1	1	5	7	4	6	0	37
themselves	10	2	1	0	0	0	0	0	0	1	1	1	0	1	7
then	4	6	5	6	1	5	10	0	6	5	9	6	3	3	65
theoretical	11	0	0	0	0	0	0	0	0	0	2	0	0	0	2
theory	6	0	1	0	0	0	0	0	0	0	0	0	0	0	1
therapeutic	11	1	0	0	0	0	0	0	0	0	0	0	0	0	1
therapist	9	3	0	11	5	1	3	0	2	2	8	4	0	2	41
therapists	10	3	1	8	5	6	9	1	6	6	10	12	1	2	70
therapy	7	0	0	2	5	2	0	3	2	2	3	1	0	1	21
there	5	1	4	5	3	7	6	3	5	6	16	9	7	5	77
therefore	9	0	0	1	0	0	0	0	0	2	0	0	1	0	4
thereof	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1
these	5	4	3	1	0	0	2	0	1	0	2	4	2	1	20
they	4	11	7	7	4	1	1	4	2	28	47	19	16	11	158
they've	7	0	0	0	0	0	0	0	1	0	3	1	0	0	5
thing	5	4	3	6	3	2	0	1	1	1	3	4	1	0	29
things	6	2	1	9	2	2	0	1	1	1	6	3	0	0	28
think	5	13	19	25	20	10	22	11	15	17	48	25	18	17	260
thinking	8	5	2	2	0	0	0	0	1	0	3	2	1	2	18
third	5	1	0	0	0	0	0	0	0	0	0	0	0	0	1
this	4	23	9	10	10	6	12	5	3	9	26	15	11	4	143
those	5	0	0	0	0	0	1	0	0	0	3	1	0	0	5
though	6	0	0	0	0	0	0	0	0	1	2	1	0	0	4
thought	7	0	0	1	0	0	0	0	0	0	0	1	0	0	2
through	7	0	1	0	0	0	1	0	0	0	1	1	0	0	4
throughout	10	0	0	0	0	0	0	0	0	0	1	0	0	0	1
throws	6	0	0	0	1	0	0	0	0	0	0	0	0	0	1
tick	4	0	0	0	0	0	0	0	0	0	0	1	0	0	1
time	4	0	0	3	3	1	0	6	0	6	6	2	3	0	30
times	5	0	0	0	2	0	0	0	0	0	0	0	0	0	2
to	2	51	30	40	27	11	39	16	22	44	107	61	53	27	528
today	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
toes	4	0	0	0	1	0	0	0	0	0	0	0	0	1	2
together	8	2	0	0	0	0	0	0	0	1	1	0	1	0	5
told	4	0	0	1	0	0	1	0	0	0	0	0	0	1	3
tone	4	0	0	0	0	0	0	0	0	0	0	0	0	1	1
too	3	0	0	0	0	0	0	1	0	1	3	0	0	1	6
took	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
tools	5	0	0	0	0	0	0	0	2	0	0	0	0	0	2
topic	5	0	0	0	1	0	1	0	0	0	0	0	0	0	2

totality	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
touch	5	1	0	0	0	0	1	0	0	0	1	0	1	0	4
tough	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
toward	6	1	0	0	0	0	0	0	0	0	1	0	0	0	2
towards	7	1	0	0	0	0	0	0	0	1	2	0	1	0	5
toys	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1
train	5	0	0	0	0	0	0	0	0	1	1	2	0	0	4
trained	7	0	0	0	0	0	0	1	0	0	1	3	2	1	8
training	8	6	0	0	1	0	2	0	1	0	1	2	2	0	15
translators	11	0	0	0	0	0	0	0	0	2	0	0	0	0	2
transparent	11	0	0	1	0	0	0	0	0	0	0	0	0	0	1
treat	5	0	0	2	1	0	0	0	0	1	0	0	0	0	4
treated	7	0	1	3	0	2	0	0	0	3	0	1	0	2	12
treatment	9	0	0	2	0	1	2	1	0	1	2	1	3	1	14
tried	5	0	0	0	0	0	0	0	0	0	0	0	0	1	1
trouble	7	2	0	1	1	0	0	0	1	1	0	0	0	0	6
true	4	0	0	0	0	0	0	0	0	0	1	0	0	1	2
truly	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
trust	5	1	0	1	0	0	0	0	1	0	4	0	3	2	12
trusted	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
try	3	0	0	1	0	0	2	0	0	0	0	1	0	0	4
trying	6	0	0	0	0	0	1	0	3	0	0	0	0	0	4
tuned	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
turn	4	0	1	0	0	0	0	0	0	0	0	0	0	0	1
turning	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
twice	5	0	0	0	0	0	0	0	0	0	5	0	0	1	6
twitter	7	0	0	0	0	0	0	0	0	0	0	0	1	0	1
two	3	1	0	0	0	0	1	1	1	0	2	0	0	0	6
type	4	0	0	0	0	0	0	1	0	0	0	0	0	0	1
types	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
uhm	3	0	0	1	1	0	0	1	0	0	0	0	0	0	3
uncertainty	11	0	0	0	0	0	1	0	0	0	0	0	0	0	1
unconditionally	15	0	0	1	0	0	0	0	0	0	0	0	0	0	1
unconscious	11	0	0	0	0	0	0	1	0	0	0	0	0	0	1
under	5	0	0	0	0	0	2	0	2	1	1	0	0	0	6
undergrad	9	0	0	0	0	0	0	0	1	0	0	0	0	0	1
undergraduate	13	0	0	0	0	0	0	0	0	0	0	0	0	1	1
underlying	10	0	0	0	0	0	0	0	0	0	0	1	0	0	1
underserviced	13	0	0	0	0	0	0	0	0	0	0	2	0	0	2
underservices	13	0	0	0	0	0	0	0	0	0	0	1	0	0	1
underservicing	14	0	0	0	0	0	0	0	0	0	1	0	0	0	1
understand	10	1	0	0	0	0	1	0	0	0	4	1	3	2	12
understanding	13	1	0	0	0	0	1	0	0	2	1	1	0	0	6
unethical	9	1	3	0	1	0	0	0	0	1	2	2	2	1	13
unfair	6	0	0	0	0	0	0	1	0	0	0	0	0	0	1
unfortunately	13	0	0	0	0	0	0	0	0	0	2	0	0	0	2

unhappiness	11	0	0	0	0	0	0	0	0	0	0	0	0	1	1
unique	6	0	1	0	0	0	0	0	0	0	0	1	0	0	2
unless	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
unnecessary	11	0	0	0	0	0	1	0	0	0	1	0	0	1	3
unprofessional	14	0	0	0	0	1	0	0	0	0	0	0	0	0	1
unsure	6	0	0	1	0	0	0	0	0	1	1	0	0	0	3
until	5	0	0	0	0	0	0	0	0	1	0	0	0	0	1
unwritten	9	0	0	1	0	0	0	0	0	0	0	0	0	0	1
up	2	1	2	2	1	1	3	1	0	3	3	0	2	0	19
upon	4	0	0	0	0	0	0	0	0	0	0	1	0	0	1
ups	3	0	0	0	0	0	1	0	0	0	0	0	0	0	1
upset	5	0	0	0	0	1	0	0	0	0	0	0	1	0	2
us	2	1	0	0	2	0	0	0	1	0	2	0	2	1	9
use	3	1	0	3	0	0	2	1	0	1	1	0	0	2	11
used	4	0	0	1	0	0	0	0	2	1	5	0	1	2	12
useful	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
using	5	0	0	0	2	0	0	0	0	0	1	0	2	2	7
usually	7	0	0	0	0	0	1	0	0	0	0	0	0	0	1
valuable	8	1	0	0	0	1	1	0	0	0	1	0	0	0	4
value	5	0	1	0	0	0	0	0	0	0	1	0	1	1	4
values	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
variance	8	0	0	0	0	0	0	0	0	1	0	0	0	0	1
various	7	0	0	0	0	0	0	0	0	0	0	1	1	0	2
varsity	7	1	0	0	0	0	0	0	0	0	0	0	0	0	1
verbal	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
verification	12	0	2	0	0	0	0	0	0	0	1	0	0	1	4
verify	6	0	0	0	0	0	1	0	0	0	0	0	0	0	1
very	4	6	5	6	3	5	8	1	2	5	7	4	4	5	61
video	5	0	0	1	0	0	0	0	0	0	0	0	0	0	1
videos	6	0	0	0	0	0	0	0	0	0	0	0	1	0	1
view	4	0	0	0	0	0	0	0	0	1	1	0	1	0	3
viewed	6	0	0	0	0	0	0	0	0	1	0	0	0	0	1
wait	4	0	0	0	1	0	0	0	0	0	1	0	0	0	2
waiting	7	0	0	0	2	0	0	2	0	1	0	0	0	0	5
waits	5	1	0	0	0	0	0	0	0	0	0	0	0	0	1
wake	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1
waking	6	0	0	1	0	0	0	0	0	0	0	0	0	0	1
walk	4	0	0	0	0	0	0	0	0	0	1	0	0	0	1
want	4	0	4	1	3	2	0	1	0	2	9	1	1	1	25
wanted	6	0	0	0	0	0	0	0	0	0	0	0	1	0	1
wanting	7	0	0	0	0	0	0	0	0	0	1	0	0	0	1
wants	5	0	0	0	1	0	0	0	0	0	0	0	0	0	1
ward	4	0	0	0	0	1	0	0	0	0	1	0	0	0	2
wards	5	0	0	0	0	1	0	0	0	0	0	0	0	0	1
was	3	1	2	6	0	1	0	0	0	1	3	6	6	8	34
way	3	1	0	2	0	0	1	1	1	0	0	1	0	0	7

ways	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1
we	2	16	5	16	4	3	3	1	7	15	19	23	12	5	129
wear	4	0	0	1	0	0	0	0	0	0	0	0	0	0	1
week	4	0	0	0	0	0	0	0	0	0	6	1	0	0	7
well	4	2	2	0	0	3	2	1	1	3	4	8	1	2	29
went	4	0	0	0	0	0	0	0	0	0	1	1	0	0	2
were	4	0	3	1	1	0	0	0	0	0	4	0	1	1	11
what	4	9	6	16	2	0	5	2	1	11	25	27	9	4	117
whatever	8	0	0	0	0	0	0	0	0	0	0	1	0	0	1
whattsapp	9	0	0	1	0	0	0	0	0	0	0	0	0	0	1
wheelchair	10	0	0	1	0	0	0	0	0	0	0	0	0	0	1
when	4	1	1	3	2	2	1	1	3	1	12	4	3	3	37
where	5	4	1	2	0	2	0	0	4	4	7	6	4	6	40
which	5	1	0	3	1	2	0	0	1	0	2	2	0	0	12
while	5	0	1	1	0	0	0	0	0	0	1	0	0	0	3
whistle	7	0	1	0	1	0	1	0	0	0	0	0	3	0	6
who	3	0	1	1	0	0	3	1	0	1	6	0	3	0	16
whole	5	0	0	0	1	1	0	0	0	2	5	0	2	0	11
why	3	1	0	0	0	0	0	0	0	0	5	0	0	0	6
will	4	14	2	4	5	2	1	2	0	5	9	3	6	2	55
willing	7	0	0	0	1	1	0	0	0	0	0	0	0	0	2
wish	4	0	0	0	0	0	0	0	1	0	0	0	0	0	1
with	4	5	9	20	4	6	6	5	8	12	23	11	10	4	123
withhold	8	0	0	0	0	0	0	0	0	0	0	0	1	0	1
within	6	0	0	1	1	0	2	0	1	0	0	1	1	0	7
without	7	2	1	0	1	0	2	1	1	2	1	1	0	0	12
woman	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
won	3	0	0	0	0	0	0	0	0	0	1	0	0	0	1
wonder	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
word	4	1	0	1	1	0	0	0	0	0	0	0	0	0	3
words	5	0	0	0	0	0	0	0	0	0	2	1	0	0	3
work	4	2	0	0	1	0	0	1	0	3	2	1	0	1	11
worked	6	0	0	0	1	0	0	0	0	0	1	0	0	0	2
worker	6	0	1	0	0	0	0	0	0	0	0	0	0	0	1
workers	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
working	7	0	1	0	1	0	0	0	1	1	2	1	1	0	8
works	5	0	0	0	0	0	1	0	0	0	1	0	0	0	2
workshop	8	0	0	0	0	0	0	0	0	0	1	0	0	1	2
workshops	9	0	4	0	0	0	0	0	0	0	1	0	0	0	5
world	5	0	0	0	0	0	0	0	0	0	1	0	1	0	2
worse	5	0	0	0	0	0	2	1	0	0	1	0	0	0	4
would	5	6	4	3	1	1	6	1	5	3	8	8	4	3	53
wow	3	0	0	0	1	0	0	0	0	0	0	0	0	0	1
write	5	0	0	0	0	1	1	0	0	0	1	0	1	0	4
writing	7	1	0	0	1	1	0	0	0	0	1	0	0	1	5
written	7	0	1	1	0	0	0	0	0	0	0	0	0	0	2

wrong	5	0	1	2	1	1	0	0	0	1	1	1	2	1	11
year	4	0	1	0	0	0	0	0	0	0	1	0	0	0	2
years	5	0	4	0	0	0	0	1	1	1	2	0	1	1	11
yes	3	0	0	2	3	0	0	0	0	0	6	0	0	1	12
yesterday	9	0	0	0	0	0	0	0	0	0	0	0	1	0	1
you	3	12	3	14	4	4	4	6	6	15	48	17	22	2	157
you've	6	0	0	0	0	0	0	0	0	0	1	0	0	0	1
young	5	0	0	0	0	0	0	0	0	0	0	0	1	0	1
younger	7	0	0	0	0	0	0	0	0	0	0	1	0	0	1
your	4	4	1	3	1	0	1	0	1	2	11	2	5	0	31
yourself	8	1	0	0	0	0	0	0	0	0	0	0	1	0	2
Total:		1283	924	1225	720	446	777	517	599	1353	2877	1531	1261	820	14333

