

**COUNSELING OF ADULTS WHO NEED AMPLIFICATION: PRACTICES  
OF SOUTH AFRICAN AUDIOLOGISTS**

BY

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SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF COMMUNICATION PATHOLOGY (AUDIOLOGY)

IN

THE DISCIPLINE OF AUDIOLOGY

SCHOOL OF HEALTH SCIENCES

UNIVERSITY OF KWAZULU-NATAL

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JUNE 2014

## DECLARATION

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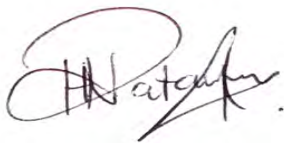
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Hereby declare that the dissertation, which is submitted to the University of KwaZulu-Natal for the degree of Master of Communication Pathology (Audiology), entitled:

### **Counseling of adults who need amplification: Practices of South African Audiologists**

Represents my own work in conception and execution. The descriptive study performed for this dissertation was under the guidance and supervision of Dr. Lavanithum (Neethie) Joseph.

The study is the work of the author and has not been submitted in any form to another University or Tertiary Institute. Where use was made of the work of others, it is duly acknowledged in the text.



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## ACKNOWLEDGEMENTS

With much gratitude, I wish to thank the following people who have been instrumental in the completion of this dissertation:

- My family members, for their continued support and for always motivating and inspiring me, in spite of the great geographical distance between us;
- Dr. Lavanithum (Neethie) Joseph for hours of supervision, advice and direction with competence, professionalism and compassion; thank you.
- Fikile Nkwanyana for assisting so patiently with the statistical analysis of the data;
- My colleagues, mentors and friends around the globe, who over the years have exhibited immense patience, understanding and support, when I was completing my degree, while holding a full time job;
- My late dad, thank you for the strong values of education you have instilled in me – I miss you every day, wishing you were here.

## ABSTRACT

This study focused on adult rehabilitative audiology, in particular the counseling offered to adults who require hearing aids; and examined the practices and views of South African Audiologists. Counseling within the audiology profession has gained increased attention over the years as the profession has evolved with the technological advancements of modern hearing aids. On a global scale the educational qualification as well as curriculum has shifted in recent years. The current practises of counseling adults, who need amplification, needs to be understood more widely in South Africa and these topics were investigated in this research, with the purpose of highlighting and influencing best practice. The barriers faced by audiologists need to be better understood in order to improve service delivery and to look at curriculum needs of the new graduating students of the profession. The study reviews literature available regarding the scope of audiology practise, and the challenges faced by adult clients acquiring hearing amplification.

The aim of the study was to describe the current practice of audiologists who counsel adult clients who require amplification by focusing on the nature and scope of services offered and the perceptions of factors affecting practice within the South African context.

An online descriptive survey was selected as the research design. Information was gathered on the educational and clinical background, current practise, skills and challenges audiologists faced in dealing with the complex task of counseling adult clients with acquired hearing loss. The study sample consisted of 152 participants of which 148 (97%) were female and 4 (3%) were male. All practitioners were registered with either of the two professional audiology associations, the South African Association of Audiologists (SAAA) and the South African Speech Language and Hearing Association (SASLHA). The majority of participants were qualified as Speech Therapists and Audiologists, and worked in the private sector.

The results revealed that Audiologists spend more time on informational counseling than rational acceptance or adjustment counseling. They also reported more time spent on counseling the client only rather than the client and significant other. The majority spent up to 15 minutes on counseling, and tended to offer counseling mostly after audiological evaluation and during hearing aid fitting and evaluation. Even though audiologists rated their skills in counseling high, especially for

informational counseling and adjustment counseling, the majority of the participants indicated the need to improve their counseling skills to serve adult clients who need hearing aids.

The results have valuable clinical implications for the rendering of adult rehabilitative audiological services in South Africa by incorporating more focus on counseling within the curricula of audiology training and by offering courses to qualified professionals to increase knowledge and skills in the area of counseling. Another implication is the need for supervision during clinical training of audiology students in order to develop skills in informational, rational acceptance and adjustment counseling.

**Key words: Counseling, adults with hearing loss, hearing aids, amplification, training of audiologists, types of counseling, counseling skills, informational counseling, rational acceptance and adjustment counseling.**

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# **CHAPTER ONE**

## **INTRODUCTION AND RATIONALE**

### **1.1 Introduction**

Hearing loss occurs as a result of a number of factors, but in adults it is largely a function of age. This hearing loss can be managed with the use of hearing devices that are acquired on the advice of an audiologist. The adult population with hearing loss is not a homogenous group, but rather a diverse group of individuals with many different needs. This study focused on the counseling of adult clients who need amplification and the practices of South African Audiologists within this area. In recent years, there has been increased attention on the role of counseling within the audiology profession in both the educational and clinical areas of practice. In layman's terms, the meaning of counseling is the advice or guidance gained from a person who is knowledgeable in a particular area. This chapter provides a background to the study. It also includes a definition of terms used and presents an outline of the chapters that comprise the dissertation. The following chapter will then highlight the role of counseling within the adult population and literature which addresses this topic in greater depth.

### **1.2 Study background**

The profession of Audiology came into existence after World War II, as a result of many soldiers suffering from noise-induced hearing loss (NIHL) resulting in the need for remediation being identified. The primary focus of Aural Rehabilitation (AR) at this time was speech reading and auditory training, the intention being to lessen the consequence of hearing loss on the individual's life. The attention of the profession shifted with the explosion of technical advancements in the realm of diagnostic audiology. This meant that there was more focus on diagnostic measures such as auditory brainstem response (ABR) and otoacoustic emissions (OAEs) in the profession in more recent times (Montano, 2009). During the earlier days audiologists were responsible for hearing evaluations which then led to hearing aid recommendations. It was considered unethical for audiologists to sell hearing aids. While audiologists had their focus on diagnosis, rehabilitation technology was left to hearing aid dealers who were responsible for the sale and fitting of hearing aids and as a result Aural Rehabilitation (AR) was practically non-existent (Alpiner, Hansen & Kaufman, 2000).

The American Speech-Language-Hearing Association (ASHA), in the current scope of practise for an audiologist clearly spells out the array of practice foci, which provides comprehensive diagnostic and rehabilitative services for auditory, vestibular and related impairments, providing these services to individuals across the lifespan (ASHA, 2004; Swanepoel, 2006). The Health Professionals Counsel of South Africa (HPCSA, 2012) outlines in the scope of practice for Audiologists that counseling is one of the ten clinical services offered by the profession. Development of culturally appropriate, audiologic rehabilitative management plans, including counseling with regards to psychosocial aspects of hearing loss and other auditory dysfunction, and processes to enhance communication competence, is also listed on this professional statement. The comprehensive audiologic rehabilitation encompasses speech and language habilitation, or rehabilitation including but not limited to speech-reading, auditory training, communication strategies and manual communication which all involve counseling in terms of psychosocial adjustment for persons with hearing loss as well as their families or caregivers (HPCSA, 2012).

Within the audiology profession, practitioners have historically assumed the role of expert within the medical framework, and offer clients a professional recommendation. However, as this young profession shifts into the bio-psychosocial realm, audiologists are faced with having to involve clients in the decision making process of their rehabilitation plan. They assist clients with hearing loss to improve the quality of life by enabling them to communicate more efficiently in daily situations. Counseling is the main contributor in achieving this goal of optimised communication; informational counseling, rational acceptance and adjustment counseling fall under this main umbrella of counseling.

Audiology has evolved into an autonomous profession since its existence in the last 50-60 years; it continues to diversify and has seen exponential growth over the last few decades (Hosford-Dunn, Roeser & Valente, 2008). Research highlights that although hearing aid technology has advanced substantially over the previous 20 years, there has not been an increase in the uptake of hearing aids, with only one in five adults reported to have adopted hearing aids (Kochkin, 2007).

Counseling has increasingly gained more attention over recent years, as training institutions are now re-evaluating the curricula of audiology on a global level to include this important component of clinical practice. The focus on counseling in the hearing care profession has gained interest in the

recent years as the advances in technology have not been matched by an increase in device uptake. Adults who lose their hearing often take a long time to admit that there is a problem, and may require the intervention of family members to seek help from audiologists. Wearing hearing aids can affect people's self-image and confidence, yet there appears to be little support from audiologists regarding adjusting to the emotional side of wearing devices through counseling. This study therefore aims to understand how audiologists view counseling in their current practice and its importance for adult clients who require hearing aids. In these instances, counseling can form an important part of their coming to terms with hearing loss and the mechanisms to cope with hearing loss. However, there appears to be little, if any research done to understand audiologists' practices regarding counseling adult clients who require hearing aids.

The research question posed therefore is; what are audiologists' practices and views regarding counseling adult clients who require hearing aids?

### **1.3 Definition of terms**

The following definitions apply to this study:

**Hearing loss:** A loss or lack of hearing sensitivity (Delk, 1983). Hearing within normal limits is considered to be between 0 and 25 dB HL in the adult population, above this level would be considered a hearing loss (Roeser and Clark, in Hosford-Dunn et al., 2008).

**Hearing aids:** An electronic amplifying device to make sounds audible to the individual with a hearing loss. Sound pressure waves are converted into electricity by a microphone. The electronic impulses are then amplified through controlled electronic circuitry. The amplified electronic impulses are then reconverted by a receiver to pressure waves at a much more intense level to be presented to the impaired ear (Delk, 1983).

**Informational counseling:** During this type of counseling situation, the audiologist instructs, guides, and gives expert information in the format of a give-and-take dialogue. Information during this type of counseling may relate to hearing loss, listening device technology and services available to the client (Tye-Murray, 2009). When clients are fitted with hearing aids, audiologists are very familiar with providing informational counseling.



**Rational acceptance:** Rational acceptance is when the audiologist discusses communication strategies and ways in which to improve communication interactions within the home setting (Tye-Murray, 2004).

**Adjustment counseling:** In adjustment counseling the audiologist may also focus on the irreversibility and permanence of the hearing loss, and may introduce concrete means for managing communication difficulties (Tye-Murray, 2004).

**Personal adjustment counseling:** Audiologists focus on the permanence of hearing loss and healthy incorporation of hearing loss into a client's self-image. The acceptance of hearing loss allows clients to accept the reality of their disability and to adjust to their values and priorities while still continuing to lead fulfilled and productive lives (Tye-Murray, 2009). Term includes both rational acceptance and adjustment counseling.

**Client/Patient:** These terms are used interchangeably in this thesis to refer to the individual with hearing loss requiring Audiological services.

**Client-contact environment:** The audiologist's employment setting is focused on working with clients, i.e. a clinic or hospital environment.

#### **1.4 Abbreviations**

<b>AAA</b>	American Academy of Audiology
<b>AR</b>	Aural Rehabilitation
<b>ASHA</b>	American Speech and Hearing Association
<b>HPCSA</b>	Health Professions Council of South Africa
<b>SAAA</b>	South African Association of Audiologists
<b>SASLHA</b>	South African Speech Language and Hearing Association
<b>SLT</b>	Speech Language Therapist
<b>STA</b>	Speech Therapist and Audiologist

## **1.5 Chapter outlines**

### **Chapter 1: Introduction and Rationale**

The purpose of this chapter was to describe the increased attention on counseling within audiology profession. This chapter also included the research question, rationale for the study and definitions of the terminology used.

### **Chapter 2: Literature Review**

This chapter provides a detailed discussion based on literature related to counseling of adults who need amplification as a result of hearing loss, and the practices of South African audiologists.

### **Chapter 3: Methodology**

This chapter highlights the methods adopted by the researcher to meet the aim and objectives of the study. This chapter provides motivations and descriptions of the participant selection criteria used, sampling technique, data collection procedures and instruments, the data analysis methods employed, the research procedure and ethical considerations taken.

### **Chapter 4: Results**

This chapter presents the results obtained based on the objectives of the study.

### **Chapter 5: Discussion**

This chapter presents and discusses the findings of the study based on results from a descriptive online survey. The interpretation of results and discussion of results are presented concurrently with use of the available literature.

### **Chapter 6: Conclusion**

This chapter clearly highlights the implications of the study, i.e. clinical, theoretical and research implications and also addresses the conclusion arrived at and recommendations made.

## **1.6 Summary**

This chapter presented an introduction and a rationale for the study. It began with a historical view of the Audiology profession and the advancements made in a short space of time. In contrast to the vast steps taken forward with the technical advances, client acceptance and use of hearing aids

remains low. Increased attention has been given to counseling within the audiology profession in recent years and it questions the readiness of audiologists to cater for the need of adult clients who need to accept and use hearing amplification.

## **CHAPTER TWO**

### **COUNSELING ADULTS WITH HEARING LOSS**

#### **2.1 Introduction**

There is limited information about audiologist's views on counseling adult clients who need amplification, especially in the South African context. The available literature in this area focuses mainly on the resistance of adult clients to acquiring assistance with regards to their hearing loss and the lack of a counseling focus in the curricula of both undergraduate and postgraduate programmes globally. In this chapter, the term counseling is defined, and the types of counseling and its importance are addressed.

#### **2.2 The nature of acquired hearing loss in adults**

English (2008), reports that it takes a person seven years or more to seek assistance for their age related hearing loss. Even at this point, many of their initial appointments are made by family members, raising the questions as to why it takes these individuals so long to seek help, and how audiologists can facilitate this process better and learn about their client's psychological and social needs and concerns. Human nature predisposes people in stressful situations to either fight or flight, which English (2008) refers to as approach or avoidance. In a situation that creates stress, people can either approach the situation by solving it, or finding help to solve it, or avoiding it. Avoidance may be a cognitive avoidance which is: "I will think about it later", procrastination type of behaviour.

Often, clients will start to react to their hearing difficulty with psychological avoidance, a natural reaction, which occurs when the client is still able to hear quite well, and at which point no physical or emotional pain is involved. These initial coping strategies become less successful as the hearing deteriorates over time and the stress increases. This first appointment at the audiologist is then seen as the first step to approaching the hearing problem (English, 2008).

The struggle begins with individuals first having to admit that they are experiencing a problem, with some people being more resistant to change than others. The change required is a personal adjustment process, with people finding this difficult due to the tension between wanting to address the problem and resisting the solution viz. hearing aids (English, 2008).

Maslow's hierarchy of needs systematically illustrates the arrangement of needs according to priority, where basic needs such as food and sleep must be met before less basic needs such as love or belonging, self-esteem and self-actualisation are addressed. This framework is described in a pyramid shape, with psychological or security being the basic needs at the broad base of the pyramid. Higher levels of the pyramid consist of progressively less basic needs. When a person manages to satisfy a level of needs reasonably well, this satisfaction activates needs at the next level. In this model, the most basic needs must be met before an individual will strongly desire the next level upwards (Weiten, 2004). Therefore, an individual having to accept and accommodate their new life and identity as an individual with hearing loss takes on many challenges that attacks their personal identity.

Some clients may be under the misconception that hearing aids will 'cure' their hearing loss and thus the myth and the reality of the limitations and restrictions of hearing aids need to be addressed (Blood, 1997). Addressing hearing loss is not merely a 'fix it' procedure such as acquiring spectacles, but a more complex and involved process. The needs of adults with hearing loss are diverse, requiring professionals who work with them to understand the needs of each individual to achieve optimal communication ability.

When individuals' with hearing loss delay or fail to address their communication needs, their life, as well as those of their immediate family is often adversely impacted. They may isolate themselves, avoid social gatherings, and prefer to engage in activities alone rather than with other family members. When social interactions and communication abilities are negatively affected, this affects their overall quality of life. Only once the individual with hearing loss begins to seek assistance to overcome the barriers of accepting their status will progress be made in finding solutions to improve their quality of life.

### **2.2.1 Barriers to acceptance of hearing loss**

A number of barriers have been recognised as affecting adults acceptance of hearing loss, such as ownership of the problem, the effect on their self-identify, stigma, self-efficacy and unmet expectations, each of which will be reviewed in detail.

### ***2.2.1.1 Ownership***

Clients often come to expect audiologists to ‘fix’ their problem, which in the medical model is referred to as ‘give me a pill to fix it’. Audiologists who may follow this model would see themselves as experts within this framework. This could explain why clients may find it difficult and take so long to take ownership of their hearing loss.

Engelund (2006) defined a four stage recognition process that individuals with hearing loss go through: attracting attention, becoming suspicious, sensing tribulation and jeopardizing fundamental self. The author (2006) further divided the unsuccessful communication attempts into two categories; relational tribulations and personal tribulations. The relational tribulations relate to how individuals experience the impact of hearing loss on other people and their resulting interaction, which affects their social identity, this being the consequence of how individuals see themselves through others’ reactions to them. The personal tribulations concern the impact of the hearing loss on the individual’s self-concept and self-esteem, the consequences of their related problems being a change in their self-identity (Engelund, 2006).

### ***2.2.1.2 Self-identity***

Having their self-identity challenged is often one of the main factors that contribute to the recognition or realisation of the presence of a hearing loss. Reflection on the reoccurring challenges faced in interpersonal relationships makes the individual with hearing loss understand that something needs to be done. They need to accept that the challenges they face are no longer solvable without professional intervention, as the hearing loss may worsen and hearing tactics will fail (Schum, Behrens & Weile, 2011). Once individuals with hearing loss decide to seek assistance or accept help for their impairment, many may still need to work through the associated stigma, which results in a paradigm shift towards client-centred care. The individual is then faced with the need to address the hearing loss and hopefully be motivated to change the situation (Engelund, 2006).

A literature review conducted on studies published between 1980 and 2014 examined the variables that could predict help seeking, hearing aid uptake use and satisfaction, Thirty one factors were examined, and included: source of motivation, expectations, attitude, measured hearing sensitivity, age, gender, cost etc. The striking finding was that the main predictor of client seeking

treatment, obtaining amplification, use of devices and benefits experienced, was individuals who self-reported their hearing difficulties (Knudsen, Öberg, Nielsen, Naylor & Kramer, 2010).

Goleman (1995) states that there is a miss-match of communication information that occurs as each individual has two minds, one that thinks and one that feels. Both these responses are equally essential for effective problem solving skills, as well as for mental and emotional health (Goleman, 1995). This clearly highlights the complexity of the interaction between the client and the audiologist, as both parties bring their own thinking and feeling minds during the consultation. Not knowing where the client is in their hearing journey with regards to their thoughts and feelings makes it difficult for the audiologist to reach the goals of AR.

### **2.2.1.3 Stigma**

Hearing loss is an invisible impairment, and wearing a hearing aid potentially makes this 'visible', and is commonly referred to as stigma. Stigma has been defined as "*the possession of or belief that one possesses some attribute or characteristic that conveys a social identity that is devalued in a particular social context*" (Gagné, Southall & Jennings, 2011, p.16). In most western societies, there is a stigma associated with hearing loss. The general population perceives individuals with hearing loss as being old, cognitively diminished, poor communication partners, and generally uninteresting, with Kochkin (2000) stating that it is often misunderstood as an intellectual challenge or a deficiency in personality and character. Stigmatization is a social construct that can be viewed from the outsiders' point of view (i.e. the person who does not possess the stigmatizing trait). The stigma associated with wearing a hearing aid is often referred to as the 'Hearing Aid Effect' (Blood, 1997), these being the perceptions of outsiders (Gagné et al., 2011).

Social stigma can also be studied from the view of the insider, i.e. the person who possesses a stigmatizing trait. Usually, the insider is aware of the prejudicial view held by the outsiders. Some of the insiders may display self-stigma, which can be described as holding the same prejudicial views about their stigmatizing condition that the outsiders have (Gagné et al., 2011). This stigma association often de-motivates the client to be committed to wearing their hearing aids. A trade-off between social acceptance, vanity, personal appraisal about aging and many other personal factors play a pivotal role in improving the quality of life for these individuals with hearing loss (Blood, 1997).

Blood (1997) investigated the degree to which the dilemma between 'cosmetics and performance' still existed. One hundred undergraduate university students between 18 and 32 years were enrolled into the study, with 63 females and 37 males. Hearing thresholds of all participants were within normal limits, Filtered and unfiltered speech was played to this group, the filtered condition created a listening situation for normal listeners that was similar to the condition experienced by individuals with hearing loss. The speech was therefore still understandable, but was softer and required more concentration, and the listener had to fill in some words or parts of speech. While the filtered conditions were more difficult for listeners to understand than the unfiltered, 99 subjects indicated that they would not wear hearing aids in the unfiltered condition. Of the group that indicated they would wear hearing aids, 88% reported that they would choose an ITE (In the Ear) hearing aid, whereas 9% said they would not wear ITE aids. With regards to the BTE (Behind the Ear) hearing aid, 72% indicated that they would wear these versus 26% who reported they would not. Of the group that chose not to wear the ITE or BTE hearing aid, 69% attributed their decision to visibility and size, while 53% indicated perceived stigma and cosmetics to be key deciding factors (Blood, 1997).

These results indicated that while many of the participants recognized the necessity of hearing aids, 25% of the listeners were biased against wearing them due to perceived stigma and or visibility (Blood, 1997). The research also concluded that while hearing care professionals offered informational counseling about hearing loss and hearing aids, additional counseling and guidance may be needed. Clients may require hearing aid orientation sessions, and their family members could benefit from listening to filtered speech samples simulating various degrees of hearing loss to gain a better understanding of the effects of the condition (Blood, 1997). Guidance and advice about the many ways to deal with friends and co-workers initial impressions, perceptions about the stigma of hearing aids, fears about hearing loss and better strategies for dealing with hearing loss are warranted for some individuals (Blood, 1997).

Self-stigma threatens people's identity, and those who experience this display a high level of stress, shame and lower self-efficacy, and are likely to develop maladaptive behaviours. The individual with hearing loss starts to conceal it, and shifts the blame onto others by saying the talker is mumbling. Eventually, the individual with hearing loss cannot deny their hearing loss any longer



and will have to have their hearing tested by a hearing care professional, at which point, the individual displaying self-stigma may feel the need to diminish the results and down play the seriousness of the hearing loss. Kochkin (2000, 2007) indicates that 40% of adults with hearing loss who do not use hearing aids cite stigma as one of the top five reasons for not purchasing a hearing device. Self-stigma is also seen as an important obstacle to AR.

In many other health conditions such as those related to psychology and psychiatry, where stigma is concealable, it has been documented that in order not to be identified as someone with a stigmatizing trait, people who display self-stigma choose not to seek treatment or they fail to comply with treatment regimens that are proposed (Gagné et al., 2011). This is the same phenomenon that is seen in individuals with hearing loss, as they choose to conceal their hearing difficulties from others. Individuals with hearing loss who experience self-stigma will not purchase or wear hearing aids, and will not use assertive communication strategies that would require them to disclose their hearing loss to their communication partners. To avoid these situations of identifying their hearing loss, they may employ mal-adaptive coping strategies. These may include avoiding social interactions in which communication breakdowns may occur, isolating and withdrawing from family and loved ones.

