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DEPARTMENT OF SPEECH PATHOLOGY AND AUDIOLOGY

The Educational Experiences of Deaf Adolescents Attending a School for the Deaf in Gauteng

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A dissertation submitted in fulfilment of the requirements for the degree of Master of Arts in Audiology in the faculty of Humanities, University of the Witwatersrand.

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Declaration

I declare that " ***The Educational Experiences of Deaf Adolescents Attending a School for the Deaf in Gauteng"*** is my own work, that it has never been submitted for any examination or degree in any other university, and that all sources to which I have made reference or quoted have been indicated and acknowledged by complete references.

Nicola van Zyl

January 2012

Signed: .....

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Acronyms and abbreviations

ADPS:	Achievements of Deaf Pupils in Scotland project
ASE:	American Signed English
ASHA:	American Speech-Language-Hearing Association
ASL:	American Sign Language
BSL:	British Sign Language
BTE:	Behind-the-Ear hearing aid
CMV:	Cytomegalovirus
dBHL:	Decibels (Hearing level)
DeafSA:	Deaf Federation of South Africa
EHDI SA:	Early Hearing Detection and Intervention, South Africa
ENT:	Ear Nose and Throat Specialist
FM System:	Frequency Modulating System
GDE (RNCS):	Government Department of Education (GDE) Revised National Curriculum (RNCS)
HH:	Hard of Hearing
HI HOPES:	Home Intervention – Hearing and Language Opportunities Parent Education Services.
HIV:	Human *Immunodeficiency Virus*
HPCSA:	Health Professions Council of South Africa
MCE:	Manual Coded English
MEP:	Middle Ear Pressure
NAME:	National Association for Multicultural Education

PTA:	Pure Tone Average
SASL:	South African Sign Language
SASLRP:	South African Sign Language Research Programme
SASSA:	South African Social Security Agency
SimCom:	Simultaneous Communication
SLED:	Sign Language Education and Development
TC:	Total Communication
TSA:	Test of Syntactic Abilities (Quigley, Steinkamp, Power & Jones, 1978)
TW:	Tympanometric Width
UNHS:	Universal Newborn Hearing Screening

Glossary

Apartheid:	Apartheid (an Afrikaans term meaning "separateness") was a legal system whereby people were segregated into racial groups (White, Black, Indian and Coloured) and separate geographic areas were designated to each racial group. Apartheid laws formed part of South Africa's legal framework from 1948 to 1994 (Baker, 2011).
Aural Habilitation:	Intervention for individuals who have not developed listening, language and speech skills. Aural habilitation may comprise diagnosis of hearing loss and consequent communication difficulties, auditory training and speech reading, speech and language therapy, communication strategies training, counselling, manual communication and educational strategy provision (Tye-Murray, 2009).
Aural/Oral Method:	A method of language instruction used to teach children presenting with significant hearing loss. This method comprises the utilisation of hearing and speechreading but not manual communication (Tye-Murray, 2009).
Aural Rehabilitation:	Intervention for individuals who have developed listening, language and speech skills prior to the onset of hearing loss. Aural rehabilitation aims to minimise the communication difficulties related to hearing loss and may comprise hearing loss diagnosis, provision of amplification, counselling and psychosocial support, auditory training and speechreading, communication strategies training, speech and language therapy, family instruction and educational management (Tye-Murray, 2009).
Biomedical/Medical model:	This term makes reference to the scientific or traditional school of thought in medicine which assumes that illness/disease can be traced to specific aetiologies and that the patient should be a

	passive recipient of treatment (Ross & Deverell, 2004, p. 12). With regard to deaf individuals, the medical model implies that deafness is a deficit that requires remediation (Lane, Hoffmeister & Bahan, 1996).
Cerumen:	"Earwax" (Martin and Clark, 2009, p. 482).
Cochlear implant:	The cochlear implant is an electronic device designed to bypass the damaged portion of the cochlea and subsequently directly stimulate the nerve fibres of the auditory nerve by means of a miniscule current. A portion of the cochlear implant is embedded under the skin, behind the ear canal in the cochlea (Venter, 2002).
Conductive Hearing Loss:	Abnormalities of the outer and/or middle ear resulting in a reduction in sound sensitivity (Martin and Clark, 2009, p. 483).
Cued Speech:	A language programme utilising a series of specifically developed handshapes near a speaker's lips in order to cue phonemes (Grimes, Thoutenhoofd & Byrne, 2007).
Deaf:	*Medical model* ("d") - The entire loss of ability to hear from one or both ears (World Health Organization, 2010). *Socio-cultural model* ("D") - The linguistic minority employing sign language and DEAF-WORLD membership (Lane et al., 1996).
DEAF-WORLD:	A cultural and linguistic minority for who sign language is the most integral instrument for communicating (Lane et al., , 1996). Inhabitants of the DEAF-WORLD are people who possess 'DEAF-WORLD knowledge' and share the understanding of what it is like to be deaf (Reagan, 2008; Lane et al., 1996). The term DEAF-WORLD is presented in upper case to denote that it is a sign and it is hyphenated because two English words are required to translate this single sign (Lane et al., 1996).

FM System:	Also referred to as a Frequency Modulating Trainer. This assistive listening device is utilised in the classroom setting and includes a microphone that is worn by the educator. The signal from the microphone is transmitted to the learner/s by means of frequency modulated radio waves (Tye-Murray, 2009).
Hard of Hearing:	Individuals showing preference for oral communication and the use of residual hearing, regardless of hearing loss severity (Israelite, Ower and Goldstein, 2002).
Hearing Aid:	Hearing aids include a microphone, an amplifier and a receiver forming an electronic listening device developed to deliver sound from the environment to the listener (Tye-Murray, 2009).
Identity:	Identity is an intricate and changing social and cognitive construct comprising various characteristics or identity elements that attach the individual to specific social groups (Leigh, 2009). This identity construction is based on an individual's perspective and experience of the biological, the psychological, the social and the spiritual facets of our being (Tatum, 1997).
Otoscope:	A device for observing the tympanic membrane, comprising a flashlight and a magnifying eye-piece with a funnel-shaped speculum at the end (Martin and Clark, 2009, p. 490).
Sensorineural hearing loss:	The loss of hearing sensitivity as a result of alteration or damage to the sensory mechanism of the cochlea or the nerves beyond the cochlea (Martin and Clark, 2009, p. 491).
Sign language:	In the context of this research project, the term sign language refers to 'official' manual languages only such as SASL and ASL.
SimCom:	Simultaneous communication employing both speech and a form of "signing in English" / "manual coded English" (MCE) (Power, Hyde, & Leigh, 2008).

Socio-cultural model:	With reference the deaf individual, the socio-cultural model of deafness regards those who are deaf as a cultural and linguistic minority (Lane et al., 1996).
Total Communication:	Also referred to as the “Combined Method” or SimCom. Signing and speech are employed simultaneously with the signing often reflecting a form closer to the spoken language used in the area as opposed to the natural sign language (Schick, 2003).
Tympanic Membrane:	Located at the end of the external auditory meatus between the middle and the outer ear, the tympanic membrane is a thin membrane that vibrates in response to sound stimulation (Martin & Clark, 2009, p. 494).
Tympanometry:	A measurement of the compliance and pressure of the middle ear represented graphically as a tympanogram (Martin & Clark, 2009, p. 494).

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Abstract

This study aimed to describe the educational experiences of deaf adolescent learners attending a school for the deaf in South Africa. The specific objectives of the current study included: (a) obtaining a detailed description of the educational experiences of deaf adolescent learners; (b) establishing with which rhetoric (medical vs. cultural) the deaf adolescents could best identify; (c) establishing the potential influence on individual identity development of the established affiliations with the opposing models of deafness.

Ten deaf adolescents ranging between 14 and 16 years, attending a single school for the deaf were selected as participants for the current study. A basic research design and a qualitative approach, embedded within the theory of social constructivism were employed. Two pilot studies were conducted in order to establish the feasibility of the current study. Thereafter, interviews as per the 'interview guide approach' were administered. Field observations within the school context and file reviews were also conducted.

Thematic content analysis was employed and the identified themes were described qualitatively.

Results revealed the emergence of three themes. Within these themes, the adolescents' experiences included: limited SASL role models both at home and at school, negative educational encounters as well as positivity and hope for the future. Experiences characteristic of the medical model and socio-cultural model of deafness were reported and factors affecting these affiliations were described.

The researcher concluded that a level of affiliation with both the medical and the socio-cultural models of deafness existed for the participants. The impact of these affiliations on identity construction was explored and a model of identity development, the multicultural-experience model, was proposed. The education of deaf individuals in South Africa shows room for significant growth. By adjusting government education policies for deaf education as well as supporting the goals of early intervention, deaf learners can reach their full potential regardless of the mode of communication favoured.

Keywords: deaf, Deaf, Hard-of-Hearing, education, interview, experience, identity construction

CHAPTER ONE: INTRODUCTION, THEORETICAL CONTEXT AND RATIONALE

1.1. Introduction

This chapter comprises a synopsis of the perspectives of deafness as well as a brief rationale for this study. Additionally, chapter one provides the reader with information regarding identity development and the impact of context on identity construction in both hearing and deaf individuals. The education of deaf individuals on a global scale as well as within the South African context is discussed and the role of the audiologist with regards to deaf individuals is described.

"...The history of education of the deaf is replete with methodology wars; the loser in these monumental battles has been the deaf child..." (Luterman, 1999, p. 32).

Globally, the history of deaf education has been characterised by conflicting schools of thought in terms of the most appropriate communication modality with which to educate deaf learners. While internationally much research has been conducted on deaf education regarding the opposing modalities and the associated academic outcomes, little is known about the subjective educational experiences of learners attending schools for the deaf, particularly in South Africa. Within the South African context, there is the superimposition of a culturally diverse nation, poverty as associated with a developing country and an oppressive political history further impacting the language choice and subsequent educational experience of deaf learners (Reagan, Penn & Ogilvy, 2006, p. 187).

An affiliation with either the medical or the socio-cultural school[1] of thought amongst others, has been recognised to influence an individual's identity development (McIlroy & Storbeck, 2011; McIlroy, 2008) as have the educational experiences of a deaf person been acknowledged to impact self-perception (Leigh, 1999). Furthermore, adolescence is recognised as a pivotal period in identity development (Erikson, 1963). Therefore, the current research describes the educational experiences of deaf adolescents attending a school for the deaf in the Gauteng province, South Africa. The study also explores the adolescents' perspectives of deafness and its subsequent impact on identity development.

1. The distinction between the two definitions of deafness may be distinguished by noting that audiological deafness is denoted by a small "d", while cultural and linguistic definitions are denoted with a capital "D" (Sacks, 2009, p. xii).
   As recommended by Reagan et al. (2006); in order to avoid oversimplifying the multilayered construction of deafness (Padden & Humphries, 2005) as well as in an attempt to avoid confusion and/or showing bias towards either the medical or the socio-cultural view of deafness, particularly when reporting the participants' responses; the investigator has made use of a small 'd' when referring to the term 'deaf' in most circumstances with the exception of cases where the denotation of a capital 'D' has been specifically stipulated by the author or in specific texts.

Estimates made by the World Health Organization, based on recent survey data, placed the global number of individuals presenting with moderate to profound hearing loss at 278 million (Tucci, Merson & Wilson, 2009). Of these 278 million individuals presenting with moderate to profound hearing loss, 50% reside in developing countries (Tucci et al., 2009). Furthermore, one to four babies in every 1000 live births is reportedly born with a hearing loss worldwide (Prpic, Mahulja-Stamenkovic, Bilic & Haller, 2007). Within sub-Saharan Africa, approximately 180 000 babies are born with or acquire within the first few weeks of life, a permanent hearing loss bilaterally (Meyer & Swanepoel, 2011). Figures of between 3306 and 6612 babies are born presenting with a hearing loss on an annual basis in South Africa (Storbeck & Swanepoel, 2009). This translates into 1.4 persons being born with a hearing loss every day (Storbeck & Swanepoel, 2009). These statistics, suggesting significant prevalence of hearing loss in South Africa have implications for early identification and intervention protocols (Tucci et al., 2009) as well as social implications due to limited access to services and resources being a prevalent issue in sub-Saharan Africa (Tucci et al., 2009). This high prevalence of hearing impairment in South Africa highlights the importance of the current study as the findings have potential to impact a proportionate sector of the population.

1.2. The Medical versus the Socio-Cultural Rhetoric of Deafness

In order to fully appreciate and understand the educational experience of a deaf adolescent, one must first possess a firm grasp of the ceaseless methodology debate in which oralism and sign language are strongly opposed.

The World Health Organization (WHO) describes hearing impairment as an umbrella phrase utilized to describe the loss of hearing in one or both ears; while deafness is defined as the entire loss of ability to hear from one or both ears (World Health Organization, 2010).

1.2.1 The Medical Model of Deafness

The medical model (also referred to as the deficit model) defines deafness in terms of the hearing deficiency and the pathology (Lane et al., 1996) as well as the degree of hearing loss audiologically (Stach, 2010, p.119). Stach (2010) believes that degree of hearing loss is an important criterion when defining deafness in audiological terms. A mild hearing loss is said to include those losses greater than 26dBHL but not exceeding 40dBHL. A hearing loss between 41dBHL and 55dBHL is described as moderate, while losses from 56dBHL to

70dBHL are described as moderately severe (Stach, 2010, p.119). Generally the term audiologically *deaf* (italics added) lends itself to severe and profound hearing losses. Severe hearing losses include those losses exceeding 70dBHL but not greater than 90dBHL. Hearing losses exceeding 90dBHL may be referred to as profound (Stach, 2010, p.119).

Superimposed on this hearing loss continuum and the arguably volatile education methodology debate is the existence of a sub-cultural group, namely those who are hard of hearing (HH) (Israelite et al., 2002). Hard of Hearing individuals are defined by Israelite et al. (2002) as individuals showing preference for oral communication and the use of residual hearing, regardless of hearing loss severity. HH individuals ordinarily supplement the residual hearing with assistive devices such as hearing aids, cochlear implants and FM (Frequency Modulating) systems. Furthermore, speech reading or lip reading and aural rehabilitation with the goal of oral language, form an integral component in the HH lifestyle decision (Israelite et al., 2002). The medical model places emphasis on the remediation of the hearing deficiency through speech and hearing therapy and the use of assistive devices such as cochlear implants and hearing aids (Hyde & Power, 2006; Ross & Deverell, 2004, p. 11). Thus, HH individuals appear to display a tendency towards the medical model of deafness as opposed to the socio-cultural model through the utilisation of assistive devices and oral language as a preferred mode of communication.

1.2.1.1. Technology and the Medical Model

Worldwide, technology has been instrumental in facilitating the advancement of equipment utilised for the early identification of hearing loss as well as the development of assistive devices which facilitate the achievements of the early intervention goals (Tucci et al., 2009). The advent of neonatal hearing screening has resulted in a dramatic increase in the fitting of prelingually deafened children with cochlear implants in both developed and developing countries (Yoshinaga- Itano, 2004). Additionally, it was established across 16 states of the United States of America that the initiation of the multichannel cochlear implant has brought with it, the guarantee of improved speech production and perception as well as language development (Loy, Warner-Czyz, Tong, Tobey, & Roland, 2009). The cochlear implants' proven success in the aforementioned areas now results however, in questions of psychosocial and cultural adjustment of those fitted with these devices (Loy et al., 2009). It should be noted that in a review of health-related-quality-of- life studies of profoundly deaf children fitted with at least one cochlear implant; Lin and Niparko (2006) identified that

children with cochlear implants experience similar psychosocial issues to their normal hearing counterparts. Furthermore, it was recognised by Lin and Niparko (2006) that in the majority of the studies reviewed, the children fitted with cochlear implants obtained similar scores to children with normal hearing in terms of health-related-quality-of-life.

Dammeyer (2010) conducted a study in Denmark evaluating the prevalence of psychosocial difficulties in 334 children with hearing loss. Psychosocial difficulties were identified by Dammeyer (2010) as 3.7 times more prevalent in children with hearing loss than in their hearing counterparts. Additionally, Dammeyer established that the participants that were highly proficient in oral/sign language did not display significantly higher prevalence of psychosocial difficulties than their peers with normal hearing. Dammeyer's (2010) study thus highlights the important relationship between communication and the psychosocial well-being of a child with a hearing loss. It is apparent that much research has been conducted in terms of the experiences and well-being of individuals fitted with cochlear implants as well those individuals favouring sign language in developed countries. However, cochlear implantation in developing countries is not common practice (Tucci et al., 2009). The imperative implications related to the findings of Lin and Niparko (2006) and Dammeyer (2010) respectively have been documented thus further supporting the need for the current study and the potential implications thereof.

1.2.2. The Socio-Cultural Model of Deafness

Contrary to the medical model's approach to deafness, the socio-cultural/social/cultural approach to deafness defines deaf individuals as culturally different as opposed to disabled (Ross & Deverell, 2004). This rhetoric of deafness stipulates that the cultural difference of deaf individuals is resonated in their linguistic minority through the employment of sign language in order to converse (Sacks, 2009, p. 2; Ross & Deverell, 2004, p. 144; Ladd, 2003; Corker, 1998, p. 5,). It is essential to note that sign language is not iconic or gestural and it is not universal, but rather may be defined in the same manner as all other languages (Sacks, 2009, p. 17). Sign language may therefore be most aptly defined as a system of arbitrary grammatical signals and symbols that alter across time and that members of the community share and make use of, for various purposes: to communicate ideas, intentions and emotions, to interact with each other, and to convey their culture from generation to generation (Sacks, 2009, p.17; Lane, et al., 1996, p. 44). Furthermore, there is a sign language distinct to the South African deaf community, namely South African Sign Language (SASL) (Reagan et al.,

2006). Characteristic of SASL is the extensive lexical variation linked to educational and regional backgrounds (Reagan et al., 2006).

1.2.2.1. The DEAF-WORLD

Sign language is the most integral instrument for communicating in the DEAF-WORLD (Lane et al., 1996, p. 6). Inhabitants of the DEAF-WORLD are people who possess 'DEAF-WORLD knowledge' and share the understanding of what it is like to be deaf (Reagan, 2008; Lane et al., 1996, p. 6).

Lane et al., (1996) assert that the level of an individual's hearing is not a key issue in deciding membership in the DEAF-WORLD. These authors believe that the use of sign language as a deaf or hearing person enables one to join both local and international networks which link members of the DEAF-WORLD. Furthermore, it allows one to acquire the accumulated wisdom of generations of deaf people; and it further allows one to understand the subtleties of relating appropriately in this world and become familiar with the traditions, culture, history and signed-language literature of the deaf (Lane et al., 1996, p. 6).

> The English meaning of a sign is denoted in capital letters (e.g.: DEAF-WORLD). Furthermore, many signs may necessitate several English words to correspond to a single sign, in such cases the English words are joined by hyphens (Reagan, 2008)

Lane (2005) outlines four reasons why the DEAF-WORLD should not be viewed as a disability group but rather as a cultural and linguistic minority. Firstly, Lane (2005) asserts that Deaf people themselves do not see themselves as disabled; secondly, the disability construction brings with it numerous medical and surgical risks for the deaf child; thirdly, holding this view also threatens the future of the DEAF-WORLD and lastly, the disability rhetoric lends itself to poor solutions to real problems because it is based on a misunderstanding (Lane, 2005).

1.2.3. Models of Deafness and Context

From the above discussion, it is clear that vastly different perspectives regarding hearing loss and deafness exist. A bold, definitive line between hearing and Deaf culture prevails and as such, a hearing parent of a deaf infant, may be faced with momentous management decisions regarding where on this cultural spectrum the newly diagnosed child will lie (Ross &

Deverell, 2004, p. 147; Schmulian, 2002; Storbeck & Morgans 2002). Parents often have to make a decision whether to communicate with their child visually or orally and ultimately whether to enrol the child in a school for deaf learners or a mainstream school respectively (Smuts, 2002, p. 51). This decision in turn, will significantly impact on whether the child will belong to the Deaf community, the hearing community or both. The term community is a multidimensional concept and thus defies a single definition (Lesser & Pope, 2007). Nevertheless, Lesser and Pope (2007) describe community loosely as people with social ties that share a sense of identity, (for example, a Deaf identity) and share common elements such as social interactions and geographic position (Lesser & Pope, 2007). From this definition of community, it can be understood that the community with which one affiliates; which in turn is associated with one's context, has been identified as pertinent in the development of one's identity (McIlroy & Storbeck, 2011; McIlroy, 2008). Erikson, in contrast to Freud's emphasis on sexuality and biology, stresses the crucial role of cultural and social contexts in identity construction (Hook, 2002a). Piaget (1952), despite focussing his cognitive development theory on the role of the individual, acknowledges the contribution that social context exerts on development (Cockroft, 2002; Hook, 2002a, p. 177). Moshman (2005) suggests that individuals in different contexts and of diverse cultures have qualitatively different self-construals, perceptions of others and understandings of the interdependence of the two. It is further suggested by Markus and Kitayama (1991) that these self-perceptions influence the nature of an individual's experiences, including emotions, cognition and motivation. Bronfenbrenner (1979) attributes identity construction in equal parts to an individual's environment and to the developing person; personal identity being the result of the interaction of the two (Hook, 2002b).