Appendix H1

MIEST completion instructions

MIEST Measuring Instrument for Ethical Sensitivity in the Therapeutic sciences

Instructions

1. Thank you for your willingness to partake in this study
2. Each one of you have received a booklet with 12 clinical scenarios
3. Below each scenario, you will find 11 statements that should be rated on the 7-point scale, with 1 meaning strongly disagree and 7 strongly agree.
4. If a concept is not relevant or if you are not sure how to rate it, there is an option (4).
5. Please indicate your start and end time on the front page.
6. There is no time limit and you may leave the venue when you have completed the 12 scenarios.
7. Please place the booklet in the container at the venue exit.
8. Any questions?

Appendix H2

Vignette 1 – 12 of MIEST

Mr. F, a final year student wants to copy assessment tests and tools to use during his community service year. He is not sure if the hospital where he is going to be employed at has any assessment tools available, but even if they do, he is concerned that it would not be the ones he feels competent in. He also plans to open a private practice after his community service year and will need the material to be able to assess his future clients. He has investigated the option of purchasing the original assessment instruments but feels it is unnecessary seeing that he has the option of simply copying it. He approached one of the lecturers at the university for permission to copy the materials. The lecturer, understanding the financial implication of purchasing original material and sensing the student's anxiety in terms of using material he is not familiar with, gives permission for him to copy the material.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mr. F	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client(s) by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients' best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client(s) to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

Mr. B is currently a client of a therapist in private practice. He has been receiving therapy for the past six months. He has a very good relationship with his therapist. During one session he asks her out to dinner. The therapist likes her client a lot but knows that she is not allowed to become involved with clients. She declines the invitation by explaining the HPCSA rules and regulations regarding therapist-client relationship. During the next session he gives her a hug at arrival of the session. She does not want to hurt his feelings but explains in a calm way that his behaviour could have serious implications for her professional future, as well as for their professional relationship. He would like to continue therapy with this specific therapist but admits that he finds her irresistible. At this point Mr. B also shares with the therapist that his girlfriend was killed in a motor vehicle accident six months ago and that the therapist reminds him of his girlfriend. He sits down in the chair and puts his hands over his face trying to hide his emotions. The therapist allows some silence respecting his grief and then gently in a soft voice offers her condolences and asks Mr. B if he would like to see a psychologist to help him deal with his loss. Mr. B agrees to this idea. The therapist, however, still needs to define how to continue with therapy. Mr. B is showing remarkable progress as a result of therapy and the therapist does not want for him to discontinue at this stage. She offers him two alternatives for continuing with therapy. The therapist can either invite an assistant to join in during sessions to ensure that therapy can continue in a professional manner or alternatively she is can refer him to an experienced colleague. He chooses the first option and accepts the terms and conditions for therapy to continue.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mr. B	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

Mrs. R is referred for therapy by a general physician for rehabilitation. The therapist at the practice was trained to do this type of treatment during her degree but she has never done it herself. The therapist knows of another therapist that does it on a regular basis but she is scared that if she refers to the other practice, the physician will refer there in future. From what the therapist can remember regarding the therapy, she feels that it cannot be that difficult to apply the treatment and she needs to increase her client base. The therapist phones the client to make an appointment in two weeks to give her time to study the treatment strategy before starting treatment. The client asks the therapist what the treatment will entail as the doctor did not give him much information. The therapist explains that she's got another client waiting and cannot go into too much detail as she can't really answer the client at this point. She briefly explains the principle of the treatment but uses medical jargon that doesn't make much sense to the client. The client, however, thinks that the therapist sounds quite clever and makes an appointment.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mrs. R	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

Mrs. H is a 34-year-old client who makes an appointment for an assessment at a therapy practice. During the case history he tells the therapist that he has been diagnosed with TB but did not go to the hospital for admission. He says that his wife will leave him if she finds out and that he will also lose his job. They recently had a baby and his family is relying on him for financial support. The therapist explains the impact of his diagnosis on others, and that he will have to be admitted to the hospital and that his family will have to be notified so that they can also be tested. During the assessment, the therapist ensures adequate ventilation in the room and both the therapist and Mr. H wear face masks. The therapist uses disinfectant sprays in the consultation rooms as standard practice. The therapist examines the client and refers him to the hospital where he should be admitted. Mr. H tells the therapist that he is going home and that nobody can force him to go to the hospital. The therapist feels sorry for him but also realise that it is his decision to make. The therapist ends the session by asking him to contact the practice should his symptoms get worse.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mrs. H	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

Mrs. A brings her 18-month-old son to a therapy practice for an assessment. The week before the assessment, the therapist received comprehensive training in a new assessment technique that she feels would be beneficial for this child. The problem is that because it is a new technique, there is no code yet to bill the Medical Aid. The therapist discusses this with Mrs. A, explaining the benefit of the assessment technique as well as the costs involved. Mrs. A asks the therapist if there is another code that would add up to the same amount in order for the therapist to still claim from the Medical Aid. Mrs. A really wants the best for her child but she does not have money to pay for the assessment. The therapist offers the option of paying for the assessment over a period of 3 months, but on her current budget Mrs. A cannot afford to do so. The therapist believes in the value of this assessment in determining the appropriate management of this child. There is another code that adds up to the same amount, and the therapist discusses it with Mrs. A explaining that the Medical Aid will pay the amount but the procedure on the statement would have a different description. Mrs. A requests the therapist to use the alternative code and to perform the assessment.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mrs. A	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

A young mother, Mrs. N, brings her 24-month-old daughter for therapy. She is very concerned about the financial implications of long term early intervention. She questions the therapist regarding the financial implications of therapy and indicates that she has limited funds available. The therapist feels sorry for the mother and does not want to add to her concerns by discussing all the costing. The therapist is also concerned that the mother might decide not to bring the child for therapy which is not in the best interest of the child. She responds to the mother's questions by asking the receptionist to do a quote for the current session and tells the mother not worry and that they will sort the rest of the costs out later. The mother feels relaxed and therapy continues.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mrs. N	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

An 8-year-old is referred to a therapy practice for an assessment. Mr. and Mrs. J arrive with their son for the first consultation. The father seems relaxed and is very talkative. The mother seems tense. She has her arms folded tightly and the therapist notices that Mrs. J is grinding her teeth. After the assessment the therapist's assistant takes the child to play in another room. As soon as the therapist starts the feedback session, she hears the mother catching her breath. Mrs. J avoids eye contact. The therapist decides that she needs more time to assess the situation with Mrs. J, as feedback will not be effective if she doesn't understand the situation better and gains Mrs. J's trust. The therapist tells the parents that she needs time to analyse the data and that she would like to reschedule a feedback session. With the remaining time she decides to focus on Mrs. J. The therapist hardly finishes her first question when Mrs. J starts to cry and say that she is tired of everybody telling her there is something wrong with her child and that she feels helpless and emotionally drained. The therapist gently introduces the idea of referring Mrs. J to a psychologist for support and schedules an appointment for the assessment feedback session. As they walk out Mrs. J gives the therapist a hug and thank her for caring.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mrs. J	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

Mrs. C brings her child for therapy every Tuesday at 14:00 to a therapist in private practice. They never miss a session and are always on time. Mrs. C, however, never attends the therapy sessions. She drops her 5-year-old son off and then Mr. C pricks him up after therapy. The therapist feels that the parents are showing a disinterest in therapy and their child. The therapist recently attended a workshop on how to construct effective home programs for preschool children. Although this child will benefit greatly from a home program, the therapist decides not to waste her time on constructing a home program since she feels that if the parents can't commit to attend a therapy session, they won't follow a home program to complement weekly therapy sessions.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mrs. C	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

Mrs. K is referred to a therapist at the Government Hospital. Mrs. K does not have a Medical Aid and needs assistive devices for rehabilitation. There is a long waiting list for devices and the therapist puts the Mrs. K on the waiting list. A couple of months later the hospital receives 10 assistive devices. There is not enough stock for everybody on the waiting list. Mrs. K is number 9 on the waiting list. The therapist decides to exchange Mrs. K with someone who is number 11 as he feel that Mrs. K, due to her ethnicity, should be able to raise some money for an assistive device and that number 11 has greater financial need. The hospital is expecting another 10 devices to be donated but he decides that he is going to ask Mrs. K for a deposit in order to keep her spot on the waiting list.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mrs. K	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

Ms. P is a 21-year-old client who receives rehabilitation from the Government Hospital therapy department. The client lives at home with her parents. The therapist at the hospital receives an email from Ms. P's mother regarding her daughter. She is concerned about her daughter. The mother shares information with the therapist about Ms. P's status at home as well as details about her relationship with her boyfriend. The mother asks for specific information regarding her daughter's progress during therapy as well as details regarding underlying causes for her problem. The mother explains that they are of Hispanic heritage, and it is customary for family members to be consulted in medical and personal decisions. The therapist is reluctant to break the confidence she has with Ms. P. During the following session the therapist asks Ms. P some questions about her heritage and from the information given she asks if Ms. P would prefer for her family to attend therapy session or receive feedback reports. Ms. P clearly objects to this suggestion. She explains that although her parents are very traditional she respects her heritage but have chosen a more modern approach in her own life and relationships. The therapist responds to the mother's email explaining that the information is confidential and that she is legally bound not to share the information.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Ms. P	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

Mr. Y, a therapist in private practice has received many enquiries from patients in the community who are disabled and in wheelchairs. None of the therapy practices in the vicinity are wheelchair friendly. He decides that therapy should be accessible to all and contacts an architect to help him make the necessary changes to his practice to accommodate people in wheelchairs. He is fully aware that people with disabilities require special care during therapy and he attends a training course in order to equip himself with the knowledge of which therapy techniques would be most useful. His receptionist contacts all the doctors in the surrounding area to let them know that the practice is wheelchair friendly. Mr. Y instructs his receptionist to tell such clients that they must be accompanied by someone who can be trained to help with the home program. When his receptionist asks him why this is not required for other patients he explains that people with disabilities are usually less competent in understanding and managing the home program and that they need special care. People with disabilities cannot manage the responsibility of following a home program by themselves and therapy without a home program is not an option.

Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

Mr. **Y**	**1 Strongly disagree**	**2 Disagree**	**3 Disagree somewhat**	**4 Neither agree nor disagree**	**5 Agree somewhat**	**6 Agree**	**7 Strongly agree**
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

Mr. S, a 58 year old man makes an appointment for a second opinion at a therapy practice. Mr. S brings copies of all the assessment results as well as a detailed report including recommendations for management. The reason for his visit is that his son wants a second opinion to ensure that the best treatment options will be provided. After the assessment the therapist realise that the initial therapist performed a more extensive assessment protocol than what would be considered best practice and used the wrong codes for reimbursement. Mr. S does not have a Medical Aid and has had to borrow money from his son to settle the account. The therapist tries to change the subject to help him feel less embarrassed. The therapist feels that the initial recommendations as stated in the report were based on highest profit to the practice, but decides not to discuss this with the client as it could lead to negative feelings towards the initial therapist. This could also harm the reputation of therapists in general. The therapist does, however, give extensive feedback to the client on her assessment findings and recommendations based on the latest research. A week later the two therapists meet at a workshop, but the second therapist decides not to discuss the incident with the initial therapist nor with anybody else.