These strategies may help conceal the stigmatizing trait from others, and may reduce the likelihood of experiencing an identity threat. However, these strategies can potentially lead to withdrawal from social activities, with social isolation potentially leading to depression with a negative impact on general health (Gagné et al., 2011). From other fields of health rehabilitation programs, self-stigma has been successfully addressed, and in the mental health area, a combination approach has been used, with a typical program including:

- Informational counseling on the targeted health condition and the deleterious effects of stigma and self-stigma
- Components of cognitive-behaviour therapy
- Empowerment and self-efficacy training in the form of interactions with people who have the same health condition, notably those who have successfully overcome self-stigma.

Almost all treatment programmes that address self-stigma issues are provided in a group intervention format (Gagné et al., 2011). Héту, as cited in Gagné et al (2001), suggests that there is a

two stage normalisation process for helping the person with hearing loss to overcome feelings of shame and guilt associated with hearing loss and regain a favourable social identity. The first stage of the normalization process involves meeting and interacting with other people who have a hearing loss, so that together, the group members can share their experiences of hearing difficulties and unsatisfactory social interactions. This therapeutic activity helps them realise that unsatisfactory social interactions are a result of the hearing loss and not the results of other factors that may have been unjustifiably attributed to them. The group members realise that it is not unusual for individuals with hearing loss to feel ashamed, diminished and denigrated. They come to a realization that other people with hearing loss share the same feelings of ineptitude and self-denigration, and that this is a normal part of the acceptance process. This assists them to have a more positive attitude about themselves, which initiates a more positive social identity enabling them to engage in more social activities and interactions. The other skills more likely to be learnt in this auditory rehabilitation programme are coping strategies and the success of using these strategies in favourable social environments. The second stage of the normalization process is to encourage these individuals with hearing loss to engage with people within their social circles who do not have a hearing loss. This is a positive cycle of change, as their participation in more satisfying social conversation restores their positive self-esteem and worth (Gagné, Southall & Jennings, 2011).

#### ***2.2.1.4 Self-efficacy***

*“Self-efficacy should be built as a first or critical goal of hearing rehabilitation in order to reach the goal of improved communication and improved quality of life”* (Gregory, 2011, p. 32). The hearing rehabilitation process can be seen as a joint decision-making process that usually requires clients to adapt or change their behaviour in order to effectively use hearing aids and implement new communications strategies (Gregory, 2011). Self-efficacy is a vital ingredient for successful auditory rehabilitation, as clients need to believe in their ability and have the confidence to follow the recommendations made by their audiologists. Without a sense of self-efficacy, people do not change, and it should therefore be the first goal of AR to ensure clients enjoy an improved quality of life (Gregory, 2011).

Christensen and Groth (2008), as cited in Kochkin et al. (2010), presented 10 key errors that clinicians make during the amplification fitting process with the client. Number 6 highlights that clinicians do not provide appropriate counseling to clients, and number 8 mentioned that clinicians

fit hearing aids without the client being convinced that they have a need for hearing aids. This translates to clinicians going ahead with hearing aid fittings for clients without the client being fully convinced that the hearing loss warrants it. The discrepancy between what the clinician thinks is best for the client, and what the client is prepared to do for themselves, needs to be addressed from the beginning of any consultation.

#### ***2.2.1.5 Unmet expectations***

According to English (2008), the inability of clients to seek assistance and deal with a chronic health condition is human nature. The step of fitting hearing aids on clients who have difficulty admitting that there is a problem, or are not ready to hear about the extent of their hearing loss, can result in the hearing aids not being used or the client reporting unsatisfactory results. Hearing aids must be seen by potential clients as a mechanical device that can improve but not restore their normal hearing. However many people expect their hearing to be restored and that they would hear normally again. They also assume that it will not take any modification or accommodation on their behalf or the speaker or listener (Souza & Hoyer, 1996). Unmet expectations and not being satisfied with the sound of the hearing instruments are the main reasons why individuals with hearing loss end up leaving their hearing aids in the drawer (Kochkin, 2007).

Unmet expectations of clients can better be minimized by offering clients appropriate counseling that will enable them to set realistic expectations. It needs to cater to meet the needs of each individual client rather than checking off a generic checklist during a consultation. Many individuals find adjusting to hearing loss very difficult, and need to go through a personal adjustment process to come to terms with their status. Likewise, the use of hearing aids or communication strategies requires behavioural changes some people may resist or are uncomfortable with. All these factors highlight the need for appropriate counseling to meet the needs of their clients and their families.

### **2.3 Counseling**

In layman's terms, counseling occurs in any relationship where one person is helping another person to better understand and solve some problem. A separation can be made between professional and non-professional counseling (Popp & Hackett, 2003). Professional counseling is based on the well-patient model, whereby a professional provides personal assistance in exploring an individual's

attitudes, feelings, values and experiences. When one person counsels another, from a perspective outside of the counseling profession, that person is a 'non-professional'. Examples of professional counsellors are attorneys, physicians, clergy as well as hearing care professions (Popp & Hackett, 2003). Shipley, Rosenberry-McKibbin & Hedge (2006) state that "*Counseling creates an interpersonal, helping relationship in which the goal is to support clients and their families who experience emotional distress related to a communication disorder*" (as cited in Reed, 2009, p1). Research consistently indicates that counseling is an essential factor in the acceptance of hearing loss, hearing aid use and satisfaction with the hearing aids (Popp & Hackett, 2003).

### **2.3.1 Types of Counseling**

As a profession, Audiology has made a distinction between informational counseling and personal adjustment counseling. During informational counseling, the audiologist is intended to provide the client with the relevant information needed to understand the nature of the disorder and the steps that are recommended to manage it. Personal adjustment counseling helps the client and the family deal with the emotional impact of the information (Margolis, 2004). English (2008) divides audiologic counseling into two types: 1) informational counseling, which relates to answering questions regarding hearing and hearing loss, explanation of test results, anatomy of the ear, amplification use, communication strategies etc., and 2) personal adjustment counseling, which encompasses dealing with the emotional and psychosocial reactions to hearing loss and gaining a deeper understanding of hearing loss. Tye-Murray (2004) uses three categories: informational counseling, rational acceptance counseling and adjustment counseling, each relating to specific aspects that audiologists should address when assisting the client to adjust to a hearing aid. However, the latter two could be covered by the term personal adjustment (Tye-Murray, 2009).

- ***Informational counseling***

When the hearing evaluation is conducted, the audiologist is firstly responsible for providing informational counseling to the client. This entails explaining the nature and degree of the hearing loss, supported by the audiogram. The benefits and limitations of amplification devices may be discussed as well as possible hands-on experience of hearing devices. During this type of counseling situation, the audiologist behaves as a subject matter expert, providing information and guidance to the client (Tye-Murray, 2004, 2009). When clients are fit with hearing aids, audiologists are very familiar with providing informational counseling.

- ***Rational acceptance***

Rational acceptance is when the audiologist discusses communication strategies and ways in which to improve communication interactions within the home setting. The invisible nature of hearing loss enables the client to conceal it until communication becomes particularly challenging before seeking help. These individuals must address many barriers before they accept their hearing loss, including ownership of hearing loss, this being an important factor to ensure a commitment to acceptance and use of amplification within an aural rehabilitation plan. However, the rational acceptance of hearing loss and coming to terms with one's new identity, which includes hearing loss, may not be addressed directly by the audiologist.

- ***Adjustment counseling***

With regards to adjustment, the audiologist may also focus on the irreversibility and permanence of the hearing loss, and may introduce concrete means for managing communication difficulties (Tye-Murray, 2004, 2009). However, it appears personal adjustment counseling is seldom adequately practised by clinicians. The terms personal adjustment counseling and adjustment counseling are used interchangeably within the audiology field.

For many individuals who do need to see an audiologist, their first visits may not be booked out of their own free will but rather by compulsion of a family member (English, 2005), family pressure pushing them to seek help. Thus these clients may not be consulted on whether they have come to terms with the diagnosis of their hearing loss, and if they are ready to commit to taking the next step of purchasing hearing devices.

Despite advances in technology, hearing aids are not able to provide people with their natural hearing ability, dashing the clients' unrealistic expectations. Further, a common assumption among audiologists is that technology advances have been so good that when fitted with hearing aids, people with hearing loss would be able to hear as they did before they lost this ability (Hickson, 2012). This is not the case despite major advancements in the hearing industry, examples of this are moving from analogue to digital hearing aids, the possibility of having more than one listening program and automatic adjusting features. According to Hickson (2012), the client's hope for a simple fix-it solution is usually short-lived, this discrepancy of unmet expectations have resulted in more focus on the client-clinician interaction within the medical and academic arena in recent years. This focus on

the client's narrative will ensure that the client's needs and concerns are heard, and that they receive quality care with the end goal of improving their overall quality of life.

### **2.3.2 Importance of counseling**

The importance of counseling in the amplification process is crucial, as English (2008) reported that it takes a person between two and 10 years to seek assistance for their hearing loss. Counseling is critical as those who are interested in seeking help need to be advised according to their requirements and expectations, and should not be lost in the process. The hearing care professional/audiologist wants to make sure that they appropriately assist the clients who come within the first few years of identifying their hearing loss, and ensure that they become long-term satisfied hearing aid users. Some audiology clinics and hospitals offer group intervention sessions at which hearing aid users and their significant others are invited to rehearse hearing aid operations or discuss communication strategies to promote effective communication.

Hearing care professionals often assume that if the client has an appointment booked for a consultation or hearing test that they are ready to seek help. This is often not the case, as many clients, after purchasing their hearing aid, stop using them. A low up-take of hearing aids with less than four hours per day results in 26% usage of hearing aids in total (Kochkin, 2007). These statistics reinforce the importance of audiologists meeting the needs of their clients, as technology alone is not the answer for individuals with hearing loss. Many reasons have been identified for this mismatch from purchase to non-compliance, with unmet expectations and clients being dissatisfied with the sound of the hearing instruments being the most common (Kochkin, 2007). Crandell (2000) indicated from a study conducted regarding counseling and the use of hearing aids that appropriate counseling is critical to rehabilitate individuals with hearing loss, noting that individuals who received counseling wore their hearing aids more and achieved a greater reduction in the perceived hearing handicap than non-counseled individuals.

The goal of the audiologist is to assist the individual to come to terms with their new self-image and manage the challenges that the hearing loss imposes on their daily life (Erdman, 2009). The audiologist assists the client to adjustment to the loss of hearing, make adaptations and develop skills to cope with communication and other hearing related experiences. Erdman (2009) explains that counseling is the means by which audiologists assist their clients to develop the confidence and

skills they need to manage their problems effectively. Traditionally, counseling was seen as a specific clinical activity provided separately from the actual hearing evaluation. However, it is also the ongoing facilitative process in which the client-clinician relationship evolves and functions, thereby creating opportunities to enhance the client's self-efficacy that is the key to successful management of a chronic condition (Erdman, 2009).

Counseling influences the commitment to the treatment recommendation as well as the reflection and realisation of treatment goals. It increases the satisfaction with all aspects of intervention, and empowers the client by instilling hope and self-belief that they have the ability to cope with their hearing loss. It enables clients to eliminate and reduce the limitations and restrictions experienced subsequent to their hearing loss (Erdman, 2009). It is therefore important that counseling is predominant in the clients' clinical encounter with the hearing care professional, as this enables expectations to be voiced and addressed from the beginning.

### **2.3.3 Pathway of counseling**

Research indicates that the limited amount of information that is able to be recalled by the client after information is shared with them to be of concern. One study shows that clients forgot their medical diagnoses even when it was a serious medical condition (Margolis, 2004). The pathway of counseling is important to examine, as the client is either attending the audiological consultations alone or with a significant other, with the flow of information therefore taking place in one of the following ways (Borg, Danermark, & Borg, 2002):

- Model 1: Therapist to client to significant other (transference from one person to the next) or
- Model 2: Therapist to client and significant other together (transference to both parties together from one source)

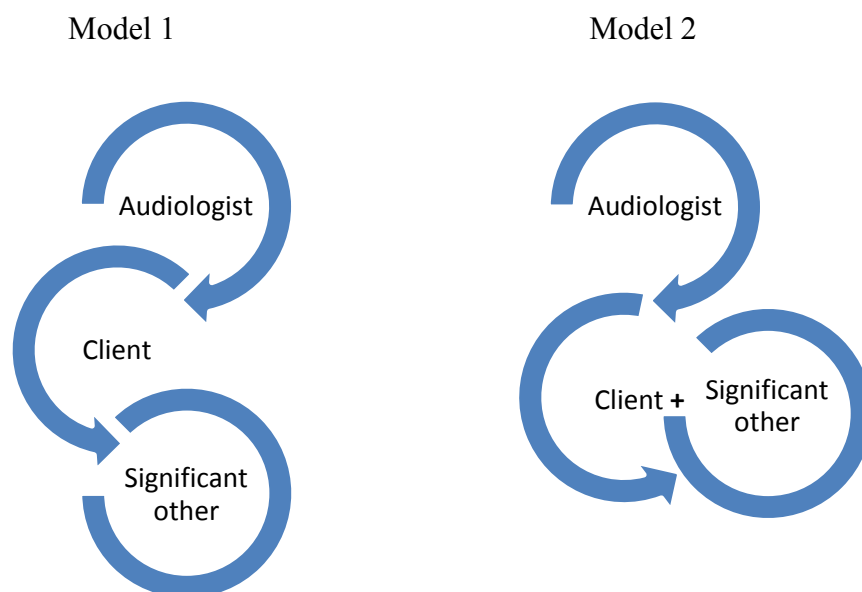


Figure 2.1 Pathways of counseling - Model 1 and Model 2 (Borg, Danermark, & Borg, 2002) (Model 1 indicates the pathway of counseling from audiologist to the client, while Model 2; the audiologist relays the information to the client and significant other at the same time)

In Model 1, the audiologist addresses the individual with hearing loss and the information is transferred from the person with hearing loss who then tells their significant other. The audiologist assumes the expert role during the aural rehabilitation plans. In contrast, Model 2 is an empowerment model of counseling education, where the audiologist addresses both the client and their significant other together, with the same information at the same time, and therefore not relying on the client to correctly relay the information to the significant other (Borg, Danermark, & Borg, 2002). A study evaluating these two models indicated that Model 2 was recommended (Borg et al., 2002), as this increased the client and their significant other's knowledge of hearing and communication, self-confidence and the ability to talk about hearing, hearing loss and communication problems. The significant others self-reported that their knowledge and understanding of the hearing loss and communication problems increased through this approach. These effects constitute changes in attitudes, and several clients reported decrease in irritation in terms of their challenges related to hearing loss and their communication breakdowns (Borg et al., 2002).

Behaviour modification is acknowledged as often requiring considerable time and motivation, as the person with hearing loss and the communication partner need to learn how to modify their behaviour to limit their communication breakdowns. Increased knowledge of hearing loss and its consequences and communication tactics for both parties is an important ingredient in attempts to



break a circle of communication breakdown, irritation and degraded self-esteem. The individual with hearing loss has the insights, knowledge and ability to counsel the partner in the communication situation or on a long term basis which promotes a positive spiral to be initiated (Borg, Danermark, & Borg, 2002). It is thus evident that counseling in audiology is a complex process.

#### **2.4 Counseling in the Audiology profession**

The audiology profession has a strong adherence to the bio-medical model; as a result emphasis is placed on the diagnostics of hearing loss rather than on rehabilitation for the affected individual. As an alternative, the bio psycho-social model encompasses a more client-centred approach, where the subjective experience of illness and disability are given greater attention (Erdman, 2009). In terms of the International Classification of Functioning, Disability, and Health (ICF) described by the World Health Organisation, hearing loss does not stop at the ear but rather *“requires the audiologist to consider how hearing loss impacts a client’s activities, the level of participation in those activities, the range of environmental and personal factors that influence and are influenced by living with hearing loss”* (English, 2009, p.971).

Counseling within audiology gained attention in the 1980’s, and a study conducted in 1981 that surveyed a sample of 500 audiologists in the United States concluded that more time was spent on informational counseling than on personal-adjustment counseling. The study respondents reported a higher perceived rating of their counseling skills in informational than personal-adjustment area (Flahive & White, 1981). Despite counseling receiving more attention since the last decade, the content and methods used appear to have changed very little, with the emotional and adjustment components being neglected. English (2008) suggests that counseling in audiology is an integrated skill and should not be viewed as an addition to the agenda of the clients’ consultation, but rather be implemented into all areas of the consultation/therapy session. English questions whether audiologists’ interactions with clients involve actively attending to and responding to the client’s psychosocial and emotional reactions to hearing loss, or resemble a business transaction (English, 2008).

Counseling begins the first time the clinician and client meet, at which time rapport begins to develop, and the clinician determines the needs of the client before proceeding with a hearing evaluation. The importance of this relationship between the two parties ensures that trust is built from

the first visit. The client then begins to trust the clinician and acknowledges their interest in the clients' well-being. An increase of client adherence of therapy goals can be seen when clinicians are counseling their clients (English, 2008).

According to Tye-Murray (2004, 2009), clinicians require three essential skills during client-centred care.

- Firstly, congruence of self is essential and reflects that the audiologists act as themselves during the clinical dyad (two units regarded as a pair – the clinician and the client) and not under a facade of professionalism, this being the most important parameter in client-centred counseling.
- Secondly, unconditional positive regard, which means that the audiologist should assume that clients know best and have inner resources to overcome their conversation difficulties.
- Thirdly, empathetic listening, which is a skill indicating that the clinician hears the client's concerns and feelings about their hearing impairment, and then reflects it back to them and with identifying a solution (Tye-Murray, 2004).

These parameters of patient-centred care highlights the many complex factors the client needs to come to terms with and deal with in their hearing journey. Each client is an individual who is influenced by both internal and external factors that shape their adaptation to a new identity of an individual with hearing loss. There are two factors that are seen to predict hearing aid use, these being perceived level of activity (how active the person is) and perceived level of difficulty. Individuals who lead more active lifestyles are more likely to take action earlier than individuals who lead less active lifestyles. Client-centred care requires the audiologist to use test results and clients' self-defined goals to address the problems of living with hearing loss (English, 2008). The myths and realities of the limitations and restrictions of hearing aids need to be addressed (Blood, 1997). This is a more complex and involved process.

Audiologists need to pay attention to the client's needs to facilitate faster acceptance of hearing loss and become successful long term users of amplification. By audiologists facilitating client ownership of their hearing loss, client empowerment and improvement in the quality of life for the client is a successful outcome for the clinician, client and the client's family. The delay of seeking assistance or the choice of not seeking assistance for an individual with hearing loss will impact their life as well as adversely impact the lives of their immediate family.

Clients come into the consultation with their own agenda. Therefore, it is important that the audiologist attempts to understand the mind-set of the client and his/her point of reference before providing counseling. Counseling then needs to be tailored to meet the client's needs by setting realistic expectations. Being able to tailor counseling to the needs of one's clients then questions how audiologists are trained to tailor counseling to their clients' needs.

## **2.5 Training of audiologists**

The audiologist's role is to help the client to recognise the negative impact that the untreated hearing loss has on an individual life, and to articulate the client's need for change (Clark, 2010). For many student audiologists, it is difficult to try and deal with the emotions and unresponsiveness of clients, and they often try to meet their supervisors' expectations rather than their clients' needs (Clark, 2010). Crandell, Culpepper and McCarthy (1994, as cited in English, 2005) highlight that for many years, the curriculum around counseling in audiology programmes has been limited, with no concerted effort being made to prepare students to interact with these aspects of client care. Clients have reported discontent regarding what they anticipated to seek from the audiologist in contrast to what the audiologist provides. The client wishes to seek personal support and adjustment to the chronic disability while the audiologist sees their role as providing information and technology details (English, 2005).

While audiologists are required to provide counseling to their clients, the question arises as to how prepared they are to do this. Crandell (2000) highlights that students trained in the USA receive limited exposure to counseling through their graduate school curricula (master's program). He also indicates that the deficiency of formal course work in counseling is presumably the reason why adults with hearing loss, and parents of children with hearing loss, are not highly satisfied with audiologists counseling skills. Ninety four percent of the programmes he surveyed offered counseling, but only 22 % required it to be taken as a course. At publication of the article in 2000, his suggestion was that audiology programmes add counseling to their curricula, whether it is on campus training or through distance learning clinical doctoral/AuD (Doctor of Audiology) degree, and that the profession no longer only rely on gaining counseling skills while on the job as clinical experiences (Crandell, 2000; English, 2009).

In the United States, a new standard to practise audiology was introduced in the early 2000's as a clinical doctoral/AuD program which implemented changes by including counseling in the course program. As cited in English (2005), 71% of AuD programmes required a course in counseling, only 14% actively integrated counseling as a topic into the existing coursework. This indicates that 85% of the AuD programs include counseling as a topic compared to only 12-18% coverage in Masters Programs. This indicates a collected move to including more counseling coursework into the audiology program (English, 2005).

The Audiology Counsellor Growth Checklist (is an example of how to facilitate developing skills in student audiologists by building positive clinical relationships). Five specific areas of clinical interaction are highlighted:

1. The manner in which students greet the client and open the session;
2. Their clinical demeanour and style of information delivery;
3. Their ability to affirm the worth of their clients;
4. Their success in encouraging clients to share their stories; and
5. The manner in which they help clients explore potential solutions to their hearing difficulties.

These five areas of clinical training can be seen to support in developing the three essential skills during client-centred care as outlined by Tye-Murray (2004, 2009), to develop future audiologists in the field.

Developing trusting relationships between health care providers and their clients is essential for clinical success. By addressing the five areas of clinical interaction, supervisors can help students to increase their confidence within the clinician-client dynamic, be more comfortable when delivering the "bad news" of hearing loss, and respond to angry or resistant clients in a way that will help move the consultations in a more positive direction (Clark, 2006).

In South Africa, the Audiology curriculum varies across the six universities that provide tertiary level instruction. Different four year undergraduate degree programs are offered; Speech-Language Pathology degree, Audiology degree or a dual Speech-Language and hearing degree.

Within this diversity, there is a lack of consistency across the different training institutions in terms of the professional preparation provided (Wemmer, 2007).