It has been established that the identity development of an individual is strongly associated with the individual's community and context (Moshman, 2005), thus highlighting the magnitude of the decision impressed upon a parent at the time of the hearing loss diagnosis. Related to this tremendously influential parental decision is the ethical obligation of the audiologist to deliver unbiased, informed and honest feedback (Ross & Deverell, 2004) to parents of a newly diagnosed child hence reiterating the importance of the current study.

1.3. Deaf Identity Development

1.3.1. Introduction to Identity Development

*"Between what a man calls **me** and what he simply calls **mine**...the line is difficult to draw"* (James, 1950, Vol.1, p. 291 as cited in Moshman, 2005).

Universally, psychological theorists concede identity has some relation to the self (Moshman, 2005). Moshman (2005) describes identity as at least to a degree, an overt theory of oneself as an individual. Identity has been described by Baumeister (1997) as "representation of the self". Despite a relatively simple definition, the construction thereof is a highly complex process, a process which has been theorised by numerous academics. Fitzgerald (1993) refers to the development of self and identity as a reflexive, multidimensional evolution, linking cultural information, psychological motivation and the capacity to perform appropriate roles. Consequently, Fitzgerald (1993) explains that identity is a dynamic construction as opposed to a static end point, incorporating language, culture and social experiences.

A considerable amount of the literature on identity development emphasises adolescence as an instrumental epoch of the human lifespan in terms of identity of self (Moshman, 2005). Moshman (2005) further emphasises that the psychological development of an adolescent may be paired robustly with the community in which the adolescent is involved and as such the community should serve to encourage and facilitate sophisticated levels of moral understanding and self-constructed identities. Erikson (1968) asserts that adolescence is a time period in which individuals transcend into an adult identity. Hall (1904) refers to adolescence as a second "birth", a time of turbulence and a transition between what is instinctual and what is refined – in essence a struggle between patterns of opposing poles (Bergevin, Bukowski & Miners, 2005). Hall (1904) further suggests that the role of educators in this tumultuous time is to motivate, guide, nurture and prevent the arrest of intellectual growth (Bergevin et al., 2005).

Traditionally, four domains of identity development for the adolescent have been stressed, these being religion, career, sexuality and political beliefs (Moshman, 2005). Shwartz (2001) however, highlights additional facets such as gender role, morality, relationships, ethnicity, education, friendship and parenting, citing the traditional domains as being restrictive and short-sighted. Vygotsky's (1956) theory of social constructivism which supersedes the traditional nature-nurture debate and allows for the encompassment of all of the

aforementioned influential facets of identity, suggests that hereditary and environmental factors as well as the individual's active participation are essential in identity development (Kozulin, 1990; Moshman, 2005). Vygotsky's social constructivism shares similar assumptions to that of Piaget's theories on how children learn, but social constructivism places significantly more emphasis on the social context of learning and development (Chen, 2011).

In Vygotsky's theories, both educators and older or more experienced children play crucial roles in learning and individual development (Chen, 2011). Vygotsky's social constructivism necessitates an active, involved adult/educator and highlights one's context in development (Chen, 2011). Additionally, Vygotsky suggests that an individual's culture provides the cognitive tools required for development (Chen, 2011). Social constructivism emphasises that parents and teachers are conduits for the tools of the culture (Chen, 2011). Vygotsky (1956) suggests that the tools provided for the individual by the culture include cultural history, social context, and language (Chen, 2011). Therefore, social constructivism was selected by the investigator in the current study as an appropriate paradigm in which to imbed the findings of the current study due to the acknowledgement of adults, both parents and educators as well as context, culture and language as being significant factors in the development of an individual (Chen, 2011).

With regards to deaf identities, Sari (2005) reiterates that identities are reinforced by educational settings, with dual identity presenting commonly in schools employing Total Communication, while oral educational settings have been found to reinforce a hearing identity. Hall's (1904), Vygotsky's (1956) and Sari's (2005) statements on adolescence, identity development and educational setting respectively, not only reiterate that educators play a pertinent role in the formation of a learner's identity but too bring to the fore the fact that it is during adolescence that one establishes one's own identity. It is for this reason, that adolescents were selected as participants in the current study. These authors' statements further highlight the necessity of describing the educational experiences of deaf adolescents.

1.3.1.1. The South African Context: A Brief Overview

It has been identified that context plays a significant role in the identity development of an individual. Furthermore, it has been acknowledged that one's educational setting, forming part of one's context, influences one's identity construction (Chen, 2011). It is thus

imperative that one is in possession of a basic understanding of the greater context of South Africa in order to grasp fully, the potential impact of this context on an individual.

South Africa has been described as a culturally and linguistically prolific country with eleven official languages and an arguably infamous political history (Reagan, 2008). Additionally, South Africa is a developing country and as such, poverty is a reality for many of its citizens. Julius and Bawane (2011) suggest that poverty is not merely lacking financial resources, but rather includes an inability to function effectively in society. Recent statistics suggest that 14.1% of the South African population reside in informal dwellings (StatsSA, 2007a). Additionally, 53% of South African schools are regarded as Quintile 1 schools (StatsSA, 2007a). A Quintile 1 school may be defined as a school categorised by the provincial education department as the poorest (Maarman, 2009). Poverty has been identified by Julius and Bawane (2011) as hampering educational attainment. These authors argue that poverty may limit the acquisition of learning as well as other academic materials. Additionally, poverty is suggested to result in social pressures which maim the mindset of impoverished learners which in turn may impact identity development (Julius & Bawane, 2011).

The key family members and their primary roles within the family unit have altered greatly within the South African context owing to HIV creating many orphans and subsequent child-headed households (Republic of South Africa Government Gazette, 2011). Economic and race relations are also significant factors in shaping South African family life (Republic of South Africa Government Gazette, 2011). These alterations in an individual's "ecosystem" are suggested by Maarman (2009) as significantly impacting his/her life experience and identity development alike.

1.3.2. Theories of Deaf Identity Development

In the past, the identity of a deaf individual was thought to be strictly medical or stringently socio-cultural (McIlroy & Storbeck, 2011; McIlroy, 2008) however, more recently this binary model has been recognized as an oversight of the complexity of deaf lives (Fernandes & Myers, 2010). Bat-Chava (2000) suggests four deaf identities, namely; **d**eaf, **D**eaf, ambiguous identity and bicultural identity (emphasis added by researcher). Brueggemann (2009) suggests that a deaf person may experience "inbetweenity" identifying stringently with neither the **D**eaf identity nor the **d**eaf identity (emphasis added). Deaf labels such as hard of hearing, hearing impaired, late deafened, oral deaf and Deaf have been recognised by Leigh (2009) as having significant implications for personal adjustment and relationships

with others as these labels are suggestive of “self-representations, communication and language choices, individual functioning, and socialization with hearing and/or deaf persons” (Leigh, 2009, p. 9).

“On the face of things, a difference in hearing *is* a disability, considering that the word “deaf” represents a functional deficiency in the ear” (Leigh, 2009, p. 11) The concept of disability is based on diagnostic criteria to classify a particular pathology or deficiency (DePoy & Gilson, 2004). Leigh (2009) highlights four possible models of identity development in the event that a deaf individual views him/herself as disabled. The deficit model being the first model of identity emphasises the impairment and the functional limitations hence resulting in a negative self-perception and a desire for normalisation (Leigh, 2009). Power inequalities and society’s dominance of individuals presenting with disabilities, are the catalysts of the dominance model, in which unifying against the dominance is viewed as empowering by the deaf individual (Leigh, 2009). The third model, the cultural difference model assumes that persons with a specific disability share a cultural relationship (Leigh, 2009). The fourth model, the narrative model, places emphasis on shared social practices and meaning that bring people together while simultaneously developing identity (Leigh, 2009).

Models of identity development for those individuals who are culturally Deaf and hence associate with the socio-cultural model of deafness have too been proposed. The social-minority model suggests that an individual is highly comfortable with their “disability” or “difference” so much so that a “cure”, if possible, would not be used to eliminate the difference (Mackelprang & Salsgiver, 1999). Furthermore, the social-minority model suggests that life with a ‘difference” may be seen merely as a different way of being as opposed to being deficient, hence conferring minority group status (Mackelprang & Salsgiver, 1999). An additional prominent model of identity development, the racial identity development paradigm, posits that deaf individuals, as members of a minority group, share experiences of oppression and recognition of differences in a manner similar to other minority groups (Ladd, 2003).

A postmodern, framework with regard to deaf identity, namely the “dialogue model” has been proposed by McIlroy and Storbeck (2011). This postmodern view of identity enables a multiplicity of identities within a single individual owing to the consideration of gender, sexual orientation, language, socio-economic status, ethnicity and other such influential factors (Moshman, 2005). McIlroy and Storbeck (2011) thus acknowledge the presence or

absence of disability as being an integral contributing factor to identity development, however identity is viewed as 'fluid' and not solely based on the presence of a hearing loss.

McIlroy and Storbeck (2011) emphatically believe that the dialogue model is not a metatheory to explain deaf identity in its entirety, but rather, the dialogue model serves as an interpretive rhetoric for theorizing how the world is experienced by deaf individuals in a way that extends beyond the inert medical/socio-cultural binary. Furthermore, the dialogue model allows for the identity of a minority group to fall on a continuum as opposed to adhering to one pole or the other (McIlroy & Storbeck, 2011, p. 8). Related to this model is the proposed bicultural "**D**ea**F** identity" (emphasis added) which portrays the cultural space from which a deaf individual moves within and between both the Deaf community and the hearing community (McIlroy, 2008).

Stinson and Foster (2000) emphasise the imperative role of communication competency in identity development with either the hearing or the Deaf community. Maximum peer social learning, group affiliation and positive social appraisals are strongly influenced by communication competency (Stinson & Foster, 2000). Lane et al. (1996) consider sign language proficiency the single most powerful indicator of DEAF-WORLD affiliation while Wheeler, Archbold, Gregory and Skipp (2007) affirm that comfortable interactions with hearing peers are facilitated by intelligible speech on the part of the deaf interlocutor.

It can be seen that numerous theorists and models of identity development support the role of culture and context in individual identity development. Furthermore, adolescence is acknowledged as an integral developmental period in terms of identity development (Erikson, 1968). Thus the current researcher investigated adolescent participants, in terms of school-aged children under the premise that this research population would prove to be most appropriate. Furthermore, the current researcher supports the belief that adolescents possess sufficient vocabulary and metacognitive and metalinguistic skills to discuss and elaborate on the researcher's questions (Mahshie, Moseley, Lee & Scott, 2006).

1.4. Deaf Education: A global, historical overview

Internationally, the education of deaf children has a controversial and contrasting history, in which oral language and signed language gained and lost favour over various periods of time. Lane (1989) in her book "When the Mind Hears: A History of the Deaf" captures most aptly

through the experiences of Laurent Clerc, the influential historical events in deaf history worldwide.

Prior to 1750, there was little hope for the vast majority of prelingually deafened people in terms of education or literacy. Congenitally deaf persons were considered, by an uninformed law as incompetent to marry, to inherit property or even to be educated (Sacks, 2009, p. 9; Lane, 1989, p.1). Radical alterations in perceptions of the deaf paralleled the discovery of Victor, the Wild Boy of Averyon in 1800. He aroused immense philosophical interest in terms of whether he was educable, or whether he was in fact, capable of thought at all (Sacks, 2009, p. 9). He was admitted to the National Institution for Deaf-Mutes, in Paris founded by Abbé de l'Epée in 1755. This institution was the first public school for deaf pupils in the world (Lane, 1989, p. 6). Abbé Roch-Ambroise Sicard was at the time, the supervisor of this institution (Sacks, 2009, p. 10; Lane, 1989, p. 23). The Wild Boy of Averyon reportedly never acquired language, but it has been postulated that had he have been exposed to sign language, in the same way that deaf learners were then being approached, perhaps he may have acquired language (Sacks, 2009, p. 11).

Abbé de l'Epée, Sicard's teacher, referred to as "the father of the Deaf" (Lane, 1989, p. 6) "...approached sign language not with contempt but with awe" (Sacks, 2009, p. 16). Abbé de l'Epée acquired the language of his pupils, then referred to by others as the "mimicry of the impoverished deaf" (Sacks, 2009, p. 17) and subsequently associated these signs with pictures and written words, thus teaching his pupils to read and write. De l'Epée combined the students' own sign with signed French grammar, thus creating, what he termed a system of "methodical" signs (Sacks, 2009, p. 17). Resultantly, his school gained public support and he trained a considerable number of teachers for the Deaf, who, had established twenty-one schools for the deaf in Europe, by the time of his passing in 1789 (Sacks, 2009, p. 17). Despite being revolutionary in the history of deaf education, Abbé de l'Epée failed to recognise sign language as a complete language, viewing it both as "universal" and lacking grammar (Sacks, 2009, p.20; Lane, 1989, p. 5). However, a pupil of Sicard's, Roch-Abroise Bébian insightfully recognised that the indigenous sign language was complete and self-sufficient, and thus disregarded the imported grammar and the "methodical signs" (Sacks, 2009, p. 20). During this time, which retrospectively has been viewed as a golden period in the history of the deaf, deaf people emerged from imposed neglect and insignificance to positions of responsibility and importance (Sacks, 2009, p. 21).

When Laurent Clerc, a pupil of Massieu, who himself was a pupil of Sicard (Lane, 1989, p. 23), visited the United States of America in 1816, he had an immense impact as American teachers of the deaf had until this visit, never imagined and certainly had never been exposed to an intelligent and well-educated deaf person (Sacks, 2009, p. 23). In 1817, Laurent Clerc and Thomas Gallaudet established the American Asylum for the Deaf and converted America in the same way in which de l'Epée converted Paris in the 1770s (Sacks, 2009, p. 22). It is rumoured, that Reverend Thomas Gallaudet's passion for the education of deaf learners was ignited by the observation of a little girl, Alice Cogswell, who was noted to be excluded from playing with a group of children one day in the garden. He sought to discover why she was not included in the fun and later established, from her father, Mason Cogswell, that she was deaf. Gallaudet, in search of assistance to found a school for the deaf in Hartford, sailed for Europe (Sacks, 2009, p. 22; Lane, 1989, p. 184). In England, he attended one of the 'oral' Braidwood schools, where he was made to feel unwelcome and was told that the 'oral method' was not a secret shared readily. It was in Paris, that he met Laurent Clerc, who himself was deaf, teaching at the Institute of Deaf-Mutes and requested his assistance in establishing a new school (Sacks, 2009, p. 23). The success of the American Asylum for the Deaf in Hartford, led to the opening of numerous other schools where there was a sufficient deaf population (Sacks, 2009, p. 23).

A number of the early scholars at the American/ Hartford Asylum for the Deaf originated from Martha's Vineyard, an island on which a significant minority of the population presented with hereditary profound hearing loss and subsequently boasted an indigenous sign language (Sacks, 2009, p. 23). As a result, these Martha's Vineyard residents contributed substantially, in conjunction with the French sign system imported by Laurent Clerc, in the development of American Sign Language (ASL) (Sacks, 2009, p. 23).

Deaf education and literacy spread infectiously from the United States to various other parts of the world and it was estimated by Lane (1989) that by 1869, 550 educators of the Deaf existed worldwide. The first institute of higher learning for the Deaf, the Columbia Institution for the Deaf and Blind in Washington was established in 1864 (Sacks, 2009, p. 24). Edward Gallaudet, son of Thomas Gallaudet was the first principal of this institution, which today is known as Gallaudet University (Sacks, 2009, p. 24).

The enormous strides of improvement in deaf education from the years 1770 to 1870 were brought to an abrupt halt, when politically, the tides turned, and the oppressiveness of the

Victorian era was instilled (Sacks, 2009, p. 24). This political climate was associated with conformity and intolerance of minority groups in ethnic, linguistic and religious spheres (Sacks, 2009, p. 24). As de l'Epée had opposed Periere (who was considered to be the greatest "oralist" of his time) so now, the deaf population of the 19th century found themselves in explicit opposition to the notion that they should speak. "Reformers" such as Horace Mann and Samuel Gridley Howe insisted that sign language was "old fashioned" and should be banished. The first "progressive oralist" school, The Clarke School for the Deaf in Northampton, was established in Massachusetts in 1867. Alexander Graham Bell, despite being a fluent signer, strongly supported oralism and was an influential character in instilling this notion (Sacks, 2009, p. 6). It was at the International Congress of Educators of the Deaf held in 1880, in Milan at which oralism was victorious and became the prescribed philosophy and practice for deaf instruction (Sacks, 2009, p. 27). Oral methods of teaching were not only prescribed at this congress but sign language was prohibited. Furthermore, the number of deaf educators of deaf students plummeted from an estimated 50 in 1850 to approximately 12 by 1960 (Sacks, 2009, p. 27). The school performance of deaf students worldwide subsequently deteriorated as a direct result of the proscription of sign language and the limited number of teaching hours available as teaching speech to the deaf learners reportedly comprised a considerable portion of the academic timetable (Sacks, 2009, p. 28). Resistance to the oral methods of teaching in the 1970s could be evidenced in the form of novels such as '*In this Sign'* by Joanne Greenberg and movies such as '*Children of a Lesser God'* by Mark Medoff (Sacks, 2009, p. 29).

In response to the objections against oralism, came the alluring compromise of a "combined system" (Power, Hyde & Leigh, 2008). Signing became re-integrated into a scattering of schools worldwide, either as a "Combined System" in which separate oral and signed classes took place within a single *school* or as a "Combined Method" which utilised oral language and signing together in a single *classroom* (Power et al., 2008) (Emphasis added by researcher). The signing used in the "Combined Method" often reflected the local spoken language as opposed to natural sign language (Schick, 1997). Dissatisfaction with the outcomes of oral education resulted in oralism prevailing only until the emergence of Total Communication (TC) in the 1960s (Jordan, Gustason, & Rosen, 1976; 1979). Theoretically, Total Communication afforded learners the opportunity to be educated in the communication method deemed most suitable to meet their academic needs, but in reality it was

Simultaneous Communication (SimCom) where speech was paired with manual signs (i.e.: manually coded English – MCE) (Power et al., 2008).

It can be seen from the above reviewed evidence that both in the past, and to date, internationally, deaf children have been taught to speak so as to 'overcome their disability' in a hearing world in order to be considered integrated and employable (Lane et al., p. 29); but there have also been movements towards educating deaf learners in a manner that is more accessible to them via a visual medium in the form of signed language (Lane et al., 1996, p. 26). These reviewed international trends were reported to be commonly mirrored by Deaf education in the South African context (Penn, 1993).

1.4.1. Current International Trends

"Cochlear implantation is altering the landscape of deaf education" (Valente, 2011, p. 639).

Worldwide, technology has changed the way in which deaf individuals learn language, socialise and are educated (Scheetz, 2012). According to Valente (2011), in developed countries, cochlear implantation and digital hearing aids, paired with aural rehabilitation/habilitation have skewed educational trends in favour of the aural/ oral approach. Grimes, Thoutenhoofd and Byrne (2007) also found that language approaches within deaf educational settings in the United Kingdom have been predominantly monolingual emphasising the development of spoken English both for personal communication and as the primary mode of instruction. In contrast, Grimes et al. (2007) also state that the acknowledgement by the British government, of British Sign Language (BSL) as an official language of Britain has been favourable in supporting the visual education of deaf learners. Additional approaches such as "cued speech" and other manually coded forms of English are also reportedly in current utilisation across the United Kingdom (Grimes et al., 2007).