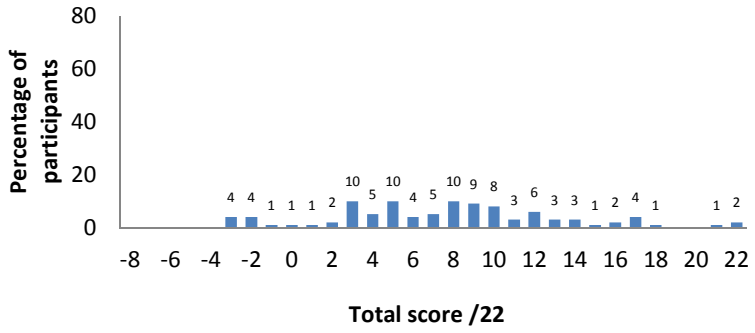
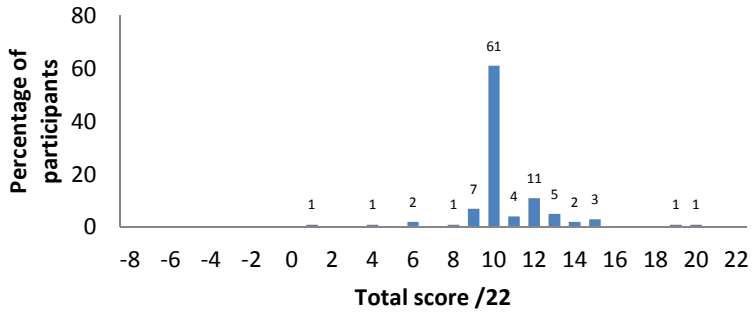
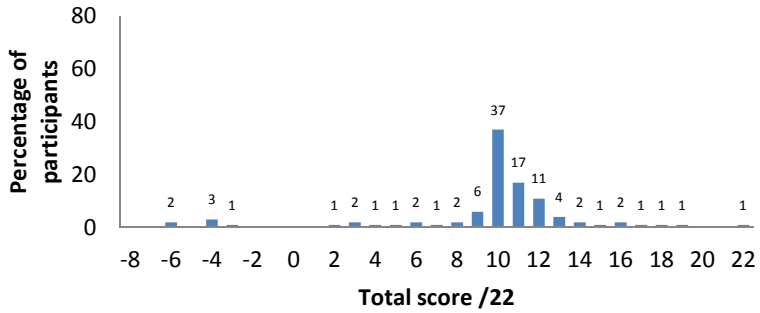
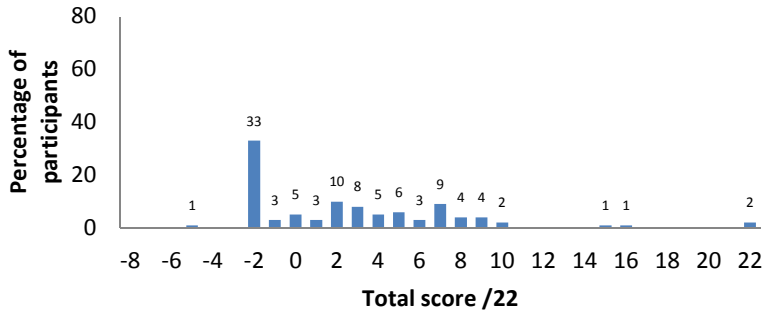
Below you will find 11 statements related to the scenario. Indicate your level of agreement with each sentence on the right by choosing a number ranging from 1 – 7.

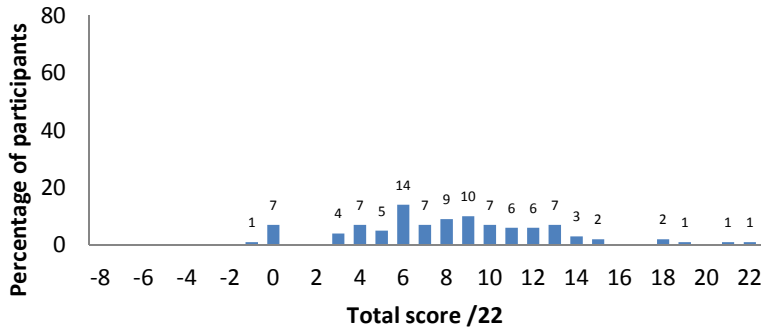
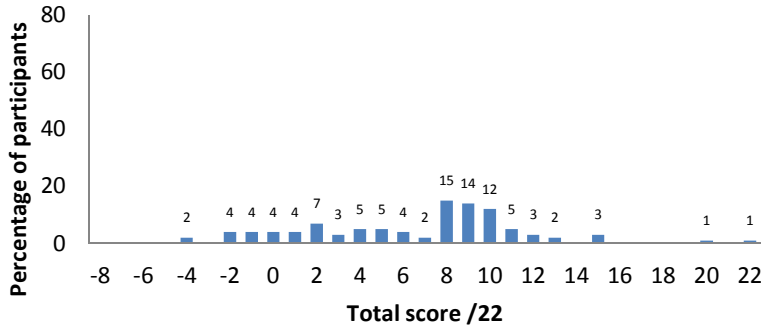
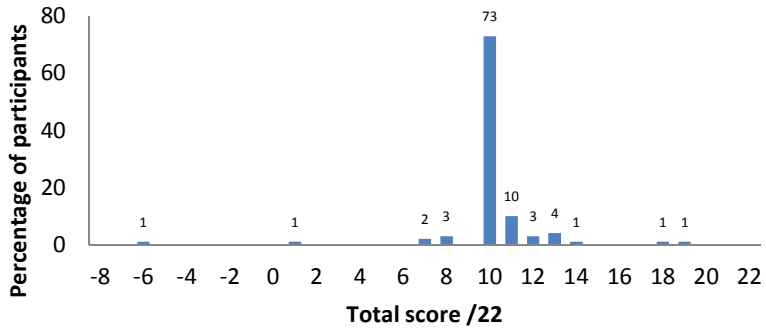
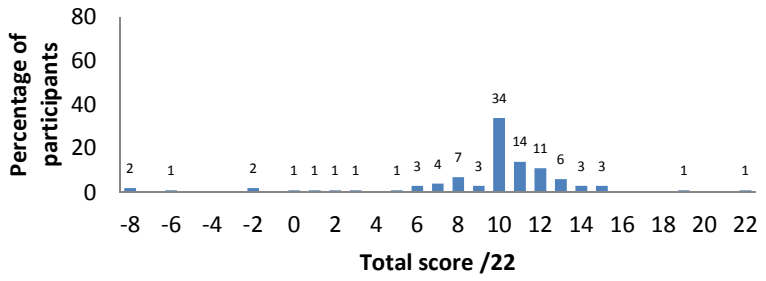
Mr. S	1 Strongly disagree	2 Disagree	3 Disagree somewhat	4 Neither agree nor disagree	5 Agree somewhat	6 Agree	7 Strongly agree
The therapist recognized her own preconceived judgments and adjusted her actions in a way to be neutral							
The therapist communicated effectively with the client							
The therapist acted in a way that actively protected the client from harm							
The therapist indicated that she is able to take the perspective of her client							
The therapist indicated that she can competently and skilfully support her client by showing concern while understanding what is important to them							
The therapist responded in a way that is in line with societal expectation of what is fair and right in the eye of the law							
The therapist took the possible cultural differences and perceptions of interpreting a situation into account while making decisions regarding client assessment and/or management							
After considering possible challenges related to this scenario as well as the implications in terms of the future, the therapist chose an appropriate way of dealing with her concerns							
The therapist actively brought about positive change with the clients best interest in mind							
The therapist identified and responded appropriately to the emotional cues from the client							
The therapist showed that she respected the rights of the client to make their own decisions, respecting the principles of privacy and confidentiality where applicable							

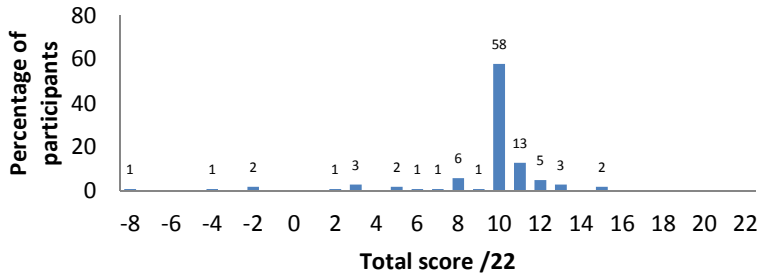
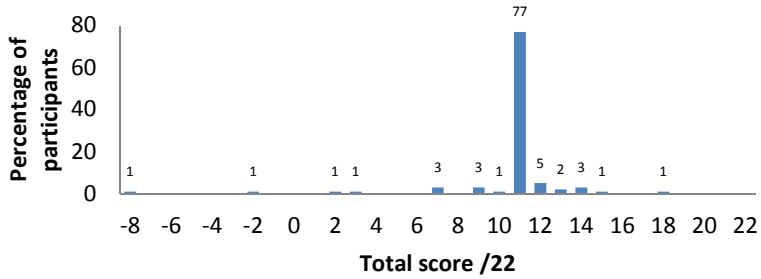
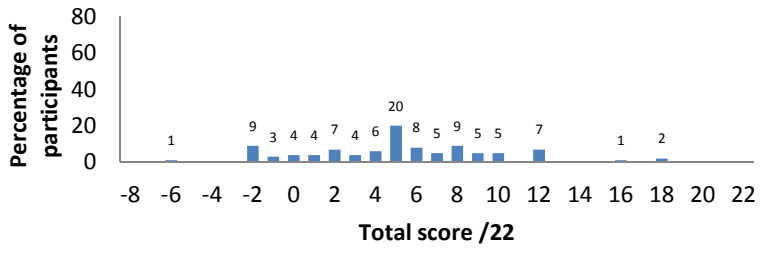
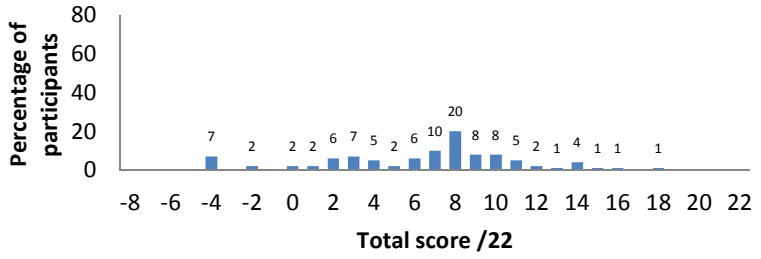
Appendix I Table 1

Results as described in Chapter 5

Table 1: Total overall score per vignette

Vignette 1: **<u>Target ethical principle</u>:** Justice **<u>Target ethical sensitivity skills:</u>** Perspective Taking; Interpreting Ethics in a Situation	
Vignette 2: **<u>Target ethical principle</u>:** Autonomy **<u>Target ethical sensitivity skills:</u>** Relating to Others; Emotional Expression	
Vignette 3: **<u>Target ethical principle</u>:** Beneficence **<u>Target ethical sensitivity skill</u>:** Effective Communication	
Vignette 4: **<u>Target ethical principle</u>:** Non-maleficence **<u>Target ethical sensitivity skill</u>:** Perspective Taking	

Vignette 5: **<u>Target ethical principle</u>:** Justice **<u>Target ethical sensitivity skill</u>:** Relating to Others	
Vignette 6: **<u>Target ethical principle</u>:** Autonomy **<u>Target ethical sensitivity skill</u>:** Effective Communication	
Vignette 7: **<u>Target ethical principle</u>:** Beneficence **<u>Target ethical sensitivity skill</u>:** Emotional Expression	
Vignette 8: **<u>Target ethical principle</u>:** Non-maleficence **<u>Target ethical sensitivity skill</u>:** Controlling Social Bias	

Vignette 9: **<u>Target ethical principle</u>:** Justice **<u>Target ethical sensitivity skill</u>:** Responding to Diversity	
Vignette 10: **<u>Target ethical principle</u>:** Autonomy **<u>Target ethical sensitivity skill</u>:** Responding to Diversity	
Vignette 11: **<u>Target ethical principle</u>:** Beneficence **<u>Target ethical sensitivity skill</u>:** Controlling Social Bias	
Vignette 12: **<u>Target ethical principle</u>:** Non-maleficence **<u>Target ethical sensitivity skill</u>:** Interpreting Ethics in a Situation	