In South African, hearing loss is often a secondary health concern when compared to the epidemics of HIV/Aids and Tuberculosis (TB), hearing loss often goes untreated. This hierarchy of medical needs is often the dilemma for clinicians tasked with providing client care, with the hearing care professionals' role in these instances usually being to monitor the clients hearing thresholds when they are administered ototoxic medication. For those relying on public health services, a lack of information, poverty and low socio-economic status, accessibility of services, different belief systems and language barriers may affect the interaction of the hearing care professional and their client. Hearing loss can be considered a chronic health condition, and may be compared to conditions such as diabetes, where clients are empowered to take control and self-manage their condition. This paradigm shift towards a more client-centred approach has also been seen in the audiology field in recent years (Hickson, 2012), and indicates the move from a medical approach with one way information flow from the health professional to the client, to two-way communication to address more than the clinical component. It entails the client being involved and encouraged to be active in the decision making process of the rehabilitation plan (Hickson, 2012).

The Health Professionals Council of South Africa (HPCSA, 2012) outlines in the scope of practice for Audiologists that counseling is one of the ten clinical services offered by the profession. Development of culturally appropriate, audiologic rehabilitative management plans, including counseling with regards to psychosocial aspects of hearing loss and other auditory dysfunction, and processes to enhance communication competence, are also listed. The comprehensive audiologic rehabilitation encompasses speech and language habilitation, or rehabilitation including but not limited to speech-reading, auditory training, communication strategies and manual communication, which are all viewed as counseling in terms of psychosocial adjustment for persons with hearing loss as well as their families or caregivers (HPCSA, 2012).

Another challenge Audiologists face in South Africa is providing services to the hearing-impaired of a diverse country, with a range of climates, geographies, cultures and languages. The differences also run across being a mixture of developed and developing contexts, with the country generally being considered a developing nation (Swanepoel, 2006). The number of qualified

audiologists is inadequate to meet the demand for Audiological services, and it is also a challenge delivering services that are linguistically and culturally appropriate to the majority of the population.. Uys and Hugo (1997) highlight that the minority of Audiologists are mother tongue speakers of English and Afrikaans, which is a considerable barrier to the profession by many of its inhabitants who speak an African language (as cited in Swanepoel, 2006). The racial diversity of the country is further diversified by the various cultures, races and associated dialects, with South Africa having 11 official languages of which English is only 5th on the list (Swanepoel, 2006).

The majority of the audiologists are in the private sector offering services to a minority of the population that can afford these services. The rest of the population that cannot afford to see an audiologist in private hospitals rely on the public sector for services. The ratio then increases in the public sector of the number of individuals with hearing loss per audiologist which serve the largest portion of the population (Swanepoel, 2006).

The past 50 years have laid the foundation of the Audiology profession in South Africa; it is now time to provide culturally and linguistically appropriate services to the entire population based on quality training and contextual research efforts (Swanepoel, 2006).

Having the ability to reflect and learn from client interactions within the audiology profession is a term called reflective practise in audiology, and is common in other health care professions which are used by the clinicians to develop self-awareness and enhance critical thinking skills. Reflection is the opportunity that the audiologist has to think about their own behaviour in a deliberate, critical and analytic way, and often occurs when something goes wrong in the clinical encounter. A reflective journal has been developed at the Ida Institute that offers audiologist's the chance to look back at what occurred to improve the future (De Placido, 2010). It is believed that by understanding their behaviour, with modifications, audiologists become more effective with clients during the clinical encounter (De Placido, 2010). Thinking and learning from own practise on a regular basis, with both successful and less successful clinical encounters, can help provide better service for the client. Improved interaction between the client and the professional occurs as the reflection focuses on, "*Is this what I think the person wants or is this what the person is telling me he wants?*" (De Placido, 2010, p. 21). As an audiologist, developing the skills to understand what the client's needs and wants are, and reflecting upon this to better provide tailored counseling that meets the client's need to accept and adjust to their hearing loss is of great importance.

## **2.6 Summary**

It is evident that many factors contribute to effectively counseling adult clients who require amplification, from both the client as well as the audiologist. This chapter provided an overview of factors affecting audiologists who need to provide counseling to adult clients, as well as the challenges clients faced when seeking assistance. The literature presented largely reviews the international literature, as little is available in the South African context. A simple solution to combat hearing loss is not simple but rather complex as human beings are complex beings. The literature clearly outlines the importance of counseling to accompany hearing amplification to ensure satisfied clients. Hearing loss cannot only be viewed as a loss of sense but rather a part of a whole person with other contributing factors.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.1 Introduction**

Leedy and Ormrod (2013, p.2), define research as “...*a systematic process of collecting, analysing, and interpreting information –data- in order to increase our understanding of a phenomenon about which we are interested or concerned.*” Formal research occurs when it is with intention that research is carried out to enhance the understanding of a phenomenon and then communicate it to a larger scientific population (Leedy & Ormrod, 2013). This chapter details the research methodology used as well as the systematic approach taken to collect, analyse and interpret the data related to counseling of adult clients with hearing aids by audiologists within South Africa. Furthermore it outlines the ethical and legal considerations there were abided by.

#### **3.2 Aim and Objectives**

##### **3.2.1 Aim**

The main aim of the study was to determine audiologists’ practices and views regarding counseling adult clients who require hearing aids in South Africa.

##### **3.2.2 Objectives**

The study had the following objectives:

- To describe the nature of counseling offered by audiologists to adult clients who require hearing aids
- To describe their views on the skills needed to counsel adult clients who require hearing aids and challenges faced

#### **3.3 Research design**

The study took the form of a quantitative descriptive research design, with data collected by means of a self-administered semi-structured electronic questionnaire survey. Maree and Pietersen (2007, p.145) define quantitative research as, “... *a process that is systematic and objective in its ways of using numerical data from only a selected subgroup of a universe (or population) to generalise the findings to the universe that is being studied*”. The current study therefore used a questionnaire survey in order to include a large population of Audiologists to ensure representation



of their diverse demographic and work experience. The data was used to describe and explain the status of phenomena, views, and report current practises and to draw comparisons.

An electronic survey is best suited for this research as it entails reaching a large population, is more cost effective than a mailed questionnaire, and can ensure anonymity (Leedy & Ormrod, 2013). A disadvantage of this type of study is the possibility of low response rates (Walonick, 2010). A 58 question online questionnaire for registered Audiologists in South Africa was administered to explore, describe and compare the difference in counseling offered to adult clients who required counseling in lieu of hearing amplification.

### **3.4 Study area and participants**

The study was conducted in South Africa, where Audiologists who train locally receive instruction at one of six tertiary institutions over four years of undergraduate training. They come from a range of cultural and linguistic backgrounds, but instruction is generally in English and or Afrikaans, and after graduating, is required to work in the public health service for a year of community service. While it is possible to indicate a preferred area to work in during that year, the graduates can be placed anywhere within the preferred region, or in the rest of the country. This means that they will interact with people who may not share the same culture or language, or with the same access to information about hearing problems or solutions. All practicing audiologists are required to be registered with the HPCSA and communication is primarily through postal mail. Registration with professional associations is via electronic communication is very often used to communicate with members.

#### **3.4.1 Inclusion and exclusion criteria**

The following inclusion criteria were applied for this study:

- Be registered with the South African Speech-Language-Hearing Association (SASLHA) and/or South African Audiologists Association (SAAA)
- Be currently practicing in South Africa.

The following exclusion criteria applied:

- Those registered with the professional bodies but practising outside the country.
- Those not registered with the South African Speech-Language-Hearing Association (SASLHA) and/or South African Association of Audiologists (SAAA)

### **3.4.2 Study sample and size**

A purposive sampling technique was used in this study, as it allows a specific population to be targeted (Maree & Pietersen, 2007), namely the audiologists who belonged to a professional association in South Africa, which is believed to have the most active members of the profession. This also provided easy access to participants in terms of the data collection method. Ensuring that only audiologists respond to this questionnaire was imperative to gain the correct target group. Purposive sampling is often referred to as the non-probability sampling method, as this is not a random selection of the population. The population was not viewed as a potentially vulnerable population, as all higher education universities in South Africa that provide Audiology instruction do so use English as a communication medium.

Once approval had been obtained from the South African Speech-Language-Hearing Association (SASLHA) and South African Audiologists Association (SAAA), their database of members was obtained and all those who were not audiologists were removed from the list. The members who belonged to both associations were only accounted for once. This resulted in two lists with a total of 1119 Audiologists:

- South African Speech-Language-Hearing Association (SASLHA): 864 people
- South African Association of Audiologists (SAAA): 255 people

### **3.4.3 Description of participants**

A total of 1119 participants were included in the study. Fifty-five (36%) of participants were registered Audiologists whilst the majority of the participants, 93 (61%) were dually registered STAs; the remainder of the four participants (3%) indicated 'other' as their educational background. From the data sample, 45 participants unsubscribed from the study indicating that they were no longer practicing Audiology, retired or only attending to clients who required speech therapy services. In addition to this number, 16 email addresses were invalid which resulted in the survey invitation email being bounced therefore the total of active target participants were 1052. A total number of 152 questionnaires were completed which results in a 14.4 % response rate.

### **3.4.4 Participants age and gender**

The majority of the participants, 148 (97.4%), were female while only 4 (2.6%) were male. The largest number of participants fell in the younger aged category under the age of 35. In Figure 3.1 the frequency of age is reported. The majority of participants currently practicing within the field

of adult audiology are between the ages of 26 and 30 year (47%), with an overall mean age of 32.75 years.

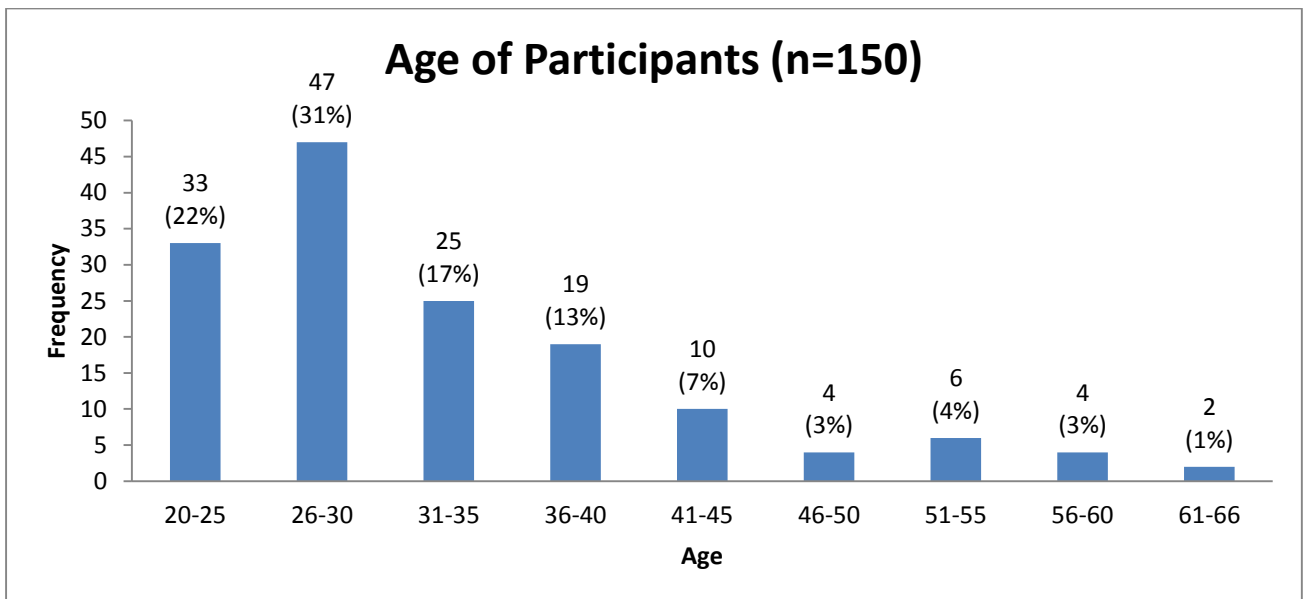


Figure 3.1 Age of Participants

### 3.4.5 Description of participants' educational background

Across the six universities in South Africa, different qualifications allow the practise of audiology. The following bar graph summarises the distribution of participants into the various qualifications.

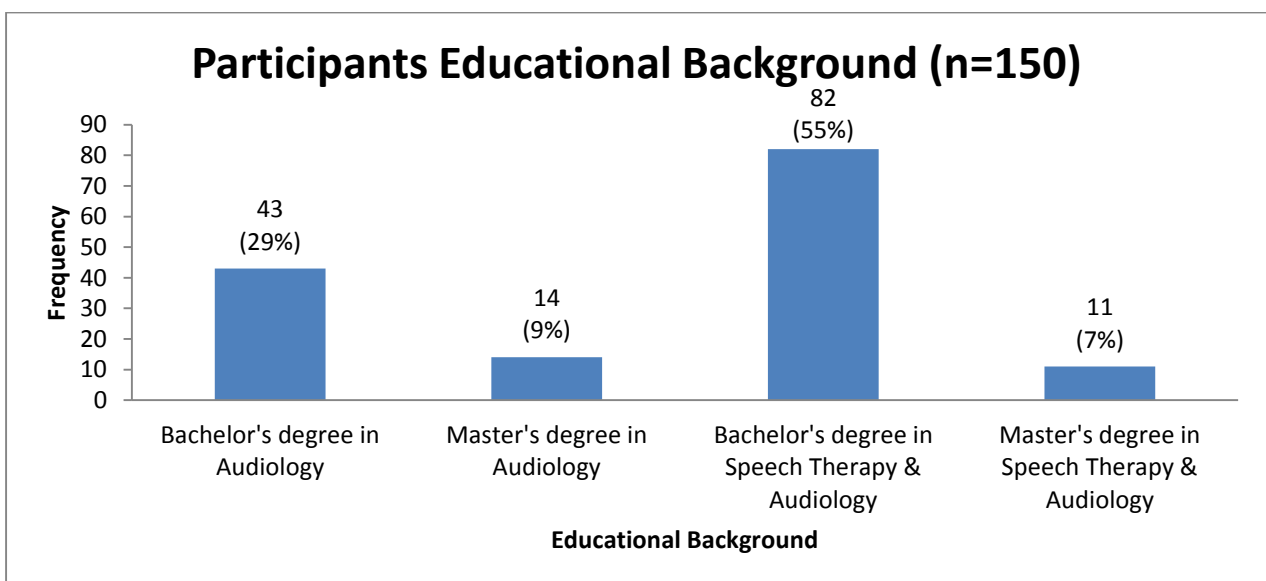


Figure 3.2 Participants Educational Background

In Figure 3.2 above, it clearly indicates that the majority of the participants (55%) held a dual bachelor’s degree in Speech Therapy and Audiology. The majority of the participants hold bachelor’s degrees (84%). Participants with Bachelors and Masters Degrees in Audiology, totals to a number of 57 participants which results to 38% of the total participants.

### 3.4.6 Sector of practice

The practice of Audiology catering to adult clients in South Africa is practised across a variety of settings. Participants were requested to state their current employment setting according to a list provided. They were divided into private practice/private hospital, government hospital, government school, special needs school, hearing aid manufacturer, old age home, university, N/A and other. The majority of the participants, 60% (90) participants in this study reported to be working in the private sector, 20% (30) participants reported government hospital as their sector of practise whilst only 9%(13), a minority of the participants were within government-schools, hearing aid manufacturer and special needs school. None of the participants in this study reported to be working in an old aged home and in the category labelled “other”, 17 of the participants (11%) indicated that their daily practice environment consisted of government clinics, private schools, consultants or tutors.

### 3.4.7 Years of clinical experience

The years of clinical experience post-graduation of the participants is indicated in Figure 3.3 below.

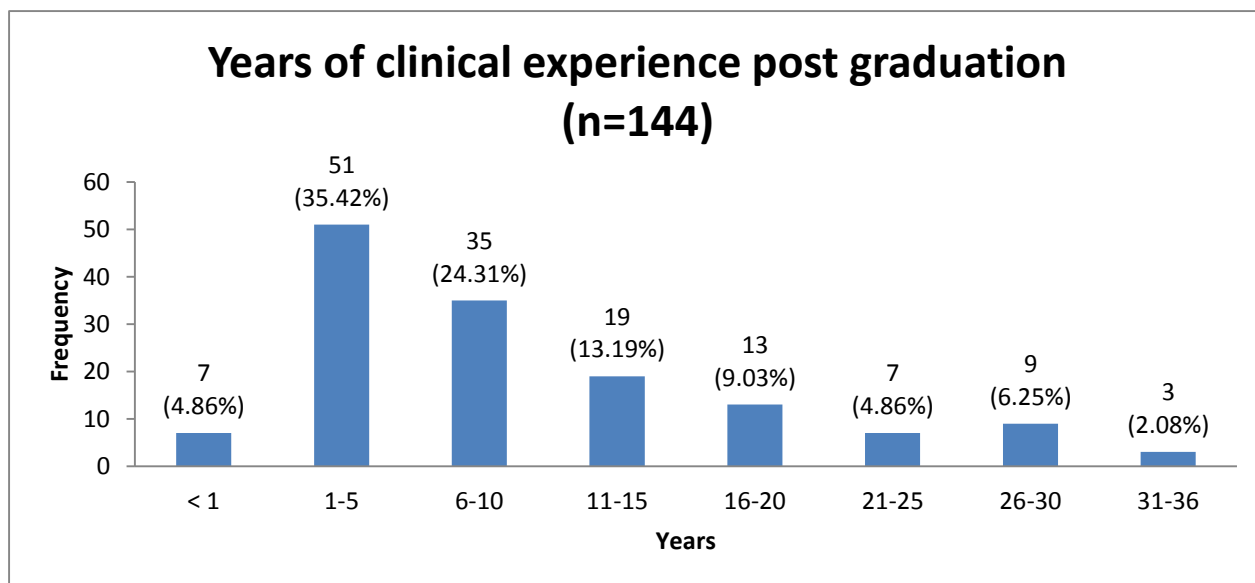


Figure 3.3 Years of clinical experience

The bar graph above reports the distribution of the length of time participants have been practising within the profession. The majority of the participants have been in practise for less than 10 years. Seven (4.86%) participants reported that they had 0 years of clinical experience therefore this means that this group of the participants were in their first year of clinical work post-graduation i.e. community service. Only 144 of the 150 participants answered this question.

### 3.4.8 Employed in client-contact environment

The majority of the participants in the study indicated that they spend between 61-100% of their work day on client contact activities as shown in Figure 3.4. Furthermore, Figure 3.5 depicts that majority of the participants work load (61-80%) are adult clients. This indicates that the purposive sampling is representative for the purpose of the study.

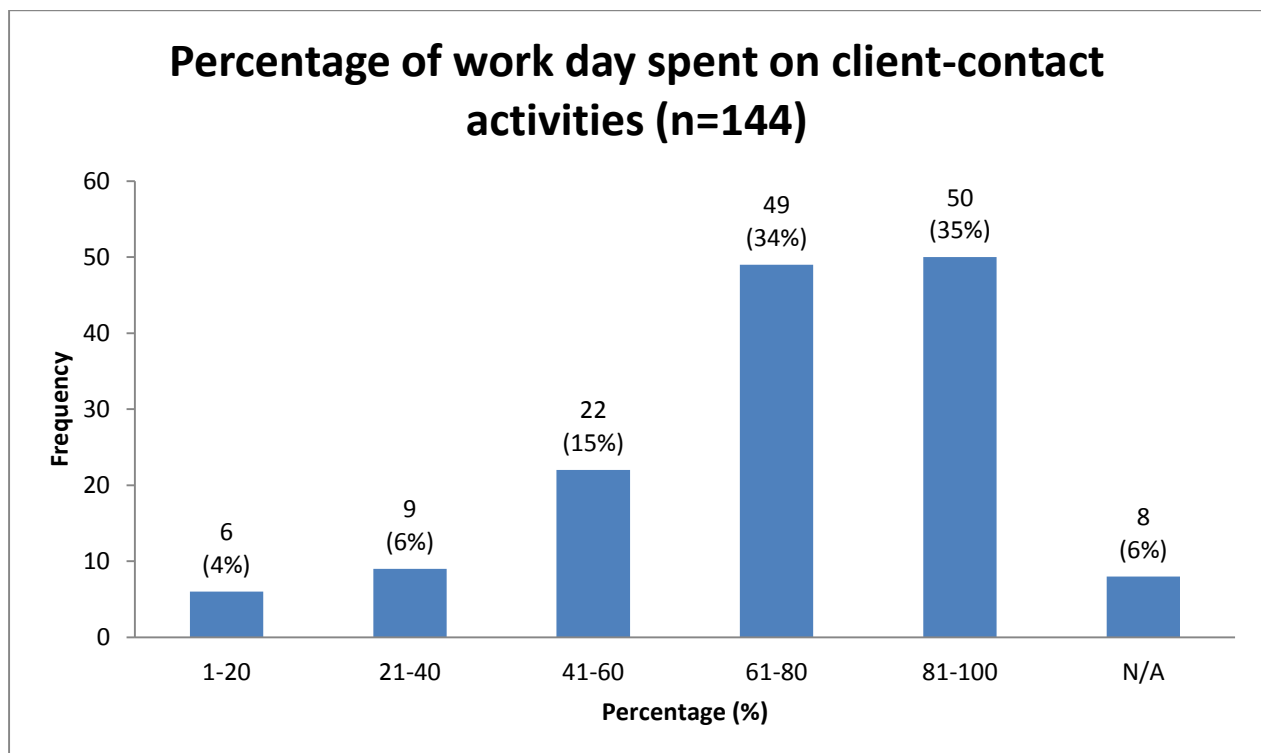


Figure 3.4 Percentage of work day spent on client-contact activities

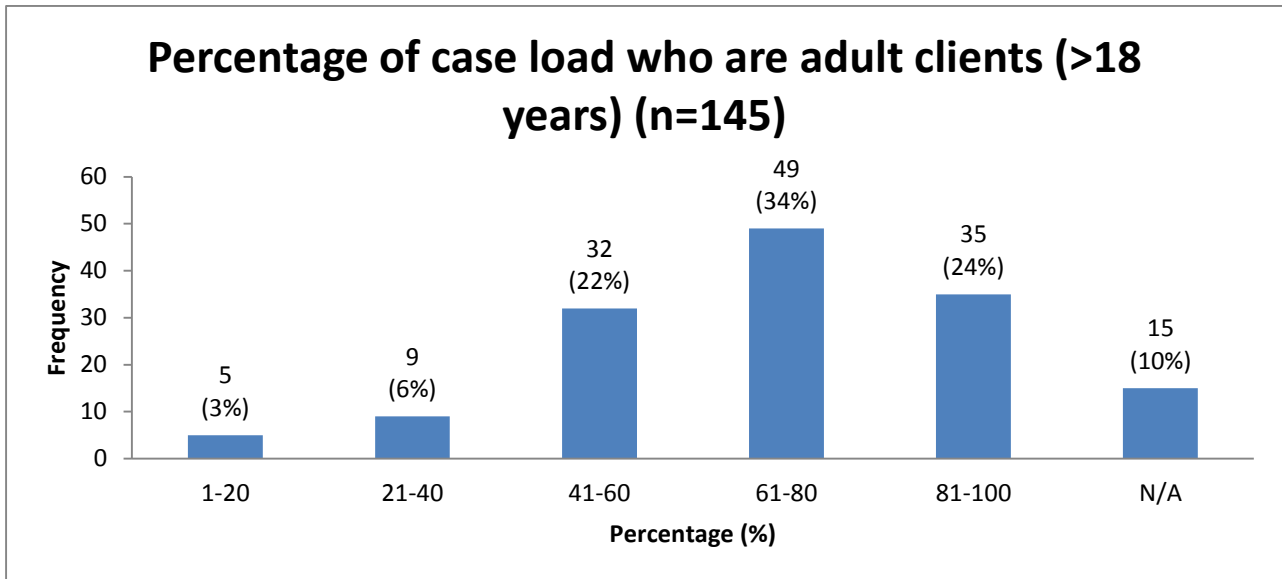


Figure 3.5 Percentage of case load who are adult clients

### 3.5 Data collection instrument

#### 3.5.1 Development of questionnaire

A questionnaire was designed with a range of questions, most of which required a choice to be made from a provided list of five answers to enable closed ended questions analysis. Where appropriate, a sixth option of ‘other’ was provided, with an opportunity to write down their open-ended response should the provided answers not adequately accommodate their response (Williams, 2003). The questionnaire took the following guidelines into consideration (Cohen, Manion & Morisson, 2011):

- Dichotomous questions: to obtain quantitative nominal data. This is a useful type of question which provides answers that are clear and unequivocal responses.
- Multiple-choice questions: a method of close ended questions where participants could choose a response from a range of options provided. This is a form of quantitative data collection and ensures quick coding and frequencies of responses.
- Likert scales: 1-5 point ratings scales provide a range of responses to a given question or statement. Rating scales offer the opportunity for flexible responses with the ability to determine frequencies, correlations and other qualitative analysis (Cohen, Manion & Morisson, 2011).