Lenihan (2010) suggests that in recent years, advances in technology paired with universal newborn hearing screening and subsequent early intervention have significantly altered deaf education in the Unites States of America. Lenihan (2010) further believes that these changes in deaf education have in turn influenced teacher preparation programmes. An effective teacher working within an aural/oral paradigm now requires knowledge regarding a plethora of listening and instructional technologies in order to optimise learning environments and situations (Lenihan, 2010). Furthermore, educators working in aural/oral and visual teaching

environments alike require fluency in the primary language in which teaching takes place (Lenihan, 2010). In addition to these educator specifications, certified teachers of deaf children are required to complete a general education test as well as a subject-specific test in deaf education (Lenihan, 2010). The audiologist's role in educational settings for deaf learners in the United States of America was officiated in Arizona in 1964 at the National Conference on Audiology and Education of the Deaf (Johnson and Seaton, 2012). According to the American Speech-Language-Hearing Association (ASHA) (2002), the responsibilities of educational audiologists include: identification of hearing loss, assessment of both hearing and language in the first language of the deaf individual (manual or oral), implementation of hearing conservation programmes as well as counselling and providing guidance to families, caregivers and educators. Additionally, it is the responsibility of the educational audiologist to collaborate with educational nurses, educators and school facilities personnel to advocate for educational facilities that encourage optimal outcomes for deaf learners (ASHA, 2002). In environments where technological assistive devices are encouraged, educational audiologists require extensive knowledge of the assistive devices such as hearing aids and cochlear implants (Johnson and Seaton, 2012).

Young, Carr, Hunt, McCracken, Skipp and Tattersall (2006) suggest that the multitude of educational approaches as well as the way in which these paradigms constantly change have varied educational implications for deaf learners, parents of deaf children, for teacher training programmes and also for other professionals working with deaf children such as the audiologist. Grimes et al. (2007) have identified these alterations in language approaches to be contributing to educator shortfalls in terms of both knowledge and skills. Informed decision- making by caregivers is also compromised when professionals do not possess sufficient knowledge regarding a particular paradigm (Young et al., 2006).

Changes in educational policies as driven by government, such as "the inclusion agenda" in Scotland have also been highly influential in shaping deaf education in recent years (Grimes et al., 2007). Consequently, the primary language of education for deaf children in Scotland is spoken English which may or may not be translated into BSL by specialist staff (Grimes et al., 2007).

1.5. Deaf Education: The South African Context

"...In the South African context deaf identity and language choice have far less to do historically with meaningful choice than they have to do with the politics of economics and access" (Reagan et al., 2006, p. 201).

When reviewing the historical background of Deaf education in South Africa, it is essential to be conscious of the political climate within the country over the past century (Reagan, 2008). Apartheid was officially instated in 1948 where, through segregation and discrimination, black people were limited to unskilled labour, negligible landownership, and their primary human right to vote was negated (Magongwa, 2010; Storbeck & Martin, 2010). Language policy and planning also have an exhaustive history in South Africa (Reagan et al., 2006). Under the Apartheid government, language policy and language planning activities were utilized to encourage an official bilingualism that was imposed to protect and cultivate the use of Afrikaans, as well as to up hold the apartheid ideology (Reagan et al., 2006). Furthermore, during the apartheid era, particularly in the educational arena, language policy in South Africa was used to emphasize cultural and tribal identity amongst black school children in an attempt to further divide black communities (Reagan et al., 2006).

Prior to Apartheid being instated, under the leadership of Bishop Thomas Griley, the first school for deaf learners in South Africa was erected in Cape Town in 1863 (Storbeck & Martin, 2010). Sign language was the primary medium of instruction and scholars of all races were permitted to enrol at this school (Storbeck & Martin, 2010). Irish signs and the one-handed alphabet were used by Irish Dominican sisters within this educational setting (Penn, 1993). Following the Irish Dominican sisters, were the German Dominican sisters who brought with them not only German signs and the two-handed alphabet, but also oralism, hence striking the match for the heated modality debate within the South African context (Storbeck & Martin, 2010).

The Milan Congress decision of 1880, as described in the international history above, spread ferociously and thus influenced the medium in which South African deaf learners were educated (Reagan et al., 2006). Sign language became marginalised world-wide and numerous educators were trained to use oral methods (Storbeck & Martin, 2010). In 1881, in response to the Milan Congress decision, the Dutch Reformed Church in the Western Cape established the Worcester School for the Deaf and Blind, at which, oral and manual methods were combined. (Storbeck & Martin, 2010). In 1884, in King William's Town, German

Dominican nuns established a school that adhered strictly to a policy of oralism (Storbeck & Martin, 2010). Both the Worcester School for the Deaf and Blind and the school established by the German Dominican sisters were stringently reserved for “European” deaf children. A school for “coloured” deaf children, “Nuwe Hoop” (New Hope) was erected by the Dutch Reformed Church in 1933, also combining both manual and oral methods of communication (Storbeck & Martin, 2010).

Eventually, in Gauteng (then Transvaal Province), the first school for “black” deaf children was established in 1941, where the Paget-Gorman System of signs, as originated in Britain was instituted (Reagan et al., 2006). Ironically, as racial tension continued to fester throughout the country, with “white deaf schools” adopting the “elitist” oral method of education, while “black deaf schools” were handed the “meagre” and “inferior” manual approach to educating deaf learners (Penn & Reagan, 1995; Storbeck & Martin, 2010). Resultantly, the visually based communication advanced the development of black deaf learners’ sign language thus further entrenching their identity as part of a Deaf culture (Reagan et al., 2006). Furthermore, hearing aids were not made available to the non-white population and so limited pressure was exerted on them to adopt an oral approach to education (Reagan, Penn & Ogilvy, 2006; Storbeck & Martin, 2010). Alternately, access to acquire oral communication was denied for non-white individuals (Reagan et al., 2006; Storbeck & Martin, 2010).

During the early 1990s, a period of astounding political climate transition in South Africa, was the simultaneous development of the Dictionary of Southern African Signs (Penn, 1992a) as facilitated by the South African Sign Language Research Programme (SASLRP) (Reagan et al., 2006, p. 192). The aim of the dictionary development project was to document real sign usage of deaf South African adults for application in educational settings (Reagan et al., 2006, p. 192).

In 1994, South Africa boasted the country’s first democratic elections and subsequently the end of the apartheid regime, bringing with it, amongst others, radical changes in language policy developments in South Africa (Reagan, 2008). There are currently 47 schools across the country catering for the needs of Deaf South African learners (Storbeck & Martin, 2010). South Africa has since been coined the “Rainbow Nation” and as an ethnic kaleidoscope and has become renowned for its culturally and linguistically rich heritage. The South African government now acknowledges eleven official languages, with South African Sign Language

(SASL) however, not yet accorded as one of these official languages (Magongwa, 2010; Storbeck & Martin, 2010; Reagan, 2008). South Africa Sign Language (SASL) has been recognised, not only by the South African Constitution of 1996 (Constitution of the Republic of South Africa, 1996) and the South African School Act of 1997 (Republic of South Africa Government Gazette, 1997) but also by the Pan South African Language Board (PanSALB, 2009) as an appropriate and necessary medium of education for Deaf learners (Storbeck & Martin, 2010; PanSALB, 2009).

The National Association for Multicultural Education (NAME) is a volunteer based organization that has been highly instrumental in shaping multicultural education policies in South Africa, amongst other countries (Magongwa, 2010). This association aims to promote respect, appreciation and understanding of cultural diversity and ethnicity in educational settings and further acknowledges the Deaf community as being culturally unique (National Association for Multicultural Education, 2010). The South African White Paper on Education and Training further states that educational settings should support the teaching of languages used for religious purposes or cultural purposes such as South African Sign Language (White Paper on Education and Training, 1997). Surprisingly however, it is not compulsory for educators of the deaf in South Africa to possess an additional qualification in deaf education or South African Sign Language in order to teach at a school catering for deaf learners (Storbeck, personal communication, December 21, 2011).

According to the Children's Charter of South Africa, all children have the right to free and equivalent, non-sexist and non-racial compulsory education because education is not a privilege but a right (The Children's Charter of South Africa, 1992). This world renowned charter also stresses that all children have the right to participate in the evaluation and improvement of the curriculum such that it respects all the traditions, cultures and values of children in South Africa (The Children's Charter of South Africa, 1992).

It is evident that education is viewed as vital in South Africa, and that one's cultural and linguistic heritage is to be respected in an educational setting; Deaf culture and South African Sign language inclusive. While on paper, signed language and Deaf culture have been acknowledged in schools, the researcher aimed to explore, by understanding the experiences of deaf adolescents at a school for the deaf in Gauteng, whether this is mirrored in practice.

1.6. The Role of the Audiologist in Deaf Education and Identity Development

With regards to the role of the educational audiologist at schools for the deaf within South Africa, stringent guidelines in terms of audiologist roles and responsibilities are not available from professional boards. An educational audiology service delivery model for use within the inclusive educational system is suggested by van Dijk (2003). Van Dijk (2003) suggests that the educational audiologist poses as a service co-ordinator within the school environment, as well as an instructional member, a consultant, a supervisor as well as a family and community liaison. Additionally, van Dijk (2003) proposes that the responsibilities of the educational audiologist include: prevention of hearing loss and conservation of hearing, assessment, habilitation and amplification as well as training and education, support and assistance of additional team members as well as families and caregivers, monitoring of progress and research within the field of educational audiology. This model applies strictly to inclusion and a significant number of deaf learners attend schools that are schools for only deaf learners as opposed to mainstream schools, such as the research site for the current research. In addition, many schools for deaf learners, again, such as the school at which data collection for this study took place, do not have many of the team members involved with deaf learners within the staff complement, such as an educational psychologist.

It is the belief of the current researcher that the role of the audiologist when working with a deaf child, spans from early identification, which ideally occurs before one year of age (Meyer & Swanepoel, 2011) to adulthood in the event that cochlear implantation or hearing aids are fitted (Hugo, 2002; Venter, 2002). It must be noted that the profession of audiology may not be encompassed heterogeneously into a single definition, and that the scope of practice included in this section and summarised in diagram 1, comprises a collection of what the researcher has identified as important from the literature and from experience within the South African context.

Early intervention may be defined loosely as the intervention practices with children from birth to three years (Khoza-Shangase, Barratt & Jonosky, 2011). In terms of hearing loss identification and subsequent intervention, a diagnosis made after nine to 12 months of age may be considered late (Meyer & Swanepoel, 2011). Late identification of hearing loss has deleterious effects on emotional, psychosocial and language development which in turn impacts negatively on the educational and subsequent occupational outcomes for the individual (Olusanya, 2008). Of significant importance for the child, is access to auditory

(Meyer & Swanepoel, 2011) or manual (Storbeck & Calvert-Evers, 2008) language stimulation in the critical language learning period (Khoza-Shangase et al., 2010; Tucci et al., 2009). In the South African context, even within the private health care sector, it has been documented by Meyer and Swanepoel (2011) that the identification of hearing loss most often occurs inertly when caregivers become concerned about speech and language delays, which ordinarily occur after two years of age (Swanepeol, 2009; Swanepoel, Storbeck & Friedland, 2009).

Having identified the critical need for early identification, much emphasis has been placed on the implementation of hearing screening programmes within the primary health care sector such that appropriate interventions may be undertaken (Storbeck & Calvert-Evers, 2008). Although universal newborn hearing screening (UNHS) is not yet a reality in sub-Saharan Africa (Tucci et al., 2009), the Health Professions Council of South Africa (HPCSA) issued a position paper in 2007 in which it proposed targeted infant hearing screening of infants classified as high risk in terms of their family history of permanent childhood hearing loss or additional factors rendering the infant prone to hearing loss such as Malaria, rubella, HIV and cytomegalovirus (CMV) (Storbeck & Calvert-Evers, 2008).

Within the South African context, Khoza-Shangase et al. (2010) identified limited parental knowledge and insufficient referrals between professionals as contributing factors to delays in early identification and subsequent early intervention. Furthermore, socio-economic difficulties, few appropriately trained personnel displaying competence both linguistically and culturally and limited resources were also acknowledged to impede South Africa's capacity to adhere fully to international standards of early audiological intervention services (Khoza-Shangase et al., 2010). Thus, it can be seen that the audiologist not only plays an instrumental role in the early identification and subsequent diagnosis of hearing loss in infants, but also in parental and inter-professional education.

Communication is central to all patient-practitioner relationships (Ross & Deverell, 2004). It is pivotal that the practitioner (audiologist) share as much information as possible with the patient (the patient's caregiver/s) to allow the patient to feel well informed without feeling overwhelmed (Steptoe, Sutcliffe, Allen & Coombies, 1991). The efficiency of the patient-practitioner communication can influence the patient's behaviour in terms of decision-making, adherence to treatment, recall of information discussed, understanding of the diagnosis, coping with the 'disability' and even quality of life (Ong, De Haes, Hoos &

Lammes, 1995). In terms of a deaf child, it is the responsibility of the audiologist to provide feedback regarding the diagnosis as well as to inform the parents/caregivers regarding the 'auditory-oral versus the signing route' as well as to provide information about combined language approaches, in an honest and unbiased manner (Shmulian, 2002). This language modality decision will in turn impact school placement and whether the need for hearing assistive devices as well as further referrals may be indicated (Shmulian, 2002). It has already been established that the environment and community to which an individual is exposed is instrumental in the development of personal identity (Moshman, 2005) thus highlighting the necessity for appropriate school placement and in turn reinforcing the need for a sound understanding of the educational experiences of deaf learners in South Africa.

Additionally, further referral may be indicated to a psychologist or counsellor to support the parents/caregiver of the newly diagnosed child (Ross and Deverell, 2004). *"Disabling conditions tend to evoke strong emotional reactions in the affected individuals as well as significant others in his or her environment, whether those persons are parents, spouses or partners, children or grandparents"*(Ross & Deverell, 2004, p. 36).

In the event that hearing aids are necessary, the audiologist will play a key role in the fitting and management thereof (Shmulian, 2002). Furthermore, aural rehabilitation in the form of speech training and lip reading will be required (Tucci et al., 2009). Should the individual be a cochlear implant candidate, the audiologist will work closely with an Ear Nose and Throat specialist (ENT) (Venter, 2002). Within sub-Saharan Africa however, approximately one in every 42 individuals requiring a hearing aid will have access to one (Tucci et al., 2009). In addition to the limited resources available to people in need of hearing aids, it has been found that even in the presence of resources allocated to hearing aid programmes, less than 50% of the recipients consistently use the hearing aids and up to 10% of people do not use them at all (Tucci et al., 2009). These findings on hearing aid use highlight the role of the audiologist as an educator regarding appropriate use and maintenance of the assistive devices (Tucci et al., 2009).

Should the caregiver/s or parents of the deaf child show preference for a manual mode of communication, then once again, the onus falls on the diagnostic audiologist to make appropriate referrals in terms of school placement as well as to dispel the myths regarding sign language such as " sign language is not a real language" (Storbeck & Morgans, 2002).

Storbeck and Morgans (2002) further reiterate that a primary necessity for parents favouring the signing route is to build a relationship with their deaf child.

It is thus evident from the above that an audiologist plays a significant role in the lives of deaf people. A summary of the role of the audiologist when working with a deaf child may be seen in Diagram 1 below. This diagrammatic summary depicting the role of the audiologist is not exhaustive, but rather represents the most common route followed in the management of a deaf child. The role of the audiologist is thought to be arguably daunting as a result of the long term implications of late diagnosis as well as the possibility that parental decisions may be based in part, on the feedback provided by the audiologist. In turn, it should be noted that audiologists should be well informed not only regarding the language and education options available to the deaf child, but also with regard to the long term implications thereof thus further supporting the importance of the current study. Within the South African context, audiologists are supported by an intervention programme called HI HOPES (Home Intervention – Hearing Language Opportunities Parent Education Services). HI HOPES was initiated by The Centre for Deaf Studies at the University of the Witwatersrand in August 2006 (Storbeck & Calvert-Evers, 2008). HI HOPES provides home-based support for families of deaf and HH infants three years and below and is accessible to both the private and public sectors at no cost to the families (Storbeck & Calvert-Evers, 2008). Such a programme is supported by the University of the Witwatersrand Hearing Aid Bank (Wits HAB) which makes hearing aids and ear moulds available to infants and children (newborn to 6 years) who require urgent amplification but do not have access to the amplification (Pillay, Moonsamy & Khoza-Shangase, 2010). This programme was developed in 2008 and is based on a collaborative model including state hospitals, parent advisors and a university audiology department (Pillay et al., 2010). The hearing aids are made available to the recipients for a period of maximum six months while awaiting their own hearing aid from a state hospital or for hearing aid trial purposes (Pillay et al., 2010).

An additional initiative supporting early identification of hearing loss is Early Hearing Detection and Intervention South Africa (EHDI SA) which was established in response to the first EHDI Africa conference in August 2007 (EHDI, 2008). EHDI SA may be described as a group with open membership for all those interested in infant hearing loss (EHDI, 2008). The University of the Witwatersrand and the University of Pretoria partner in heading EHDI SA and this initiative is based on the HPCSA 2007 position statement on early hearing detection

and intervention (EHDI) programme (EHDI, 2008). EDHI (2008) aims "to advocate, develop and coordinate widespread implementation of EHDI programmes in the public and private healthcare sectors of South Africa". Furthermore, EHDI strives to support the rights of all deaf and hard of hearing individuals without displaying preference for a particular mode of communication as selected by the family of a deaf child (EHDI, 2008). It is hoped that these various initiatives together with competent professionals should provide the parents of a newly diagnosed deaf child, with sufficient support and information in order to make an informed decision regarding the mode of communication best suited to the deaf child such that the child may reach his/her full potential. Diagram 1 below summarises the perceived role of the audiologist with regard the deaf child.

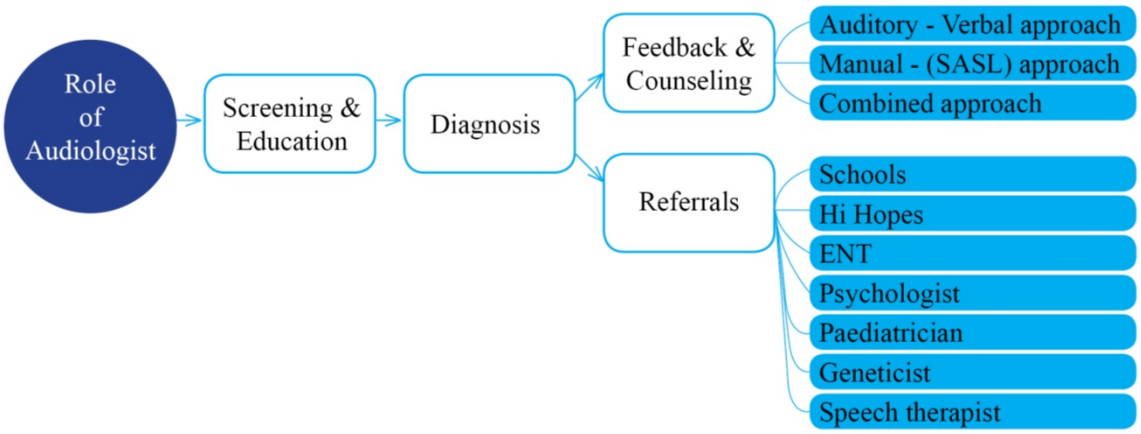

Diagram 1: Flowchart summarising the role of the audiologist in working with a deaf child

1.7. Summary of Chapters

This dissertation will present findings from a study investigating the educational experiences of deaf adolescents attending a school for the deaf in Gauteng, South Africa. The researcher thus aimed to report accurately the participant accounts so as to provide a detailed understanding of personal educational experiences of adolescents enrolled at the identified school for deaf individuals. The researcher also aimed to obtain information regarding the perspectives on deafness with which these participants affiliated. The researcher in turn, aimed to provide insight on the identity development of these individuals based on the perspective of deafness with which they affiliated. Finally, the researcher proposes an additional framework with which to consider the identity development of a deaf individual.

The researcher will, in chapter two, commence by describing the findings from studies conducted both internationally and locally pertaining to the educational experiences of deaf learners as well as the identity development of deaf individuals so as to provide a foundation from which to understand the findings of the current study as well as to highlight the importance of the findings of the current study.