Appendix I Table 2

Results as described in Chapter 5

Table 2: Population mean score across the four professions per vignette

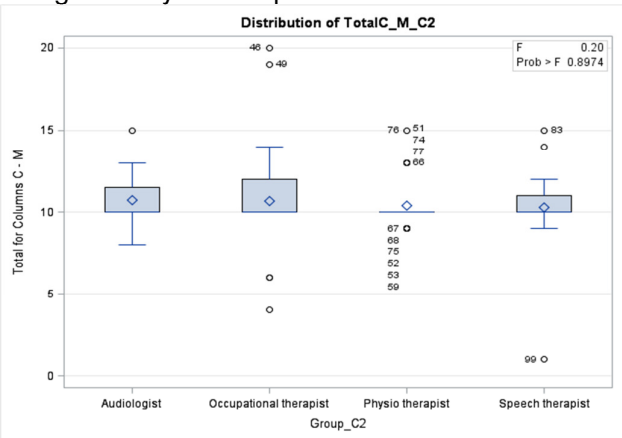
Source	DF	Anova sum of squares	Mean Square	F Value	Pr > F
Vignette 1	3	410.66	136.89	4.90	0.0032
Vignette 2	3	3.17	1.06	0.20	0.8974
Vignette 3	3	112.88	37.63	1.82	0.1495
Vignette 4	3	232.71	77.57	3.19	0.0273
Vignette 5	3	107.67	35.89	1.73	0.1654
Vignette 6	3	214.97	71.66	3.11	0.0301
Vignette 7	3	31.49	10.50	1.82	0.1484
Vignette 8	3	76.44	25.48	1.24	0.3013
Vignette 9	3	114.37	38.12	3.45	0.0197
Vignette 10	3	32.47	10.82	1.31	0.2758
Vignette 11	3	223.30	74.43	3.95	0.0106
Vignette 12	3	57.44	19.15	0.85	0.4710

Appendix I Table 3

Results as described in Chapter 5

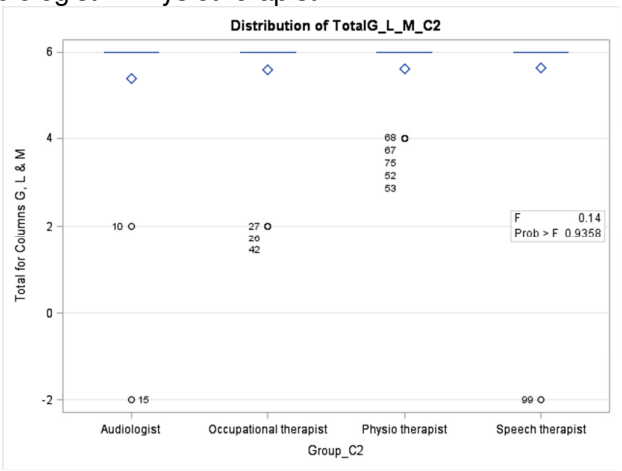
Table 3: Multiple pairwise comparisons for population mean score

Vignette 1 (Comparisons significant at the 0.05 level are indicated by *)			
Group Comparison overall score	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	1.900	-2.440	6.240
Occupational therapist – Speech-language therapist	2.174	-1.993	6.340
Occupational therapist – Physiotherapist	5.333	1.345	9.321*
Audiologist - Occupational therapist	-1.900	-6.240	2.440
Audiologist – Speech-language therapist	0.274	-4.322	4.870
Audiologist – Physiotherapist	3.433	-1.002	7.868
Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.8000	-0.8641	2.4641
Occupational therapist – Speech-language therapist	0.9652	-0.6325	2.5629
Occupational therapist - Physiotherapist	3.7704	2.2411	5.2996*
Audiologist - Occupational therapist	-0.8000	-2.4641	0.8641
Audiologist – Speech-language therapist	0.1652	-1.5973	1.9277
Audiologist – Physiotherapist	2.9704	1.2697	4.6711*
Vignette 2 (Comparisons significant at the 0.05 level are indicated by *)			
Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.0333	-1.8635	1.9302
Occupational therapist – Speech-language therapist	0.2926	-1.6459	2.2311
Occupational therapist - Physiotherapist	0.4391	-1.5698	2.4481
Audiologist - Occupational therapist	-0.0333	-1.9302	1.8635
Audiologist – Speech-language therapist	0.2593	-1.4838	2.0023
Audiologist – Physiotherapist	0.4058	-1.4153	2.2269



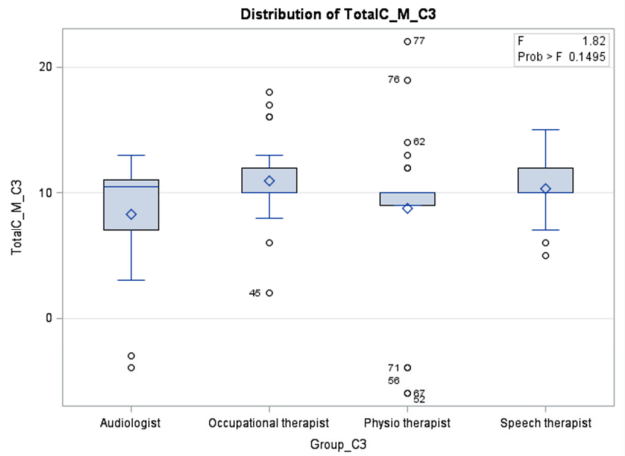
Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	

Occupational therapist – Audiologist	0.0225	-1.1239	1.1690
Occupational therapist – Speech-language therapist	0.0522	-1.0676	1.1719
Occupational therapist - Physiotherapist	0.2522	-0.9831	1.4875
Audiologist - Occupational therapist	-0.0225	-1.1690	1.1239
Audiologist – Speech-language therapist	0.0296	-1.0422	1.1014
Audiologist – Physiotherapist	0.2296	-0.9623	1.4216



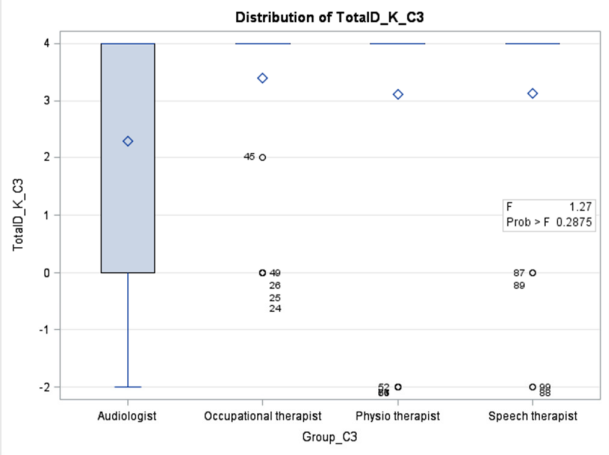
Vignette 3
(Comparisons significant at the 0.05 level are indicated by *)

Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.586	-3.005	4.176
Occupational therapist – Speech-language therapist	2.119	-1.318	5.555
Occupational therapist – Physiotherapist	2.583	-1.157	6.323
Audiologist - Occupational therapist	-0.586	-4.176	3.005
Audiologist – Speech-language therapist	1.533	-2.143	5.209
Audiologist – Physiotherapist	1.998	-1.963	5.959



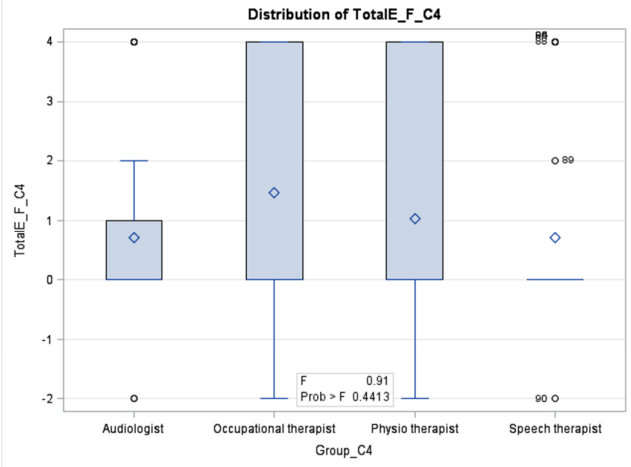
Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.2696	-1.3010	1.8401
Occupational therapist – Speech-language therapist	0.2889	-1.2144	1.7921
Occupational therapist – Physiotherapist	1.1000	-0.5359	2.7359

Audiologist - Occupational therapist	-0.2696	-1.8401	1.3010
Audiologist – Speech-language therapist	0.0193	-1.5886	1.6273
Audiologist – Physiotherapist	0.8304	-0.9021	2.5630

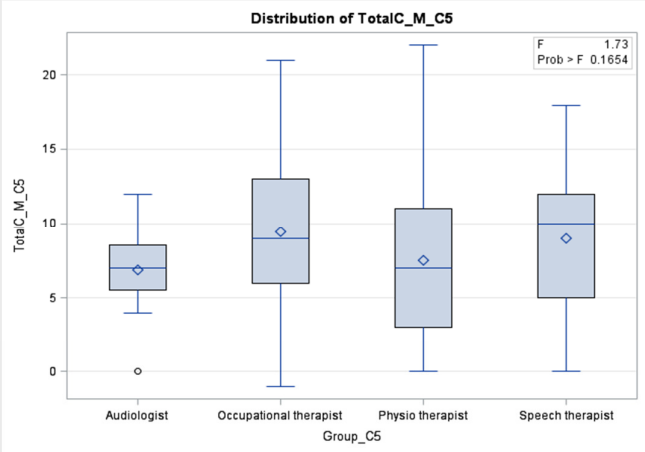


Vignette 4
(Comparisons significant at the 0.05 level are indicated by *)

Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	2.0512	-0.9314	5.0339
Occupational therapist – Speech-language therapist	2.7643	-0.3388	5.8673
Occupational therapist – Physiotherapist	3.4443	0.5279	6.3607*
Audiologist - Occupational therapist	-2.0512	-5.0339	0.9314
Audiologist – Speech-language therapist	0.7130	-2.5275	3.9536
Audiologist – Physiotherapist	1.3930	-1.6693	4.4553
Group Comparison per target principle and skill	**Difference Between Means**	**Simultaneous 95% Confidence Limits**	
Occupational therapist – Audiologist	0.4296	-1.0514	1.9106
Occupational therapist – Speech-language therapist	0.7667	-0.8450	2.3783
Occupational therapist – Physiotherapist	0.7710	-0.7763	2.3183
Audiologist - Occupational therapist	-0.4296	-1.9106	1.0514
Audiologist – Speech-language therapist	0.3370	-1.3101	1.9841
Audiologist – Physiotherapist	0.3414	-1.2428	1.9256



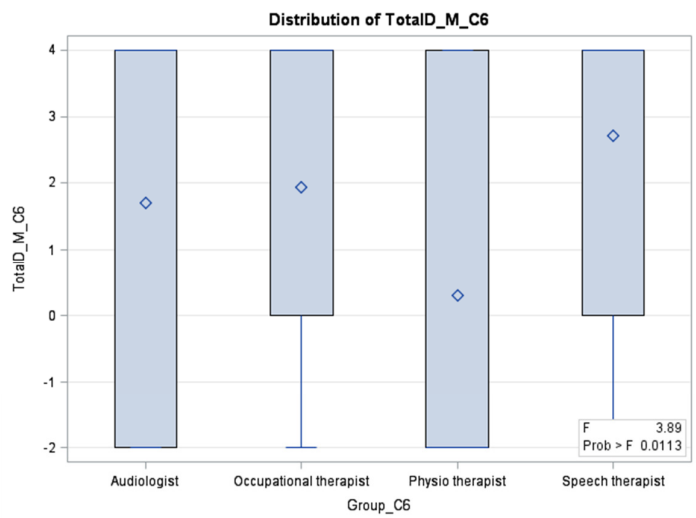
Vignette 5 (Comparisons significant at the 0.05 level are indicated by *)			
Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.400	-3.189	3.989
Occupational therapist – Speech-language therapist	1.919	-1.517	5.354
Occupational therapist – Physiotherapist	2.550	-1.189	6.289
Audiologist - Occupational therapist	-0.400	-3.989	3.189
Audiologist – Speech-language therapist	1.519	-2.156	5.194
Audiologist – Physiotherapist	2.150	-1.810	6.110



Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.5304	-0.8494	1.9103
Occupational therapist – Speech-language therapist	0.7000	-0.7373	2.1373
Occupational therapist – Physiotherapist	1.3259	0.0052	2.6467*
Audiologist - Occupational therapist	-0.5304	-1.9103	0.8494
Audiologist – Speech-language therapist	0.1696	-1.3527	1.6918
Audiologist – Physiotherapist	0.7955	-0.6173	2.2082