- Open-ended questions: these were used to gather qualitative responses from the participants to some of the challenges they faced.

### **3.5.2 Description of questionnaire**

A questionnaire was compiled to meet the study objectives and consisted of the three sections (Appendix A) and is detailed in Table 3.1. The research tool drew on a study conducted in the early 1980s entitled *Audiologists and Counseling* (Flahive & White, 1981), with 20 questions of the original questions being modified and incorporated into the questionnaire. The final survey questionnaire in this study had a total of 58 questions, the additional questions being derived from literature that highlighted issues in counseling in Audiology, and were included to shed light on the audiological practice in South Africa with regards to counseling. The questionnaires were divided into three areas and are indicated in Table 3.1. The questionnaire was only provided in English, as all audiologists were expected to be proficient in English.

The questions were divided into sections with clearly marked start and end marks to each one to make it easier for the participant to distinguish between them (Williams, 2003). The questions were short, simple and specific to ensure that there was no ambiguity in the answers required. The questions were directly related to the research question, which explored the characteristics of the different study group and included filler questions that, while not part of research, added to the flow of the questionnaire (Williams, 2003). General questions preceded more specific questions, and personal questions were featured last to ensure that the participants had gained trust and an interest in the study (Williams, 2003). Refer to Appendix A for the questionnaire.

Table 3.1 Description of the questionnaire

<b>Sections of the Questionnaire</b>	<b>Aspects covered</b>	<b>Motivation for inclusion</b>
<p><b>Section A. Background Information</b></p> <p><b>Questions 1-10</b></p>	<ul style="list-style-type: none"> <li>• Age</li> <li>• Gender</li> <li>• Qualification</li> <li>• Experience</li> <li>• Sector</li> </ul>	<p>To address the vast difference in educational programs and settings of employment within the South African context. Inferential statistics were used to correlate different variable to establish if statistical significance was present.</p>
<p><b>Section B. Current Practice</b></p> <p><b>Questions 11-50</b></p>	<ul style="list-style-type: none"> <li>• Current area of practice within Audiology</li> <li>• Types of counseling offered; informational, rational acceptance, adjustment.</li> <li>• Time spent counseling per client</li> <li>• Counseling offered to the client only or/and the significant other</li> <li>• Current level of confidence in counseling. Perceived skill level and current skills, materials used in counseling sessions</li> <li>• Views of clients behaviour with regards to hearing loss</li> </ul>	<p>To understand the current practises of audiologists in South Africa within the counseling realm.</p>
<p><b>Section C: Challenges</b></p> <p><b>Questions 51-58</b></p>	<ul style="list-style-type: none"> <li>• Challenges faced in the different types of counseling</li> <li>• Issues of training received</li> </ul>	<p>Literature indicates that audiology educational programs do not adequately equip young professionals with the necessary skills to counsel clients with hearing loss. Therefore assessing the current confidence in the skills and the need for future training will highlight the future curriculum needs within the South African context.</p>



### **3.6 Pilot study**

A pilot study was conducted to evaluate the questionnaire, establish whether it would provide the required answers, identify obvious or possible weaknesses, and modify it to enhance its reliability and validity (Leedy & Ormrod, 2013). A number of authors highlighted that the appropriate functioning of a questionnaire is of paramount importance, and that pre-testing is crucial to its success (Cohen, Manion & Morisson, 2011). The questionnaire was administered to eight UKZN academic members within the Audiology field over a period of two weeks. The participants of the pilot study were not included in the final study. The modifications made to the pilot questionnaire are presented in Table 3.2.

Table 3.2 Results from the pilot study

Aims	Results	Outcome
<b>1. Wording of information/clarity</b>	<ul style="list-style-type: none"> <li>All participants felt that the overall wording was clear to understand, with the exception of questions 11-18 which they found too lengthy.</li> </ul>	<ul style="list-style-type: none"> <li>Questions 11-18 were edited to ensure a clear understanding of the questions by shortening them.</li> </ul>
<b>2. Terminology</b>	<ul style="list-style-type: none"> <li>All participants felt that the terminology used was clear, understandable and appropriate for an audiologist.</li> <li>Participants also felt that by providing explanations to the terms assisted in ease of completing the questionnaire.</li> </ul>	
<b>3. Difficulty of task</b>	<ul style="list-style-type: none"> <li>Overall, participants felt that the task was simple and clear.</li> <li>Participants did feel that question 11-18 was not very clear and needed some clarity.</li> </ul>	<ul style="list-style-type: none"> <li>Questions 11-18 were shortened to aid in clarity of the questions.</li> </ul>
<b>4. Ease of flow</b>	<ul style="list-style-type: none"> <li>Participants felt that providing the definitions of the different types of counseling provided at the beginning of the question was distracting from the actual question.</li> <li>Participants shared the view that information was repeated in the consent form and the information sheet</li> </ul>	<ul style="list-style-type: none"> <li>Definition of terms were moved from the above the questions to below to limited distraction from the questions.</li> <li>The information letter and the consent form were edited so that the information letter provided information regarding the study, the aim and contact details for more information whilst the consent form only stated that the participant was informed about the nature of the study, understand its voluntary to participant in the study and decide whether to agree/disagree to participant in the study.</li> </ul>

<b>5. Order of questions</b>	<ul style="list-style-type: none"> <li>• Participants felt that the order of questions were appropriate.</li> </ul>	<ul style="list-style-type: none"> <li>• Minor changes were made to assist in the flow of the questionnaire, with the order of the questions being slightly adjusted;</li> </ul>
<b>6. Format</b>	<ul style="list-style-type: none"> <li>• Clear</li> </ul>	
<b>7. Time/length</b>	<ul style="list-style-type: none"> <li>• 10-20 min</li> </ul>	
<b>8. Overall interest</b>	<p>All participants shared that the questions were appropriate, addressed the necessary areas of concern, and that the questionnaire was comprehensive.</p>	

### **3.7 Data collection procedure**

Ethical clearance was obtained from the Human and Social Sciences Research Ethics Committee of the University of KwaZulu-Natal before any data was collected (Appendix B). After obtaining ethical clearance, the secretaries of the professional bodies of SAAA and SASLHA were e-mailed to obtain the register of audiologists belonging to their organizations (Appendix C). Once the database was obtained, an invitation to participate in the study was sent via email to those listed in the database (Appendix D) and contained a link to the online survey that was hosted on a website called Question Pro. Voluntary participants entailed that the respondents clicked on the link that directed them to the consent page of the survey (Appendix E). The participant was required to give consent to participate before answering the questionnaire online. Participants were required to indicate their consent to participate on the first page which provided information about the project and details regarding ethics and confidentiality, which were maintained during the study. Participants were able to access the questionnaire easily and at a time that was convenient for their lifestyle. The participant was then presented with the 58 questions of the semi-structured online survey. The 58 questions took approximately 15 minutes to complete, and all answered questionnaires were kept anonymous, with no possibility of tracking responses to a particular participant.

Data was collected over a four week period from 2<sup>nd</sup> April to 7<sup>th</sup> May 2014. Reminders were sent to participants who did not respond to the survey two weeks after the initial invitation and the second reminder one week after the first (Cohen et al., 2011).

### **3.8 Data analysis**

Once all the replies had been received, data was entered and analysed using SPSS version 21. Descriptive statistics such as frequencies, proportions, means and median was used to summarize results. The Kruskal-Wallis test was used to test relationship between age (and years of experience) and their skill rating. The McNemar test was used to test for the associations between categorical variables that were dependent. Cronbach's alpha was calculated to test for internal consistency. P-value less than 0.05 were considered to be statistically significant (Cohen et al., 2011).

Maree and Pietersen (2007) state that descriptive statistics are provided as a way of organising and summarising data in a meaningful manner to promote an understanding of the data characteristics whilst inferential statistics enable researchers to make inferences to the wider population.

The nominal data (gender, years of practicing audiology) was represented as bar graphs. A table of frequencies was used to calculate the percentage of audiologists who spend more time with their clients counseling them compared to those who offer less counseling. Comparisons included the means of the different times spent counseling clients as well as the types of counseling offered.

Open ended questions were analysed using thematic analysis and its frequency was tallied.

### **3.9 Validity and reliability**

A pilot study was conducted to ensure that the questions were short, easy to understand and was effective to solicit the correct outcomes (Leedy & Ormrod, 2013). Reliability and validity of the questionnaire was ensured by using mutually exclusion answers as well as Likert scales to yield ordinal data. Cronbach alpha was used to verify internal validity. There is a combination of open and closed ended questions. The questions were kept short and the participants' tasks were kept simple with straightforward and specific instructions. The language used in the questions was clear and unambiguous. These considerations were adhered to ensure the validity of the questionnaire (Leedy & Ormrod, 2013).

Reliability is the consistency of a measuring instrument which is able to yield a certain consistent result when the entity being measure has not changed (Leedy & Ormrod, 2013). Internal consistency reliability, which is the extent to which all the items within a single instrument yield similar results, was used to ensure reliability of the study. Questions 34-41 were tested for internal consistency using Cronbach Alpha which yielded a score of 0.69 and questions 42-48 yielded a score of 0.84; scores which are closer to one are considered to be of good internal consistency.

### **3.10 Ethical and legal considerations**

The following ethical considerations were adhered to:

- It is a legal requirement to obtain clearance from a Research Ethics Committee prior to starting any study in the field of health care in South Africa. Prior to conducting the study, a proposal was submitted to the Human and Social Science Ethics Committee at the University of KwaZulu-Natal. Once ethical approval had been obtained (HSS/1257/013M), the SAAA/SASLHA was contacted, and on receipt of their database, audiologists were invited to participate in the study. They had the choice whether or not to partake in the study by clicking on the link provided in an email.

- **Autonomy:** Informed consent was obtained before they could participate in the study, and they were informed that they had the right to withdraw from the study at any time. The consent form outlined the purpose, the non-invasive and voluntarily nature of the study. The consent page followed the information page, and only once they had agreed to participate and had submitted the consent form, the survey could begin. The participants were reassured that their confidentiality was protected at all times during and after the study, with no means of linking their responses to any biographical data, thereby ensuring anonymity.
- The identifying details of the participant would not be linked to their questionnaire, this coding having been done in setting up the survey. The questionnaires separated the participants' details from the answered questions that controlled for any identifiable measure of personal information. On completing the questionnaire, the researcher's contact information was displayed for participants who wished to make contact.
- The data is stored electronically at UKZN Audiology Department, and all electronic copies will be deleted after a period of five years. Any hardcopies of the data will be locked in the department for a period of 5 years and will thereafter be shredded. The researcher has completed the online ethics course offered by the University of KwaZulu-Natal via the National Institutes of Health (NIH) (See Appendix F).
- **Beneficence:** The potential benefit for the participants to partake in the study was that the results of the research could improve their situation and may contribute to improving the instruction provided in the undergraduate programmes that deal with counseling. The researcher abided to secure the well-being of all participants from harm and the possible benefits of their involvement in the study.
- **Justice:** The study was targeted to the registered population of audiologists belonging to a professional body therefore it did not exclude participants based on age, class, gender or social economic status.
- **Non-maleficence:** Participants were informed that the study posed no harm to them and that anonymity would be maintained at all times.

- Privacy: The nature of participants' performance on the questionnaire was strictly confidential and not accessible via the internet. No identifying details of participants are attached to the raw data set.

### **3.11 Summary**

In summary, the researcher adopted a quantitative survey research approach. The participants were accessed via two professional associations; SAAA and SASLHA. A pilot study was conducted on audiology academic staff at the University of KwaZulu-Natal. The study took the form of an online questionnaire targeted towards audiologists in South Africa, with the data being collected over a period of five weeks. Data analysis was conducted with the assistance of a statistician. Ethical and legal considerations were maintained as well as validity and reliability methods were considered.

## **CHAPTER FOUR**

### **RESULTS**

#### **4.1 Introduction**

In this section the results of the study are presented to address the main aim of the study, which was to determine audiologists' practices and views regarding counseling adult clients who require hearing aids in South Africa.

The comprehensive data obtained met the following objectives of the study:

- To describe the nature of counseling offered by audiologists to adult clients who require hearing aids;
- To describe their views on the skills needed to counsel adult clients who require hearing aids and challenges faced.

The data was converted to whole number percentages for analysis. Rounding errors consequently caused the total percentages to read from 99 to 101 for each category.

#### **4.2 Nature of counselling**

##### **4.2.1 Counseling need versus counseling received by adult clients**

When participants were asked to indicate the average percentage of adult clients who needed informational, rational acceptance and adjustment counseling versus those who received any of the three types of counseling, a trend appeared. Table 4.1 indicates the percentage of adult clients who needed counseling as compared to the percentage of adult clients who actually received counseling.



Table 4.1 Percentage of adults who need counseling versus actual percentage of adults who received counseling

Types of counseling – needed and provided	Average percentage of adult clients					n=
	1-20%	21-40%	41-60%	61-80%	81-100%	
Informational counseling						
Adults who need	6%	5%	12%	19%	58%	125
Adults who received	3%	6%	10%	20%	61%	127
Rational acceptance counseling						
Adults who need	7%	9%	28%	31%	24%	127
Adults who received	9%	12%	22%	32%	25%	123
Adjustment counseling						
Adults who need	6%	14%	23%	25%	31%	126
Adults who received	8%	18%	21%	25%	28%	126

The data suggests that more clients needed information counseling and did receive it as compared to rational acceptance and adjustment counseling. These later two counseling have lower percentage need and therefore lower percentage received.

#### 4.2.2 Average amount of time spent counseling

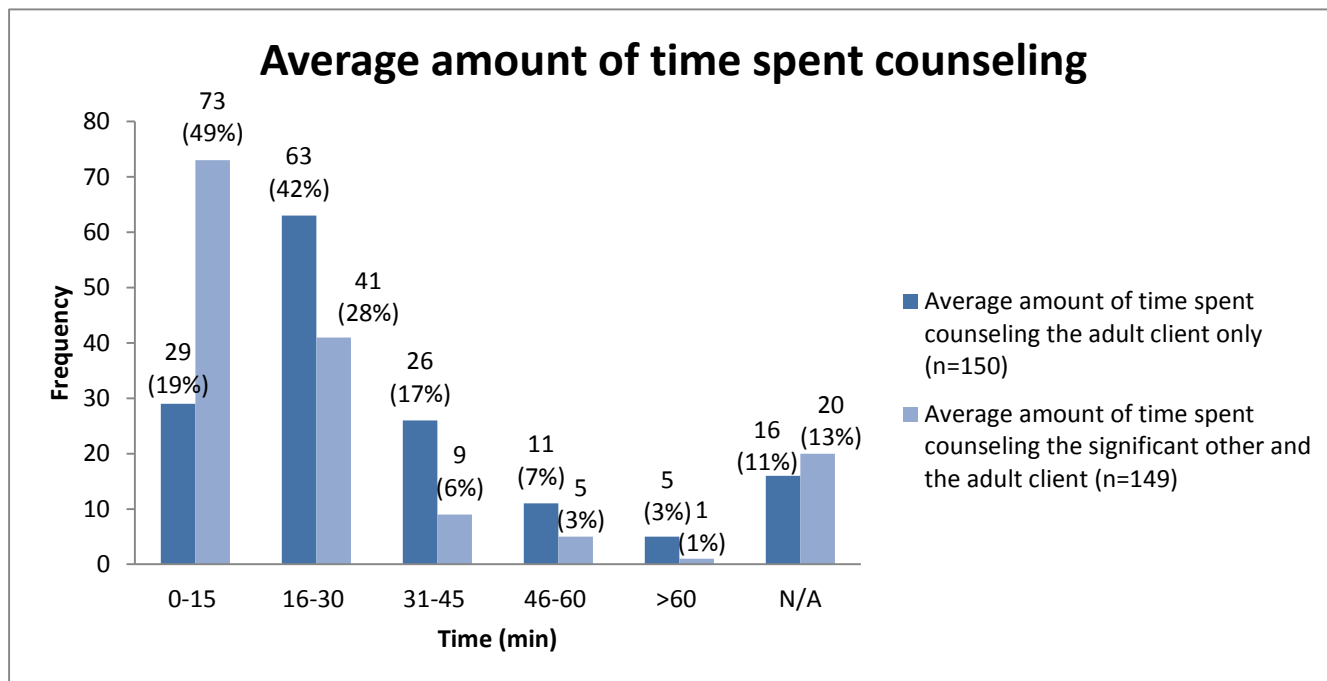


Figure 4.1 Average amount of time spent counseling the adult only versus counseling the adult and significant other person

When looking closer at the approximate time spent per client per session in the different counseling activities with adult clients, participants indicated that most of their time is spent with counseling the adult client only (Refer to Figure 4.1). The majority (42%) of the participants spent 16-30 minutes, 29 participants (19%) spent 0-15 minutes, 17% of participants spent 31-45 minutes, 7% spent 45-60 minutes and 3% spent above 60 minutes per adult client. It appears that there is no recommendation based on the actual time allocated to counseling but rather that counseling is integrated into existing audiology practice (English, 2005).

When asked regarding the average time spent on counseling the adult and significant other, results indicated that approximately half (49%) of participants spend 0-15 minutes with the both parties as seen in Figure 4.1. Therefore on average it indicates that more time is spent counseling the client.

As a validity question later in the study participants were asked to indicate whom they offered counseling to. The majority of the participants (79 %) indicated that they provided counseling to the adult client and the significant other whilst the minority, only 14 % indicated that they only provided counseling to the adult client only.

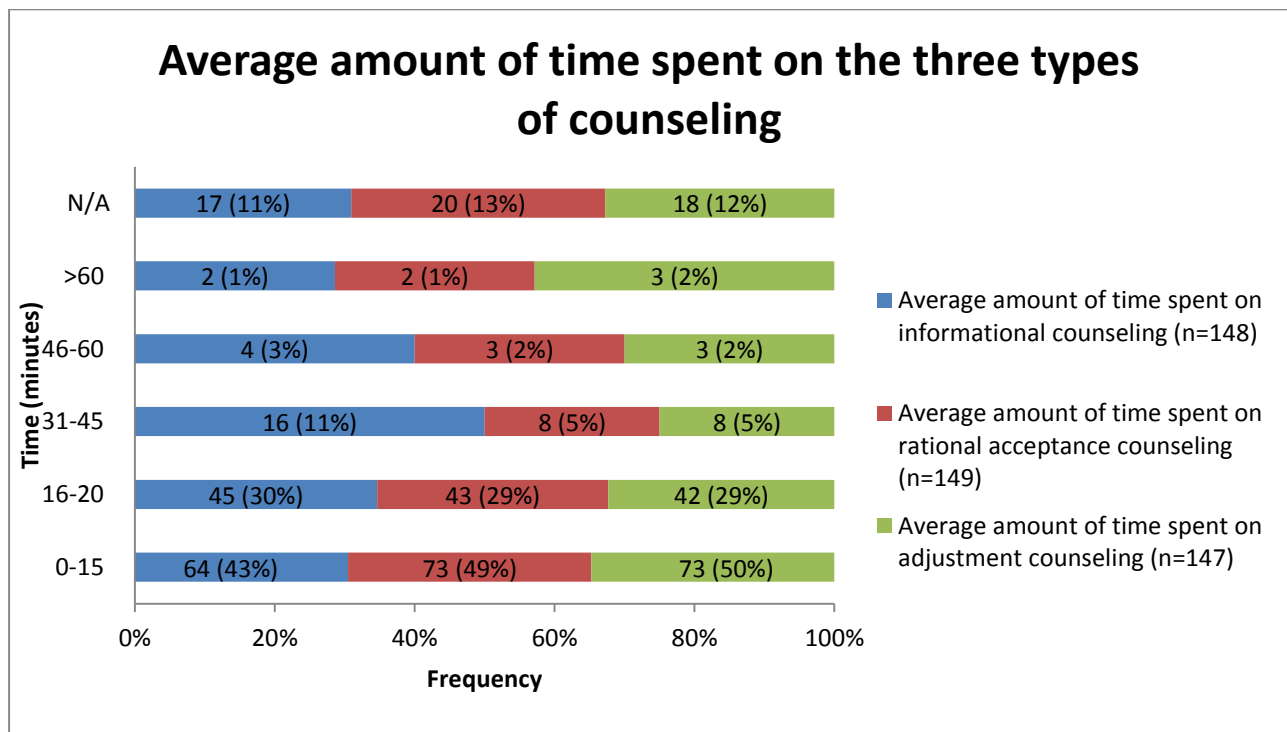


Figure 4.2 Average time spent in the three types of counseling

When looking further into how time is spent in the three types of counseling, Figure 4.2 depicts that on average the majority of the participants spent 0-15 minutes on counseling. A trend can be seen across all three types of counseling, as time increases less time is spent on all three types of counseling. Data shown in Figure 4.1 and Figure 4.2 suggest a similar trend of less time is spent counselling as time increases.