This will be followed by a methodology chapter which provides detailed accounts of what the current study entailed. The aims of the study, the research design adopted, a detailed description of the context in which the study was conducted as well as a thorough depiction of the participants is provided in chapter three. Furthermore, participant inclusion and exclusion criteria as well as the actual research methods followed are described in the methodology chapter.

In chapter four, the researcher presents findings from the current study in accordance with the specified aims of the study. These findings are concurrently discussed in chapter four with the dissertation ending in chapter five where conclusions, implications of the current study and recommendations are put forward. The researcher also highlights the limitations that should be kept in mind when interpreting the research.

Chapter 2: Literature Review

This chapter entails a review of the literature pertaining to research conducted both internationally and locally regarding the education of deaf learners. Studies pertaining to the way in which the identity of a deaf person may be shaped by mode of communication as well as educational environment are explored and the rationale for the current study is further highlighted.

A review of the literature regarding education of deaf children both internationally and locally reveals relatively stark evidence that for centuries this field has been and continues to be, plagued by a lack of understanding of the educational needs of these individuals. Worldwide, there is evidence of a divide still deeply entrenched between those supporting oral education of deaf learners and those in support of signed language. The impact of this continued "modality war" on identity development has been sparsely explored within the unique context of South Africa.

2.1. International Research on Deaf Education and Identity

On review of literature pertaining to the education of deaf learners, it was found that mainstreaming deaf learners is based on an integrational policy of education where learners who are deaf are required to communicate orally and subsequently have "equal" opportunities as their hearing counterparts (Marschark, 2002). This access to equal opportunities however, is seldom the case, and deaf children are often perceived as disabled and different and so barriers to full inclusion result (Marschark, 2002).

Israelite, Ower and Goldstein (2002) conducted a qualitative study with seven hard-of-hearing (HH) participants in Toronto, Canada. Toronto is recognised by these researchers as a culturally diverse metropolis as almost 51% of school aged children in Toronto are said to be proficient in a language other than English and in excess of 80 native languages are represented in schools in Toronto (Israelite et al., 2002). These seven participants, of whom six were female, had experienced part or their entire elementary school career in classes for HH students that combined specialised instruction in separate classes with mainstreaming (Israelite et al., 2002). Furthermore, the educators of these students possessed qualifications in both regular education as well as education of deaf and HH learners. The severity of the hearing losses of the participants in the study conducted by Israelite et al. (2002) ranged from moderately-severe to profound, reflecting a similar profile of degree of hearing loss to the

participants in the current study. Three of the HH participants, unlike in the current study, presented with associated learning disabilities and two of the Canadian participants presented with physical disability (Israelite et al., 2002). The HH participants took part in two open-ended group interviews conducted by Israelite and Ower, both of whom were former educators of deaf and HH students.

Data analysis was conducted via coding and recurring themes were identified. The researchers found that when HH learners were asked to describe what it meant to be HH, their definitions commonly were in relation to hearing people and in some instances Deaf people. These participants highlighted the fact that they did not share a common community with which to identify as those who are Deaf (Israelite et al., 2002). An additional difference between HH and Deaf individuals that was identified by the seven students was the willingness of HH persons to assimilate and integrate with the dominant hearing culture. One participant revealed that she felt trapped between the dominant culture and Deaf culture, experiencing difficulty in being fully integrated into either of these cultures. “Fitting in” and being accepted into the mainstream was highlighted as a priority amongst these participants (Israelite et al., 2002). A number of the participants expressed that in an effort to be integrated into mainstream, they would attempt to conceal their hearing loss. Furthermore, recollections of negative experiences with mainstream educators was a resonating theme (Israelite et al., 2002).

The inclusion criteria in terms of severity of hearing loss in the study conducted by Israelite et al. (2002) bear much similarity to the inclusion criteria of the current study and included participants presenting with hearing losses from moderately-severe to profound. However, these authors include individuals with physical and cognitive disabilities, while the investigator of the current study excluded individuals with comorbidities as it was thought that the presence of supplementary factors may alter the educational experience for those learners presenting with these additional difficulties, which in turn may impact generalisability of findings. Furthermore, Canada may be considered a developed country while South Africa is a developing country; a fact which has significant implications for access and resources hence the educational settings and subsequent educational experiences of deaf adolescents are likely to be different. However, comparisons between the two studies may also be made as both contexts have been described as multicultural in nature. Finally, an appreciation for the way in which identity construction occurs in HH adolescents in Canada

provides an outline with which to compare the identity development framework of the participants in the current study.

Kelman and Branco (2004) conducted a study related to the integration of deaf students into mainstream schools in Brazil, through the use of communication and metacommunicative strategies utilized in teacher – deaf student interactions. In this study, a 'master teacher' and a translator were present and Brazilian Sign Language (BSL) was incorporated into the classroom. They found that the hearing peers worked continuously as mediators and that students who were deaf, were viewed equally in terms of their competencies (Kelman & Branco, 2004). Furthermore, the deaf students expressed comfort in asking questions in the classroom and the hearing learners were swift to learn Brazilian Sign Language (Kelman & Branco, 2004). It was however, prominent that the deaf learners received less instruction than their hearing counterparts for activities. Kelman and Branco (2004) attributed this discrepancy in the level of instruction to the fact that the deaf students were instructed as a 'deaf group' while the hearing students were busy on other academic tasks. Sacks (2009) also emphasises that incidental learning with deaf students is limited in a classroom where oral instruction is favoured.

While Kelman and Branco's (2004) study adds value to the academic understanding of deaf education in terms of integration, it is representative of only seven students and describes an ideal setting where the teacher is both fluent in spoken and signed language and is further facilitated by a trained translator and the number of children in a classroom is comparatively small which is optimal for efficient teaching (Kelman & Branco, 2004). Furthermore, it appears that the socio-economic context in which this study was conducted bares little similarity to the impoverished context in which the current study was conducted. Kelman and Branco's (2004) study, despite being qualitative in nature, also does not delve into the cultural and personal experiences of the deaf learners, but rather, emphasizes the academic inclusion of the learners, hence supporting the value of the current study which aimed to describe the personal, educational experiences of deaf learners and the subsequent impact on identity development thereof .

Smiler and Locker McKee (2006) attempted to ascertain the perceptions of *Maori* Deaf identity amongst deaf citizens in New Zealand. These authors aimed, using interviews with eight participants who included both children and adults; to establish an understanding of DEAF -WORLD diversity by studying how *Maori* deaf people's perceptions are shaped by

their socialization into the DEAF-WORLD and *Te Ao Maori* (*Maori* world). Smiler and Locker McKee (2006) pointed out that tensions of identity for this group exist. These tensions were postulated to be firstly, due to their minority status within hearing and Deaf communities and secondly, due to the fact that modern *Maori* deaf find themselves at the crossroads of a significant time frame of *Maori* linguistic and cultural renaissance and the dawning of Deaf culture consciousness in New Zealand (Smiler & Locker McKee, 2006). The authors' findings included the resonating fact that all the participants highlighted a level of connection and dissension within both worlds, both of which had inadequate appreciation and understanding of the other.

Smiler and Locker McKee (2006) further asserted that in deaf educational settings, *Maori* students were offered scarce opportunities to learn about *Maori* culture and exposure to *Maori* role models, either deaf or hearing. In mainstream schools, deaf students were presented with opportunities to learn about *Maori* culture, however, this information was portrayed in an oral fashion. Conversely, those participants who attended schools for the deaf reported that they knew that they were *Maori,* but they felt both physically and culturally distanced from the *Maori* world (Smiler & Locker McKee, 2006). Finally Smiler and Locker McKee (2006) noted that the participants were reluctant to commit to a 'primary' identity as either Deaf or *Maori*. The participants expressed that Deaf and Maori are inseparable parts of self and that the behaviours and feelings associated with each aspect are fore grounded differently in deaf and *Maori* settings. The chosen site for the current study is rich in cultural diversity in terms of both its educators and its learners which is characteristic of the "Rainbow Nation" and as a result educational experiences at the identified school may, in a similar fashion to Smiler and Locker McKee's (2006) study, provide the setting for multiple communities and identities with which the learners may or may not associate.

A study was carried out by Grimes, Thoutenhoofd and Byrne (2007) in order to establish which language approaches were being used with deaf pupils in Scotland as an element of the Achievements of Deaf Pupils in Scotland (ADPS) project. Five surveys, using paper questionnaires were conducted annually (2000-2005) on educators of deaf learners by the ADPS project group (Grimes et al., 2007). The educators were defined as the respondents of the questionnaires while the target group comprised deaf learners. The target population was defined by services rendered as opposed to degree of hearing loss (Grimes et al., 2007). Group A of the target population comprised deaf learners that either attended a school for deaf learners, a mainstream school with a section for deaf learners or were visited by an

educator of deaf children at least twice a year. Group B comprised deaf learners who were visited by an educator of deaf children once a year or less (Grimes et al., 2007).

Findings revealed that the vast majority of learners in Group A were only exposed to spoken or written English at school with Total Communication (TC) being the second most favoured approach (Grimes et al., 2007). Additionally, 45% of the target population (Group A and Group B) attended schools whose language policies fell within the category of TC while 16% of learners in Group A attended schools at which the language policy excluded British Sign Language (BSL) entirely (Grimes et al., 2007). Language policies and low levels of BSL qualifications among educators of deaf learners were highlighted as a concern by Grimes et al (2007). These authors further reported limited availability of BSL training for educators in Scotland. Grimes et al. (2007) conclude by expressing concern regarding the restricted linguistic choices available to Scottish deaf learners and propose that further research be carried out regarding language environments and factors influencing language policies for deaf learners in Scotland.

Scotland is a developed country, yet the education of deaf learners continues to be a concern, hence the implementation of the ADPS project in order to address the identified issues (Grimes et al., 2007). As has been discussed above, South Africa is a developing country with various additional issues contributing to the country's educational context and policies which in turn are likely to impact the identity development of the country's school-going population (Moshman, 2005; Bronfenbrenner, 1979) thus stressing the necessity of the current study.

Power et al. (2008) conducted a study in Queensland, Australia with learners from two high school, and two elementary school units for deaf students, in order to examine the impact of the use of SimCom (with the signed constituent being ASE) on the student's development of English. The 45 participants ranged from 10 to 17 years of age and were in grades ranging from five to 12. The participants had all been described as being of normal intelligence by their respective educators (Power et al., 2008). While some of the participants followed the regular school curriculum, the majority were enrolled in specially designed education programmes. Most of the participants had also attended pre-schools particularly for deaf learners, employing ASE in SimCom. Hence, the majority of the participants had long-term exposure to ASE (Power et al., 2008).

The educators in the study carried out by Power et al. (2008) all presented with hearing within normal limits and were required to respond to a questionnaire regarding their teaching experience and in using Signed English. Furthermore, the educators completed a questionnaire assessing their knowledge of the rules and principles of ASE (Power et al., 2008, p. 39) as well as an attitudinal scale regarding their use of the system with deaf children (Leigh, 1995). Furthermore, the educators were required to complete a questionnaire concerning the students' exposure to SimCom at home and at school, as well as aspects related to the students' academic performance and their development of signed, written and spoken English (Power et al., 2008, p. 39). Instruments used to establish the English competency of the deaf students included the Syntactic Abilities Screening Test Form 2 (TSA) (Quigley, Steinkamp, Power & Jones, 1978) as well as a story-writing task which included a series of pictures as a stimulus.

Findings from this study suggested a significant correlation between signed English (SE) environment (both at school and at home) and written English. There were no statistically significant differences in mean scores between the high school and the elementary school groups in terms of propositions or vocabulary measures (Power et al., 2008). Furthermore, the participants averaged 1.4 spelling errors per story. The authors were surprised to find that the elementary school learners scored as well overall as the high school learners in the TSA. The authors suggest that this finding may be attributable to the limited emphasis placed on the use of ASE at a high school level due to the increased curriculum demands (Power et al., 2008). Difficulty in relative clauses, verb processes and nominalisation was noted across the age groups. There was no evidence in the study conducted by Power et al. (2008) to suggest that the use of SimCom negatively affects the participants' spoken language. However, the authors found that ASE proved beneficial to the participants in the development of a number of their written-English skills (Power et al., 2008, p. 45). The authors highlight that these findings cannot be interpreted in isolation as numerous other factors are also influential in exposing these learners to English. They refer to factors such as exposure to captioned television, educator SE competency, the teaching of reading and written English at school as well as in the home environment and parental proficiency in using SE (Power et al., 2008, p. 45).

While the study conducted by Power et al. (2008) involved participants favouring oral communication in mainstream educational settings, the current research focuses on the experiences of learners attending a school for the deaf where both SASL and SimCom/Total

Communication (TC) are incorporated. Additionally, Power et al. (2008) establish through the use of questionnaires, educator competency in SE as well as educator perceptions of SE and the learners' daily exposure to SE. Furthermore, the authors investigated the academic outcomes related to the use of SimCom as opposed to the participants' experiences thereof, thus highlighting the necessity of the current study.

2.1.1. International Research on Educational Contexts

Internationally, educational context, with particular focus on poverty has been widely documented as bearing impact on the academic achievement of learners (Sznitman, Reisal & Romer, 2011). Sznitman et al. (2011) suggest that poverty is the strongest variable related to academic outcomes. However, poverty is acknowledged to be an indirect determinant rather than having a direct effect on educational achievement because of its impact on the emotional well-being of the students (Sznitman et al., 2011). Sznitman et al. (2011) conducted a study in the United States of America (USA) to determine the role of adolescent emotional well-being as a mediator of the impact of poverty on variations in educational achievement.

By determining the differences in adolescent academic performance across 23 developed countries and 39 states within the USA, Sznitman et al. (2011) established that the level of a country's or state's adolescent emotional well-being is a powerful predictor of its educational outcomes. Furthermore, policies developed to address the negative repercussions of poverty on mental health were found to be critical in order to improve mental health care which in turn was identified to have the potential to decrease individual and societal costs related to health and sub-standard educational achievement (Sznitman et al., 2011).

While research has been conducted internationally on the impact of poverty on educational performance, there is surprisingly a scarcity of research within South Africa, despite being a developing country where poverty is rife, in this regard. Additionally, the findings of Sznitman et al.'s (2011) research reinforces the importance of sound mental health status for academic achievement. The current research pertains to identity development, which falls within the scope of mental health (Moshman, 2005) within an educational context where the majority of learners are of a low socio-economic context. Thus the current research has the potential to supplement the limited body of knowledge regarding educational context and mental health.

Based on the hypothesis that absenteeism from school would be the greatest mediator between homelessness and academic achievement, Buckner, Bassuk and Weinreb (2001) conducted a study as part of the Worcester Family Research Project in Massachusetts in order to identify predictors of academic achievement among homeless and low-income housed children. The authors utilised a case-control study design by enrolling 220 homeless and 216 low-income housed single-parent families (Buckner et al., 2001). The scholars (ranging from six to 17 years of age) in both groups (homeless and low-income housed) were interviewed and underwent academic and cognitive testing while all the scholars' mothers were interviewed regarding school-related difficulties and family demographics (Buckner et al., 2001).

Statistical analyses were conducted and findings revealed that the vast majority of learners who participated in this study scored in the low-average range on measures of fundamental mathematics, reading and spelling compared with children in the general population (Buckner et al., 2001). Dispelling Buckner et al.'s(2001) hypotheses, absenteeism was surprisingly low in both groups of scholars and thus had no statistically significant impact on academic achievement. Gender, age, race and school mobility however, were identified as independent predictors of the participants' academic outcomes. The majority of the variation in academic performance was unexplained with child-centred variables (negative life events, abuse) being unrelated to academic achievement (Buckner et al., 2001). The authors of his study attribute the lack of explanation regarding the variation in academic performance to the demographic profile of the participants when compared with participants in other similar studies; paired with the unexpectedly low level of absenteeism (Buckner et al., 2001).

While the socio-economic status of the participants in Buckner et al.'s(2001) study mirrors quite closely the socio-economic status of the participants in the current study, the authors focus the impact thereof on academic achievement rather than educational experiences. Additionally, the participants in the study conducted by Buckner et al. (2001) do not present with hearing loss which in itself has significant bearing on the learners' educational experience (McIlroy, 2008) thus further suggesting the necessity of the current research.

In a study using secondary data from eight Kenyan provinces regarding poverty levels and education indicators, Julius and Bawane (2011) aimed to establish the relationship between poverty and education in Kenya. A poverty headcount indicator, which measures poverty incidence was used; establishing the percentage of the population unable to purchase a basic

basket of groceries and access pertinent rudimentary services (Julius & Bawane, 2011). Education indicators included: enrolment rate, dropout rate, literacy levels and academic achievement. These authors established that Nairobi province presented with the lowest poverty head count as well as the best educational performance from 2005 until 2007 (Julius & Bawane, 2011). Additionally, Julius and Bawane (2011) found that the province with the highest poverty headcount, North Eastern, demonstrated the lowest enrolment rate and the lowest literacy rate. North Eastern also had the highest dropout rate and the poorest academic achievement in the country of Kenya (Julius & Bawane, 2011).

Julius and Bawane (2011) suggest that individuals residing in the most marginal districts of Kenya generally have access to poorer quality educational opportunities and that children from poorer households are less likely to be enrolled for schooling. These authors attribute this lack of enrolment to the high opportunity costs of education. For example, children may be required to conduct domestic or agricultural chores and thus the family may view the benefits of education as limited, particularly for girls (Julius & Bawane, 2001). In addition, the absence or lack of basic resources such as books and stationery and overcrowding in many schools in developing countries contribute to the poor quality of education received. Home circumstances, such as insufficient lighting or work surfaces to complete homework and poor nutrition are also regarded by Julius and Bawane (2011) as barriers to educational achievement. These authors conclude that poverty is strongly correlated to poor educational achievement. However, they do not regard the personal educational experiences of the individuals. This study was quantitative in nature and thus elaboration on the influencing factors is limited to correlation as opposed to a “thick” description thereof. While the current researcher does not measure the impact of poverty on education, the impact of poverty on the educational experiences of the deaf adolescents in the current study is described.

2.2. South African Research on Deaf Education and Identity

Heap (2006) investigated via an ethnographic longitudinal study, the concept of community as derived from adults in Cape Town who were either born deaf or were deafened as children and whose primary language is SASL. Heap’s (2006) paper describes community as sign-deaf spaces (Heap, 2003). Sign-deaf spaces are demonstrated by the author as networks of social spaces that consist predominantly of deaf people. Heap (2006) further describes these networks as operating to generate spaces of shared sign language, familiarity, communality

and sociability in an often unfriendly and unwelcoming hearing world. This long-term study spanned September 1995 to December 2001 and comprised informal interviews as well as participant observation. A key strategy was identified during the longitudinal study; a signing network or space of social relations that could be recognized on the basis of sign-based communication (Heap, 2003). The network developed as a process over time to include not only Deaf individuals but also hearing people who were able to utilise sign language (Heap, 2006).

Further investigation of the signing space exposed two sets of networks; sign-deaf and sign-hear spaces. The networks could be differentiated in terms of the number of Deaf persons versus those who were hearing, the functions and types of social relations as well as the boundaries crossed (Heap, 2006). Similarities between the networks were identified as both groups were flexible and fluid, as composition, size and extent of participation altered over time (Heap, 2006). Heap (2006) acknowledges that sign language gives an identity while simultaneously creating sign-deaf spaces allows Deaf people to share social identity via the use of the created networks (Marcus, 1992). Furthermore, associated with this social identity are the feelings of cohesion and belonging, hence, *"designating sign-deaf spaces as 'ethnicized'or analogous to ethnicity"* (Heap, 2006, p. 42; Bechter, 1999).

Heap's (2006) study proves useful in reinforcing the data collection methods employed by the current researcher in terms of exploring the experiences of deaf individuals and the identity development of deaf people. However, Heap's study was conducted over an extended period of time focussing more on the reflection and creation of theoretical frameworks as opposed to clinical implications and informing deaf education policies thus supporting the importance of the current research. Furthermore, Heap (2006) incorporated participants from a similar socio-economic context to the current study however, while Heap interviewed adults from various locations within Cape Town, the current research concentrates on adolescents within a single educational environment hence, enabling comparisons between the two studies to be drawn, thus allowing for a clearer and more complete picture of the educational experiences of deaf adolescents in South Africa.