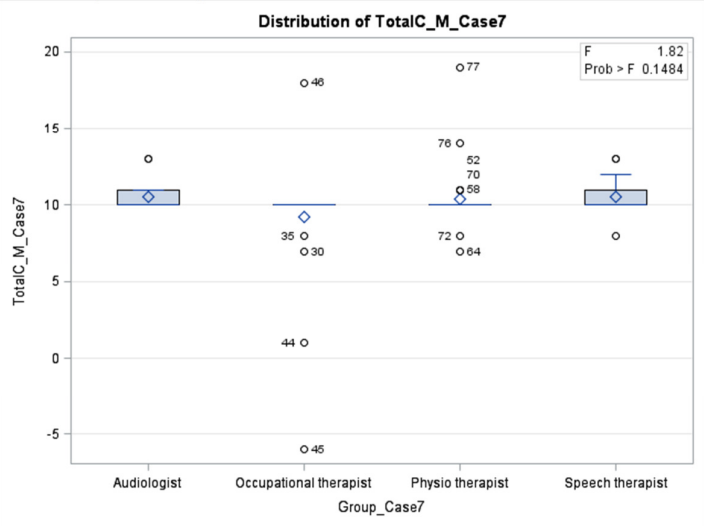
Vignette 6 (Comparisons significant at the 0.05 level are indicated by *)			
Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	2.049	-1.739	5.838
Occupational therapist – Speech-language therapist	2.233	-1.947	6.412
Occupational therapist – Physiotherapist	4.153	0.274	8.032*
Audiologist - Occupational therapist	-2.049	-5.838	1.739
Audiologist – Speech-language therapist	0.183	-3.763	4.129
Audiologist – Physiotherapist	2.104	-1.522	5.730

Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.7623	-1.2622	2.7868
Occupational therapist – Speech-language therapist	0.9957	-1.2377	3.2291
Occupational therapist – Physiotherapist	2.3994	0.3266	4.4721
Audiologist - Occupational therapist	-0.7623	-2.7868	1.2622
Audiologist – Speech-language therapist	0.2333	-1.8754	2.3421
Audiologist – Physiotherapist	1.6370	-0.3007	3.5748

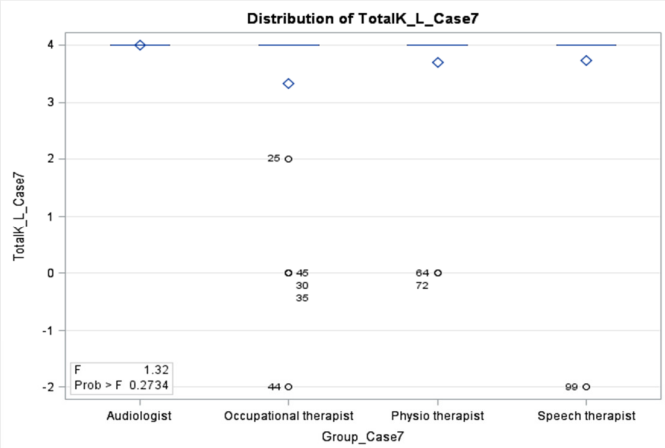


Vignette 7
(Comparisons significant at the 0.05 level are indicated by *)

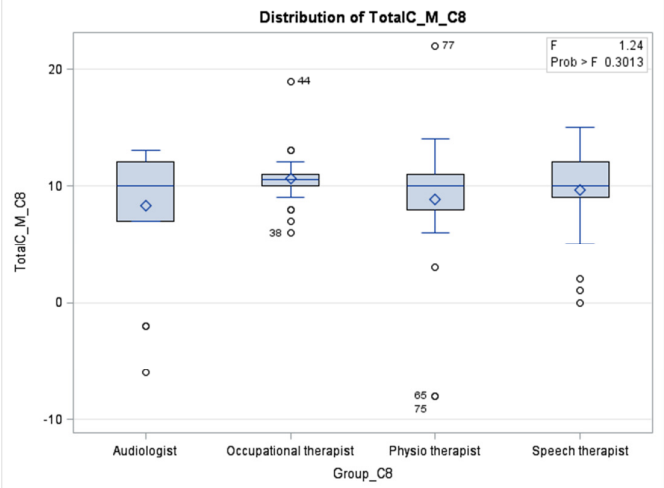
Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.0283	-2.0601	2.1166
Occupational therapist – Speech-language therapist	0.1426	-1.8725	2.1577
Occupational therapist – Physiotherapist	1.2833	-0.6884	3.2551
Audiologist - Occupational therapist	-0.0283	-2.1166	2.0601
Audiologist – Speech-language therapist	0.1143	-1.8238	2.0525
Audiologist – Physiotherapist	1.2551	-0.6380	3.1481



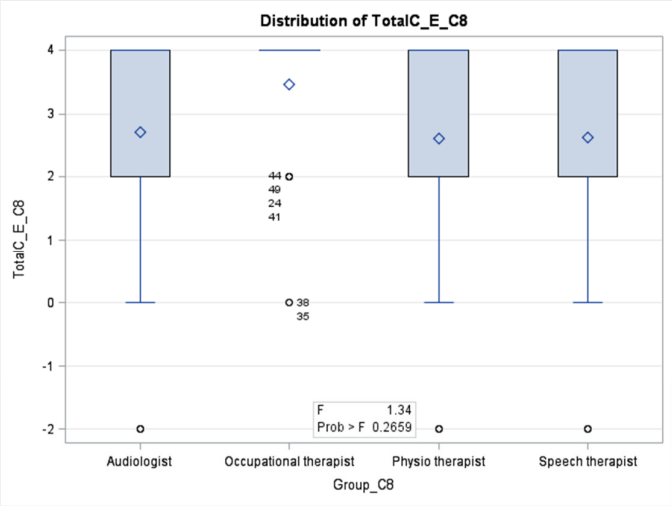
Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.2609	-0.7851	1.3068
Occupational therapist – Speech-language therapist	0.2963	-0.7129	1.3055
Occupational therapist – Physiotherapist	0.6667	-0.3209	1.6542
Audiologist - Occupational therapist	-0.2609	-1.3068	0.7851
Audiologist – Speech-language therapist	0.0354	-0.9353	1.0061
Audiologist – Physiotherapist	0.4058	-0.5423	1.3539



Vignette 8 (Comparisons significant at the 0.05 level are indicated by *)			
Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	1.025	-2.558	4.607
Occupational therapist – Speech-language therapist	1.781	-1.647	5.210
Occupational therapist – Physiotherapist	2.283	-1.448	6.014
Audiologist - Occupational therapist	-1.025	-4.607	2.558
Audiologist – Speech-language therapist	0.757	-2.911	4.424
Audiologist – Physiotherapist	1.259	-2.693	5.210

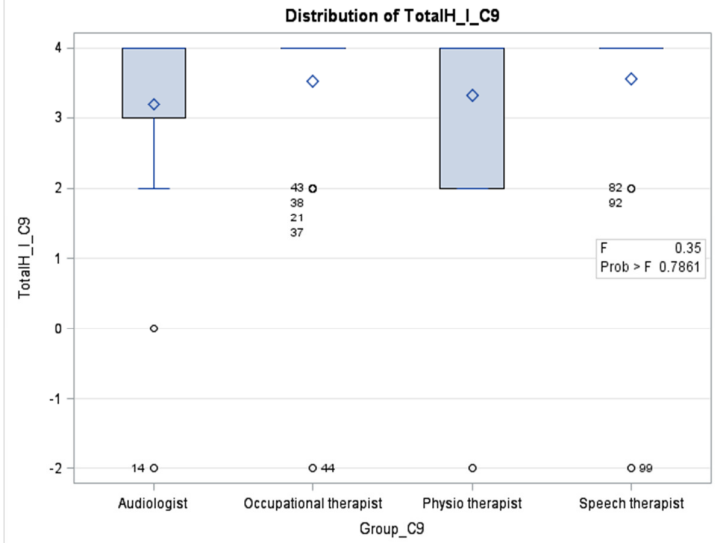


Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.7667	-0.8145	2.3479
Occupational therapist – Speech-language therapist	0.8580	-0.6601	2.3760
Occupational therapist – Physiotherapist	0.8741	-0.5789	2.3271
Audiologist - Occupational therapist	-0.7667	-2.3479	0.8145
Audiologist – Speech-language therapist	0.0913	-1.5834	1.7660
Audiologist – Physiotherapist	0.1074	-1.5085	1.7234

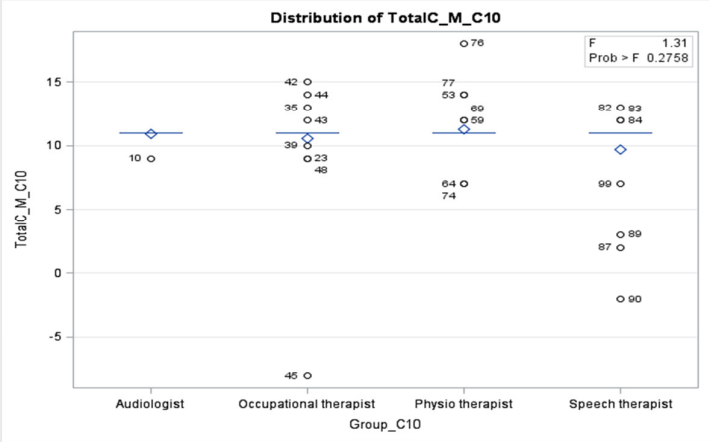


Vignette 9
(Comparisons significant at the 0.05 level are indicated by *)

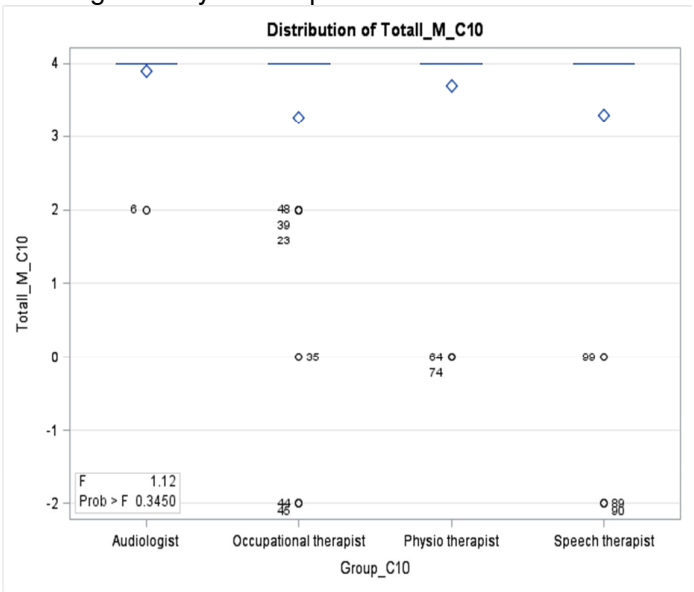
Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.6319	-1.9905	3.2543
Occupational therapist – Speech-language therapist	1.8152	-1.0777	4.7082
Occupational therapist – Physiotherapist	2.7504	0.0655	5.4353*
Audiologist - Occupational therapist	-0.6319	-3.2543	1.9905
Audiologist – Speech-language therapist	1.1833	-1.5481	3.9148
Audiologist – Physiotherapist	2.1185	-0.3915	4.6286
Group Comparison per target principle and skill	**Difference Between Means**	**Simultaneous 95% Confidence Limits**	
Occupational therapist – Audiologist	0.0319	-1.0610	1.1247
Occupational therapist – Speech-language therapist	0.2319	-0.8870	1.3508
Occupational therapist – Physiotherapist	0.3652	-0.8404	1.5708
Audiologist - Occupational therapist	-0.0319	-1.1247	1.0610
Audiologist – Speech-language therapist	0.2000	-0.8460	1.2460
Audiologist – Physiotherapist	0.3333	-0.8050	1.4716



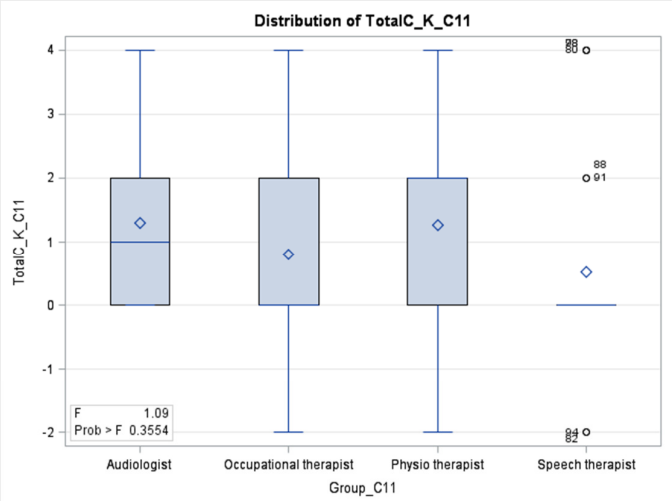
Vignette 10 (Comparisons significant at the 0.05 level are indicated by *)			
Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.3593	-2.0542	2.7727
Occupational therapist – Speech-language therapist	0.7259	-1.4442	2.8960
Occupational therapist – Physiotherapist	1.5636	-0.7576	3.8849
Audiologist - Occupational therapist	-0.3593	-2.7727	2.0542
Audiologist – Speech-language therapist	0.3667	-1.9949	2.7282
Audiologist – Physiotherapist	1.2043	-1.2968	3.7055