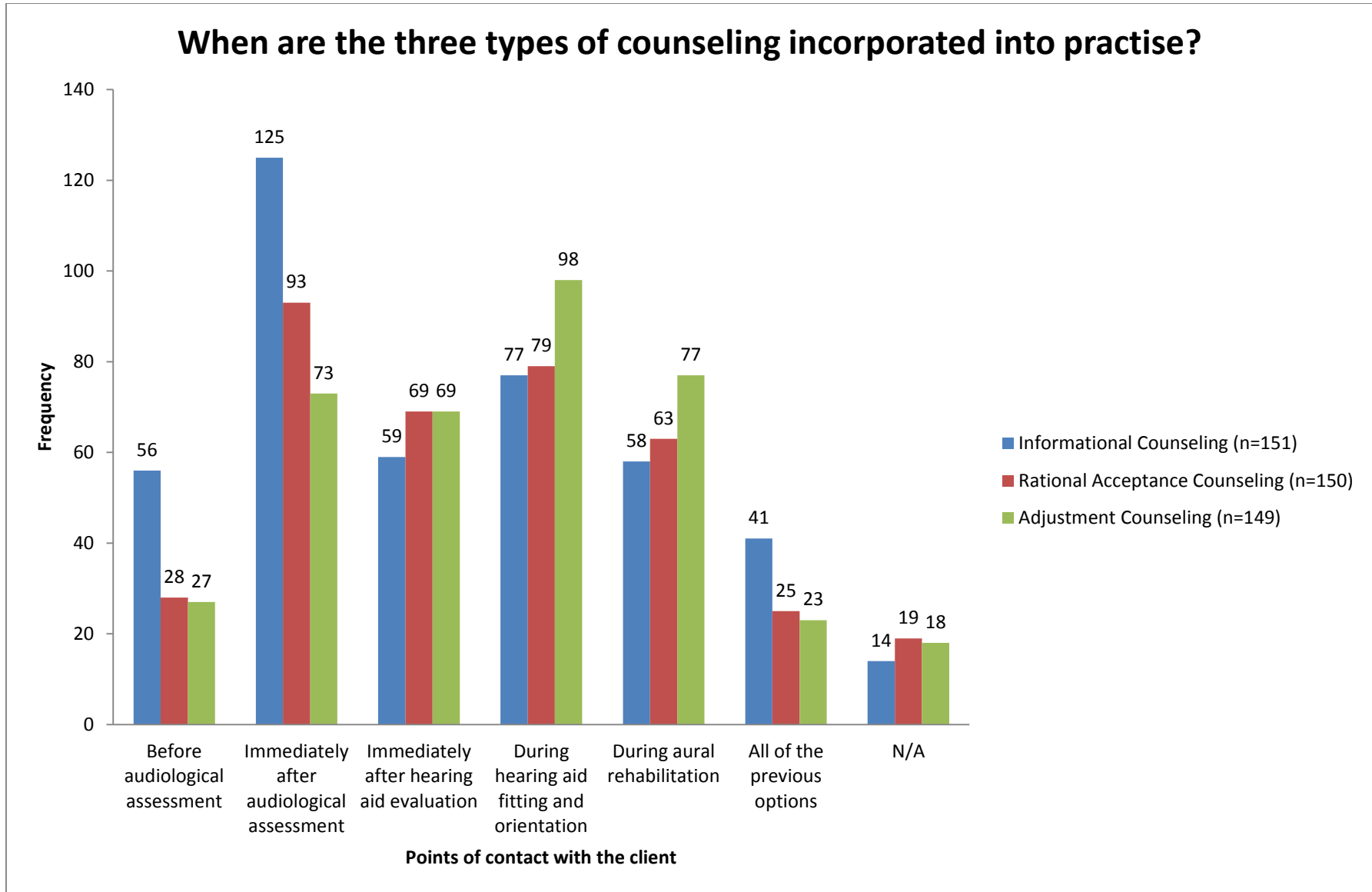


Figure 4.3 When is counseling incorporated into daily practice?

### 4.2.3 Counseling incorporated into daily practice

Interesting enough when the participants were asked to indicate at which points of contact with the client they incorporate counseling, the majority of the participants indicated before audiological assessment, immediately after audiological assessment and immediately after hearing aid evaluation.

Overall when participants were asked to indicate when counseling was incorporated into their daily practise. Informational counseling was incorporated from the beginning of contact with the client whilst rational acceptance and adjustment counseling was incorporated more equally later in the point of contact as seen in Figure 4.3.

### 4.2.4 Addressing the impact that hearing loss has on the client and family

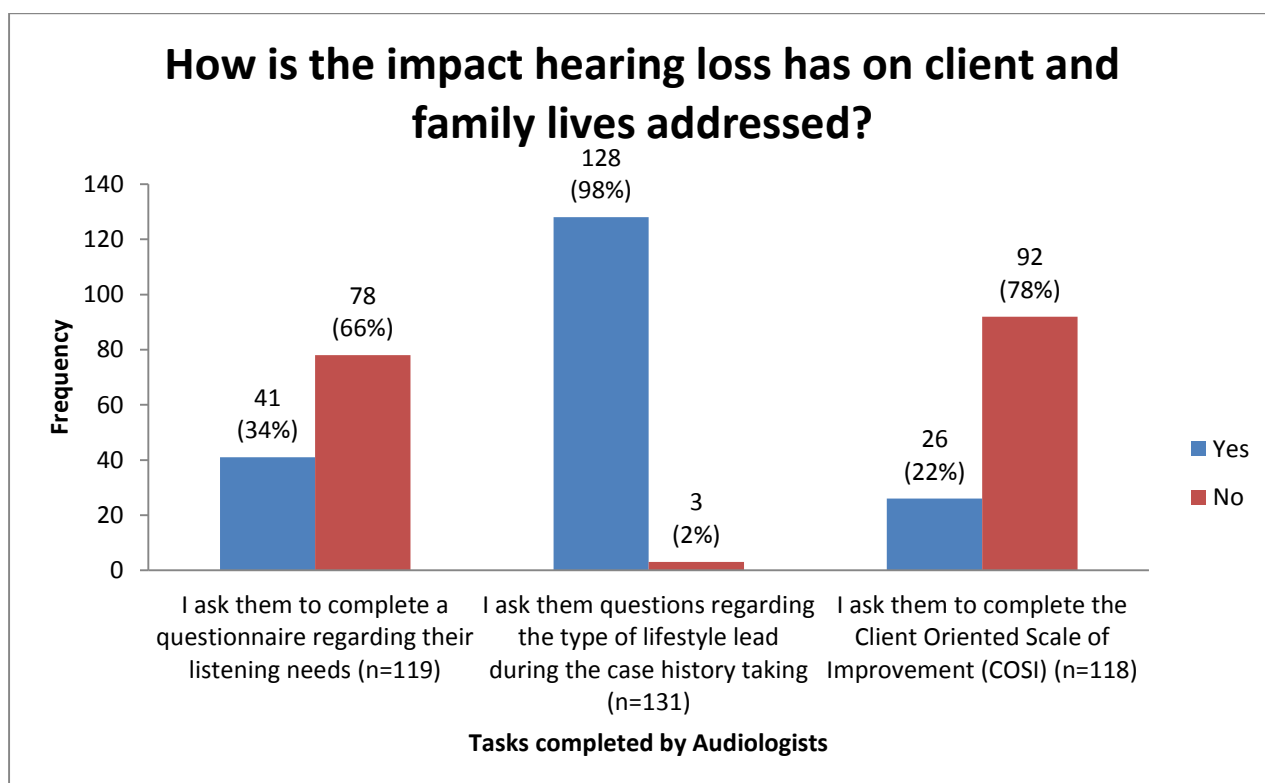


Figure 4.4 Addressing the impact hearing loss has on the client and family

The impact that hearing loss has on the client and their family, is an important aspect of understanding the strain and emotional impact experienced by both parties. Figure 4.4 summarizes how audiologists acquire this knowledge from the adult client. The majority of participants (98%), gained information regarding the impact of hearing loss on the client based on information gathered

during the case history whilst formal questionnaires and the Client Orientated Scale of Improvement (COSI) were less favoured with 34% and 22% respectively.

### **4.3 Counseling skills**

#### **4.3.1 Rating of skills**

Participants were asked to rate their own skill within the three realms of counseling, Figure 4.5 below indicates their perceived skill

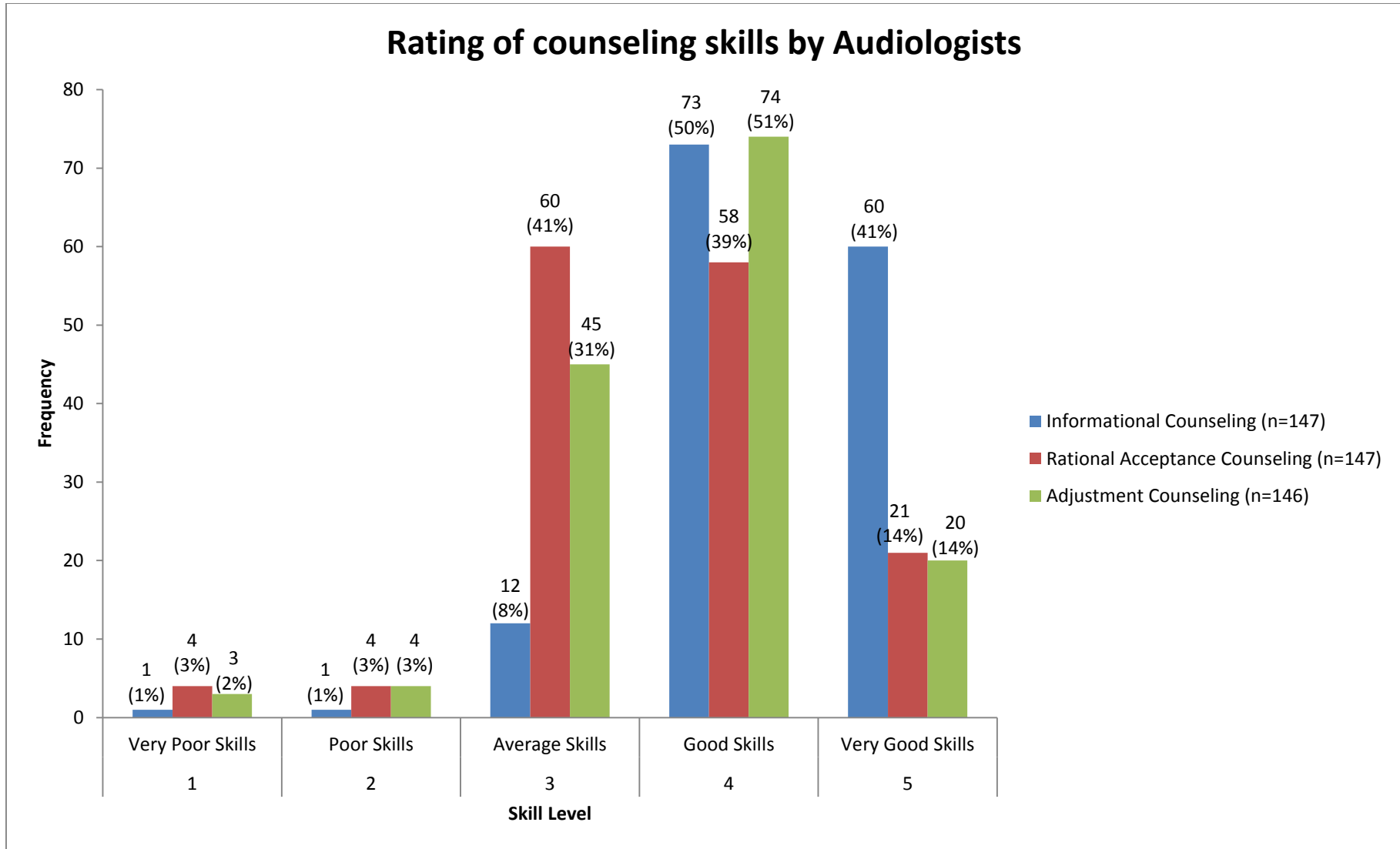


Figure 4.5 Rating of counseling skills by Audiologists

The majority of participants rated informational counseling as the highest of having very good skills in this area whilst skills in adjustment counseling on average was rated as good and rational acceptance counseling as average. A minority of participants rated their skills in all three areas of counseling from very poor (1) to poor (2) skills whilst the majority of participants rated their skills from three to five on a five point Likert scale, with 1 indicating very poor skills to 5 being very good skills. On further investigation, participants rating of skills were analysed with age and number of years of clinical experience post-graduation using the Kruskal-Wallis Test. This test allows for determining the differences between three or more groups on a rating scale (Cohen et al., 2011).



Table 4.2 Age and number of years of clinical experience versus level of rating of skills in providing counseling

Skill rating	Informational counseling		Rational acceptance counseling		Adjustment counseling		
	Age	Number of years of clinical experience post-graduation	Age	Number of years of clinical experience post-graduation	Age	Number of years of clinical experience post-graduation	
Very poor	N	1	1	4	4	3	3
	Median	58.00	25.00	26.50	3.00	28.00	4.00
	Minimum	58	25	22	0	22	0
	Maximum	58	25	58	25	58	25
Poor	N	1	1	4	3	4	3
	Median	22.00	.00	27.00	8.00	25.50	4.00
	Minimum	22	0	23	2	22	0
	Maximum	22	0	32	11	32	10
Average	N	12	11	60	57	45	43
	Median	29.50	6.00	27.50	5.00	28.00	6.00
	Minimum	22	0	22	0	22	0
	Maximum	43	19	55	33	55	33
Good	N	71	68	56	56	72	71
	Median	29.00	7.00	32.50	10.00	30.50	9.00
	Minimum	22	0	23	0	22	0
	Maximum	62	33	62	33	62	33
Very good	N	60	59	21	20	20	19
	Median	30.50	7.00	37.00	13.50	36.50	13.00
	Minimum	23	0	26	3	26	3
	Maximum	66	36	66	36	66	36
Total	N	145	140	145	140	144	139
	Median	30.00	7.00	30.00	7.00	30.00	7.00
	Minimum	22	0	22	0	22	0
	Maximum	66	36	66	36	66	36
	p=	0.035*	0.114	0.000*	0.000*	0.010*	0.013*

A closer look at Table 4.2 above indicates a trend that as the level of skill increases, the number of years of clinical experience also increases and so does the age of the participant. This implies that as the audiologist gains years of experience in counseling the adult client their rating of

their own skills in counseling increases. On average, less years (7 years) of experience indicated a skill rating of good and very good for informational counseling whilst between 9-13.5 years of experience on average were indicated for rational acceptance and adjustment counseling in the categories of good and very good. This trend indicates that less years of experience is needed in informational counseling to reach a higher level of skill rating as opposed to rational acceptance and adjustment counseling. The trend is statistically significant when age and number of years of clinical experience versus the level of confidence in skills in providing counseling with the exception of years of clinical experience in informational counseling. The statistically significant p value was set to 0.05.

When looking at Figure 4.2, the p- values were calculated for age and years of clinical experience versus the skill rating. Statistically significant values of  $p = 0.035^*$ ,  $p = 0.000^*$ ,  $p = 0.010^*$  and  $p = 0.013^*$  were calculated for age in informational counseling, age and years of clinical experience in rational acceptance counseling and age and years of clinical experience for adjustment counseling.

#### **4.3.2 Important attributes and skills that make a competent audiologist**

The participants rated the attributes and skills that make a competent audiologist as shown in Figure 4.6.

## Rating of attributes and skills that make a competent Audiologist

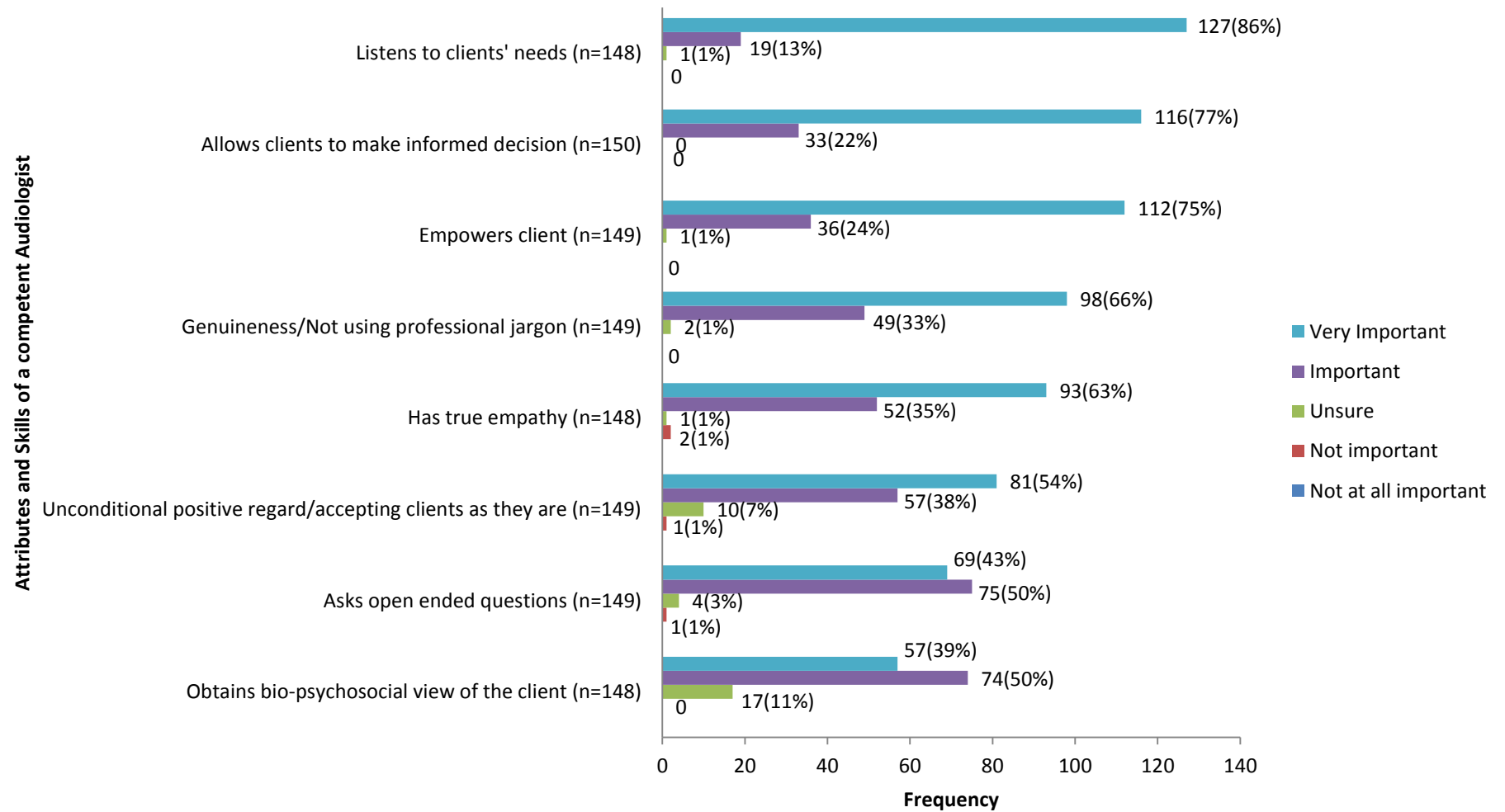


Figure 4.6 Rating the importance of attributes and skills that make a competent audiologist

Asking open ended questions, obtaining a bio-psychosocial view of the client, listening to clients' needs, allowing the client to make informed decisions and empowering the client are all necessary skills audiologists are to portray to be competent in their field of work. All of the participants stated the statements below to be important to very important which is indicated a trend towards the majority of statements rated as degree of importance.

#### **4.3.3 Strengths of Audiology participants**

Participants had the option of providing a detailed explanation of the strengths they possess as an audiologist with respect to providing services to adults with hearing loss.

Table 4.3 Thematic Analysis of strengths of audiologists with respect to providing services

Theme	Comments made - examples	Frequency (Percentage)
<b>Empowerment</b>	<ul style="list-style-type: none"> <li>“Empowering”, “empower clients”, “empowerment”</li> </ul>	5 (3.3%)
<b>Good Listener</b>	<ul style="list-style-type: none"> <li>“Active listening”, “good listener”, “ good listening and communication skills”, “active listening”, “Ability to listen”, “the ability to listen”, “Truly listen”, “listening to their needs”</li> </ul>	31 (20.4%)
<b>Empathy</b>	<ul style="list-style-type: none"> <li>“Compassion”, “empathy”, “compassion”, “Very caring”</li> </ul>	44 (28.9%)
<b>Experience</b>	<ul style="list-style-type: none"> <li>“Experience in working with clients with hearing loss and hearing aids”, “Good knowledge of technology”, “Will do research when unsure”, “Keeps up to date with new developments”</li> </ul>	36 (23.7%)
<b>Patience</b>	<ul style="list-style-type: none"> <li>“Spent time with client”, “Do not rush”</li> </ul>	27 (17.8%)
<b>Client Needs</b>	<ul style="list-style-type: none"> <li>“Understand client needs”, “Analysis of client needs”, “Establishing goals with client”, “Understanding their difficulties and makes adjustment plans”</li> </ul>	11 (7.2%)
<b>Counseling</b>	<ul style="list-style-type: none"> <li>“Provide information for client and significant other”, “informational counseling”, “Informative”, “Sufficient information”, “Adjusting counseling to need”</li> </ul>	13 (8.6%)
<b>Information</b>	<ul style="list-style-type: none"> <li>“Understand information”, “Explaining information in layman’s terms”</li> </ul>	9 (5.9%)

An overwhelming number of participants responded that empathy, active listening to the client and their needs, as well as being able to explain technical information regarding hearing aids in layman’s terms as their key strengths.