The most recent study pertaining to educational experience and its subsequent impact on Deaf identity within the South African context was conducted by McIlroy in 2008, in which the author also outlines various theories of deaf identity. It should be noted that McIlroy himself, being a bicultural/bilingual DeaF[2] person, was a participant in this study. His

research was qualitative in nature and comprised narrative enquiry with nine participants between the ages of 24 and 55 years, of which six were female and three were male, seven were white and two were of colour. With the exception of one participant, those involved in the study had hearing parents. In this study, the researcher aimed to explore the perspective of deaf persons on how their identity has been shaped by their educational experiences (McIlroy, 2008).

2. The emphatic 'D' and 'F' in the word DeaF serves as a linguistic marker for deaf persons identifying with both the Deaf and hearing worlds in a bilingual-bicultural manner as described in the dialogue model of identity (McIlroy & Storbeck, 2011; McIlroy, 2008).

McIlroy (2008) notes that the identity of the vast majority of deaf children follows the language that is predominantly used in the home; and that this means that many deaf children are exposed to the spoken language of their parents such as isiZulu or English as opposed to South African Sign Language, which is more accessible to these profoundly deaf children in terms of ease of learning (McIlroy, 2008). Furthermore, McIlroy's study investigated the transition of identity that numerous deaf people make from a culturally hearing identity to a culturally Deaf identity. He proposes three thematic clusters, namely: 'Significant Moments of being deaf', 'Connections at school' and 'Deaf Identity Development' and these themes are subsequently detailed with regard to each participant.

Prevalent within the first theme 'Significant Moments of being deaf' were participant recollections of discovering 'deafness' and the subsequent struggle for inclusion versus exclusion (McIlroy, 2008). 'Connections at School', the second cluster of themes, highlights the extensive efforts that were required on the part of the participants in order to adapt to the hearing world when being taught in mainstream educational settings. These efforts included assistive devices, attending intense speech therapy sessions and overextension of self in the classroom (McIlroy, 2008). Initially, all the participants were educated in mainstream schools and thus experienced the medical rhetoric of deafness. A transition to a school for the Deaf, in a number of the participants resulted in an alteration of their self perceptions as being 'culturally Deaf'. The subsequent transitions to South African Sign Language were reiterated to accommodate this cultural transformation (McIlroy, 2008). Furthermore, loneliness and exclusion were emotions that were repeatedly raised by the participants as they often experienced sitting on the cusp of two cultures and languages as opposed to belonging to one;

or neither, the Deaf-World or the hearing world (McIlroy, 2008). The third theme, 'Deaf Identity Development' emphasises the contribution that associating with other deaf people had in altering the participants' perceptions of self. Furthermore, the researcher noted that placement in "the right school" was viewed as pivotal by the participants. McIlroy (2008) further found that as a result of hearing loss being an 'invisible' disability, the participants expressed concern that members of the hearing community, and more imperatively, teachers, did not fully grasp the needs of deaf learners (McIlroy, 2008).

This study, in a similar manner to Smiler and Locker McKee's (2006) study, emphasizes the role that education plays in shaping the cultural and linguistic identity of individuals and provides a framework with which to consider the development of personal identity. However, it was a retrospective study and so it is possible that certain aspects may have been forgotten by the participants, particularly those who completed their education many years prior to the administration of the study. Furthermore, the participants in this study predominantly attended mainstream schools favouring oral education for the initial stages of their education; a feature which has been observed as different to the current study's population. Thus a comparison of the educational experiences of those initially placed in mainstream schools versus those who attend a school for the deaf may ensue. Furthermore, the current research is reflective of a younger population's experiences and a minimally larger sample size was utilized. Finally, McIlroy's (2008) study makes little reference to the socio-economic status of the participants in his study, which is thought by the investigator of the current study to be a pertinent influencing aspect with regard to both educational experiences as well as identity development for the participants involved in the current study.

2.3. Summary:

From the above studies, it can be seen that the educational contexts, experiences and languages to which an individual is exposed has the potential to significantly influence the identity development of the individual. Furthermore, in the case of deaf learners, the educational placement and ensuing language and hence mode of education (oral versus signed) and the subsequent cultural identity are equally influential on the learner's educational experiences. It should also be noted that in order to adhere to the aforementioned charters regarding children's educational rights, a comprehensive understanding of a learner's stance on Deaf culture is pertinent. There is however, a scarcity of research focused on

providing those who are deaf with a platform to make their opinions and experiences known both locally and internationally, hence the necessity of the current study which will describe the educational experiences of deaf adolescents attending a school for the deaf in Gauteng, South Africa. By establishing the educational experiences of Deaf South African learners, the researcher hopes to produce findings that may be instrumental in further shaping multicultural educational policies such that they are tailored to provide deaf learners with a wealth of understanding, respect and appreciation of both their familial cultural heritage as well as Deaf culture and hence create a sense of belonging in both communities as opposed to isolation from both the Deaf community and the hearing community.

Chapter 3: Research Methodology

Chapter two details the methodology of this research. It provides the aims and objectives of the study as well as an overview of the research design, participant information and the way in which trustworthiness of the findings was ensured. Furthermore, this chapter delineates the data collection process and data analysis methods employed by the researcher. Finally, a description of the context in which the study took place is provided as the educational context bears impact on the findings of the current research.

3.1. Aims

The aim of this study was to describe the educational experiences of deaf adolescent learners attending a school for the deaf in Gauteng, South Africa.

The specific objectives of this study included:

1. To obtain a detailed description of the educational experiences of deaf adolescent learners.
2. To establish with which rhetoric (medical vs. cultural) the deaf adolescents attending the identified school for the deaf can best identify.
3. To establish the potential influence on individual identity development of the established affiliations with the opposing rhetorics.

3.2. Research Design

The current research approach was qualitative in nature, while the design may be described as a basic research design, embedded within the theory of social constructivism, employing ethnographic principles and subsequently producing descriptive data allowing for the emergence of themes (Patton, 1990). Research design serves to aid the investigator in obtaining answers to the posed research questions and to assist the researcher in controlling experimental, error and extraneous variances of the existing study (Schiavetti & Metz, 2002, p. 81). Field research yields data that is qualitative in nature (Patton, 1990). Observations and personal experiences lend themselves to qualitative research methods as they evoke themes rather than numbers (Rubin and Babbie, 2005). Basic research refers to research with

the primary purpose of generating theoretical information as well as to ascertain certain truths (Patton, 1990, p.12).

Social constructivism stipulates that individuals search for understanding of the world in which they reside and work (Creswell, 2003, p. 8; Terre Blanche, Kelly, & Durrheim, 2006, p.279). Subjective meanings of an individual's experiences are developed and these meanings are concentrated onto certain objects or things (Creswell, 2003, p. 8). Furthermore, social constructivism stipulates that language facilitates the construction of an individual's reality (Terre Blanche et al., 2006). The methodology for this research project is strongly based in the theoretical traditions of social constructivism as the goal of research based on the premises of social constructivism is to rely, as far as possible on the participants' views of the situation under investigation (Creswell, 2003, p.8). In addition, having established that language is a symbol of community (Ross & Deverell, 2004) and that in turn the community with which one interacts impresses strongly on one's identity development (Moshman, 2005), social constructivism proves an appropriate framework to guide the current research.

Moshman (2005) further supports the notion that identity formation is an extension of the constructivist view which the researcher deemed appropriate due to identity being a key aspect within the current research. Moshman (2005) further explains that a constructivist tends toward the belief that individuals play an overt role in creating their own identities by means of their interactions, understandings, considerations and coordination (Moshman, 2005). With regard the current study, the researcher requested that the participants share their perspectives and experiences of their educational setting. The meanings constructed by individuals are multiple and diverse, thus a complexity of views was sought after as opposed to simply narrowing meanings into categories (Creswell, 2003, p. 8).

3.3. Access to Participants

The researcher was previously employed by the school at which the current research was conducted, as a Speech-Language Pathologist and Audiologist for a year and a half prior to the inception of the current study. In order to gain access to the participants, the investigator requested verbal permission and obtained written consent from the Principal of the school, who granted access to the learners such that participants for the study could be identified.

3.4. Participants

3.4.1. Sample Size and Sampling Strategy

Twelve deaf adolescents attending the particular school were selected as participants for the current study (two for the pilot studies and 10 for the main study). In order to produce a "thick description" of their educational experiences, the investigator included fewer participants to provide a detailed account of their educational experiences (Whitley, 2002, p. 397) as opposed to selecting many participants sharing a superficial or "thin" description of their educational experience (Patton, 1990, p. 430). A "thick description" may be defined as a comprehensive description of the characteristics, processes, communications, and contexts that constitute the phenomenon being studied, couched in language not foreign to the phenomenon or subject, as well as the researcher's role in constructing this description (Terre Blanche et al., 2006, p. 321). Two of the participants took part in the pilot study, while the remaining ten were involved in the main study. The researcher made use of convenience sampling in the selection of the research site (Patton, 1990). This school has a number of participants fulfilling the inclusion criteria for the current study and having been employed by the school, the researcher already possessed extensive knowledge about this particular school. As a result of the researcher having been employed by the school, the risk of bias needed to be considered (Patton, 1990). In order to address the issue of potential bias, the investigator requested the assistance of both an interpreter and two additional research assistants to verify the findings as will be discussed at length in the section pertaining to the trustworthiness of the findings.

In order to obtain a representative sample of the adolescent deaf population attending this school, the researcher utilised purposive sampling which implies that information rich cases were selected to participate in the current study (Durrheim, 2006). Additionally, the purposive sampling was criterion based, which implies that all the participants were required to meet the criteria outlined below in order to be included in the study (Patton, 1990, p. 183). Initially, the investigator invited learners between the ages of 14 years and 16 years attending the identified school to participate in the current study. The learners were required to record their names on a list if they were eager to participate in the research.

The researcher then reviewed the school files of the volunteers in order to establish which learners met the stipulated inclusion criteria.

3.4.2. Participant Inclusion Criteria

The following criteria had to be met in order for the participants to be suitable candidates for the current study:

1. Participants were required to present with a hearing loss greater than a moderate hearing loss (moderately-severe, severe or profound). This criterion was based on the three frequency pure tone averages (PTA) calculated for the participants. The PTA may be defined as the average air conduction thresholds for three frequencies; these including 500, 1000 and 2000Hz (Schlauch & Nelson, 2009, p. 39). A moderately-severe hearing loss is one in which the pure tone average exceeds 55dB (Schlauch & Nelson, 2009, p. 39).
   Hearing losses of lesser degrees seldom warrant the use of signed language (Hugo & Blumberg, 2002, p.26; Sacks, 2009, p. 4) and those presenting with less severe hearing losses are often designated hard of hearing (Israelite et al., 2002). The researcher conducted audiometric testing on participants one, two, five and nine as audiograms were not available in the school records for these participants. Existing audiograms, were reviewed for the remaining participants in order to ascertain their hearing thresholds. Where audiometric testing was indicated, the test battery included: an otoscopic examination, tympanometry and bilateral pure tone air and bone conduction testing. By conducting the aforementioned tests, the researcher possessed sufficient information to describe the type (conductive versus sensorineural) and degree of hearing loss of the various participants (Stach, 2009, p.212).

2. Participants were required to be between the ages of 14 and 16 years.
   The age boundaries defining adolescence are unclear, and by incorporating various definitions, results in an age range from eleven to twenty one years (Lee & Friere, 2005). However, the researcher limited the age range to between the ages of fourteen and sixteen years to prevent excessive variance such that themes were unidentifiable, as it has been found that the experiences of very young adolescents (e.g.: 13 years of age) might be very different to that of an older adolescent (e.g.: 18 years of age) (Moshman, 2005). The researcher has selected adolescents as participants for this study due to the implications in terms of identity development that educational experience can render on this population (Israelite et al., 2002). Furthermore, it is thought that adolescents ought to be proficient in South African Sign Language at this

stage of their maturation and so “thick descriptions” may be obtained from the participants. Sign language, just as any other language comprises content, form and use and is therefore mastered in the same manner and in the same time-frames as oral languages (Sacks, 2009, p. 90). Therefore, it can be assumed that adolescent participants, provided they have had sufficient exposure to SASL, should be proficient in signed language, or at least, more so than their younger counterparts. Furthermore, adolescents should possess the metacognitive and metalinguistic skills to discuss and elaborate on the researcher’s questions (Herbert, 2006). Proficiency in signed language however, is not a criterion for inclusion as a number of the learners at the identified school are capable of oral language. The participants were made aware that oral language could be utilized for the interviews in the event that they were more comfortable using this mode of communication. However, the ten participants in the main study showed preference to participating in the interviews in South African Sign Language.

3. Participants were required to be enrolled at the identified school at the time of the interviews. It was mandatory that the participants had attended the school for at least the duration of two years prior to the date of their interview, such that a sufficient opportunity to be submerged into the school’s environment and subsequent influences had occurred.

Furthermore, it was essential that both day scholars as well as hostel scholars and prelingually- and postlingually deafened learners were selected to participate, in order to obtain findings that best represented the diversity of the learners attending the school.

3.4.3. Participant Exclusion Criteria

The following factor resulted in learners being excluded from the current study:

1. Participants who presented with any co-morbidities to the hearing loss such as cognitive impairment or physical disability.
   Co-morbidities were viewed by the investigator as extraneous variables that potentially may have skewed the data and eliminated any possibility of causal relationships (Devlin, 2006, p. 36). In order to determine the presence of any co-morbidities, the researcher reviewed the files of the potential participants (volunteers). Each file stored at the school comprised an admission form which included a designated section for the presence of co-morbidities to be mentioned. Furthermore,

learners identified by their educators to be performing poorly at the school have had previous assessments and therefore their reports were also accessed and these volunteers could subsequently be excluded from the current study.

3.4.4. Demographic Profile of Participants

The learners attending the identified school are all black South Africans and are generally from low income families. Having acknowledged in the review of the literature that a strong relationship between poverty, political history of South Africa and access to services exists (Reagan et al., 2006), it is thought that the low socio-economic status of the participants may bear impact on the educational experiences of the participants in the current study, rendering the experiences potentially different from deaf learners from other races or families with high socio-economic status.

As evident in Table 1 below, the participants for the current study ranged from fourteen to sixteen years of age (mean = 15.3 years). Six of these participants were male, while four participants were female. The participants ranged from grade four to grade nine, however the majority of the learners were in grade seven. Four of these scholars resided in the school hostels while six of the participants commuted on a daily basis. Furthermore, the participants for the current study had attended the identified school for a period of time ranging from two to 10 years (mean = 5.7 years). Table 1 summarises these demographics.

Table 1: Profile of participants in the current study

Participant	Gender	Age (years)	Grade	No. of years at identified school	Hostel/Commute
1	Female	16	7	8 years	Hostel scholar
2	Female	16	9	5 years	Day scholar
3	Male	14	6	6 years	Hostel scholar
4	Female	15	5	6 years	Day scholar
5	Male	16	8	10 years	Day scholar
6	Male	15	7	4 years	Hostel scholar
7	Male	16	7	3 years	Day scholar
8	Male	14	7	2 years	Day scholar
9	Male	15	4	No dates available	Hostel scholar
10	Female	16	7	8 years	Day scholar

3.4.4.1. Audiological Description of Participants

The ten participants were divided audiologically in terms of onset of hearing loss. Prelingual deafness infers that oral language was not yet acquired prior to the onset of the hearing loss, while postlingual deafness refers to having acquired oral language and having been exposed to sound prior to the onset of deafness (Sacks, 2009, p. 6). Two of the participants were postlingually deafened, while eight of the participants were born with congenital hearing loss and consequently were prelingually deafened.

Otoscopy proves necessary in order to inspect the pinna, the external auditory meatus and tympanic membrane for signs of malformations, disease or occlusion (Diefendorf, 2009, p. 549). Participants three, six, seven, eight and 10 presented with normal otoscopy results bilaterally. The otoscopy findings for the participants for the current study may be evidenced in Table 2. Participant one presented with no abnormalities of the left external ear, however, she presented with a complete cerumen occlusion of the right tympanic membrane. Participant four possessed a normal right external ear however, the left tympanic membrane was dull and no cone of light could be observed. Participant nine also presented with no abnormalities of the left external ear with a complete cerumen occlusion of the right tympanic membrane. Participant two presented with congenital aural atresia and microtia thus she possessed abnormally undersized pinna bilaterally. Furthermore, participant two did not possess a right or left external auditory meatus and the tympanic membrane could not be visualised bilaterally. Congenital aural atresia and microtia can include malformations of the auricle, external auditory meatus, the middle ear cleft as well as the ossicles (Castillo & Roland, 2007, p.84). Such malformations may be accompanied by additional regional or distal malformations but may too occur in isolation. Furthermore, congenital atresia and microtia may be associated with a number of syndromes (Castillo and Roland, 2007, p. 84).

Tympanometry yields measurements that may be interpreted to provide insight into the acoustic immitance of the middle ear system (Shanks & Shohet, 2009, p. 160). Type A tympanograms, with a peak at or approximating 0 daPa as well as ear canal volume and static compliance within normal limits is suggestive of normal middle ear functioning and may be obtained by patients with normal hearing as well as those presenting with sensorineural hearing losses (Shanks & Shohet, 2009, p. 160). According to Margolis and Hunter, (2000, p. 391) normative values for ear canal volume for children between the ages of three and 10 years fall between 0.3cm^{3}and 0.9cm^3 while normative values for ear canal volume for adults

fall between 0.9cm^3 and 2.0cm^3. Additionally, Margolis and Hunter (2000, p. 391) stipulate that static compliance (Cz) should fall between 0.25mmho and 1.05mmho for children (3 to 10 years) and 0.30mmho and 1.70mmho for adults in order to be considered within the norm. Middle Ear Pressure (MEP) or Tympanometric Width (TW) for children (3 to 10 years) should fall between 80daPa and 159daPa and for adults should fall between 51daPa and 114daPa (Margolis and Hunter, 2000). The norms detailed by Margolis and Hunter (2000) were applied to the audiometric findings for the participants in the current study.

Participants six, eight and ten presented with type A tympanograms bilaterally. Furthermore, participants six, eight and ten presented with pure tone results that were purely sensorineural in nature, thus suggesting good inter-test agreement. Participant one obtained a type Ad tympanogram in the right ear, suggestive of possible ossicular discontinuity or a flaccid tympanic membrane (Shanks & Shohet, 2009, p. 160). The tympanometry results for participant one do not correlate with the pure tone test results, which suggest the absence of a conductive component. Furthermore, participant one possessed a complete cerumen occlusion of the right tympanic membrane which is more commonly associated with type As tympanograms (Courtois, n.d., p. 12). Participant three however, presented with a type As tympanogram in the right ear which may suggest, but not exclusively, otosclerosis (Shanks & Shohet, 2009, p. 160). While a type A tympanogram was obtained in the left ear. The pure tone results and the tympanometry findings in the left ear for participant three do not correlate as a conductive component characteristic of otosclerosis (Castillo & Roland, 2007, p. 91) was not evident in the audiogram.

Participant four presented with a type B tympanogram in the left ear, which is commonly associated with middle ear effusion (Shanks & Shohet, 2009, p. 160). This tympanometry finding correlates with both the otoscopic examination findings as well as the mixed hearing loss suggested by the pure tone test results for the left ear. Furthermore, participant four presented with a type A tympanogram in the right ear. Participant five also presented with audiological findings that did not correlate as a type B tympanogram was obtained bilaterally, as was a strictly sensorineural hearing loss as indicated by the pure tone results. Participant seven presented with type As tympanograms bilaterally as well as pure tone results suggesting a sensorineural hearing loss, thus signifying poor inter-test agreement. Participant nine obtained a type A tympanogram in the right ear, consistent with the sensorineural pure tone findings. However, a type As tympanogram obtained in the right ear does not support the purely sensorineural findings of the pure tone results.

The investigator conducted tympanometry testing on all ten of the participants, while pure tone testing was conducted by the investigator on only five of the participants, as recent audiograms were available for the remaining five participants. It is possible that the poor inter-test agreement between tympanometry and pure tone testing for a number of the participants may be attributable to the time lapse between the tympanometry conducted by the investigator and the audiograms obtained by previous audiologists. Furthermore, there was also a three week time lapse between the date of the pure tone testing and the tympanograms conducted by the researcher, as the tympanometer battery was faulty on the day of the planned audiological assessments and thereafter school holidays ensued, thus resulting in a three week time difference between pure tone testing and tympanometry. This time lapse may be accountable for the lack of inter-test agreement in a number of the cases. It should be noted that despite a number of the participants presenting with poor inter-test reliability, these participants were included in the current study as it was thought that the poor inter-test correlation would not bear impact on the educational experiences of the individuals. In addition, it was not the aim of the researcher to establish conclusions regarding differences in the educational experiences of those presenting with conductive hearing losses versus sensorineural or mixed hearing losses. Table 2 summarises the otoscopic examination and tympanometry findings for the participants in the current study.