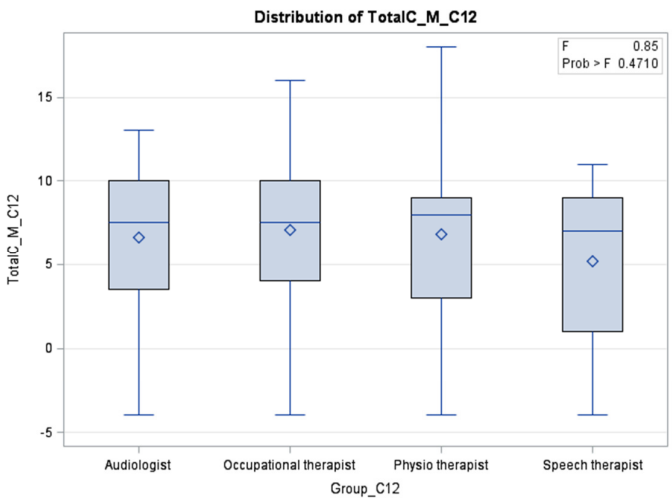
Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.1963	-0.9977	1.3903
Occupational therapist – Speech-language therapist	0.5957	-0.6417	1.8330
Occupational therapist - Physiotherapist	0.6333	-0.5350	1.8016
Audiologist - Occupational therapist	-0.1963	-1.3903	0.9977
Audiologist – Speech-language therapist	0.3994	-0.7490	1.5477
Audiologist – Physiotherapist	0.4370	-0.6366	1.5106



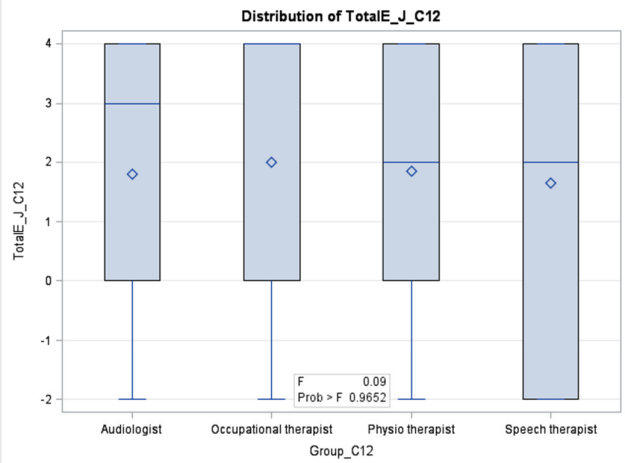
Vignette 11 (Comparisons significant at the 0.05 level are indicated by *)			
Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.809	-2.616	4.233
Occupational therapist – Speech-language therapist	0.959	-2.819	4.737
Occupational therapist - Physiotherapist	3.868	0.362	7.374*
Audiologist - Occupational therapist	-0.809	-4.233	2.616
Audiologist – Speech-language therapist	0.150	-3.417	3.717
Audiologist – Physiotherapist	3.059	-0.219	6.337
Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.0407	-1.4182	1.4997
Occupational therapist – Speech-language therapist	0.5000	-0.9276	1.9276
Occupational therapist - Physiotherapist	0.7783	-0.7338	2.2903
Audiologist - Occupational therapist	-0.0407	-1.4997	1.4182
Audiologist – Speech-language therapist	0.4593	-0.8526	1.7711
Audiologist – Physiotherapist	0.7375	-0.6657	2.1408



Vignette 12 (Comparisons significant at the 0.05 level are indicated by *)			
Group Comparison	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.248	-3.339	3.835
Occupational therapist – Speech-language therapist	0.500	-3.403	4.403
Occupational therapist - Physiotherapist	1.970	-1.778	5.717
Audiologist - Occupational therapist	-0.248	-3.835	3.339
Audiologist – Speech-language therapist	0.252	-3.737	4.241
Audiologist – Physiotherapist	1.721	-2.115	5.558



Group Comparison per target principle and skill	Difference Between Means	Simultaneous 95% Confidence Limits	
Occupational therapist – Audiologist	0.1481	-1.6943	1.9906
Occupational therapist – Speech-language therapist	0.2000	-1.8049	2.2049
Occupational therapist - Physiotherapist	0.3478	-1.5771	2.2727
Audiologist - Occupational therapist	-0.1481	-1.9906	1.6943
Audiologist – Speech-language therapist	0.0519	-1.9971	2.1009
Audiologist – Physiotherapist	0.1997	-1.7711	2.1704



Appendix I Table 4

Results as described in Chapter 5

Table 4: Observed and Expected Cell Frequency for correct identification of an ethical principle vs the identification of the same principle in an alternative vignette

Ethical principle: Justice

2x2 contingency table			Vignette 9: Incorrect option identified	Vignette 9: Correct option identified	Total
Vignette 5	Incorrect option identified	Observed frequency	1	9	10
		Expected frequency	0.38	9.62	
	Correct option identified	Observed frequency	2	66	68
		Expected frequency	2.62	65.39	
Total		Frequency	3	75	78

Ethical principle: Autonomy

2x2 contingency table			Vignette 10: Incorrect option identified	Vignette 10: Correct option identified	Total
Vignette 6	Incorrect option identified	Observed frequency	4	37	41
		Expected frequency	3.05	37.95	
	Correct option identified	Observed frequency	3	50	53
		Expected frequency	3.95	49.05	
Total		Frequency	7	87	94

Ethical principle: Beneficence

2x2 contingency table			Vignette 11: Incorrect option identified	Vignette 11: Correct option identified	Total
Vignette 7	Incorrect option identified	Observed frequency	5	1	6
		Expected frequency	3.70	2.30	
	Correct option identified	Observed frequency	45	30	75
		Expected frequency	46.30	28.70	
Total		Frequency	50	31	81

Ethical principle: Non-maleficence	2x2 contingency table			Vignette 12		Total
				Incorrect option identified	Correct option identified	
	Vignette 8	Incorrect option identified	Observed frequency	0	2	2
			Expected frequency	0.75	1.25	
		Correct option identified	Observed frequency	12	18	30
			Expected frequency	11.25	18.75	
	Total		Frequency	12	20	32

Appendix I Table 5

Results as described in Chapter 5

Table 5: Observed and Expected Cell Frequency for correct identification of a target ethical Sensitivity Skill in relation to the correct identification of the remaining ethical sensitivity skills

Ethical sensitivity skill: Controlling Social Bias	2x2 contingency table		Vignette 11		Total
			Incorrect option identified	Correct option identified	
	Vignette 8	Incorrect option identified	Observed frequency	6	18	24
			Expected frequency	7.2	16.8	
		Correct option identified	Observed frequency	24	52	76
			Expected frequency	22.8	53.2	
	Total		Frequency	30	70	100
Ethical sensitivity skill: Relating to Others	2x2 contingency table		Vignette 6		Total
			Incorrect option identified	Correct option identified	
	Vignette 3	Incorrect option identified	Observed frequency	4	6	10
			Expected frequency	3.5	6.5	
		Correct option identified	Observed frequency	31	59	90
			Expected frequency	31.5	58.5	
	Total		Frequency	35	65	100
Ethical sensitivity skill: Perspective Taking	2x2 contingency table		Vignette 4		Total
			Incorrect option identified	Correct option identified	
	Vignette 1	Incorrect option identified	Observed frequency	2	17	19
			Expected frequency	2.5	16.5	
		Correct option identified	Observed frequency	11	70	81
			Expected frequency	10.5	70.5	
	Total		Frequency	13	87	100

Ethical sensitivity skill: Emotional Expression	2x2 contingency table			Vignette 10	Total
				Incorrect option identified	Correct option identified	
	Vignette 7	Incorrect option identified	Observed frequency	1	18	19
			Expected frequency	1.5	17.5	
		Correct option identified	Observed frequency	7	74	81
			Expected frequency	6.5	74.5	
	Total		Frequency	8	92	100
Ethical sensitivity skill: Interpreting Ethics in a Situation	2x2 contingency table			Vignette 12	Total
				Incorrect option identified	Correct option identified	
	Vignette 1	Incorrect option identified	Observed frequency	17	20	37
			Expected frequency	11.8	25.2	
		Correct option identified	Observed frequency	15	48	63
			Expected frequency	20.2	42.8	
	Total		Frequency	32	68	100
Ethical sensitivity skill: Emotional Expression	2x2 contingency table			Vignette 7	Total
				Incorrect option identified	Correct option identified	
	Vignette 2	Incorrect option identified	Observed frequency	1	1	2
			Expected frequency	0.1	1.9	
		Correct option identified	Observed frequency	2	96	98
			Expected frequency	2.9	95.1	
	Total		Frequency	3	97	100
Ethical sensitivity skill: Relating to Others	2x2 contingency table			Vignette 5	Total
				Incorrect option identified	Correct option identified	
	Vignette 2	Incorrect option identified	Observed frequency	3	4	7
			Expected frequency	1.5	5.5	
		Correct option identified	Observed frequency	18	75	93
			Expected frequency	19.5	73.5	
	Total		Frequency	21	79	100

Appendix I Table 6

Results as described in Chapter 5

Table 6: Observed and Expected Cell Frequency for correct identification of a target ethical Sensitivity Skill in relation to the correct identification of an ethical principle in the same vignette

Vignette 1

2x2 contingency table			Justice: Incorrect option identified	Justice: Correct option identified	Total
Perspective taking	Incorrect option identified	Observed frequency	6	13	19
		Expected frequency	4.18	14.82	
	Correct option identified	Observed frequency	16	65	81
		Expected frequency	17.82	63.18	
Total		Frequency	22	78	100

Vignette 4

2x2 contingency table			Non-maleficence: Incorrect option identified	Non-maleficence: Correct option identified	Total
Perspective taking	Incorrect option identified	Observed frequency	8	5	13
		Expected frequency	8.84	4.16	
	Correct option identified	Observed frequency	60	27	87
		Expected frequency	59.16	27.84	
Total		Frequency	68	32	100

Vignette 5

2x2 contingency table			Justice: Incorrect option identified	Justice: Correct option identified	Total
Relating to others	Incorrect option identified	Observed frequency	4	17	21
		Expected frequency	4.2	16.8	
	Correct option identified	Observed frequency	16	63	79
		Expected frequency	15.8	63.2	
Total		Frequency	20	80	100

Vignette 8

2x2 contingency table			Non-maleficence: Incorrect option identified	Non-maleficence: Correct option identified	Total
Social Bias	Incorrect option identified	Observed frequency	9	15	24
		Expected frequency	3.8	20.2	
	Correct option identified	Observed frequency	7	69	76
		Expected frequency	12.2	63.8	
Total		Frequency	16	84	100

Vignette 11

2x2 contingency table			Beneficence: Incorrect option identified	Beneficence: Correct option identified	Total
Social Bias	Incorrect option identified	Observed frequency	8	22	30
		Expected frequency	18.3	11.7	
	Correct option identified	Observed frequency	53	17	70
		Expected frequency	42.7	27.3	
Total		Frequency	61	39	100

Vignette 3

2x2 contingency table			Beneficence: Incorrect option identified	Beneficence: Correct option identified	Total
Effective communication	Incorrect option identified	Observed frequency	9	1	10
		Expected frequency	1.9	8.1	
	Correct option identified	Observed frequency	10	80	90
		Expected frequency	17.1	72.9	
Total		Frequency	19	81	100

Vignette 6

2x2 contingency table			Autonomy		Total
			Incorrect option identified	Correct option identified	
Effective communication	Incorrect option identified	Observed frequency	29	6	35
		Expected frequency	14.7	20.3	
	Correct option identified	Observed frequency	13	52	65
		Expected frequency	27.3	37.7	
Total		Frequency	42	58	100

Vignette 9

2x2 contingency table			Justice		Total
			Incorrect option identified	Correct option identified	
Responding to diversity	Incorrect option identified	Observed frequency	4	15	19
		Expected frequency	1	18.1	
	Correct option identified	Observed frequency	1	80	81
		Expected frequency	4.1	77	
Total		Frequency	5	95	100

Vignette 10

2x2 contingency table			Autonomy		Total
			Incorrect option identified	Correct option identified	
Responding to diversity	Incorrect option identified	Observed frequency	4	4	8
		Expected frequency	6	7.4	
	Correct option identified	Observed frequency	4	88	92
		Expected frequency	7.4	84.6	
Total		Frequency	8	92	100

Vignette 1

2x2 contingency table			Justice		Total
			Incorrect option identified	Correct option identified	
Interpreting ethics in a situation	Incorrect option identified	Observed frequency	17	20	37
		Expected frequency	8.1	28.9	
	Correct option identified	Observed frequency	5	58	63
		Expected frequency	13.9	49.1	
Total		Frequency	22	78	100