#### 4.4 Current challenges faced by Audiologists in South Africa

Table 4.4 Challenges that frequently arise during counseling of adult clients who need hearing aids

Theme	Comments made- examples	Frequency (Percentage)
<b>Client</b>	<ul style="list-style-type: none"> <li>“do not take responsibility of the hearing loss”, “subconsciously have not accepted they need a hearing aid”, “it takes a lot of time to break through”, “unrealistic expectations”, lack of understanding”, “poor socioeconomic status”, “poor caregiver or family support”, “not wanting people to see that they are wearing hearing aids”. “Unrealistic expectations from the client regarding hearing aid (magic fix)”, “uninformed public due to restriction of the HPCSA on advertising”</li> </ul>	80 (52.6%)
<b>Audiologist</b>	<ul style="list-style-type: none"> <li>“language barrier”, “not having skills, knowledge and resources to counsel”, “still lack clinical experience”, “time constraints”, “use of an interpreter is also difficult”, “lack of counseling skills”, “not enough time for effective aural rehabilitation”, “the fact that I am young and do not have a hearing loss and trying to counsel them”, “poor follow up”</li> </ul>	15 (9.9%)
<b>Hearing Aids</b>	<ul style="list-style-type: none"> <li>“clients want to purchase hearing aids that are cheaper and no necessarily the best fit”, “complaints with regards to sound quality”, “expense of hearing aids”, “adherence to hearing aids”, “financial”, “previous experiences/stigma of hearing aids”, “ non-compliance of hearing aids”, “family forces the client to get hearing aids”, “misconceptions regarding hearing aids”, reluctant to wear hearing aids”, “cost”, “cosmetic issues”, “do not want to wear HA all the time”</li> </ul>	42 (27.6%)

Overall similar themes appeared between the participants who responded to what in their opinion are the challenges faced when dealing with adults who are fit with hearing aids. The top themes were lack of financial resources to afford hearing aids or to obtain a technology level that is appropriate for the needs of the client, language barrier, unrealistic expectations and non-compliance of wearing hearing aids for an ample amount of time before deciding to withdraw.

Table 4.4 above presents a summary of the themes related to the Client, Audiologists and Hearing Aids. Under the theme of client the most common challenges faced by the audiologists are clients not taking responsibility for their hearing loss, unrealistic expectations and the lack of understanding regarding hearing and hearing aids. Challenges faced by the Audiologists were grouped into; the language barrier between the clinician and the client, not having adequate skills and knowledge to counsel the client as well as the lack of time. Finally the theme of hearing aids face challenges of the client not understanding the limitations of hearing aids, financial constraints to hearing aids and the stigma related to them.

## **4.5 Training in counselling**

### **4.5.1 Types of counseling covered during professional training**

Participants indicated that during their professional training the following three types of counseling were covered; informational counseling, rational acceptance and adjustment counseling. The majority of participants indicated that their professional training encompassed informational counseling whilst rational acceptance and adjustment counseling received less attention. Sixty-nine percent (69%) of the participants indicated that their professional training covered all three types of counseling.

The majority of the participants also indicated that between the three types of counseling trained, they were able to spend more time on informational counseling than rational acceptance and adjustment counseling. A large number of participants (67%), stated that all three types of counseling coursework was covered during professional training whilst only 48% of the participants were offered the opportunity to practise all three types of counseling. In contrast to this 3% of the participants did not cover coursework on the three types of counseling whilst 11% of the participants did not receive any opportunity to practise the three types of counseling. This indicates a large difference between theories covered in counseling versus the practise covered in all three types of counseling during audiology training indicating a gap in audiology curricula in South Africa.



Table 4.5 Cross tabulation of the three types of counseling received in coursework versus practise during audiology training

<b>Cross Tabulation</b>					
<b>All three types of counseling during audiology training (coursework versus practise)</b>					
		<b>Practise in all 3 types of counseling</b>		<b>Total</b>	
		<b>Yes</b>	<b>No</b>		
<b>Training received in all three types of counseling</b>		<b>Count</b>	<b>67</b>	<b>37</b>	<b>104</b>
	<b>Yes</b>	Percentage training received in all three types of counseling	64.4%	35.6%	100.0%
		Percentage practise in all three types of counseling	93.1%	46.3%	68.4%
		<b>Count</b>	<b>5</b>	<b>43</b>	<b>48</b>
	<b>No</b>	Percentage training received in all three types of counseling	10.4%	89.6%	100.0%
		Percentage practise in all three types of counseling	6.9%	53.8%	31.6%
<b>Total</b>		<b>Count</b>	<b>72</b>	<b>80</b>	<b>152</b>
		Percentage training received in all three types of counseling	47.4%	52.6%	100.0%
		Percentage practise in all three types of counseling	100.0%	100.0%	100.0%

In Table 4.5 above, indicates a cross tabulation of 152 participant responses of course work versus ability to practise all three types of counseling during audiology training. Analysis conducted using the McNemar Test which is a statistical test used on

paired nominal data; revealed a value of  $p = 0.0$  therefore this indicates a statistically significant value as the  $p$ -value  $< 0.05$ .

#### **4.5.2 Perception of counseling skills**

Questions 5-8 outlined in Figure 4.7 analysed the participants' perception of their training and views on whether audiologists are confident to provide counseling.

## Do you agree with the following statements?

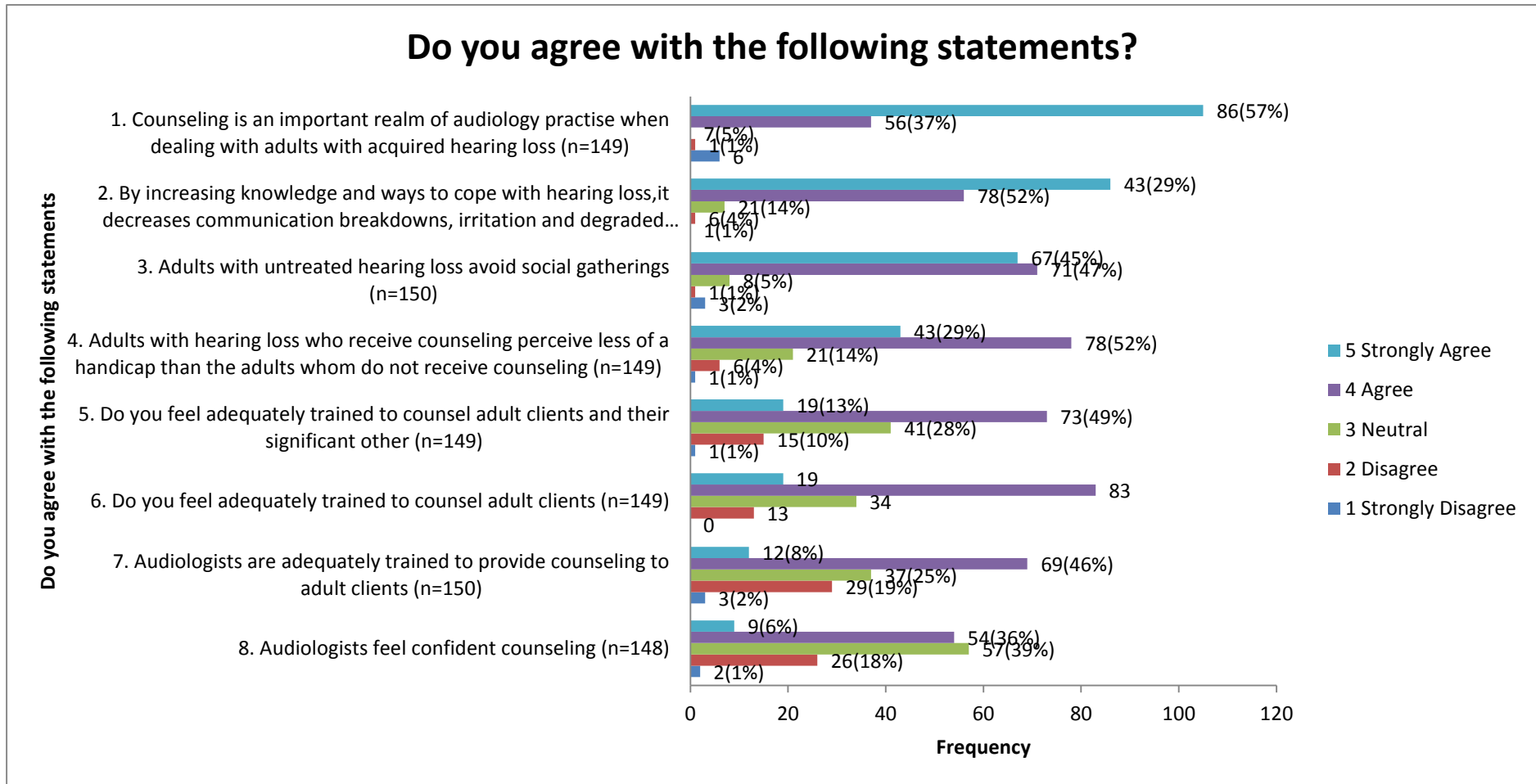


Figure 4.7 Participants agreeing to statements related to adult hearing loss

When participants were asked to rate the statements listed above in Figure 4.7, it is important to note that in question seven which related to audiologists being adequately trained to provide counseling to adult clients, a total number of 32 participants (three participants strongly disagreed and 29 participants disagreed) which resulted in 21% out of 150 responses. A significant number of the participants (37; 25%) remained neutral, whilst approximately half of participants agreed or strongly agreed with the statement which made up 81 out of 150 participants amounting to 54% of the total responses. It is also interesting to note that when participants were asked to agree or disagree with the statement that audiologists feel confident counseling, 57 out of 148 participants which makes up 39% took a stance of being in between neither agreeing or disagreeing with the statement. When this statement results are compared to feeling adequately trained to counsel adult clients, only 23% remained neutral whilst 68% of the participants agreed or strongly agreed with this statement. This inconsistency warrants the query of participants wanting not to take a stand one way or the other but rather staying in the middle. These results look similar to question number 5 in Figure 4.7 relating to the adult client and significant other. More than half of the participants, 55% felt they adequately trained to counsel both the client and significant other. Questions 1- 4 dealt with the importance of counseling which could be seen as filler questions (Williams, 2003) as their responses were expected and it correlate with literature.

#### **4.5.3 Perceived need for training in counseling**

When the audiologists rating of their skills were compared to their perceived need to improve their skills it was interesting to note that informational counseling received the least need whilst the need for further training in rational acceptance and adjustment counseling were greater (moderate and great need) on a five point Likert scale seen in Figure 4.8.

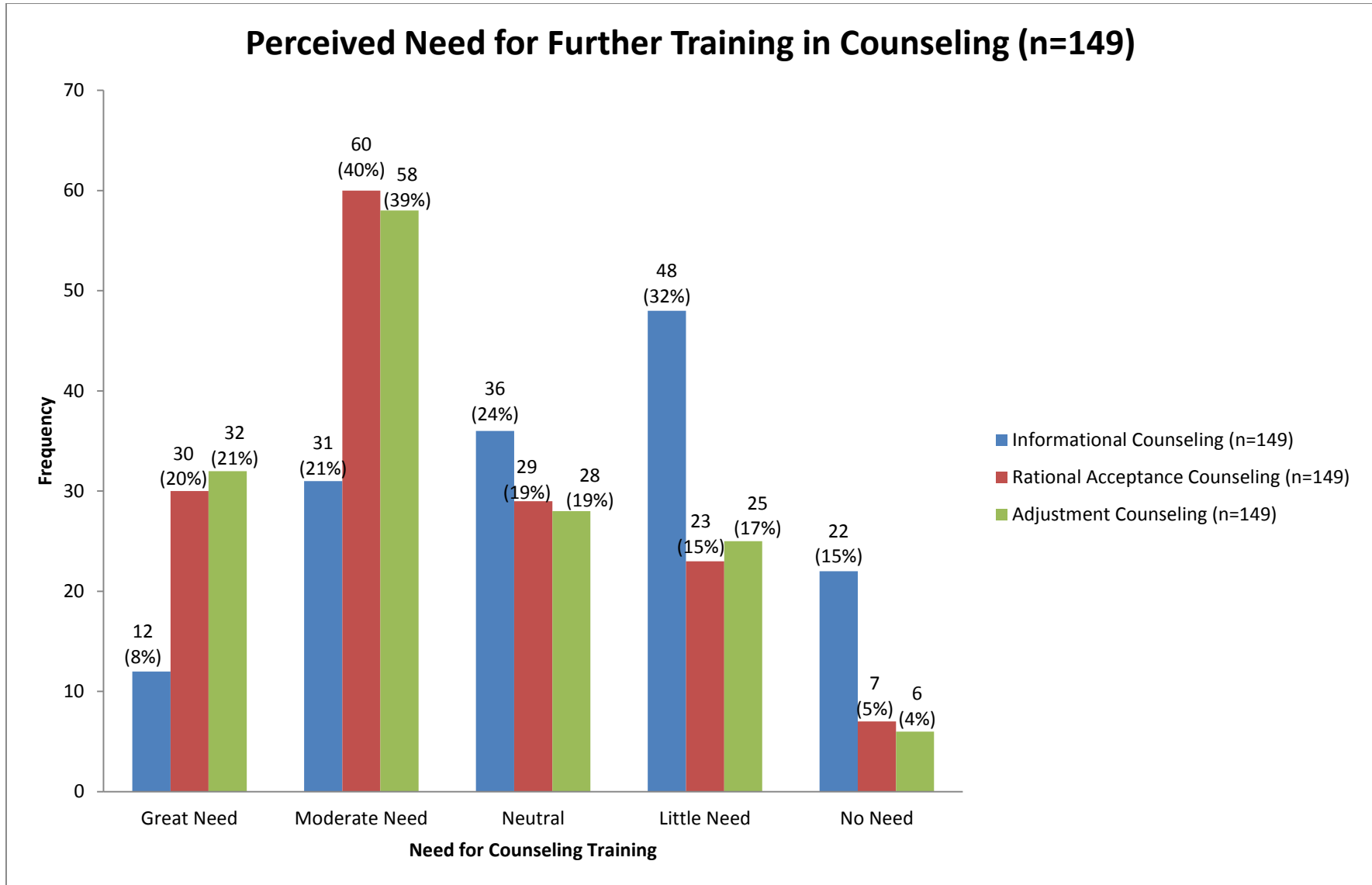


Figure 4.8 Perceived need for further training in counseling

#### 4.5.4 Improving skills in counseling

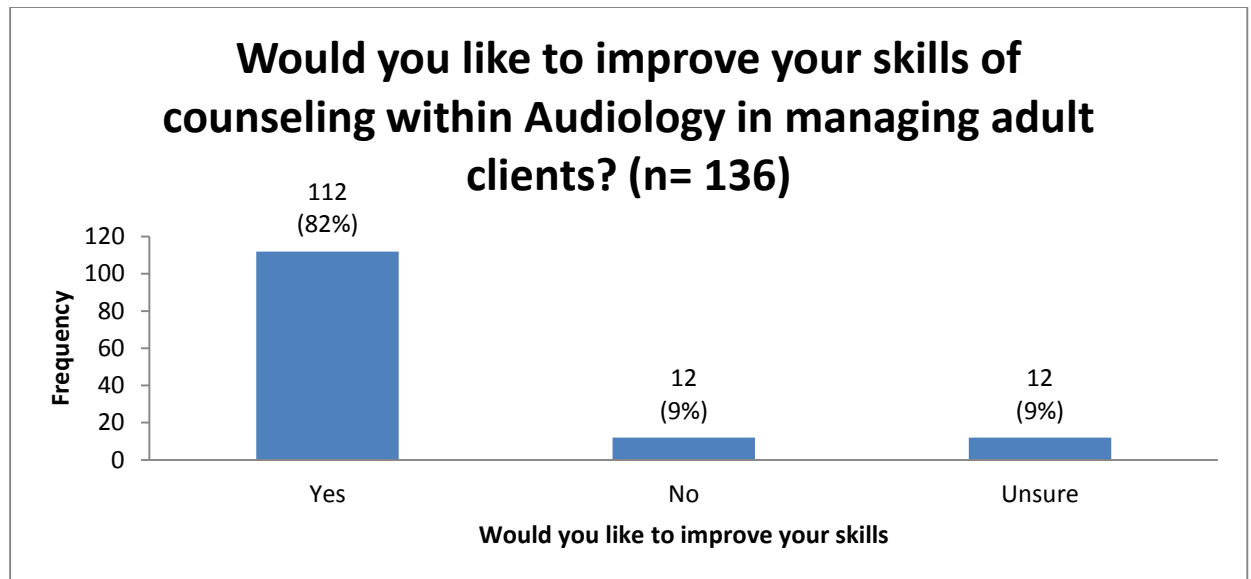


Figure 4.9 Increase skills in counseling within Audiology in managing adult clients

When the audiologists participating in the study were asked to indicate whether they would like to increase their skills of counseling within Audiology in managing adult clients, the vast majority of 82% of the participants indicated yes whilst only 9% said no and a minority of 9% were unsure. A summary of these results can be seen in Figure 4.9 above.

Audiologists were also questioned on their own suggestions for improving counseling of adult clients who need hearing aids; Table 4.6 below indicates a summary of suggestions for the client and audiologist. The suggestions mentioned below are very interesting as there are very practical examples that could be implemented immediately into daily practise.

Table 4.6 Suggestions to improve the counseling of adult clients who need hearing aids

Theme	Comments made- examples	Frequency (Percentage)
<b>Client</b>	<ul style="list-style-type: none"> <li>“more client driven”, “create realistic expectations to client, family and employers”, “empowered from the beginning”, “honest about expectations and counseling on auditory deprivation”, “regular appointments”, “create support groups”, “handing our reading material that is user friendly”,</li> </ul>	52(34.2%)
<b>Audiologist</b>	<ul style="list-style-type: none"> <li>“more training at university level”, “Improve counseling skills training”, “consider the needs of the client and genuinely listen to his/her concerns”, allowing more time for counseling”, “better and more training before qualification”, counseling should be adapted”, “Trial fitting”, “home visits could be an excellent way of improving counseling”, “counseling needs to be ongoing”, “better training at undergraduate level, clinical supervisors who have many years of clinical experience not just academic experience”, “a list/structured guidelines regarding counseling (when and how to address areas)”, “IDA tools the line and the box”, “pictures/visual representations”.</li> </ul>	59(38.8%)

### Ways to increase knowledge of counseling within Audiology (n=126)

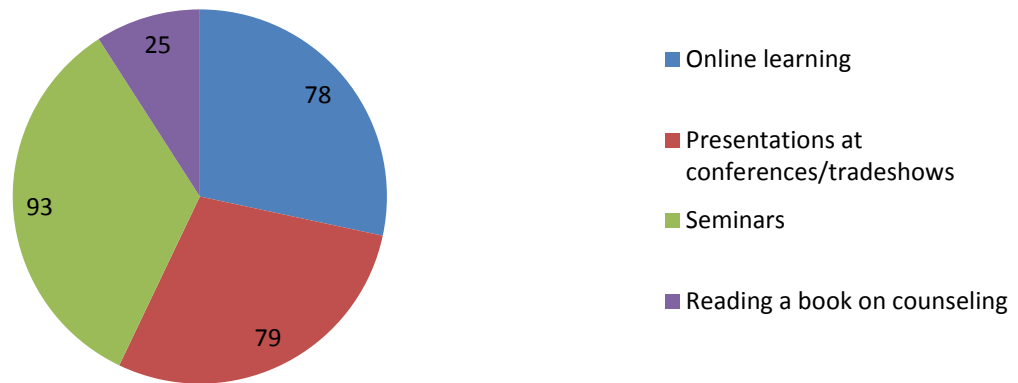


Figure 4.10 Suitable ways of increasing knowledge of counseling within Audiology

Figure 4.10 furthermore indicates that 74% of participants would like to increase their knowledge in counseling by means of seminars, 63% by presentations at conferences or trade shows, 62% through online learning and 20% from reading a book on counseling. Whilst a few of the participants suggested the following ideas; psychologists presenting on behavioural modifications techniques, practise with the IDA tools, informal practical case discussions with appropriate supervision and guidance, multidisciplinary influence with working together with social work and psychology, role play and practical workshops.

#### 4.6 Summary

This chapter presented the results of the study and interpretation of the data. Findings in this chapter both support literature as well as highlights deficient areas within the three counseling types. Literature supports the findings in the results displayed above. Audiologists in South Africa spend more time on informational counseling than rational acceptance or adjustment counseling and spent more time counseling the client only than the client and significant other. Even though audiologists rated their skills in counseling high, the majority of the participants indicated the need for improving their counseling skills with regards to adult clients who need hearing aids. Chapter five will discuss the results in detail.



## **CHAPTER FIVE**

### **DISCUSSION**

#### **5.1 Introduction**

This chapter discusses the findings reported in the results chapter. The discussion refers to literature as well as other findings from the study. The discussion is reported in terms of the objectives outlined below:

- To describe the nature of counseling offered by audiologists to adult clients who require hearing aids
- To describe their views on the skills needed to counsel adult clients who require hearing aids and challenges faced

#### **5.2 Description of participants and context**

It is vital to understand the demographics of the study participants before the interpretation of the later part of the survey is done as this creates the context which makes the content relevant for deeper understanding.

The majority of the participants were qualified as both speech therapists and audiologists (STAs), holding a dual bachelor's degree in Speech Therapy and Audiology. Experience following certification was varied by the number of clinical years of experience reported; 86(60%) of those responding reported six years or more of clinical experience. The majority of the participants in particular have been in practise between 1 to 10 years whilst a large percent (40%) of participants only had between 1-5 years of experience. Yet when the percentage of clinical experience was totalled for less than one year up to 10 years, this amounted to 65% of the total test population. This is interesting this study therefore represents the younger audiologists in South Africa.

Eighty one percent (81%) of the respondents were employed on a full-time basis and 89% were in client-contact environments. More specifically sixty nine percent (69%) of these audiologists reported that more than 61% of their day is spent on client activities. All of the participants had seen adult clients and adult clients made up the bulk of the case-load. When asked, more than half (80%) of the participants indicated that 41-100% of their case loads were comprised of adults clients.

When comparing this to the Flahive and White (1981), study, of the 266 participants who participated in the study, 50% of participants reported six years or more of clinical experience and only 76% were employed full time. The majority of 90% of participants reported being employed in client-contact settings with 55% of the participants reported >60% of their day was spent on client activities which is 14% less than this research study.

Flahive and White (1981), had a completion rate of 45% out of the 500 sample population through a postal survey as compared to this online survey which a total number of 152 questionnaires out of 1119 were completed which results in a 14 % response rate. Even though the two studies had been of different scales, comparisons are made which drew comparisons and differences between them which span over different decades however seemed to have faced the same challenges.