Table 2: Otoscopy and tympanometry results for participants

Participant	Otoscopy (Right)	Tympanometry (Right)	Otoscopy (Left)	Tymapnometry (Left)
1	100% cerumen occlusion	Type Ad	No abnormalities detected	Type A
2	Aural atresia and microtia. No TM visible	Could not test	Aural atresia and microtia	Could not test
3	No abnormalities detected	Type As	No abnormalities detected	Type A
4	No abnormalities detected	Type A	Dull with no cone of light, TM intact	Type B
5	Bulging, intact TM	Type B	50% cerumen occlusion	Type B
6	No abnormalities detected	Type A	No abnormalities detected	Type A
7	No abnormalities detected	Type As	No abnormalities detected	Type As
8	No abnormalities detected	Type A	No abnormalities detected	Type A
9	100% cerumen occlusion	Type As	No abnormalities detected	Type A
10	No abnormalities detected	Type A	No abnormalities detected	Type A

Pure tone testing has been described as the bench mark in terms of audiological evaluation (Roeser & Clark, 2007, p. 238). It is the results from pure-tone testing that separates normal from abnormal hearing (Roeser, & Clark, 2007, p. 238). Pure-tone testing, which includes both air-conducted and bone-conducted transmission provides information regarding the laterality, symmetry, type, degree and configuration of the hearing loss (Roeser, & Clark,

2007, p.239; Schlaugh & Nelson, 2009, p. 30). In terms of pure-tone findings, all ten of the participants in this study presented with bilateral hearing losses. Participants five, seven and ten presented with symmetrical hearing losses while the remaining participants presented with asymmetrical hearing losses. Furthermore, the majority of participants presented with sensorineural hearing losses with only participant two presenting with a bilateral mixed hearing loss and participant four presenting with a mixed hearing loss in the left ear. A mixed hearing loss is one in which the loss comprises both a conductive and a sensorineural component (Schlauch & Nelson, 2009, p. 40). Table 3 overleaf provides descriptions of the participant's pure tone air- and bone conducted results.

Table 3: Participants' pure tone audiometry results.

Participant	Postlingual/ Prelingual	PTA (Right)	Description of Hearing Loss (Right)	PTA (Left)	Description of Hearing Loss (Left)
1	Postlingual	96.6dB	Severe to profound undulating sensorineural hearing loss	65dB	Moderately severe sloping to profound sensorineural hearing loss
2	Prelingual	66.6dB	Severe rising to moderate mixed hearing loss	76.6dB	Profound rising to moderate mixed hearing loss
3	Prelingual	NR	Profound rising sensorineural hearing loss	NR	Profound sloping sensorineural hearing loss
4	Postlingual	90dB	Severe sloping to profound sensorineural hearing loss	92.5dB	Moderately severe sloping to profound mixed hearing loss
5	Prelingual	NR	Profound flat sensorineural hearing loss	NR	Profound flat sensorineural hearing loss
6	Prelingual	53.3dB	Borderline normal sloping to profound sensorineural hearing loss	97.5dB	Moderately severe sloping to profound sensorineural hearing loss
7	Prelingual	90dB	Moderately severe sloping to profound sensorineural hearing loss	95dB	Moderately severe sloping to profound sensorineural hearing loss
8	Prelingual	80dB	Moderately severe sloping to profound sensorineural hearing loss	80dB	Moderate sloping to severe profound sensorineural hearing loss
9	Prelingual	NR	Profound flat sensorineural hearing loss	93.3dB	Severe to profound trough-shaped sensorineural hearing loss
10	Postlingual	NR	Profound flat sensorineural hearing loss	NR	Profound flat sensorineural hearing loss

3.5. Ethical Considerations

Ethical clearance from the University of the Witwatersrand Human Research Ethics Committee (non-medical) was obtained prior to the commencement of the study (Protocol number: H100921) (Appendix A). Furthermore, the researcher was granted written permission from the Department of Education (Appendix B) to conduct research at the identified school. Written consent was obtained from the Principal and Deputy Principal of the school to perform both the pilot studies (Appendix C) as well as the main study at the school (Appendix D). Permission from the parents of the participants in the two pilot studies was also obtained (Appendix E). The researcher sent the necessary documentation home for the parents/caregivers of the potential candidates in order for permission to be granted for the learners to participate in the pilot study.

The researcher attended a scheduled parent-teacher meeting on the 19th March 2011 (The majority of the learners attend these meetings with their parents/caregivers) held at the school in order to explain the research to the parents of the participants as well as to the participants themselves. The investigator attended this meeting as scheduled by the school principal so as to distribute the learners' academic reports, as opposed to hosting an additional meeting such that there were no supplementary costs incurred to the parents to attend a further meeting regarding the research.

The researcher obtained verbal assent from the two participants involved in the pilot study as well as verbal and written consent from the participants involved in the main study confirming their willingness to be interviewed (Appendix F). Verbal assent as opposed to written consent from participants under the age of 18 years is considered acceptable as below the age of 18 years, participants are still considered minors (Wassenaar, 2006). The consent forms for the participants in the main study were written in conversational language and were supplemented with pictures. Reading achievement among deaf students ordinarily lags considerably behind their hearing counterparts (Marschark, Sapere & Convertino, 2009). The average reading age of severely hearing impaired eighteen year old learners in the United States of America is reported to be equivalent to that of an eight year old hearing child (Marschark et al., 2009). Literacy levels in students who are deaf have posed as an educational struggle for many years (Marschark et al., 2009). It was essential that the participants fully understood what participating in the study entailed as well as their rights as participants (these rights being autonomy, anonymity and confidentiality), thus the researcher

deemed it necessary to supplement the written content with pictures to aid understanding. An additional consent form was distributed to the participants in order to ensure that the participants permitted being video-recorded (Appendix G) as well as to have allowed a review of the participants' files (Appendix H). Furthermore, because the learners were below 18 years of age, consent forms were given to their caregivers at the parent-teacher meeting (Appendices I, J, K and L). It was made known to the participants and their parents/caregivers that participation in this study was entirely voluntary and that there would be no deleterious consequences for the participants had they wished to withdraw from the study at any time.

The transcriptions and videotapes did not depict the names of the participants and were stored in the investigators office in a cupboard that was not easily accessible and that was kept locked.

Furthermore, the ethical principles as stipulated by the South African Speech-Language-Hearing Association (SASLHA) (2010) in response to the Health Professions Act No 56 of 1974 were adhered to throughout the conduction of the current study. These principles include autonomy, beneficence, non-maleficence and justice and are informed by bioethics (SASLHA, 2010).

3.6. Referral Protocol

In light of the current research being deemed possibly emotionally and psychologically sensitive in nature, the researcher provided each participant with the contact details of psychologists proficient in South African Sign Language or those who had access to a South African Sign Language interpreter, practising in both a private and the public sector. These contacts included:

1. Natalspruit Hospital Psychology Department:
   011 389-0868
   Hospital street, Katlehong, Johannesburg

2. Puseletso Dlukulu (Clinical Psychologist)
   0835329153
   Johannesburg central

3. Dean Kilian (Clinical Psychologist)
   011 443-6863
   Parkhurst

4. Kovashni Gordhan (Social Worker)
   0844048920
   Randburg

The researcher also offered to make referrals to the appropriate counselling professionals on the participants' behalf. However, the participants did not communicate any distress or discontent from having taken part in the interviews and often expressed that the interviews were enjoyable. Furthermore, there was a social worker from the Deaf Federation of South Africa (DeafSA) that frequented the school that was able to assist the learners in accessing counselling services appropriate to the learners' needs, should they not have expressed their concern or anxiety to the investigator.

In terms of audiological referrals, participants one through five as well as participant nine were referred to the nearest public hospital Speech Therapy and Audiology department as a result of the abnormal tympanometry results obtained, such that direct referral to the Ear Nose and Throat surgeon (ENT) could take place for middle ear management. Participants one, five and nine were also referred to the nearest public hospital Speech Therapy and Audiology department for cerumen management by either the audiologist or the ENT as the school did not have an audiologist on the staff complement at the time of the research commencement.

3.7. Methods of Data Collection

Ethnography is characterised by the researcher studying an existing cultural group in a natural setting over a stipulated time period, in which the investigator collects data predominantly through naturalistic observation (Creswell, 2003, p. 14). Culture is viewed as a central idea in ethnography. An underlying assumption of ethnographic enquiry is that all human groups that exist together for a period of time will develop a culture (Patton, 1990, p. 68). The investigator obtained the majority of data through participant interviews and naturalistic observation. Additionally, context and culture are key elements in the current study. Thus, ethnographic principles were drawn upon in the selection of data collection methods.

The researcher employed three methods of investigation for the current study; field observation, participant interviews and file reviews.

- Field Observation

During field observations, the researcher shares as intimately as possible in the life and activities of the setting under study. The purpose of such participation is to develop an "insider's view of what is happening" (Patton, 1990, p. 207). The data from observations comprise comprehensive descriptions of people's activities and behaviours as well as the organisational processes and interpersonal interactions that take place (Patton, 1990). The researcher overtly observed the students in a non-participant specific manner in a number of settings. The researcher was fortunate in that considerable time had already been spent at the school prior to conducting the study, and thus familiarisation with the setting had already occurred. The observations took place in a number of settings within the school context so as to establish a holistic and integrated representation of the educational experience. These observations were carried out in the classroom, the playground, the dining hall, the hostels, during outside assembly and on the school corridors. A portion of the participant observations took place prior to the interviews being conducted so as to ensure that the participants were familiar with the researcher such that the interviews in turn, were less intimidating for the learners. The observation schedule below (Table 4) details the educational settings observed as well as the associated data collection methods that were conducted within these settings.

Table 4: Observation schedule

Educational Setting	**Methods of Enquiry**		
	Participant observation	File Review	Interview
Classroom	•	•	•
Playground	•		•
Dining hall	•	•	•
Hostels	•	•	•
Assembly	•		
Corridors	•		

- Interviews

The interview structure followed the ‘interview guide approach’ as described by Rubin and Babbie (2005). Applying this approach implied that the interviewer possessed a plan of enquiry as well as a set of questions (Appendix N), but the questions were not asked in the same order with each participant. This interview configuration allowed the participants to express their individual perspectives in a unique manner (Rubin & Babbie, 2005). The ‘interview guide approach’ is advantageous as it ensures that the evaluator has decided how best to utilise the limited interview time period and it further allows interviewing across a number of participants to be exhaustive and systematic by delimiting beforehand the issues to be explored (Patton, 1990, p. 282). The questions compiled to guide the interview process were based on the various elements that had been raised in the studies critically discussed in the literature review.

Interviewing is a research method that aims to move away from fixed answer questions (Stroh, 2000). “Questionnaires are usually standardized; they are not tailored to individuals’ circumstances’ (Valentine, 1997:110 as cited in Stroh, 2000), whereas one-to-one interviews provide the researcher with the opportunity to investigate an individual’s opinion exhaustively (Stroh, 2000). The interviewer attempted to conduct the interviews in a conversational manner and thus it was imperative that the interviewer did not sit in the interview setting and ask a series of closed ended questions (Stroh, 2000). Open ended questions are essential to any interview. These are questions that necessitate a long answer to a question as opposed to a ‘yes’ or ‘no’ response (Stroh, 2000). Time is the primary constraint to the number of interviewees. Interviews are time consuming to conduct due to their nature (Stroh, 2000). For this reason, ten participants were included in the current study. The participants were interviewed expansively, such that detailed information could be gathered to allow for the emergence of themes.

- File reviews

The researcher also conducted file reviews and subsequently recorded extensive information regarding each participant from the school files. These files have been previously reviewed by the researcher during the time of employment by the school and the majority of the audiograms and therapy reports in the school files were compiled by the researcher. The admission forms contained data regarding home languages, number of siblings, presentation

of co-morbidities, religion of the family and domicile. This information proved valuable in establishing participant candidacy as well as in determining whether any patterns with regard the findings and the demographic information occurred.

3.8. Data Collection Schedule

The investigator collected data for the main study over the period of 28th February 2011 to 19th May 2011, which spans approximately three and a half months. It should be noted that the learners had school holidays in which no data collection could take place commencing 25th March to 11th April 2011. Table 5 below summarises the data collection activities that proceeded during this time span.

Table 5: Data collection activities

Date	**Data collection activities**
28/02/2011	Observations
03/03/2011	Observations
04/03/2011	File review for participant candidacy and analysis
07/03/2011	Observations
08/03/2011	One interview conducted, observations
11/03/2011	Air and bone conduction audiometry where necessary
14/03/2011	Observations
15/03/2011	Observations, four interviews
18/04/2011	Four interviews
10/05/2011	Otoscopy and tympanometry on all participants, final interview
12/05/2011	Observations

3.9. Data Collection Procedures

- Observations

The investigator observed the participants for 29 hours over a period of seven days simultaneously documenting the observations and descriptions regarding the field of enquiry. Patton (1990) asserts that the notes compiled by the observer become the eyes and ears of the reader and for this reason the data needs to be sufficiently detailed and descriptive such that the reader may know "what occurred and how it occurred" (Patton, 1990, p. 26). Based on the recommendations made by Patton, the researcher documented the observations according to the perceptual senses, thus producing data depicting what was seen, heard, and felt. These observations were read repeatedly and subsequently sorted into 'key events' and 'various settings' as recommended by Patton (1990). In order to avoid bias, the observational data was compared to the interview transcriptions by the research assistant in order to support or negate the interview responses.

- Interviews

"As an interviewer I want to establish rapport with the person I am questioning, but that rapport must be established in such a way that it does not undermine my neutrality concerning what the person tells me" (Patton, 1990, pp. 316-317).

Interviews were conducted by the investigator in South African Sign Language and were video-recorded on a Sony Steady Shot DSC-W310 camera such that the interviews could then be transcribed for interpretation (Patton, 1990). South African Sign Language is not a verbal language but rather a visual language thus necessitating the video camera as opposed to a Dictaphone. The video recorder was stabilised on a tripod by the researcher as opposed to the utilization of a videographer so as to exclude any additional persons being present at the interview in order to protect the confidentiality of the participants. The interviews spanned for a maximum of 45 minutes and the interview guide served to remind the investigator of the necessary questions, however, the order of questions was not strictly adhered to (Appendix N). The questions included "simulation questions", where the person interviewed responds to the questions as if he/she were another individual (Patton, 1990) as well as "the direct announcement format" which includes a simple statement telling the person being interviewed what will be asked next (Patton, 1990). Furthermore, the

interviews comprised probes and follow up questions as well as support and recognition responses (Patton, 1990).

- File Reviews

The investigator was not permitted to remove the school files from the school property. Thus, copies of the available audiograms were made and demographic information regarding the participants was documented by the investigator. Information noted included participant details regarding inclusion and exclusion criteria for the current study (Patton, 1990) as well as additional information such as onset of hearing loss and whether the learner is a day scholar or a hostel scholar.

3.10. Pilot Studies

Guba and Lincoln (1983) align the reliability of a quantitative study to the dependability of a qualitative study. In order to ensure that the findings of the current study were dependable, two pilot studies were conducted at the school prior to the main study. A pilot study may be described as a preliminary study conducted on a smaller sample so as to assist the investigator in identifying potential problems with the planned design (Van der Riet & Durrheim, 2006, p. 94).

3.10.1. Working within a language mediated environment

Patient-practitioner interactions require facilitation by an interpreter not only so as to mediate communication linguistically, but also to convey the communication in a manner that is culturally sensitive and appropriate (Penn, Watermeyer, Koole, de Picciotto, Ogilvy, & Fisch, 2010). In the context of South Africa, which has been described as culturally diverse and linguistically rich, the incorporation of a language mediator is further necessitated (Penn, 2007). In addition, in the presence of a complex term or jargon, conveying the communication directly to the recipient in layman's terms can result in misunderstandings which in turn may alter the nature of the interaction (Ross & Deverell, 2004).

Language barriers as well as cultural differences between the investigator and the participants were apparent, hence the investigator's initial tendency to incorporate an SASL interpreter into the research interactions. The researcher has a level one SASL qualification which was obtained at a first year university level and the researcher worked at the identified school

using SASL on a daily basis for one and a half years. Furthermore, the researcher facilitated a Deaf friend by assuming the role of SASL interpreter at the researcher's church on a weekly basis. Nevertheless, it was still thought that the researcher's SASL capabilities were insufficient to conduct the interviews independently, thus the interpreter was required to translate the researchers questions from English to SASL and the respondents answers from SASL into English for the investigator.

3.10.2. Training of the language mediator

The language mediator (Ms. G) utilised in both the first and second pilot studies (not in the main study) is an employee of the school at which the research was conducted. Ms. G is a grade R teacher and possesses a level six SASL qualification as certified by Sign Language Education and Development (SLED). Furthermore, the language mediator does additional work as an SASL interpreter in South African courts of law and is thus familiar with the concept of confidentiality. Nevertheless, a confidentiality agreement (Appendix O) was signed by Ms. G.

The researcher met with Ms. G in September 2010 at the identified school in order to provide a full orientation to Ms. G regarding the research project as well as the underlying concepts and the interviews. More specifically, this discussion took place in the speech therapy room at the school and was approximately two hours in length. The researcher reiterated the necessity of retaining the integrity of the message conveyed by the participants and Ms. G in turn, possessing greater experience in working with deaf learners, suggested the rewording of some of the questions to facilitate the learners' understanding thereof. On the 8th of October 2010, the date of the first pilot study, the language mediator and the investigator met one hour prior to the first pilot study interview taking place in order to set up the interview environment (the speech therapy room) in a way in which was thought to allow the participant to feel comfortable as well as to facilitate communication and such that the SASL conversation was easily recorded by the video-camera. Furthermore, the underlying concepts of the research and the way in which the questions would be asked were revised.

3.10.3. Pilot Study One

In order to validate the interview questions, the researcher conducted the first pilot study on the 8th of October 2010.

- **Participant Description**

The first pilot study was conducted on a participant recommended to the investigator by one of the Deputy Principals of the school, as she was said to meet the necessary inclusion criteria (as per the main study, with the exception that a participant was only required to have attended the identified school for a period of one year). Thus, a female, fourteen year old learner in grade three was interviewed so as to establish the feasibility of the study as well as the appropriateness of the research questions (Appendix M). This participant was postlingually deafened as she suffered from Meningitis in 2008. She presented with a bilateral, profound flat sensorineural hearing loss.

- **Procedures**

The interview was facilitated by an interpreter, Ms. G. Interpreters' roles often exceed translating a communication from one language to another, as their role often encompasses that of a counsellor, a cultural mediator and that of an advocate on behalf of the person being interviewed (Penn, et al., 2010). The interview was video recorded on a Sony Steady Shot DSC-W310 camera and subsequently transcribed for analysis. The interview was ten minutes in length.

- **Findings and Design Alterations**

The findings in terms of the research aims (as per the main study) were very limited. Despite the researcher having attempted to compose unambiguous and relatively uncomplicated questions that had been further revised by the language mediator, the participant experienced significant difficulty in understanding the questions asked by the researcher and often provided unrelated answers, single word answers or no answer at all. It was thought that this may be attributable to the participant having only been deaf for less than two years and having attended the school for only one year, thus her exposure to South African Sign Language was inadequate for her to be a representative participant. The researcher concluded that an additional pilot study was necessary. The researcher thus deduced that in terms of inclusion criteria, the time at which the learner had been at the school, and subsequently

exposed to South African Sign Language should be increased from one to two years. Furthermore, it was decided that the participants would be permitted to partake in the interview in either oral or signed language.

3.10.4. Pilot Study Two

- **Participant Description**

Pilot study two took place on the 20th January 2011 at the school in the speech therapy room with a sixteen year old, grade eight, prelingually deafened, female participant who had attended the school for eight years. She too presented with a bilateral, profound, flat, sensorineural hearing loss. The participant in pilot study two met the inclusion criteria as per the main study as well as having attended the school for a period of longer than two years.

- **Procedures**

The interview took place under the same conditions as pilot study one, with the exception that this participant had attended the identified school for a minimum of two years and subsequently chose that the interview be conducted in South African Sign Language.