Vignette 12

2x2 contingency table			Justice		Total
			Incorrect option identified	Correct option identified	
Interpreting ethics in a situation	Incorrect option identified	Observed frequency	19	13	32
		Expected frequency	12.2	19.8	
	Correct option identified	Observed frequency	19	49	68
		Expected frequency	25.8	42.2	
Total		Frequency	38	62	100

Vignette 2

2x2 contingency table			Autonomy		Total
			Incorrect option identified	Correct option identified	
Emotional expression	Incorrect option identified	Observed frequency	2	0	2
		Expected frequency	1	1.9	
	Correct option identified	Observed frequency	4	94	98
		Expected frequency	5.9	92.1	
Total		Frequency	6	94	100

Vignette 7

2x2 contingency table			Beneficence: Incorrect option identified	Beneficence: Correct option identified	Total
Emotional expression	Incorrect option identified	Observed frequency	2	1	3
		Expected frequency	0.2	2.8	
	Correct option identified	Observed frequency	5	92	97
		Expected frequency	6.8	90.2	
Total		Frequency	7	93	100

Vignette 2

2x2 contingency table			Autonomy: Incorrect option identified	Autonomy: Correct option identified	Total
Relating to others	Incorrect option identified	Observed frequency	2	5	7
		Expected frequency	0.4	6.6	
	Correct option identified	Observed frequency	4	89	93
		Expected frequency	5.6	87.4	
Total		Frequency	6	94	100

Appendix I Table 7

Results as described in Chapter 5

Table 7: Observed and Expected Cell Frequency for correct identification of one ethical principle compared to the correct identification of another ethical principle

Justice vs Autonomy	2x2 contingency table			**Vignette 1 Justice**		Total
				Incorrect option identified	Correct option identified	
	Vignette 2,6,10 Autonomy	Incorrect option identified	Observed frequency	25	25	50
			Expected frequency	17	33	
		Correct option identified	Observed frequency	9	41	50
			Expected frequency	17	33	
	Total		Frequency	34	66	100
Beneficence vs Autonomy	2x2 contingency table			**Vignette 3 Beneficence**		Total
				Incorrect option identified	Correct option identified	
	Vignette 2,6,10 Autonomy	Incorrect option identified	Observed frequency	14	36	50
			Expected frequency	9.5	40.5	
		Correct option identified	Observed frequency	5	45	50
			Expected frequency	9.5	40.5	
	Total		Frequency	19	81	100
Non-maleficence vs Autonomy	2x2 contingency table			**Vignette 4 Non-maleficence**		Total
				Incorrect option identified	Correct option identified	
	Vignette 2,6,10 Autonomy	Incorrect option identified	Observed frequency	36	14	50
			Expected frequency	34	16	
		Correct option identified	Observed frequency	32	18	50
			Expected frequency	34	16	
	Total		Frequency	68	32	100

Justice vs Autonomy

2x2 contingency table			Vignette 5 Justice: Incorrect option identified	Vignette 5 Justice: Correct option identified	Total
Vignette 2,6,10 Autonomy	Incorrect option identified	Observed frequency	15	35	50
		Expected frequency	10	40	
	Correct option identified	Observed frequency	5	45	50
		Expected frequency	10	40	
Total		Frequency	20	80	100

Beneficence vs Autonomy

2x2 contingency table			Vignette 7 Beneficence: Incorrect option identified	Vignette 7 Beneficence: Correct option identified	Total
Vignette 2,6,10 Autonomy	Incorrect option identified	Observed frequency	6	44	50
		Expected frequency	3.5	46.5	
	Correct option identified	Observed frequency	1	49	50
		Expected frequency	3.5	46.5	
Total		Frequency	7	93	100

Non-maleficence vs Autonomy

2x2 contingency table			Vignette 8 Non-maleficence: Incorrect option identified	Vignette 8 Non-maleficence: Correct option identified	Total
Vignette 2,6,10 Autonomy	Incorrect option identified	Observed frequency	11	39	50
		Expected frequency	8	42	
	Correct option identified	Observed frequency	5	45	50
		Expected frequency	8	42	
Total		Frequency	16	84	100

Justice vs Autonomy

2x2 contingency table			Vignette 9 Justice: Incorrect option identified	Vignette 9 Justice: Correct option identified	Total
Vignette 2,6,10 Autonomy	Incorrect option identified	Observed frequency	5	45	50
		Expected frequency	2.5	47.5	
	Correct option identified	Observed frequency	0	50	50
		Expected frequency	2.5	47.5	
Total		Frequency	5	95	100

Beneficence vs Autonomy

2x2 contingency table			Vignette 11 Beneficence: Incorrect option identified	Vignette 11 Beneficence: Correct option identified	Total
Vignette 2,6,10 Autonomy	Incorrect option identified	Observed frequency	32	18	50
		Expected frequency	30.5	19.5	
	Correct option identified	Observed frequency	29	21	50
		Expected frequency	30.5	19.5	
Total		Frequency	61	39	100

Non-maleficence vs Autonomy

2x2 contingency table			Vignette 12 Non-maleficence: Incorrect option identified	Vignette 12 Non-maleficence: Correct option identified	Total
Vignette 2,6,10 Autonomy	Incorrect option identified	Observed frequency	21	29	50
		Expected frequency	19	31	
	Correct option identified	Observed frequency	17	33	50
		Expected frequency	19	31	
Total		Frequency	38	62	100

Justice vs Beneficence

2x2 contingency table			Vignette 1 Justice		Total
			Incorrect option identified	Correct option identified	
Vignette 3,7,11 Beneficence	Incorrect option identified	Observed frequency	44	26	70
		Expected frequency	43.4	26.6	
	Correct option identified	Observed frequency	18	12	30
		Expected frequency	18.6	11.4	
Total		Frequency	62	38	100

Autonomy vs Beneficence

2x2 contingency table			Vignette 2 Autonomy		Total
			Incorrect option identified	Correct option identified	
Vignette 3,7,11 Beneficence	Incorrect option identified	Observed frequency	5	65	70
		Expected frequency	4.2	65.8	
	Correct option identified	Observed frequency	1	29	30
		Expected frequency	1.8	28.2	
Total		Frequency	6	94	100

Non-maleficence vs Beneficence

2x2 contingency table			Vignette 4 Non-maleficence		Total
			Incorrect option identified	Correct option identified	
Vignette 3,7,11 Beneficence	Incorrect option identified	Observed frequency	46	24	70
		Expected frequency	47.6	22.4	
	Correct option identified	Observed frequency	22	8	30
		Expected frequency	20.4	9.6	
Total		Frequency	68	32	100

Justice vs Beneficence

2x2 contingency table			Vignette 5 Justice: Incorrect option identified	Vignette 5 Justice: Correct option identified	Total
Vignette 3,7,11 Beneficence	Incorrect option identified	Observed frequency	15	55	70
		Expected frequency	14	56	
	Correct option identified	Observed frequency	5	25	30
		Expected frequency	6	24	
Total		Frequency	20	80	100

Autonomy vs Beneficence

2x2 contingency table			Vignette 6 Autonomy: Incorrect option identified	Vignette 6 Autonomy: Correct option identified	Total
Vignette 3,7,11 Beneficence	Incorrect option identified	Observed frequency	29	41	70
		Expected frequency	29.4	40.6	
	Correct option identified	Observed frequency	13	17	30
		Expected frequency	12.6	17.4	
Total		Frequency	42	58	100

Non-maleficence vs Beneficence

2x2 contingency table			Vignette 8 Non-maleficence: Incorrect option identified	Vignette 8 Non-maleficence: Correct option identified	Total
Vignette 3,7,11 Beneficence	Incorrect option identified	Observed frequency	13	57	70
		Expected frequency	11.2	58.8	
	Correct option identified	Observed frequency	3	27	30
		Expected frequency	4.8	25.2	
Total		Frequency	16	84	100

Justice vs Beneficence

2x2 contingency table			Vignette 9 Justice: Incorrect option identified	Vignette 9 Justice: Correct option identified	Total
Vignette 3,7,11 Beneficence	Incorrect option identified	Observed frequency	5	65	70
		Expected frequency	3.5	66.5	
	Correct option identified	Observed frequency	0	30	30
		Expected frequency	1.5	28.5	
Total		Frequency	5	95	100

Autonomy vs Beneficence

2x2 contingency table			Vignette 10 Autonomy: Incorrect option identified	Vignette 10 Autonomy: Correct option identified	Total
Vignette 3,7,11 Beneficence	Incorrect option identified	Observed frequency	7	63	70
		Expected frequency	5.6	64.4	
	Correct option identified	Observed frequency	1	29	30
		Expected frequency	2.4	27.6	
Total		Frequency	8	92	100

Non-maleficence vs Beneficence

2x2 contingency table			Vignette 12 Non-maleficence: Incorrect option identified	Vignette 12 Non-maleficence: Correct option identified	Total
Vignette 3,7,11 Beneficence	Incorrect option identified	Observed frequency	31	39	70
		Expected frequency	26.6	43.4	
	Correct option identified	Observed frequency	7	23	30
		Expected frequency	11.4	18.6	
Total		Frequency	38	62	100

Autonomy vs Justice

2x2 contingency table			Vignette 2 Autonomy		Total
			Incorrect option identified	Correct option identified	
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	4	30	34
		Expected frequency	2	32	
	Correct option identified	Observed frequency	2	64	66
		Expected frequency	4	62	
Total		Frequency	6	94	100

Beneficence vs Justice

2x2 contingency table			Vignette 3 Beneficence		Total
			Incorrect option identified	Correct option identified	
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	9	25	34
		Expected frequency	6.5	27.5	
	Correct option identified	Observed frequency	10	56	66
		Expected frequency	12.5	53.5	
Total		Frequency	19	81	100

Non-maleficence vs Justice

2x2 contingency table			Vignette 4 Non-maleficence		Total
			Incorrect option identified	Correct option identified	
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	25	9	34
		Expected frequency	23.1	10.9	
	Correct option identified	Observed frequency	43	23	66
		Expected frequency	44.9	21.1	
Total		Frequency	68	32	100

Autonomy vs Justice

2x2 contingency table			Vignette 6 Autonomy: Incorrect option identified	Vignette 6 Autonomy: Correct option identified	Total
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	20	14	34
		Expected frequency	14.3	19.7	
	Correct option identified	Observed frequency	22	44	66
		Expected frequency	27.7	38.3	
Total		Frequency	42	58	100

Beneficence vs Justice

2x2 contingency table			Vignette 7 Beneficence: Incorrect option identified	Vignette 7 Beneficence: Correct option identified	Total
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	5	29	34
		Expected frequency	2.4	31.6	
	Correct option identified	Observed frequency	2	64	66
		Expected frequency	4.6	61.4	
Total		Frequency	7	93	100

Non-maleficence vs Justice

2x2 contingency table			Vignette 8 Non-maleficence: Incorrect option identified	Vignette 8 Non-maleficence: Correct option identified	Total
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	8	26	34
		Expected frequency	5.4	28.6	
	Correct option identified	Observed frequency	8	58	66
		Expected frequency	10.6	55.4	
Total		Frequency	16	84	100

Autonomy vs Justice

2x2 contingency table			Vignette 10 Autonomy		Total
			Incorrect option identified	Correct option identified	
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	5	29	34
		Expected frequency	2.7	31.3	
	Correct option identified	Observed frequency	3	63	66
		Expected frequency	5.3	60.7	
Total		Frequency	8	92	100

Beneficence vs Justice

2x2 contingency table			Vignette 11 Beneficence		Total
			Incorrect option identified	Correct option identified	
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	23	11	34
		Expected frequency	20.7	13.3	
	Correct option identified	Observed frequency	38	28	66
		Expected frequency	40.3	25.7	
Total		Frequency	61	39	100

Non-maleficence vs Justice

2x2 contingency table			Vignette 12 Non-maleficence		Total
			Incorrect option identified	Correct option identified	
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	18	16	34
		Expected frequency	12.9	21.1	
	Correct option identified	Observed frequency	20	46	66
		Expected frequency	25.1	40.9	
Total		Frequency	38	62	100

Autonomy vs Justice

2x2 contingency table			Autonomy: Incorrect option identified	Autonomy: Correct option identified	Total
Vignette 1,5,9 Justice	Incorrect option identified	Observed frequency	25	25	50
		Expected frequency	17	33	
	Correct option identified	Observed frequency	9	41	50
		Expected frequency	17	33	
Total		Frequency	34	66	100