In general, sixty percent (60%) of the participants were employed in the private sector which concurs with Swanepoel (2006), who states that majority of audiologists in South Africa are employed in the private sector who offer services to a minority of the population who can afford these services yet the remainder of the population rely on public sector services. This therefore means that the participants from this study reflect the inequality of service delivery by accommodating the minority of South Africa's population in private audiology clinics.

### **5.3 Nature of counseling**

Objective one in this study dealt with the description of the nature of counseling offered by audiologists to adult clients who wear hearing aids in South Africa. According to Tye-Murray (2004), three counseling types are categorised as; informational counseling, rational acceptance counseling and adjustment counseling. However in 2009, Tye-Murray cited only two types of counseling; informational and personal adjustment counseling. Since this study was aimed to gather an in-depth analysis of the South African audiology population, it was decided to look into the three types of counseling to better understand the value of rational acceptance counseling on the acceptance of hearing loss and barriers associated with hearing loss. When compared to the study by Flahive and White (1981), there were namely only two; informational counseling and personal adjustment counseling. Therefore the study reported in this paper is based on three and not two types of counseling. No matter whether counseling within the audiology field is broken into two or three types,

the importance of counseling is well documented as clients report less of a perceived handicap with hearing loss and wear their hearing aids more (Crandell, 2000).

More recent literature established that counseling can improve the quality of audiology services and is crucial to the successful acceptance and use of hearing aids which includes informational counseling, counseling for adjustment to hearing loss and counseling for the acceptance of hearing loss and living with it. Evidence points to the direction of Audiological counseling by means of the client-centred approach (Cienkowski & Sanders, 2013).

### **5.3.1 Counseling need versus counseling received**

Participants were asked to indicate the average percentage of adult clients who needed informational, rational acceptance and adjustment counseling versus those who had received any of the three types of counseling (refer to section 4.2.1). When the weighted means of *need* versus *received* counseling were compared, it was clear to see that the need for counseling was closely correlated to the counseling received by adult clients. Therefore the services provided by audiologists are in close agreement with the reported need. Flahive and White (1981) also shared similar findings however the questionnaire design may have potentially biased the responses by sequentially asking for needs and received services data. The participants indicated that informational counseling is needed more frequently than rational acceptance and adjustment counseling. However the need for both rational acceptance and adjustment counseling scored very closely. This could explain the reason for these two types of counseling being combined to namely be called personal adjustment counseling. This again highlights the emphasis given to informational counseling over the other two types of counseling. This result may suggest that the client is counseled in terms of information given yet the client is not provided optimal assistance to come to terms with their hearing loss and adjust to living with hearing aids. Tye-Murray (2009), reinforces this notion that personal adjustment counseling (rational acceptance and adjustment counseling) occurs less often than informational counseling which suggests that speech and hearing professionals (audiologists) may lack confidence or skill in providing this type of counseling and/or it may reflect inadequate time in practise for audiologists to offer this.

### **5.3.2 Average amount of time spent counseling**

In an attempt to quantify counseling time, a closer look was taken at the data and a trend appeared; less time was spent by the audiologists when counseling the client and the significant other (0-15 min) whilst more time was spent on counseling the client only (16 - >60 min) (Section 4.2.2). Referring back to literature, which indicate that the transference of information to both the client and significant other with the same information at the same time decreased the reliance of the client correctly being able to relay the information to the significant other which is a form of empowerment (Borg et al., 2002). Borg et al. (2002) also concluded that this empowerment model increased the client and significant other's knowledge of hearing and communication, self-confidence and ability to talk about hearing, hearing loss and communication problems. The significant others self-reported that their knowledge and understanding of the hearing impairment and communication problems, increased through this approach. This recommendation that counseling both the client together with the significant other was beneficial for the transference of information and assisting in coping with hearing loss indicates a need to educate and stress the importance of this to audiologists.

Another drawback of only presenting information to clients is that clients forget as much as 40%-80% of information immediately after hearing it in a medical setting (Tye-Murray, 2009), therefore providing counseling to the client together with the significant other is recommended. Therefore the main goals during informational counseling is to present information in a way that the client will both understand what is being said and remember the important points (Tye-Murray, 2009). Findings from the thematic analysis in Table 4.4 resonate with challenges; lack of time to provide counseling, poor support from the family of the client and language barriers.

Again informational counseling appeared to have more emphasis among the three types of counseling, as on average more time is spent on this. Another observation (Section 4.2.2) made was that as time increased rational acceptance and adjustment counseling drastically dropped after 20 minutes. This could indicate the lack of time on part of the audiologist or the lack of need from the client's side. In the thematic analysis of the challenges audiologists' face when counseling adults with hearing loss who require hearing aids, the limitation of time with the client was evident.

In lieu of time as a challenge, recent literature highlights that online rehabilitation for adult hearing aid users have shown positive results and effects were maintained and improved at follow-

up. Through this online format, significant improvements have also been reported in the domain of psychosocial wellbeing and again found at the follow-up session (Thorèn, Ôberg, Wånstrom, Andersson & Lunner, 2014).

### **5.3.3 Counseling incorporated into daily practice**

The results from this study again support the notion that informational counseling is more prominent than rational acceptance and adjustment counseling across the interactions between the client and audiologist. Tye-Murray (2004, 2009) cites Erdman (2000), that there are many different approaches to counseling yet they all indicate a combination of these three categories; approaches aimed at modifying thought processes (cognitive), approaches aimed at modifying behaviour (behavioural) and approaches aimed at modifying emotions (affective). Therefore the trend that appears is that audiologists are using all three types of counseling during the different points of contact with the client.

Figure 4.3 (Section 4.2.3) indicates that counseling is spread across the contact between the audiologist and the client. However in recent literature, results indicated that counseling prior to fitting of hearing aids can be advantageous to the outcome as unrealistic expectations can be addressed prior to fitting hearing aids. The data also indicated that positive expectations regarding the impact hearing aids have on psychosocial well-being are important for successful hearing aid outcome (Sanders, Lewis, Forsline, 2009).

Participants agreed to statements which related to counseling and hearing loss. From this a trend can be seen that counseling is an important realm of audiology practice as the majority (70%) participants strongly agreed with this statement. Erdman (2009) reinforces that since hearing impairment is of chronic nature, there is a need for a bio-psycho-social approach in Audiology.

A recent study in Finland indicates that counseling in audiology was effective and warranted. This study was conducted on first-time users of hearing aids in which in-home counseling was provided at six months after their initial hearing aid fitting and counseling session in the clinic. This home counseling session was primarily focused on hearing aid use. At the 12 month visit, more than half of those who had only been wearing their hearing aid occasionally at the six month point became regular users. The more interesting finding was that one third of the non-users had become regular

users of their hearing aids. Another very important observation was that, at the 12 month follow-up the clients felt less of a need for counseling than they did at six months. These clients displayed greater skills in managing their hearing aids in terms of maintenance, telephone usage and inserting and positioning their hearing aids. Further, their analyses indicated that the counseling sessions were highly cost effective (Erdman, 2009).

#### **5.3.4 Addressing the impact that hearing loss has on the client and family**

In the results seen in Figure 4.4 (Refer to section 4.2.4), it became clearly evident that the majority of the participants gained information of the impact hearing loss has on the client and family lives from the case history. This may understandably be the appropriate manner in which to gather information from the client if the client is illiterate, does not share the same language as the audiologist and therefore poses a language barrier or if the client has multiple health conditions that prevent the client from providing written information. However if all information is gathered in the form of the case history there may be misinterpretations between the audiologist and the client or the targeted information needed may not be collected. Formal measures using questionnaires and the COSI indicated low response rates which were surprising as using these tools were a part of one's educational curriculum in audiology. One may question, if these tools are not being utilised then what tools are? Gathering all the information poses the question if there is a move from the medical approach of one way information flow from the health professional to the client, to a two-way communication which entails the client being involved and encouraged to be active in the decision making process of the rehabilitation plan (Hickson, 2012). This should be emphasised to audiologists to move towards a two way communication pattern which will result in an informed decision making process and better outcome for both the clinician and client.

A recent literature search by Knudsen, Öberg, Nielsen, Naylor & Kramer (2010), examined variables that could predict help seeking, hearing aid uptake use and satisfaction. Out of 31 factors which included; source of motivation, expectation, attitude, measured hearing sensitivity, age, gender, and cost etc., the alarming finding was that the main predictor of client seeking treatment, obtaining amplification, use of devices and experience benefit was individuals who self-reported their hearing difficulties. Findings in this study (Refer to Table 4.4) confirm that many clients who are seen by audiologists have not come to terms with their hearing loss and therefore do not accept responsibility for their hearing loss and often have unrealistic expectations. Audiologists therefore

need to be aware of clients who do not self-report their hearing difficulties and counsel the client accordingly to their expectations.

## **5.4 Counseling**

### **5.4.1 Rating of skills**

The results indicated that the majority of participants rated their own skills as average, good or very good skills which are three and above on a five point Likert scale. This indicated that participants are confident in their skills counseling as an audiologist. When a closer look was taken at the results displayed in Figure 4.5 (Section 4.3.1) indicated that the majority (91%) of participants rated their skills in informational counseling as good or very good skills (4 or 5) on the five point Likert scale. When compared to rational acceptance, the majority (41%) of participants rated their skills as average whilst only 53% about half of the participants rated their skills in this type of counseling at the 4 and 5 points on the scale. Lastly when looking at adjustment counseling, the majority (51%) of participants rated their skills as good – four on a five point scale. Therefore this totals to 65% of the participants rated their skills in adjustment counseling as good or very good. This could be accepted on face value that the participants are generally competent in providing informational counseling, adjustment counseling and rational acceptance in the order of highly skilled. This can be viewed as the participants rating their perceived level of counseling skills as an audiologist high. However when participants were asked to rate their need for training in the three different types of counseling later in the questionnaire; contradicted these findings. This may represent that participants rated their own skills more favourable than if their skills were rated by an observer against a checklist of what attributes would consider their skills from very poor to very good. An example of this could be the Audiology Growth Checklist (ACGC) (which facilitates the development of clinical skills in student audiologists). This ACGC provides supervisors areas of which will increase the audiology students' confidence in the clinician-client dynamic and move consultations to a more positive direction (Clark, 2006). Another example of developing skills in the experienced audiologist could entail the reflective practise which requires the audiologist to develop self-awareness and enhance critical thinking skills, think about own behaviour and by understanding their own behaviour and make modifications will results in more successful clinical encounters and help provide better services for the client (De Placido, 2010).

The challenge of finding a standardized way of evaluating clinical competence is shared by the organisations accrediting AuD programs across universities in the United States. Their recommendation is to develop standardised client cases which can be used in assessing clinical competence uniformly as it has been used with medical students over the past 50 years yet there is very limited following in the audiology profession (Dinsmore, Bohnert & Preminger, 2013).

#### **5.4.2 Important attributes and skills that make a competent audiologist**

In Figure 4.6 (Section 4.3.2) , the results displayed the ratings of attributes and skills that make a competent audiologist were sorted from very important to not at all important (five to one) on the Likert scale. This provided a clear representation (important(4) and very important(5)) of the findings which resonates with Tye-Murray (2004), who outlined three essential skills required by audiologists during client-centred care namely; congruence of self (genuineness/not using professional jargon 99%), unconditional positive regard (92%) and empathetic listening (99%). This indicates that audiologists in South Africa are aware of the required attributes and skills that make a competent audiologist.

#### **5.4.3 Strengths as an Audiologist**

Participants had the option of providing a detailed explanation of the strengths they possess as an audiologist with respect to providing services to adults with hearing loss. An overwhelming number of participants responded that empathy, active listening to the client and their needs as well as being able to explain technical information regarding hearing aids in layman's terms as their key strengths. The main themes which emerged were; empowerment, good listener, empathy, experience, patience, client needs, counseling and information. This suggests that audiologists in South Africa are aware of the main attributes that make a competent audiologists are recognise their practise of these skills.

#### **5.5 Current challenges faced by Audiologists in South Africa**

Participants were asked to name the challenges audiologists face in counseling adult clients who require hearing aids. Overall similar themes appeared when asked between the participants who responded to what in their opinion are the challenges faced when dealing with adults who are fit with hearing aids. The top themes were lack of financial resources to afford hearing aids or to obtain a technology level that is appropriate for the needs of the client, language barrier, unrealistic



expectations and non-compliance of wearing hearing aids for an ample amount of time before deciding to withdraw from using them which can be seen in Table 4.4 (Section 4.4). A South African study by Sooful (2007), also confirms that the challenge of language presented complications for clients to fully understand all aspects covered by the audiologist during hearing aid fitting and orientation especially in the public sector. The themes that appeared from the study which related to clients, resonates with literature presented earlier (Section 2.5) regarding the barriers to acceptance of hearing loss namely; ownership, self-identity, stigma, self-efficacy and unmet expectations. Even though most of the literature presented is of international standing, it's important to note that the client no matter where in the world they reside, the barriers to acceptance of their hearing loss manifests similarly.

## **5.6 Training in counseling**

### **5.6.1 Types of Counseling covered during professional training**

The description of the training received for counseling adult clients who need hearing aids was further analysed. In the cross tabulation displayed in Table 4.5 (Section 4.5.1), a trend appeared when training (coursework/theory) of counseling received is compared to the opportunity to practise these three types of counseling during the educational training of audiologists in South Africa. Approximately one third of the participants did not receive any training or practice in the three types of counseling, this is alarming as it is not clear how these professionals acquire the necessary skills to cater to the needs of adult clients with hearing loss.

More recently, an extended workshop was developed for audiologists for 20 hours over a six week period who were interested in expanding their counseling skills in the United Kingdom. The workshop was run over a few weeks as a one time workshop would not have resulted in changes in practice. The workshop consisted of multiple opportunities to learn several counseling strategies and apply and evaluate the effectiveness of these strategies in clinical settings. The results of this study indicated that all respondents made changes to client communication to different degrees, several of the counseling concepts were incorporated into their daily work environments and positive changes were noted in the clinician-client dyad (English & Archbold, 2014). The success of this six week workshop proved to be effective in assisting audiologists to change their counseling skills within their daily practise.

### **5.6.2 Perceived need for training in counseling**

A closer look at Figure 4.8 (Section 4.5.3) revealed the discrepancy of the previous results. This visual representation clearly makes one question audiologists' confidence in counseling versus their need for further training. As in Figure 4.5 regarding skill ratings by each audiologist indicated that they acquired good or very good skills in the three types of counseling however this does not correlate with the findings above. On a five point Likert scale which ranged from great need to no need (one to five), when adding the two scales of great need and moderate need (one and two on the scale), informational counseling resulted in 29% whilst rational acceptance counseling and adjustment counseling both resulted to 60% of the participants. This dis-proportion to the results seen in Figure 4.9 may indicate that participants could have had reported their skills more favourable which can be explained by the Hawthorne effect.

### **5.7 Summary**

This chapter discussed and interprets the results to other findings in this study as well as to literature both locally and internationally. Even though there seems to be focus on counseling within the adult counseling realm of audiology, little is known on what is being done to improve these skills of audiologists over the last few decades. Audiologists have rated their skills high in providing informational, rational acceptance and adjustment counseling yet they also indicate the need for further training amongst all three types very high.

## **CHAPTER SIX**

### **CONCLUSION AND IMPLICATIONS**

#### **6.1 Introduction**

This chapter ties up the findings from the results and discussion chapters and provides a conclusion to this study. The strengths and limitations of the study are highlighted as well as suggestions for future research is made. The chapter will end with a summary of the entire study which provides a holistic view of this research finding.

#### **6.2 Summary of the study**

This research study provides insight into the South African Audiologists experience and views on counseling skills with regards to adult client who require hearing aids. Data emerged in this study was invaluable to the need for further training needed in counseling skills even after professional training has been completed.

#### **6.3 Strengths of the study**

- The majority of the participants are actively practising within this field and therefore results are likely a true representation of the current situation in South Africa.
- This study provides insights to the current situation in South Africa in terms of audiologists who provide counseling to adults with hearing loss who require hearing aids.
- Highlights that even though audiologists seemed to have received training in all three types of counseling they skill indicate an interest in improving their skills.
- Interpretation of the open ended questions in themes supported quantitative data.

#### **6.4 Limitations of the study**

- Results may have been influenced by the low response rate.
- Participants had to rely on memory to recall details regarding their professional training which may have been in the recent past or more distant past for other participants which could have led to misrepresentation of the exact situation.
- Participants had to belong to the SAAA or SASHLA which are both private associations that audiologists can choose to become a member of, this was the database used to contact participants. The HPCSA database would have tapped all professionals registered.

- Participants seemed to be newly graduated with the majority reporting less than ten years of clinical experience.
- This study relied on audiologists self-reporting their skills which may have led to the Hawthorne effect than if their skills were observed.
- Questions structure of 9 and 10 may have resulted in ambiguity.
- The majority of participants who responded were in private practice/hospital settings. This is an indication that high end technology may only be made available to the private health care system in South Africa.

### **6.5 Implications of the study**

- This study provides theoretical and clinical insights to audiologists' views on counseling adults who need hearing aids in the South African context.
- This study highlights the need for further training in counseling offered to audiologists even after graduating from an educational institute.
- This study also highlights the need for supervision to build all three types of counseling skills in undergraduate training within the South African context.
- This provides an indication that audiologists could benefit from post graduate CPD accredited training in the three types of counseling in particular rational acceptance and adjustment counseling.

### **6.6 Recommendations for future research**

- Look more closely at the South African public versus the private sector with regards to audiologists offering counseling to the different population groups as well the similarities and contrasts/ limitations that are shared by these sectors.
- To investigate further if informational counseling is more important than rational acceptance and rational counseling.
- As technological advances face the world, academic online research needs to consider the accessibility to valuable data if placed on mediums like social media, appropriate audiology websites and research websites could reach more participants and therefore result in wealth knowledge. This method may result in quicker analysis and results being more readily available which will assist in improvements being made at a faster rate.

- Investigate further if these findings are similar or different from counseling within the paediatric realm of audiology.
- Most of the information gathered from the client was taken during the case history; an investigation should be made into what type of questions/ areas that should be addressed so that appropriate information is collected for the client.

## **6.7 Summary**

This study tapped into of audiologists' views of counseling adults with hearing loss who require hearing aids in the South African context. The study results, discussion and summary of this study support the notion that more training should be provided to audiologists who are in this realm of practice. The benefits of counseling adults with hearing loss are well reported and the need for audiologists to provide counseling to help assist clients to come to terms with their hearing loss and increase the quality of life of the individual and their families is imperative.

## REFERENCES

- Alpiner, J. G., Hansen, E. M., & Kaufman, K. J. (2000). Rehabilitation Audiology – Children and Adults. In Alpiner, J. G. & McCarthy, P. A. (Eds.). *Rehabilitative Audiology into the New Millennium* (pp. 3-5). Baltimore: Lippincott Williams and Wilkins.
- American Speech-Language-Hearing Association (ASHA). (2004). *Scope of Practice in Audiology* [Scope of Practice]. Retrieved February 21, 2013 from [www.asha.org/policy](http://www.asha.org/policy).
- Blood, I. M. (1997). The Hearing Aid Effect: Challenges for counseling. *Journal of Rehabilitation*, 63(4), 59-62.
- Borg, E., Danermark, B., & Borg, B. (2002). Behavioural awareness, interaction and counseling education in audiological rehabilitation: development of methods and application in a pilot study. *International Journal of Audiology*, 41(5), 308-322.
- Christensen, L., & Groth, J. (2008). Top ten clinician mistakes in geriatric hearing aid fitting. Seminar presented at: American Academy of Audiology; April 2008; Dallas. In Kochkin et al. MarkeTrak VIII: The Impact of the Hearing Healthcare Professional on Hearing Aid User Success -Correlations between dispensing protocols and successful patient outcomes. *The Hearing Review*, 17, 12-34.
- Cienkowski, K.M., & Saunders, G.H. (2013). An examination of hearing aid counseling implemented by Audiologists. *Special Interests Group 7 Perspectives on Aural Rehabilitation and Its Instrumentation*, 20, 67-76. doi:10.1044/ari20.2.67
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (7<sup>th</sup> ed.). London: Routledge.
- Clark, G.J. (2010). The Geometry of Patient Motivation circles, lines and boxes. *Audiology Today*. July/Aug, 32-40.
- Clark, G. J. (2006). The Audiology counseling growth checklist for student supervision. *Seminars in Hearing*, 27(2), 116-126.
- Crandell, C. (2000). Counseling instruction within audiology programs: A Major Deficit in Training. *Audiology online, archived articles*
- De Placido, C. (2010). Reflective practice in audiology. *The Hearing Review*. 17(2), 20-25. Retrieved October 12, 2012 from <http://www.hearingreview.com/2010/02/reflective-practice-in-audiology/>
- Delk, J.H. (1983). *Comprehensive Dictionary of Audiology* (4<sup>th</sup> ed.). Massachusetts: The Laux Company Inc.

- Dinsmore, B.F., Bohnert, C., & Preminger, J.E. (2013). Standardized patients in audiology: A proposal for a new method of evaluation of clinical competence. *Journal of the American Academy of Audiology*, 24(5), 372-392. doi: <http://dx.doi.org/10.3766/jaaa.24.5.5>
- English, K. (2005). Get ready for the next big thing in audiologic counseling. *The Hearing Journal*, 58(7), 10-15
- English, M.K. (2008). Counseling issues in audiologic rehabilitation. *Contemporary Issues in Communication Science and Disorders*, 35, 93-101.
- English, M.K. (2008). Counseling for diagnosis and management of auditory disorders. In Hosford-Dunn, H., Roeser, R. J., Valente, M.(Eds.). *Audiology: Treatment (2<sup>nd</sup> ed.)*. (pp 198-211). New York: Thieme Medical Publishers, Inc.
- Kochkin, S. (2000). MarkeTrak V: "Why my hearing aids are in the drawer": the consumers' perspective. *The Hearing Journal*, 53(2), 34.
- English, K., & Archbold, S. (2014). Measuring the effectiveness of an audiological counseling program. *International Journal of Audiology*, 53(2), 115-120. doi:10.3109/14992027.2013.837224
- Engelund, G. (2006). PhD thesis: "*Time for hearing*"- recognising process for the individual. *A grounded theory*. Department of Nordic Studies and Linguistics Audiologopedics. University of Copenhagen & Oticon Research Centre, Eriksholm.
- Erdman, S.A. (2009). Audiologic counseling: A bio psychosocial approach. In Montano, J.J., & Spitzer, J.B. (Eds.), *Adult Audiologic Rehabilitation*. (pp 171-216). San Diego: Plural Publishing Inc.
- Flahive, M.J., White, S.C. (1981). Audiologists and counseling. *Journal of the Academy of Rehabilitative Audiology XIV*, 274-287.
- Gagné, J.P., Southall, K., & Jennings, M.B.(2011) Stigma and self-stigma associated with acquired hearing loss in adults. *Hearing Review*. 18, 8, 16-22.
- Goleman, D. (1995). *Emotional Intelligence*. New York: Bantam Books
- Gregory, M. (2011). Self-efficacy and successful hearing rehabilitation. *Hearing Review*, 18( 8), 28-32.
- Health Professionals Council of South Africa (HPCSA). (2012), Regulations defining the scope of the professions of Speech Therapy and Audiology. Act 56 of 1974
- Hickson, L. (2012). Defining a paradigm shift. *Seminars in Hearing*, 33, (3-8).