- **Findings and Alterations to Design**

While this participant did not display difficulty in understanding the questions asked by the investigator, the answers provided were once again, limited for the most part, to one word answers. This pilot study provided incomplete and deficient information in terms of the research aims (as above). However, the insight it provided the investigator regarding the interview questions and the interview structure was invaluable. Retrospectively, the researcher was reminded that the quality of the information gathered during an interview was significantly dependent on the interviewer (Patton, 1990, p. 279). It was for this reason that the researcher examined closely, the interview questions and established the following:

- The researcher failed to create an environment in which natural conversation could flow between the participant and the researcher by including the interpreter, an educator at the school, the participants were not likely to divulge information particularly of a negative or sensitive nature for fear of the possible consequences.
- The questions were predominantly of a ‘yes/no’ format despite the researcher having selected the ‘interview guide approach’ and many of the questions were ‘why’

questions. Patton (1990, p. 302) cautions that numerous ‘why’ questions can present themselves as accusatory. The insert below demonstrates the use of ‘why’ and ‘yes/no’ questions by the investigator during pilot study two.

“R: What was the name of the school that you went to before you came here?
P: [Name of previous school]. I used to talk
R: Ok, so was it a school for hearing children?
P: Yes.
R: Why?
P: They talked there and it’s nice to talk.”

Key: R: Researcher P: Participant

- There were too few questions asked in order to obtain sufficient data for further analysis.
- The questions were predominantly demographic and knowledge based questions. Patton (1990, p. 292) describes demographic questions as enquiries regarding identifying and background information whereas knowledge based questions are proposed in order to establish what factual information the participant may possess.

Therefore, the investigator identified the need to conduct the interviews without the assistance of an interpreter *directly* not only to create a less intimidating interview environment but also because numerous researchers report distortion, errors, alterations and deviances made by interpreters (Penn et al., 2010). Furthermore, the interview questions were altered to include less ‘yes/no’ and ‘why’ questions and additional questions were included that were experience based as well as emotive in nature (Appendix N). As a result of the investigator having to conduct the interviews independently, the role of the language mediator shifted. Once new interview questions had been derived by the investigator, the researcher met with Ms. G at the school at the end of January 2011 in the speech therapy room, such that Ms. G could assist the researcher in practising asking the participants the newly devised questions in South African Sign Language. The language mediator further agreed to verify that the transcriptions from the interviews were correct when compared to the video recordings once the ten interviews for the main study had been conducted and transcribed by the investigator.

3.11. Trustworthiness of Findings

It is the obligation of the naturalistic researcher to attend to the trustworthiness of the qualitative research in the same way it is on the onus of the empirical researcher to determine the reliability and validity of his/her quantitative research (Guba & Lincoln, 1983).

In qualitative research, the credibility of a study is heavily reliant on the meticulous techniques and methods instituted to gather high quality data as well as the way in which it is analysed (Patton, 1990, p. 461).

In order to ensure that the questions used in the current study were tailored to achieve the research objectives, two pilot studies were conducted (as above) at the identified school.

Observer bias refers to the cultural assumptions which all researchers bring to their work which ultimately influences their method of research as well as their observations (Marshall, 1998). In order to overcome this, the researcher observed the participants on several occasions and in various educational settings (various classrooms, the playground, the dining hall and the hostel). Guba and Lincoln (1983) refer to multiple observations as *persistent observation* and this is said to aid confirmability of qualitative research. Furthermore, in order to overcome the obstacle of observer bias, the investigator practised reflexivity in the form a reflective journal. Reflexivity is reinforced by feminine social scientists insisting that the investigator's personal and demographic characteristics play a role in eliciting the research data and thus the researcher's subjective response to the investigative process should be documented (Eagle, Hayes & Sibanda, 2006, p. 506)

The researcher was aware that the learners may alter their behaviour in the presence of the observer. This alteration in behaviour when being studied may be referred to as the Hawthorne Effect (Shuttleworth, 2009). The researcher aimed to observe the learners in a manner that was as unobtrusive as possible, such that the learners could function as normally as possible in their natural environment. Furthermore, in order to ensure confirmability of findings, as suggested by Guba and Lincoln (1983) the researcher implicated *prolonged engagement* at the school in order to overcome distortions introduced by the researcher's presence.

Methods triangulation refers to the application of several research methods in order to obtain the same information so as to increase the credibility of a study (Patton, 1990, p. 464). By making use of interviews, file reviews and field observations, the researcher was able to cross

check and cross reference data obtained from the various methods in order to ensure that responses provided by the participants were consistent (Guba & Lincoln, 1983).

Theory/perspective triangulation implies using a number of perspectives or theories to interpret the data obtained (Patton, 1990, p. 464). Numerous theories regarding identity development were considered (as outlined in the introduction) as opposed to a single theory when interpreting the data. Furthermore, so as to avoid bias when identifying themes, the investigator requested that a colleague (Masters of Audiology Graduate) review the tabulated themes and supporting quotations (Appendix P) and compare these to 40% (4 of10) of the interview transcriptions.

In addition, the use of a South African Sign Language interpreter allowed the researcher to verify fifty percent of the transcriptions to ensure that all communications were correctly transcribed and understood by the interviewer.

The researcher returned to the school after the completion of the interviews and transcriptions in order to conduct individual discussions, prompted by the participants reading the transcription of their interview so as to verify that the interviews had been correctly transcribed and understood by the investigator.

3.12. Data Analysis

The researcher utilized interpretative analysis as per the guidelines described by Terre Blanche et al. (2006, p. 322). There are various qualitative analytic traditions that fall under the category of interpretive analysis, such as grounded theory (Strauss & Corbin, 1990 as cited in Terre Blanche et al., 2006, p. 322) and thematic content analysis (Smith, 1992 as cited in Terre Blanche et al., 2006 p. 322). For the purposes of the current study, the researcher made use of thematic content analysis as this method was deemed by the researcher as most appropriate for the current research as the emergence of themes enabled the researcher to strongly identify recurrent patterns within the educational experiences of deaf adolescents.

The following analytic steps as recommended by Terre Blanche et al. (2006, p. 322) were implicated in order to divide data that was attained into various themes.

1. **Familiarisation and immersion** – By the time one is at the point of data analysis, one should already possess a preliminary understanding of one's data, as research is not a mindless gathering of information (Terre Blanche et al., 2006, p. 322). At this stage, the researcher assembled all texts and findings and became immersed in the interview transcripts and field notes. At this point, the investigator was conscious of what data had been found where and what theories were supported by the data and what was not supported (Terre Blanche et al., 2006, p.322).

2. **Inducing themes** – Induction is a 'bottom up' approach to analysis as it implies that one infers general rules or classes from specific instances. It is recommended by Terre Blanche et al. (2006, p. 322, p. 322) that at this stage, one uses the language of the interviews and the interviewees rather than convoluted and abstract theoretical language. Furthermore, the researcher moved beyond summarizing content but rather recognized processes, contradictions and functions within the data (Jackson, 2000; Terre Blanche et al., 2006, p. 322). The optimal number of themes was recognized, as too few tend to produce uninteresting research, while too many result in confusion. Taylor and Ussher (2001) assert that themes do not passively 'emerge' and are not 'discovered' but rather, the researcher plays an active role in the identification process. Braun and Clarke (2006) suggest that one can only identify themes once what constitutes a theme has been clearly defined in the mind of the researcher. These authors suggest that "a theme captures something important about the data in relation to the research question, and represents some level of patterned response or meaning within the data set" (Braun & Clarke, 2006, p. 82). The constructionist paradigm has been strongly correlated to thematic analysis at a latent level which surpasses the semantic content of the data and begins to establish or identify the underlying conceptualizations and ideas (Braun & Clarke, 2006).

3. **Coding** - While developing themes, one should also code one's data. In the current study, this comprised marking various sections of the data as being relevant to, or instances of; the identified themes (Terre Blanche et al., 2006, p. 325). Coding entailed identifying a line, a phrase or a single word that

pertained to a particular theme. This highlighted area may have referred to more than one identified theme, and thus was labelled with more than one code. The investigator colour-coded the data (e.g.: references made to educators were highlighted in yellow). " In coding, we break down a body of data (text domain) into labelled, meaningful pieces, with a view to later clustering the 'bits' of coded material together under the code heading and further analyzing them both as a cluster and in relation to the other clusters" (Terre Blanche et al., 2006, p. 325).

4. **Elaboration** – During the collection of data for interpretive analysis, one experiences things people say and events in a linear order. When one then immerses oneself in interview transcripts and field notes, one still very much views these materials in a chronological fashion (Terre Blanche et al., p. 326). The induction of themes and coding allowed the researcher to fragment this sequence, such that events that were distant from one another could now be brought together which in turn allowed for accurate comparison. The role of elaboration is to detect subtle nuances that were previously overlooked by the initial, more rudimentary coding system (Terre Blanche et al., 2006, p. 326). Patton (1990) refers to the comparison of participants or cases without the consideration of the time-line as cross-case analysis. It was at this stage that the investigator, as per the recommendation of King and Horrocks (2010) tabulated identified themes and evidenced these themes with supporting quotations from the interviews (Appendix P). Thereafter, the researcher analysed the interviews case by case as per the recommendation of Patton (1990) for individual differences and nuances as the most significant similarities and themes had now been identified.

5. **Interpretation and checking** – This comprised a written account of the phenomenon investigated by the researcher, utilizing thematic categories from the analysis as subheadings. At this point, one is attempting to identify weaknesses, over interpretations and contradictions in one's own study. It is important at this stage to acknowledge areas where the researcher may have allowed personal bias to come into play which in turn affects the validity and

reliability of the study (Terre Blanche et al., 2006, p. 327). At this point of the data analysis, the researcher compared the transcriptions to the field notes to identify what had been observed and what had been reported were in agreement. Furthermore, the dates of the observations and interpretations were compared to the dates in the investigator's reflective journal so as to further eliminate the potential for bias.

3.13. Ethnographic Context Description

In order to fully appreciate the educational experiences of the participants in the current study, it is pertinent that the context in which the school is situated, as well as the school setting itself, is fully understood.

3.13.1. The broader context

The school is a public school situated in a township, south of Johannesburg. The proximity of this residential area to an industrial area is no coincidence, but rather is a remnant of the Apartheid era, during which, according to the Bantu Building Workers Act, Act No 27 (1951), black people were trained as artisans, but were limited to designated locations and menial, unskilled tasks. Furthermore, the Group Areas Act, Act No 41(1951) enforced separation between races by creating different residential areas for the various races. On entering the township from the main road, a public, tertiary hospital may be observed on the left hand side. On the adjacent side of the main road is an informal settlement, in which homes of corrugated iron, portable ablution facilities and no running water, is the norm. Next to the informal settlement is a busy taxi rank, the point of accumulation for the mode of transport for the majority of the residents. The road running perpendicular to the main road is lined with vendors selling fruit, vegetables, loose cigarettes and live chickens. The tarred roads in this area are dotted with potholes and the pavements are lined with people, young and old, on foot. Commencing down the perpendicular street, 'spaza' shops and modest brick houses with well-swept dusty 'gardens' become visible. Entrepreneurs advertise their services, ranging from surgery to hairdressing on the fences or walls of their homes. It is popular amongst residents to build corrugated extensions onto their more stable brick houses and rent these rooms to those in search of accommodation. Interspersed among the houses,

and along the secondary dust roads, are churches, second-hand furniture stores and even a make-shift carwash for the fortunate few.

3.13.2. The school context

The school comprised approximately 220 learners at the time of the current study and it catered for learners from grade R through to grade nine. This school previously accommodated for learners with both hearing and/or visual impairment (Grade 1 Educator, personal communication, March 15, 2011). Due to a lack of qualified teachers, amongst other reasons, the school eradicated the division catering for the visually impaired to cater only for the hearing impaired (Foundation Phase HOD, personal communication, March 15, 2011).

The school currently comprises 3 phases, the Foundation Phase, the Intermediate Phase and the Senior Phase which extends to grade 9, where after students are required to attend a different school should they wish to matriculate (Deputy Principal 1, personal communication, March 15, 2011). The school curriculum follows the Government Department of Education (GDE) Revised National Curriculum Statement (RNCS) while incorporating tools and techniques taught by SLED (Sign Language Education and Development) in the Foundation Phase (Deputy Principal 1, personal communication, May 12, 2011). The learners attending this school communicate predominantly in South African Sign Language (SASL) amongst themselves. A small portion of the learners are capable of oral communication. There are a number of educators that are proficient in South African Sign Language, teaching at this school; however, it was acknowledged by the Principal of the school that the majority of the educators make use of Total Communication (Personal communication, February 28, 2011). There is naturally no school bell, however there is also no visual system (such as flashing lights) in place to indicate to the learners that a period has ended. Both the educators, of which there are 26, and the learners therefore rely heavily on their time-keeping skills.

On entering the school, the reception area becomes visible. This brick building also comprises the staff room and Head of Department (HOD) offices and eventually meets with the Foundation Phase classrooms. An unkempt lawn dotted with old, wooden playground equipment is the view from the five Foundation Phase classrooms. The classrooms are sparsely decorated with educational posters and class size ranges from 12 to 18 learners. The Intermediate and Senior Phase building comprises numerous classrooms, a number of which

are not occupied and all of which are minimally decorated. Prefabricated classrooms, of which there are three for senior use, are situated on a grassy area between the buildings.

The sporting facilities at the school are very limited. The school has a large sports field but this grassy outstretch is not maintained and consists of only a single, rusty netball post and soccer goals. Figure 1 is of the school's sports field.

Figure 1: Students playing netball on the school field.

The school hall, which is reserved for mealtimes and parent's meetings, is separated from the reception building by a grey-bricked area, on which daily school assemblies take place. The school hall, as can be seen in Figure 2 is a large brick building which is regularly maintained. The learners are provided with tea and bread in the hall during lunch time on a daily basis, which for some, may be the only meal for the day (Deputy Principal 1, personal communication, March 15, 2011). In these impoverished instances, the learner is encouraged to arrive at school early in the morning and join the hostel residents for breakfast (Deputy Principal 1, personal communication, March 15, 2011).

Figure 2: Inside the school dining hall

Despite the students being provided with tea and bread during mealtimes and parental incomes being low, the ‘tuck shop’ comprising a make-shift table, an entrepreneur and loose 20 cent sweets, chips and fruit remains popular. Figure 3 depicts the ‘tuck shop’.

Figure 3: The ‘tuck shop’

The day scholars attending this school are required to pay R1000.00 per year in tuition fees, while the remaining costs are subsidised by the Gauteng Government Department of Education (GDE) or by sponsorship from corporate companies or willing individuals (Deputy Principal 1, personal communication, March 15, 2011). This R1000.00 annual tuition fee is to be covered by the Care Dependency Grant for which the parents/legal guardians of those who are diagnosed as having a severe to profound hearing loss (and subsequently requiring education outside the boundaries of mainstream schooling) qualify (South African Social Security Agency, 2011). This qualification for a Care Dependency Grant in itself raises the issue of big 'D' Deaf versus small 'd' deaf, as this grant is offered to the parent/legal guardian of a *disabled* child (South African Social Security Agency, 2011) (Emphasis added).

The hostel facilities house approximately 120 learners; 60 males and 60 females (Deputy Principal 2, personal communication, May 12, 2011). The male and female hostels are separate brick buildings at the back of the school premises. The amenities within the two hostels are virtually identical, differing only in colour; blue for the boys and red for the girls. The hostels accommodate learners between the ages of four to sixteen years (Deputy Principal 2, personal communication, May 12, 2011). The hostels comprise a communal room at the entrance of each of the brick buildings. A public telephone booth, a television and a large green chalk board may be found in each of the communal rooms. Also, at the entrance of each communal room is an area where the learners are required to leave their school shoes ready for the next day. Each hostel has a small kitchen however the hostel dwellers share mealtimes in the dining hall. The bedrooms and bathrooms within each of the hostels are kept sanitary by the 'hostel mothers'. Two 'hostel mothers' are assigned to each of the hostels and these 'mothers' prepare meals, clean the hostels and do the laundry for the residents. The cost to reside in the hostels, including tuition fees of R1000.00 is R2500.00 per annum. Also included in this fee are the 3 daily meals provided for the learners as well as homework assistance Monday to Friday by volunteering educators from the school.

CHAPTER 4: Results and Discussion

Chapter four explores the themes identified by the researcher from the interviews conducted with the deaf adolescents (as supported or negated by the participant observations) with regard the aims and objectives of this study. In addition, the themes are discussed in relation to literature from both international and local sources. The implications of the findings of the current study on identity development are highlighted and a model of identity construction for the deaf individual is also proposed in this section.

A data collection process based on ethnographic principles, as recommended by Bhana and Kanjee (2001) served the researcher well, as it afforded the researcher an opportunity to become submerged into the educational setting of the deaf adolescents. The 'interview guide approach' as described by Rubin and Babbie (2005) offered sufficient structure to ensure that the relevant questions were probed with each participant, but also offered adequate flexibility so as not to impede the natural flow of conversation. Furthermore, the file reviews as outlined by Patton (1990) not only enabled the researcher to establish candidacy for participation in the current study but also provided insight into the onset of the participants' deafness as well as additional audiological information and demographic data.

Having employed thematic content analysis as proscribed by Braun and Clarke (2006) and Terre Blanche et al. (2006), three resounding themes were identified by the researcher which may subsequently be further divided into a number of sub-themes as follows:

4.1 Communication

4.1.1 Insufficient SASL role models at school

4.1.2 Limited parent-child communication in the home

4.2 Education Context

4.2.1 Dissatisfaction with school placement

4.2.2 Positivity and hope for the future

4.3 Affiliation

4.3.1 'Silent' affiliation with Deaf culture

4.3.2 Disability – The often unknown term, the often known negative experiences

4.3.3 A Hard-of-Hearing subculture

4.3.4 A desire to be hearing

4.1. Communication

"Language is so tightly woven into human experience that it is scarcely possible to imagine life without it" (Pinker, 1994, p. 17).

Pinker (1994, p.17) suggests that language and communication are essential for the majority of activities associated with community living such as preparing shelter and food, teaching, loving, arguing and negotiating. Consequently, Pinker (1994, p.17) asserts that difficulty or an inability to communicate may hamper an individual's capacity to become a fully fledged, contributing member of a particular community.

4.1.1. Insufficient SASL Role Models at School

Johnson & McIntosh (2009) highlight the need for education systems to display cognisance of the responsibility for preparing educators who value cultural diversity, cultural pluralism, cultural proficiency, and the necessary competency to accommodate the significant variance in students' experiences, abilities, backgrounds, languages and belief systems. Cultural competence and proficiency is essential as an educator at a school for the deaf where sign language, which has already been established to be linguistically equal to spoken language (Fox, 2007, p. 19), is the mode of education, particularly because sign language is the most evident affiliation with Deaf culture (Lane et al., 1996).

The School Principal's acknowledgement that the educators at the identified school utilize Total Communication (TC) as opposed to SASL, despite favouring an SASL approach to education, suggests a possible level of cultural incompetence on the School Principal's and educators' behalf (Johnson & McIntosh, 2009, p.67). Power et al. (2008) suggest that the use of SimCom or Total Communication when sufficient educator training has taken place will not result in deleterious effects on the deaf learners' acquisition of English. However, these authors as well as Grimes et al. (2007) highlight the necessity of educator proficiency in the mode of instruction, either TC or sign language, for academic success to occur.

This lack of proficiency in SASL was an issue that was raised by seven of the 10 participants in this study, as an area of concern. However, it must be noted that a number of the educators and Deaf mentors/ classroom assistants employed by the school are in the current researcher's opinion, highly proficient in SASL and display rich Deaf cultural knowledge.