Autonomy vs Non-maleficence

2x2 contingency table			Autonomy: Incorrect option identified	Autonomy: Correct option identified	Total
Non-maleficence	Incorrect option identified	Observed frequency	31	51	82
		Expected frequency	27.9	54.1	
	Correct option identified	Observed frequency	3	15	18
		Expected frequency	6.1	11.9	
Total		Frequency	34	66	100

Beneficence vs Non-maleficence

2x2 contingency table			Beneficence: Incorrect option identified	Beneficence: Correct option identified	Total
Non-maleficence	Incorrect option identified	Observed frequency	58	24	82
		Expected frequency	57.4	24.6	
	Correct option identified	Observed frequency	12	6	18
		Expected frequency	12.6	5.4	
Total		Frequency	70	30	100

Beneficence vs Autonomy

2x2 contingency table			Beneficence: Incorrect option identified	Beneficence: Correct option identified	Total
Autonomy	Incorrect option identified	Observed frequency	37	13	50
		Expected frequency	35	15	
	Correct option identified	Observed frequency	33	17	50
		Expected frequency	35	15	
Total		Frequency	70	30	100

Non-maleficence vs Autonomy

2x2 contingency table			Non-maleficence: Incorrect option identified	Non-maleficence: Correct option identified	Total
Autonomy	Incorrect option identified	Observed frequency	44	6	50
		Expected frequency	41	9	
	Correct option identified	Observed frequency	38	12	50
		Expected frequency	41	9	
Total		Frequency	82	18	100

Justice vs Beneficence

2x2 contingency table			Justice: Incorrect option identified	Justice: Correct option identified	Total
Beneficence	Incorrect option identified	Observed frequency	27	43	70
		Expected frequency	23.8	46.2	
	Correct option identified	Observed frequency	7	23	30
		Expected frequency	10.2	19.8	
Total		Frequency	34	66	100

Appendix I Table 8

Results as described in Chapter 5

Table 8: Observed and Expected Cell Frequency for correct identification of an ethical principle in relation to the identification of ethical sensitivity skills

Autonomy & Controlling Social Bias	2x2 contingency table			**Controlling social bias**		Total
				Incorrect option identified	Correct option identified	
	Autonomy	Incorrect option identified	Observed frequency	30	20	50
			Expected frequency	24	26	
		Correct option identified	Observed frequency	18	32	50
			Expected frequency	24	26	
	Total		Frequency	48	52	100
Autonomy & Effective Communication	2x2 contingency table			**Effective communication**		Total
				Incorrect option identified	Correct option identified	
	Autonomy	Incorrect option identified	Observed frequency	35	15	50
			Expected frequency	20.5	29.5	
		Correct option identified	Observed frequency	6	44	50
			Expected frequency	20.5	29.5	
	Total		Frequency	41	59	100
Autonomy & Perspective Taking	2x2 contingency table			**Perspective taking**		Total
				Incorrect option identified	Correct option identified	
	Autonomy	Incorrect option identified	Observed frequency	18	32	50
			Expected frequency	15	35	
		Correct option identified	Observed frequency	12	38	50
			Expected frequency	15	35	
	Total		Frequency	30	70	100

Autonomy & Relating to Others

2x2 contingency table			Relating to others: Incorrect option identified	Relating to others: Correct option identified	Total
Autonomy	Incorrect option identified	Observed frequency	12	38	50
		Expected frequency	12.5	37.5	
	Correct option identified	Observed frequency	13	37	50
		Expected frequency	12.5	37.5	
Total		Frequency	25	75	100

Autonomy & Responding to Diversity

2x2 contingency table			Responding to diversity: Incorrect option identified	Responding to diversity: Correct option identified	Total
Autonomy	Incorrect option identified	Observed frequency	20	30	50
		Expected frequency	13	37	
	Correct option identified	Observed frequency	6	44	50
		Expected frequency	13	37	
Total		Frequency	26	74	100

Autonomy & Interpreting Ethics in a Situation

2x2 contingency table			Interpreting ethics in a situation: Incorrect option identified	Interpreting ethics in a situation: Correct option identified	Total
Autonomy	Incorrect option identified	Observed frequency	34	16	50
		Expected frequency	26	24	
	Correct option identified	Observed frequency	18	32	50
		Expected frequency	26	24	
Total		Frequency	52	48	100

Autonomy & Emotional Expression

2x2 contingency table			Emotional expression		Total
			Incorrect option identified	Correct option identified	
Autonomy	Incorrect option identified	Observed frequency	4	46	50
		Expected frequency	2	48	
	Correct option identified	Observed frequency	0	50	50
		Expected frequency	2	48	
Total		Frequency	4	96	100

Non-maleficence & Controlling Social Bias

2x2 contingency table			Controlling social bias		Total
			Incorrect option identified	Correct option identified	
Non-maleficence	Incorrect option identified	Observed frequency	43	39	82
		Expected frequency	39.4	42.6	
	Correct option identified	Observed frequency	5	13	18
		Expected frequency	8.6	9.4	
Total		Frequency	48	52	100

Non-maleficence & Effective Communication

2x2 contingency table			Effective communication		Total
			Incorrect option identified	Correct option identified	
Non-maleficence	Incorrect option identified	Observed frequency	35	47	82
		Expected frequency	33.6	48.4	
	Correct option identified	Observed frequency	6	12	18
		Expected frequency	7.4	10.6	
Total		Frequency	41	59	100

Non-maleficence & Perspective Takings

2x2 contingency table			Perspective taking: Incorrect option identified	Perspective taking: Correct option identified	Total
Non-maleficence	Incorrect option identified	Observed frequency	25	57	82
		Expected frequency	24.6	57.4	
	Correct option identified	Observed frequency	5	13	18
		Expected frequency	5.4	12.6	
Total		Frequency	30	70	100

Non-maleficence & Relating to Others

2x2 contingency table			Relating to others: Incorrect option identified	Relating to others: Correct option identified	Total
Non-maleficence	Incorrect option identified	Observed frequency	21	61	82
		Expected frequency	20.5	61.5	
	Correct option identified	Observed frequency	4	14	18
		Expected frequency	4.5	13.5	
Total		Frequency	25	75	100

Non-maleficence & Responding to Diversity

2x2 contingency table			Responding to diversity: Incorrect option identified	Responding to diversity: Correct option identified	Total
Non-maleficence	Incorrect option identified	Observed frequency	20	62	82
		Expected frequency	21.3	60.7	
	Correct option identified	Observed frequency	6	12	18
		Expected frequency	4.7	13.3	
Total		Frequency	26	74	100

Non-maleficence & Interpreting Ethics in a Situation

2x2 contingency table			Interpreting ethics in a situation: Incorrect option identified	Interpreting ethics in a situation: Correct option identified	Total
Non-maleficence	Incorrect option identified	Observed frequency	43	39	82
		Expected frequency	42.6	39.4	
	Correct option identified	Observed frequency	9	9	18
		Expected frequency	9.4	8.6	
Total		Frequency	52	48	100

Non-maleficence & Emotional Expression

2x2 contingency table			Emotional expression: Incorrect option identified	Emotional expression: Correct option identified	Total
Non-maleficence	Incorrect option identified	Observed frequency	4	78	82
		Expected frequency	3.3	78.7	
	Correct option identified	Observed frequency	0	18	18
		Expected frequency	0.7	17.3	
Total		Frequency	4	96	100

Justice & Controlling Social Bias

2x2 contingency table			Controlling social bias: Incorrect option identified	Controlling social bias: Correct option identified	Total
Justice	Incorrect option identified	Observed frequency	22	12	34
		Expected frequency	16.3	17.7	
	Correct option identified	Observed frequency	26	40	66
		Expected frequency	31.7	34.3	
Total		Frequency	48	52	100

Justice & Effective Communication

2x2 contingency table			Effective communication: Incorrect option identified	Effective communication: Correct option identified	Total
Justice	Incorrect option identified	Observed frequency	20	14	34
		Expected frequency	13.9	20.1	
	Correct option identified	Observed frequency	21	45	66
		Expected frequency	27.1	38.9	
Total		Frequency	41	59	100

Autonomy & Emotional Expression

2x2 contingency table			Emotional expression: Incorrect option identified	Emotional expression: Correct option identified	Total
Autonomy	Incorrect option identified	Observed frequency	15	19	34
		Expected frequency	10.2	23.8	
	Correct option identified	Observed frequency	15	51	66
		Expected frequency	19.8	46.2	
Total		Frequency	30	70	100

Justice & Relating to Others

2x2 contingency table			Relating to others: Incorrect option identified	Relating to others: Correct option identified	Total
Justice	Incorrect option identified	Observed frequency	12	22	34
		Expected frequency	8.5	25.5	
	Correct option identified	Observed frequency	13	53	66
		Expected frequency	16.5	49.5	
Total		Frequency	25	75	100

Justice & Responding to Diversity

2x2 contingency table			Responding to diversity: Incorrect option identified	Responding to diversity: Correct option identified	Total
Justice	Incorrect option identified	Observed frequency	8	26	34
		Expected frequency	8.8	25.2	
	Correct option identified	Observed frequency	18	48	66
		Expected frequency	17.2	48.8	
Total		Frequency	26	74	100

Justice & Interpreting Ethics in a Situation

2x2 contingency table			Interpreting ethics in a situation: Incorrect option identified	Interpreting ethics in a situation: Correct option identified	Total
Justice	Incorrect option identified	Observed frequency	26	8	34
		Expected frequency	17.7	16.32	
	Correct option identified	Observed frequency	26	40	66
		Expected frequency	34	3	31.7
Total		Frequency	52	48	100

Justice & Emotional Expression

2x2 contingency table			Emotional expression: Incorrect option identified	Emotional expression: Correct option identified	Total
Justice	Incorrect option identified	Observed frequency	3	31	34
		Expected frequency	1.4	32.6	
	Correct option identified	Observed frequency	1	65	66
		Expected frequency	2.6	63.4	
Total		Frequency	4	96	100

Beneficence & Controlling Social Bias

2x2 contingency table			Controlling social bias: Incorrect option identified	Controlling social bias: Correct option identified	Total
Beneficence	Incorrect option identified	Observed frequency	31	39	70
		Expected frequency	33.6	36.4	
	Correct option identified	Observed frequency	17	13	30
		Expected frequency	14.4	15.6	
Total		Frequency	48	52	100

Beneficence & Effective Communication

2x2 contingency table			Effective communication: Incorrect option identified	Effective communication: Correct option identified	Total
Beneficence	Incorrect option identified	Observed frequency	29	41	70
		Expected frequency	28.7	41.3	
	Correct option identified	Observed frequency	12	18	30
		Expected frequency	12.3	17.7	
Total		Frequency	41	59	100

Beneficence & Perspective Taking

2x2 contingency table			Perspective taking: Incorrect option identified	Perspective taking: Correct option identified	Total
Beneficence	Incorrect option identified	Observed frequency	21	49	70
		Expected frequency	21	49	
	Correct option identified	Observed frequency	9	21	30
		Expected frequency	9	21	
Total		Frequency	30	70	100

Beneficence & Relating to Others

2x2 contingency table			Relating to others: Incorrect option identified	Relating to others: Correct option identified	Total
Beneficence	Incorrect option identified	Observed frequency	20	50	70
		Expected frequency	17.5	52.5	
	Correct option identified	Observed frequency	5	25	30
		Expected frequency	7.5	22.5	
Total		Frequency	25	75	100

Beneficence & Responding to Diversity

2x2 contingency table			Responding to diversity: Incorrect option identified	Responding to diversity: Correct option identified	Total
Beneficence	Incorrect option identified	Observed frequency	17	53	70
		Expected frequency	18.2	51.8	
	Correct option identified	Observed frequency	9	21	30
		Expected frequency	7.8	22.2	
Total		Frequency	26	74	100

Beneficence & Interpreting Ethics in a Situation

2x2 contingency table			Interpreting ethics in a situation: Incorrect option identified	Interpreting ethics in a situation: Correct option identified	Total
Beneficence	Incorrect option identified	Observed frequency	37	33	70
		Expected frequency	36.4	33.6	
	Correct option identified	Observed frequency	15	15	30
		Expected frequency	15.6	14.4	
Total		Frequency	52	48	100

Beneficence & Emotional Expression

2x2 contingency table			Emotional expression		Total
			Incorrect option identified	Correct option identified	
Beneficence	Incorrect option identified	Observed frequency	4	66	70
		Expected frequency	2.8	67.2	
	Correct option identified	Observed frequency	0	30	30
		Expected frequency	1.2	28.8	
Total		Frequency	4	96	100

Appendix I Table 9

Results as described in Chapter 5

Table 9: The ANOVA procedure with dependent variable: Complete time to completion in minutes

Source	DF	Anova sum of squares	Mean Square	F Value	Pr > F
Vignette 1-12	3	4958.72	1652.91	79.74	<.0001