- Hosford-Dunn, H., Roeser, R. J., Valente, M. (2008). *Audiology Treatment* (2<sup>nd</sup> ed.). New York: Thieme Medical Publishes Inc.
- Knudsen, L., Öberg, M., Nielsen, C., Naylor, G & Kramer, S. (2010). Factors influencing help seeking, hearing aid uptake, hearing aid use and satisfaction with hearing aids: A Review of the Literature. *Trends in Amplification*, 14(3), 127 –154.
- Kochkin, S. (2000). MarkeTrak V: "Why my hearing aids are in the drawer": the consumers' perspective. *The Hearing Journal*, 53(2), 34.
- Kochkin, S. (2007). MarkeTrak VII: Obstacles to adult non-user adoption. *The Hearing Journal*. 60(4), 24-51.
- Kochkin, S., Beck, D.L., Christensen, L .A., Compton-Conley, C., Fligor.B.J., Kricos, P.,... Turner,R.G.(2010). MarkeTrak VIII: The impact of the hearing healthcare professional on hearing aid user success -Correlations between dispensing protocols and successful patient outcomes. *The Hearing Review*, 17, (12-34).
- Leedy, P.D. & Ormrod, J.E. (2013). *Practical research: Planning and Design* (10<sup>th</sup> ed.) New Jersey: Pearson Education Inc.
- Maree, J.G & Pietersen, J.(2007). Chapter 8: The quantitative research process in Maree, J.G. (Ed.). (2007). *First Steps in Research*. Pretoria: Van Schaik Publishers.
- Margolis, R. H. (2004). *Informational counseling in health professions: What do Patients Remember?*.University of Minnesota. Retrieved on March 09, 2012 from [http://www.audiologyincorporated.com/ai\\_articles.htm](http://www.audiologyincorporated.com/ai_articles.htm)
- Montano, JJ. (2009). Defining Audiologic Rehabilitation. In Montano, J.J., & Spitzer, J.B. (Eds.), *Adult Audiologic Rehabilitation*. (pp 25-36). San Diego: Plural Publishing Inc.
- Popp, P., & Hackett, G. (2003). The counseling process: Before and after the hearing instrument fitting. *The Hearing Review* 10(4), 44-46.
- Reed, H. (Ed.).(2009). *Guide to Counseling for SLP*.LinguiSystems, Inc. USA
- Roeser, R.J., & Clark, J.L. (2008). Pure-Tone Tests. In Hosford-Dunn, H., Roeser, R. J., Valente, M.(Eds.). *Audiology Diagnosis* (2<sup>nd</sup> Ed.). (pp 238-260). New York: Thieme Medical Publishes Inc.
- Sanders, G.H., Lewis.M.S., & Forsline, A.(2009). Expectations, prefitting counseling and hearing aid outcome. *Journal of American Academy of Audiology* 20(5), 320-34.



- Schum, D., Behrens, T., & Weile, J. (2011). New insights to first time users. *White paper*. Oticon A/S, Kongebakken, Denmark
- Sooful, P. (2007). *The maintenance and utilization of government fitted hearing aids*. Unpublished master's thesis). University of Pretoria
- Souza, P.E., & Hoyer, W.J. (1996). Age Related Hearing Loss: Implications for Counseling. *Journal of Counseling and Development*, 74.
- Swanepoel, D.W. (2006). Audiology in South Africa. *International Journal of Audiology*, 45, 262-266. Retrieved on February 09, 2013 from: <http://www.mendeley.com/research>
- Thorèn, E.S., Öberg, M., Wånstrom, G., Andersson, G., & Lunner, T. (2014). A randomized controlled trial evaluating the effects of online rehabilitative intervention for adult hearing-aid users. *International Journal of Audiology*, 53(7), 452-461. doi: 10.3109/14992027.2014.892643
- Tye – Murray, N. (2004). *Foundations of aural rehabilitation. Children, adults and their families*. Baltimore: Lippincott, Williams and Wilkins.
- Tye – Murray, N. (2009). *Foundations of aural rehabilitation. Children, adults and their families (3<sup>rd</sup> Ed.)*. Clifton Park, NY: Delmar Cengage Learning.
- Walonick, D.S. (2010). *Survival statistics*. Bloomington: Minneapolis
- Weiten, W. (2004). *Psychology: Themes & Variations (6<sup>th</sup> Ed.)*. USA: Thomson Learning, Inc.
- Wemmer, K. (2007). *Educating audiologists in South Africa: internationally recognized specialists or locally relevant generalists*. (Unpublished master's thesis). University of Witwatersrand: Johannesburg.
- Williams, A. (2003). How to... Write and analyse a questionnaire. *Journal of Orthodontics*, 30, (245-252).

## Appendix A: Questionnaire

### Section A: Background Information

**Q1. Gender:**

- Male
- Female

**Q2. Age:**

years

**Q3. Professional Registration:**

- Audiologist
- Speech Therapist & Audiologist
- Other

**Q4. Educational Background:**

- Bachelor's degree in Audiology
- Master's degree in Audiology
- Bachelor's degree in Speech Therapy & Audiology
- Master's degree in Speech Therapy & Audiology
- Other (specify)

**Q5. Number of years of clinical experience post graduation:**  Years

**Q6. Presently employed in a client-contact work setting?**

- Yes
- No

**Q7. Employed full time or part time?**

- Full time
- Part time
- Unemployed
- Other (specify)

**Q8. Indicate your daily practice environment:**

- Private Practice/Private Hospital
- Government Hospital
- Government School
- Special Needs School
- Hearing Aid Manufacturer
- Old Age Home
- University
- N/A
- Other

**Q8.1 What percentage of the Private Practice do you own?**

- 100 %
- 50 %
- 0 %
- Other

**Q9. During your professional training, did your course cover?**

- Informational counseling\*
- Rational acceptance\*\*
- Adjustment counseling\*\*\*
- All 3 of the above
- None

**\*1) Informational counseling which relates to answering questions regarding hearing and hearing loss, explanation of test results, anatomy of the ear, amplification use, communication strategies etc;**  
**\*\*2) Rational acceptance - Encompasses dealing with the emotional and psycho-social reactions to hearing loss, and gaining a deeper understanding of hearing loss, and leads to acceptance of hearing loss.**  
**\*\*\*3) Adjustment counseling - focuses on the permanency of hearing loss and concrete means to managing communication problems.**

**Q10. During your professional training, which were you able to practise?**

- Informational counseling
- Rational acceptance
- Adjustment counseling
- All of 3 of the above
- None

**\*1) Informational counseling which relates to answering questions regarding hearing and hearing loss, explanation of test results, anatomy of the ear, amplification use, communication strategies etc;**

**\*\*2) Rational acceptance - Encompasses dealing with the emotional and psycho-social reactions to hearing loss, and gaining a deeper understanding of hearing loss, and leads to acceptance of hearing loss.**  
**\*\*\*3) Adjustment counseling - focuses on the permanency of hearing loss and concrete means to managing communication problems.**

## Section B: Current Practise

**Q11-Q18. Indicate the percentage that best represents your activities in the following:**

	1 1-20%	2 21-40%	3 41-60%	4 61-80%	5 81-100%	N/A
Average percentage of work time spent in client contact activities per day	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average percentage of case load who are adults (>18 years )	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average percentage of <b>adults</b> who <b>need</b> informational counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average percentage of <b>adults</b> who <b>need</b> rational acceptance counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average percentage of <b>adults</b> who <b>need</b> adjustment counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average percentage of <b>adults</b> who <b>received</b> informational counseling from you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average percentage of <b>adults</b> who <b>received</b> rational acceptance counseling from you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average percentage of <b>adults</b> who <b>received</b> adjustment counseling from you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**\*1) Informational counseling which relates to answering questions regarding hearing and hearing loss, explanation of test results, anatomy of the ear, amplification use, communication strategies etc;**  
**\*\*2) Rational acceptance - Encompasses dealing with the emotional and psycho-social reactions to hearing loss, and gaining a deeper understanding of hearing loss, and leads to acceptance of hearing loss.**  
**\*\*\*3) Adjustment counseling - focuses on the permanency of hearing loss and concrete means to managing communication problems.**

**Q19-23. Indicate the approximate time spent per client per session in the different counseling activities with adult clients:**

	1 0-15 min	2 16-30 min	3 31-45 min	4 46-60 min	5 >60 min	6 N/A
Average amount of time spent counseling the adult client only	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average amount of time spent counseling the significant other person and the adult client	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average amount of time spent on informational counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average amount of time spent on rational acceptance counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Average amount of time spent on adjustment counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- \*1) Informational counseling which relates to answering questions regarding hearing and hearing loss, explanation of test results, anatomy of the ear, amplification use, communication strategies etc;**
- \*\*2) Rational acceptance - Encompasses dealing with the emotional and psycho-social reactions to hearing loss, and gaining a deeper understanding of hearing loss, and leads to acceptance of hearing loss.**
- \*\*\*3) Adjustment counseling - focuses on the permanency of hearing loss and concrete means to managing communication problems.**

**Q24-26. When is counseling incorporated into your practice with adults?**

	Before audiological assessment	Immediately after audiological assessment	Immediately after hearing aid evaluation	During hearing aid fitting & orientation	During aural rehabilitation	All of the previous answers	N/A
When is informational counseling generally provided to your adult client?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When is rational acceptance counseling generally provided to your adult client?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
When is adjustment counseling generally provided to your adult client?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- \*1) Informational counseling which relates to answering questions regarding hearing and hearing loss, explanation of test results, anatomy of the ear, amplification use, communication strategies etc;**
- \*\*2) Rational acceptance - Encompasses dealing with the emotional and psycho-social reactions to hearing loss, and gaining a deeper understanding of hearing loss, and leads to acceptance of hearing loss.**
- \*\*\*3) Adjustment counseling - focuses on the permanency of hearing loss and concrete means to managing communication problems.**

**Q27-29. Please rate your skills in providing:**

	1 Very Poor Skills	2 Poor Skills	3 Average Skills	4 Good Skills	5 Very Good Skills
Informational counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rational acceptance counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjustment counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- \*1) Informational counseling which relates to answering questions regarding hearing and hearing loss, explanation of test results, anatomy of the ear, amplification use, communication strategies etc;**
- \*\*2) Rational acceptance - Encompasses dealing with the emotional and psycho-social reactions to hearing loss, and gaining a deeper understanding of hearing loss, and leads to acceptance of hearing loss.**
- \*\*\*3) Adjustment counseling - focuses on the permanency of hearing loss and concrete means to managing communication problems.**

**Q30-32. Please rate your perceived need for further training in counseling from 1-5:**

1                      2                      3                      4                      5

	Great Need	Moderate need	Neutral	Little need	No Need
Informational counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rational acceptance counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjustment counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- \*1) Informational counseling which relates to answering questions regarding hearing and hearing loss, explanation of test results, anatomy of the ear, amplification use, communication strategies etc;**  
**\*\*2) Rational acceptance - Encompasses dealing with the emotional and psycho-social reactions to hearing loss, and gaining a deeper understanding of hearing loss, and leads to acceptance of hearing loss.**  
**\*\*\*3) Adjustment counseling - focuses on the permanency of hearing loss and concrete means to managing communication problems.**

**Q33. When you generally provide counseling, whom do you provide it to?**

- Adult client only  
 Adult client & Significant other person e.g. spouse/child  
 Other (specify)

**Q34-41. Do you agree with the following statements?**

	1 Strongly disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly agree
Audiologists are adequately trained to provide counseling to adult patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Audiologists feel confident counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling is an important realm of audiology practice when dealing with adults with acquired hearing loss	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you feel adequately trained to counsel adult clients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you feel adequately trained to counsel adult clients and their significant other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adults with untreated hearing loss avoid social gatherings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adults with hearing loss who receive counseling perceive less of a handicap than the adults whom do not receive counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
By increasing knowledge and ways to cope with hearing loss; it decreases communication breakdowns, irritation and degraded self-esteem	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q42-49. Rate the importance of the following attributes and skills that make a competent Audiologist:**

	1 Not at all important	2 Not important	3 Unsure	4 Important	5 Very important	6 N/A
Asks open ended questions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Obtains bio-psychosocial view of the client	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Listens to the clients' needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Allows client to make informed decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Empowers client	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Has true empathy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Unconditional positive regard (accepting clients as they are)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Genuineness (not using professional jargon)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**Q50. Name your strengths as an Audiologist with respect to providing services to adults with hearing loss:**

### Section C: Current Challenges

**Q51. In your opinion, what challenges do you face with adult clients who are fit with hearing aids?**

**Q52. What are your suggestions to improve the counseling of adult clients who have been fit with hearing aids?**

**Q53. What are the issues that arise frequently during counseling of adult clients with hearing loss?**

**Q54-56. How do you address the impact that the hearing loss has on the client and their families lives?**

	Yes	No
I ask them to complete a questionnaire regarding their listening needs	<input type="radio"/>	<input type="radio"/>
I ask questions regarding the type of lifestyle lead during the case history taking	<input type="radio"/>	<input type="radio"/>
I ask them to complete the Client Orientated Scale of Involvement	<input type="radio"/>	<input type="radio"/>

I ask them to complete the Client Orientated Scale of Improvement (COSI)

**Other (Explain):**

**Q57. Would you like to improve your skills of counseling within Audiology in managing adult clients?**

- Yes
- No
- Unsure

**Q58. If so, what would be the most suitable way of increasing your knowledge of counseling within Audiology?**

- Online learning
- Presentations at conferences/trade shows
- Seminars
- Reading a book on counseling
- Other

Thank you for taking the time to participate in my study.  
Please be assured that all data collected will be kept strictly confidential.

For any information or comments, please feel free to contact me on husmita.r@gmail.com.

Kind Regards  
Husmita Ratanjee  
031-813 5935

[Thank You for completing this survey](#)

Online Surveys Powered By





## Appendix B: Ethics Approval-Humanities and Social Sciences Research Ethics Committee



28 January 2014.

Ms Husmita N Ratanjee (211525615)  
School of Health Sciences  
Westville Campus

Protocol reference number: HSS/1257/013M  
Project title: Counseling of adults who need amplification: Practices of South African Audiologists

Dear Ms Ratanjee,

In response to your application dated 10 September 2013, the Humanities & Social Sciences Research Ethics Committee has considered the abovementioned application and the protocol have been granted **FULL APPROVAL – Expedited**.

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

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

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

Yours faithfully

Dr Shenuka Singh (Chair)

/ms

Cc Supervisor: Dr L Joseph  
cc Academic Leader Research: Professor HJ van Heerden  
cc School Administrator: Ms Phindile Nene

Humanities & Social Sciences Research Ethics Committee

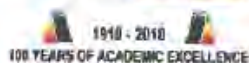
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Website: [www.ukzn.ac.za](http://www.ukzn.ac.za)



Founding Campuses: Edgwood Howard College Medical School Pietermaritzburg Westville

## Appendix C: SAAA/SASLHA-Access to members email addresses

DISCIPLINE OF AUDIOLOGY  
SCHOOL OF HEALTH SCIENCES  
Tel: 031 260 7438/8986  
Fax: 031 260 7622  
E-mail: sitholep2@ukzn.ac.za  
E-mail: naidoor1@ukzn.ac.za



The Chair  
Executive Committee  
South African Association of Audiologists

**RE: ACCESS TO EMAIL ADDRESSES OF MEMBERS FOR RESEARCH**

Dear Sir/ Madam

My name is Husmita Ratanjee and I am currently undertaking my Master of Communication Pathology (Audiology) degree at the University of KwaZulu-Natal. The research aims to investigate the practice and skills of audiologists in counseling adult patients who need amplification.

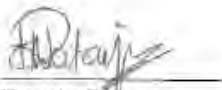
I need to survey audiologists registered with professional associations, and will be very grateful if you will grant me access to email addresses of your members. The title of my study is **COUNSELING ADULTS WHO NEED AMPLIFICATION: PRACTICES OF SOUTH AFRICAN AUDIOLOGISTS.**

The study aims to gain a better understanding of this area of audiological practice, as there is limited research on the topic within the South African context. The study is in the form of an online questionnaire. The questionnaire will take approximately 15 minutes to complete. Ethical clearance to conduct this research has been obtained from the Humanities and Social Research Ethics Committee of the University of KwaZulu-Natal (HSS/1257/013M).

All participants who undertake the survey can be assured that their responses will be kept confidential and they will remain anonymous. The database into which the replies will be entered will ensure that identifying personal data and answered questions will not be linked to the participant. This ensures that the research cannot tie the results to any particular participant.

Data will be stored safely electronically for five years after which time the data will be destroyed. Should you have any questions, you may email Husmita Ratanjee at [hurmita.re@gmail.com](mailto:hurmita.re@gmail.com) or contact the UKZN Research office at: 031-260-4769.

Thanking you



Husmita Ratanjee  
Research Masters Student  
BSc Audiology (UCT)



Dr Neethie (L) Joseph  
Research Supervisor  
PhD (UP)

DISCIPLINE OF AUDIOLOGY  
SCHOOL OF HEALTH SCIENCES  
Tel: 031 260 7438/8986  
Fax: 031 260 7622  
E-mail: sitholep2@ukzn.ac.za  
E-mail: naidoor1@ukzn.ac.za



UNIVERSITY OF  
KWAZULU-NATAL

INYUVESI  
YAKWAZULU-NATALI

The Chair  
Executive Committee  
South African Speech, Language and Hearing Association

**RE: ACCESS TO EMAIL ADDRESSES OF MEMBERS FOR RESEARCH**

Dear Sir/ Madam

My name is Husmita Ratanjee and I am currently undertaking my Master of Communication Pathology (Audiology) degree at the University of KwaZulu-Natal. The research aims to investigate the practice and skills of audiologists in counseling adult patients who need amplification.

I need to survey audiologists registered with the professional associations, and will be very grateful if you will grant me access to email addresses of your members. The title of my study is **COUNSELING ADULTS WHO NEED AMPLIFICATION; PRACTICES OF SOUTH AFRICAN AUDIOLOGISTS.**

The study aims to gain a better understanding of this area of audiological practice, as there is limited research on the topic within the South African context. The study is in the form of an online questionnaire. The questionnaire will take approximately 15 minutes to complete. Ethical clearance to conduct the research has been obtained from the Humanities and Social Research Ethics Committee of the University of KwaZulu-Natal (HSS/1257/013M).

All participants who undertake the survey can be assured that their responses will be kept confidential and they will remain anonymous. The database into which the replies will be entered will ensure that identifying personal data and answered questions will not be linked to the participant. This ensures that the research cannot tie the results to any particular participant.

Data will be stored safely electronically for five years after which time the data will be destroyed. Should you have any questions, you may email Husmita Ratanjee at [husmita.r@gmail.com](mailto:husmita.r@gmail.com) or contact the UKZN Research office at: 031-260-4769.

Thanking you

Husmita Ratanjee  
Research Masters Student  
BSc Audiology (UCT)

Dr Necthie (L) Joseph  
Research Supervisor  
PhD (UP)

## **Appendix D: Invitation email**

Dear Participant,

My name is Husmita Ratanjee and I am currently undertaking my Master of Communication Pathology (Audiology) degree at the University of KwaZulu-Natal.

I would appreciate it if you took the time to participate in a study regarding counseling in Audiology.

The study aims to gain a better understanding of counseling adults who need hearing aids, as there is limited research on the topic within the South African context. The study is in the form of an online questionnaire which will take approximately 15 minutes to complete. Your participation will be greatly appreciated.

Please click on the link below for more information and/or to begin the survey.

Thanking you  
Husmita Ratanjee  
Masters Research Student

<SURVEY\_LINK>

## Appendix E: Information sheet & consent form

### Survey: Counseling Adults who need Amplification:

Counseling of adults who need amplification: Practice of South African Audiologists

#### INFORMATION SHEET:

Dear Participant,

The survey is entitled **COUNSELING OF ADULTS WHO NEED AMPLIFICATION: PRACTICE OF SOUTH AFRICAN AUDIOLOGISTS**.

In this survey, all audiologists registered with the professional audiology associations in South Africa are invited to complete a survey that investigates Audiologists' practices in Counseling.

It will take approximately 15 minutes to complete the survey.

Your participation in this study is completely voluntary and there are no foreseeable risks associated with this project.

Your survey responses will be strictly confidential and data from this research will be reported grouped. Your information will be coded and you will remain anonymous. Data will be stored electronically for five years after which time it will be destroyed.

If you have questions you may contact Husmita Ratanjee at 031-813 5935 or via email listed below. You may also contact the UKZN Research Office on 031-260 4769.

Thank you very much for taking the time to participate in the study.

Kind Regards  
Husmita Ratanjee  
Research Masters Student  
BSc Audiology (UCT)  
husmita.r@gmail.com  
031-813 5935

Dr Neethie (L) Joseph  
Research Supervisor, PhD (UP)  
josephl@ukzn.ac.za  
031-260 6725

#### CONSENT:

I understand that my participation in this study is completely voluntary and there are no foreseeable risks associated with this project. Should I feel uncomfortable answering any questions, I am aware that I may withdraw from the survey at any point.

Survey responses will be strictly confidential and data from this research will be reported grouped. Information will be coded and I understand that my responses will remain anonymous.

If I have questions at any time regarding the survey, I am aware that I can contact Husmita Ratanjee at 031-813 5935 or via email: husmita.r@gmail.com or the UKZN Research Office at 031-260 4769.

**Note: Please select the print option in your browser to print this consent page for your reference.**

- I agree to participate in this study
- I do not agree to participate in this study

**Appendix F: Certificate of Ethics Course- National Institutes of Health (NIH).**