Nevertheless, in response to being asked whether the teachers use oral or sign language in the classroom, the participants responded as follows:

- ***"I have seen that they sign a bit and talk a lot. I'm hard of hearing so it's fine because I can lip read, but then those who are deaf ask me what was said because I am hard of hearing, so I have to help them. The teachers need to sign. Talking and signing doesn't work."***
- ***"It's half talking and half sign language. They teach in both."***
- ***"The teachers talk and then they fight with us when we don't understand and we ask them to sign, or when the hard of hearing don't understand the teachers' sign language. Some of them will say sorry and then sign again slowly or say it again but some of them just don't care."***
- ***"There's talking and signing and I don't understand and it's work."***

Additional responses related to the mode of communication in the classroom included:

- ***"Some of the teachers sign but some of the teachers can't. They just talk to communicate."***
- ***"They [the teachers] just talk and talk and talk and I will ask them to sign instead of talk or at least try and sign."***
- ***"Yes they [the teachers] talk a lot."***

A few of the participants further expressed a preference for a manual mode of teaching and learning thus:

- ***"Sign language [is better] because I am deaf but they talk too and I watch."***
- ***"Because I don't want to hear hearing people when they talk. I need to learn in sign language, it's better for me."***

Interestingly, a number of the participants, when asked what they would like to change about the school alluded to changing the teachers as follows:

- ***"I would like to make this school perfect. I would like the teachers to be perfect, not this talking and signing. It's wrong and nobody understands it. We need perfect teachers."***
- When asked what needed to be done in order to make the teachers perfect, participant one above stated: ***" Deaf teachers or using interpreters or for these teachers to stop***

and ask " Ok, does everyone understand?" and the teachers should give notes to help us understand. We also wait long for the teachers, which is wrong. The teachers should be perfect. Talking and signing is wrong."

- ***"I would change the teachers. They shouldn't talk. I would change them. They must teach so that we understand."***

Participant one highlights a crucial factor with regard to the educational experience of deaf adolescents and deaf learners as a whole; that being the relative absence of *Deaf* educators in schools for the deaf. As a result of elimination from equal education opportunities for deaf learners, one third of the deaf population in South Africa is functionally illiterate (Magongwa, 2010). This poor level of education at a school level consequently leads to deaf adults in South Africa being excluded from tertiary education and subsequent employment. Consequently, opportunities for deaf graduates to return to schools in professional roles and to pose as role models for the deaf learners is significantly reduced (Magongwa, 2010).

The investigator also observed on more than one occasion, the use of oral language as opposed to South African Sign Language in the participants' classrooms. While signing did take place in the classrooms during the investigator's observations, and speech was kept to a relative minimum, the sign language used in a number of classrooms was grammatically incorrect, often following English grammar, thus representing a Signed English in the absence of the English speech. It is speculated that the educators limited their use of oral language in the presence of the researcher hence the occurrence of the Hawthorne Effect (Shuttleworth, 2009), as the participants unequivocally reported the continual use of speech in the classroom. This is supported by the Principal's reference to Total Communication and this was also observed on several occasions by the researcher when previously employed at the school, when the educators may have felt less 'observed' by the current researcher. Positively, the school has three Deaf mentors in their employ who pose as excellent SASL models as well as adult role models for the deaf learners.

Related to the participants' reporting the insufficient use of SASL in the classroom setting, was the recognition that a number of the educators were not sufficiently qualified in SASL relative to the grades or subjects that they were teaching at the time of data collection. South African Sign Language not being recognized as a subject in schools has been acknowledged by Magongwa (2010) as having a severely negative impact on academic outcomes for deaf learners. He further affirmed that "schools that profess to use SASL do not often achieve the

desired outcomes because they tend to use Total Communication (a mixture of signs that are supported by a spoken language in an ad hoc way). If not used consistently by well-trained, skilled signers, Total Communication not only undermines SASL but also creates a barrier to quality education for Deaf children" (Magongwa, 2010, p. 493). Power et al. (2008) as noted in the literature review, share Magongwa's (2010) sentiment that SimCom, Total Communication and Signed English need to be used consistently by well-trained educators in order to be effective as the mode of instruction in an educational setting.

Parkin (2010), the director of Deaf education of the Deaf Federation of South Africa (DeafSA) emphasizes that within the Department of Education, at a policy-forming and decision making level, insufficient knowledge and expert skills regarding deaf learners is inadequate to inform appropriate deaf education practices and support. Furthermore, she explains that the Department of Education lacks monumentally in supporting and assessing educators of the deaf in various spheres, including curriculum completion, teaching methods and qualification requirements (Parkin, 2010).

Parkin (2010) aptly captures the experiences expressed by the participants in the current study when describing the deleterious effects of an educator unskilled in SASL:

> Many teachers enter the classroom for Deaf learners with little or no experience with deafness; nor are they required to have any. The burden of this situation is twofold on teaching and learning: First, teachers are faced with learners they cannot communicate with, or communication is rudimentary, at best, and second, teachers lack the qualifications necessary to empower them as educators in the classroom for Deaf learners. Teaching is thus set at the pace at which the teacher acquires the ability to communicate with his or her learners (Parkin, 2010, p. 491).

Immense emphasis is placed on the necessity for skilled signers as language models and educators and it is for this reason that the investigator has included data regarding the South African Sign Language qualifications of the teaching staff employed by the school. This information was provided in tabulated form by one of the Deputy Principals at the school and has been summarised in order to respect the anonymity of the educators. Of the 29 teaching staff, two, including the School Principal, have no SASL qualifications. The majority of the educators (17) possessed a level one South African Sign Language qualification, while six of the educators were in possession of a level two SASL qualification. The grade R educator who assisted the investigator in determining whether the participant interviews had been

correctly transcribed, has a level six SASL qualification. Sign Language Education and Development (SLED) in 2011, recommended that educators require a minimum NQF level seven (which is equivalent to a three year university qualification) in SASL as well as complete competence when using SASL as the language of instruction in their particular subject matter in order to be considered adequately equipped to educate senior school learners.

The SASL qualifications cannot be considered in isolation when measuring educator competence, particularly because a number of educators at the identified school possess a wealth of experience in working with deaf learners. Furthermore, the three Deaf classroom assistants employed by the school, despite lacking formal SASL training are fluent, first language users of SASL and were observed to pose as sign language models and mentors for the learners. Nevertheless, from the findings of the current study on the educational experiences of deaf adolescents, it can be deduced that the educators fall considerably short of the recommendations for educator SASL competence as offered by SLED. This finding is consistent with Power et al.'s findings (2008) and Magongwa's (2010) sentiment asserting the necessity of competent educators and educator proficiency in the language of instruction for academic success. Although the academic outcomes of the participants in the current study were not established, educator SASL proficiency was repeatedly raised as an area of concern by the participants in the current study.

The above findings regarding the language mode in the classroom are highly distressing. Having observed the participants to be considerably more fluent in SASL than their educators is cause for concern particularly with regard to the academic success of these learners. While SASL and cultural diversity in terms of the educational setting have been moderately acknowledged in government policies, in practice, the learners report a very different experience in which they are often taught in a language that is not easily accessible to them; oral language.

In terms of sub-aim two of the current research; affiliation with either the medical or the socio-cultural model, the participants' exposure to ad hoc Total Communication or rudimentary sign language as well as very few Deaf mentors, does not afford the learners exposure to a 'true' SASL environment and experience of Deaf culture. Additionally, the absence of FM systems and cochlear implantation/ well-maintained hearing aids and the related aural habilitation/rehabilitation does not provide the learners with an accurate

‘hearing’ environment. As a result of the absence of an ‘authentic’ experience of either of these models in terms of linguistic tendencies, affiliation with one or the other may be difficult. This in turn in turn will bear impact on the identity development of these individuals as either big ‘D’ or small ‘d’ deaf persons. This finding is both consistent with and partially in opposition to, the findings of McIlroy’s (2008) suggesting that SASL as well as transitioning to a school for deaf learners facilitated identity construction as a Deaf individual. While the use of SASL has been acknowledged as a facilitator of Deaf identity development, attending a school for the deaf, where there are few Deaf mentors and where the SASL proficiency of the educators is low may prove to be an inadequate environment for Deaf identity construction to occur.

Limited SASL proficiency was not limited to only the educators at the school. The hostel mothers (n=4) at the school were also observed to possess only modest SASL skills, this finding was confirmed by one of the Deputy Principals at the school (personal communication, May 10, 2011) when he further explained that the support staff at the school, which included hostel mothers, were being educated in entry level SASL for one hour every Tuesday by the educator in possession of a SASL level 6 qualification. This was positive to note as the number of learners residing in the hostels is significant and individuals competent in SASL are essential as language models for the students (Sacks, 2009; Pinker, 2007). As established in the profile of the participants, four of the learners involved in the current study reside in the school hostel and thus are exposed to these individuals who may not yet be considered as adequate SASL models. Fortunately however, the participants themselves operate as SASL models for the learners younger than themselves residing in the school hostels. It is essential as a speech language pathologist and audiologist to note the influential role of peers in terms of language learning with regard to language intervention.

It was interesting to note that in contrast to the participants who reported to be displeased with the use of oral language in the classroom, participants four and 10 expressed dissatisfaction with the educators’ use of SASL as they both expressed a desire to be taught in oral language. This desire to be taught in oral language is thought to be linked to the onset of these participants’ hearing losses, as both participants four and 10 were post-lingually deafened and are thus thought to possess memory of sound and an affiliation with the hearing world (Sacks, 2009). In addition, the desire to be taught via the auditory-verbal approach does not correlate with the severity of the participants’ hearing losses as participant four and participant 10 both presented with pure tone averages that may be described as profound

(Stach, 2010) thus rendering oral communication difficult (Venter, 2002). Nevertheless, a tendency towards verbal instruction as opposed to SASL may be suggestive of an affiliation with the medical model of deafness (Sacks, 2009) for these two participants. It is possible that being postlingually deaf and having 'lost' the ability to hear may reinforce this affiliation and subsequent identity development as a small 'd' deaf individual.

4.1.2. Limited parent-child communication in the home

Despite the focus of the current study being the *educational* experiences of deaf adolescents, the theme of 'limited parent-child communication in the home' was one that was relevant to seven of the 10 participants in the current study. Furthermore, language models are not limited to educators but rather, the onus falls on parents/guardians and family members to demonstrate language use particularly in the first years of life (Khoza-Shangase et al., 2010: Pinker, 2007). With regard to the caregivers of the participants in this study, familiarity with SASL was reportedly exceedingly limited as is evidenced below:

- ***"Me, I sign. Them, they are hearing. I am the only deaf one. They don't understand sign language."***
- ***"If my mom and dad talk to each other or to me, I don't understand it. They write it and I try and understand it in sign language."***
- ***"My mom and dad are hearing and so I don't understand them and they don't understand me. When they are arguing, I don't understand what they are saying."***
- ***"I can't communicate with hearing people. They communicate and I don't know what is going on."***

It was positive to note that six of the participants reported teaching their parents, caregivers or siblings some SASL and that attempts had been made by family members to learn SASL. The participants' comments included:

- ***"Ja, they try and sign"***
- ***"I love my mother because she lets me teach her sign language."***
- ***"...My mom is trying to learn sign language and I help her."***
- ***"Ja, they try and sign, my sister is quite good."***
- When asked whether his family knows sign language, participant two responded: ***"No (shakes head). Well, a bit. My dad knows a bit."***

Two of the participants reported having a single family member proficient in SASL. Participant seven reported the following:

- ***"My sister is hearing, but she can communicate in sign language..."***

While attending the quarterly parent-teacher meeting, the mother of participant eight reported to the investigator that she utilizes SASL when conversing with her son. This was confirmed by participant eight during the participant interviews thus:

- ***"My mom and dad will talk to each other and then I will ask my mom "YOU SAY WHAT?" and then she will sign it for me so that I understand."***

No information regarding the level or fluency of the aforementioned family members' SASL was available but it was positive to note that an effort had been made by family members to learn the first language in which the participants converse.

A number of the participants further made reference to the use of oral language and subsequent lip-reading in the home as suggested by the following comments:

- ***"Well, I am hard of hearing so we talk and I lip read."***
- ***"They are hearing so I lip read."***
- When asked whether her family knew SASL, participant one responded thus: ***"Ja, they try and sign but it is easier just to talk."***

It should be noted that participant one was postlingually deafened and as identified in the participant profile, presents with a moderately severe sloping to profound sensorineural hearing loss in the left ear, thus suggestive of some residual hearing in the low to mid frequency range which may explain the relative ease with which oral communication takes place at home. The investigator also observed participant one to converse orally with an educator at the school on more than one occasion.

It has been established that attempts have been made by family members to learn SASL, the proficiency of which was unfortunately not determined by the investigator but generally reported by the participants to be rudimentary. Furthermore, lip reading was reported to facilitate communication in the home but, as identified when introducing this theme, the majority of the participants reported inadequate communication in the home. Insufficient language stimulation within the critical language period has been identified by Meyer and Swanepoel (2011) as a precursor to cognitive, emotional and psychosocial delays which in

turn may have ramifications for academic performance (Meyer & Swanepoel, 2011). Although the participants exceed considerably, the critical language period of 12 months of age as suggested by Meyer and Swanepoel (2011) it is assumed that if currently, family members are not SASL users, then it is likely that during this critical language acquisition period, family members were not fluent signers, thus potentially resulting in the participants experiencing the delays described by Meyer and Swanepoel (2011). Sacks (2009) further proposes that opportunistic learning for a deaf child in a hearing environment is considerably restricted.

Poverty, to an extent was thought to be an influencing factor on the caregiver's opportunities to acquire SASL as a number of courses available to the public can be quite costly and when the investigator offered SASL workshops at no cost for parents, when employed by the school, the attendance rate was ample. Related to this, is a lack of parent awareness regarding courses and resources available to parents of deaf children. Stern (1998) recognises a multitude of interpersonal and socioeconomic factors to influence parental orientation, such as the presence of a caring partner and his/her parental orientation, household composition, the number of, and age-gaps between other children, availability of social and material support as well as the parent's age, financial status and outside interests.

It was concerning to note that the participants' low socio-economic status and limited access to information and resources was a significant influencing factor on the ability of the caregivers to communicate with their children. This finding is concerning not only because the caregivers pose as deficient language models which may potentially lead to subsequent associated delays (Meyer & Swanepoel, 2011), but rather due to the influences that lack of communication are imagined to have on the parent-child relationships . Socha and Stamp (2009) assert that communication is a valuable predictor of parent-child relationships. These authors further suggest that parents who involve their child in everyday interactions and who reword or explain complex phrases for the child tend to have stronger parent-child relationships (Socha and Stamp, 2009). Additionally, Stern (1998) suggests that an inadequate parent-child relationship can have deleterious consequences on the emotional and personal development of an individual throughout the lifespan.

An awareness of the implications of limited parent-child communication instilled a feeling of guilt on the part of the researcher. Having been employed by the school and having been in a position to empower these parents by offering introductory SASL workshops, "taking away"

this opportunity for the caregivers to learn SASL and potentially improve communication in the home setting left the researcher feeling despondent and guilty.

Failure to learn SASL on the part of the caregivers is thought to reinforce the medical model of deafness due to the emphasis that is placed on lip-reading and listening. This affiliation with the medical model of deafness may assert an individual identity that tends strongly towards "disabled" (Leigh, 2009). Findings of the current study suggesting limited parent-child communication in the home raises implications in terms of the psychological well-being of the deaf individuals, not only in terms of identity development but also due to the potential ramifications of a poor parent-child relationship and the absence of adult role models with whom the deaf individuals can communicate. This finding is consistent with a finding of McIlroy's (2008) in his study pertaining to educational experience and its subsequent impact on deaf identity, which highlighted loneliness as an emotion experienced by the deaf participants. Conversely, attempts made by caregivers to communicate with their deaf child manually may suggest support of the child's first language and Deaf culture. With regard the identity of these participants for whom communication at home is limited, "inbetweenity" as suggested by Brueggemann (2009) may be an accurate representation of the self, as a level of Deaf culture is experienced at school, while the hearing world is experienced at home. The "dialogue model" as proposed by McIlroy and Storbeck (2011) is thought not to be appropriate to describe the identities of the participants in the current study due to the limited proficiency in SASL of the educators and the restricted experience of the hearing world to which these learners are exposed, thus not allowing 'true' affiliation with either the medical model of deafness nor the socio-cultural model of deafness.

Related to the experience of poor language models and the potential educational consequences thereof, the investigator noted that the participants had difficulty reading the consent forms for the current study and often requested assistance with a number of the words on the forms despite the researcher's attempts at ensuring that the language used in the participant consent forms (Appendix F, G and H) was kept simple and that these forms were supplemented with pictures to facilitate understanding. This resulted in the researcher explaining the consent forms point by point to each participant. Difficulty in reading was not isolated to the consent forms as the participants requested assistance when reading the interview transcriptions composed by the investigator. This task too resulted in the investigator having to discuss the transcript line by line with the participants in order to ensure verification of the transcriptions. Literacy in the deaf population worldwide has been a

cause for concern for a number of years (Marschark et al., 2009) and as such, this finding in not unique to the school at which this research was conducted. The research conducted by Grimes et al.(2007) regarding language approaches used with deaf pupils in Scotland was carried out as part of the Achievements of Deaf Pupils in Scotland (ADPS) project which aimed to establish causative factors leading to the poor academic achievement of deaf learners. In terms of the school at which the current research was performed, it is encouraging to note that Sign Language Education and Development (SLED) has become actively involved in the school at a Foundation phase level, in order to improve the literacy capabilities of these children.

4.2. Education Context

4.2.1. Dissatisfaction with school placement

Over and above concern regarding the SASL skills of the educators at the identified school, five of the 10 (50%) participants reported various additional factors leading to dissatisfaction with school placement. Concerns raised were not related solely to the classroom setting as dissatisfaction within the hostel was also reported by two of the participants as follows:

- ***"I don't like the hostel. I was abused in the hostel...The house mother hit me again and again, more and more. I would work so hard but she would just shout at me and hit me and I became depressed."***
- When asked whether participant eight would like to return to residing in the hostels, he retorted: ***"No. They steal your clothes and take them away."***

It was positive to note that the participants that shared these negative hostel experiences no longer reside in the hostel. Nevertheless, it was concerning to be made aware of an instance of abuse as well as of theft. A number of researchers have acknowledged factors related to children, parents, families and society at large that escalate the potential for the abuse of children with disabilities (Ammerman, 1997; Mitchell & Buchele-Ash, 2000).

Numerous researchers express that societal attitudes and beliefs play a noteworthy role in placing individuals with disabilities at risk for maltreatment (Child Welfare Information Gateway, 2001). Furthermore, Steinberg and Hylton (1998) suggest the notion that some institutionalised policies, practices and beliefs "devalue" children presenting with disabilities.

These flawed beliefs may be manifested in ways that suggest that children with disabilities are not as worthy of social, educational or vocational opportunities as those without disabilities (Child Welfare Information gateway, 2001). The National Resource Center on Child Sexual Abuse (1994) warns that children with disabilities may internalise these societal notions and negative attitudes and thus experience shame and feelings of unworthiness in terms of being treated respectfully. Thus it can be seen that by impressing the medical or disability rhetoric of deafness on a deaf child, negative consequences on the individual's emotional development and self-worth may result. The National Resource Center on Child Sexual Abuse (1994) further add that by segregating disabled individuals from mainstream schools and communities may result in highlighting the perception of difference between the separated group and society at large. Thus segregation from mainstream schools in favour of schools for the deaf may result in placing the deaf child at heightened risk for abuse due to the individual being considered disabled by certain members of society. The decision to attend a school for the deaf places the deaf individual in a double bind, as attending a school for deaf learners as opposed to mainstream education is ordinarily characteristic of favouring the socio-cultural model of deafness rather than the medical model of deafness with which the term "disabled" is associated, yet society views the educational segregation as further entrenching the difference between the deaf child and a child attending a mainstream school.

Having the participants share these atrocities with the investigator induced a sense of responsibility to report such incidents and as a result, the researcher's ethical obligation of confidentiality was challenged. In order to respect the confidentiality of the participants as well as to adhere to all ethical responsibilities of an audiologist, the researcher met with one of the Deputy Principals from the school in December 2011in order to discuss these matters. The names of the participant were not mentioned at the meeting and the Deputy Principal expressed that the school was aware of these occurrences and that the incidences had been dealt with accordingly.

Not only do the findings pertaining to the abuse of a vulnerable population have implications in terms of deaf identity construction but also for the psychological well-being of deaf learners thus necessitating the employment of an educational psychologist and/or a social worker, or the implementation of a referral protocol at the school to assist the learners in accessing these services such that issues of learner well-being may be addressed.

Also related to the participants' dissatisfaction with their current school placement were the participants' several references to the educators not being "serious" about teaching as well as the consequent anxiety related to the poor standard of teaching and learning. Furthermore, apprehension in terms of the behaviour of the other learners, in particular the male learners, was recognized as cause for concern by three of the six male participants.

Reference to the concerning behaviour of some of the learners may be evidenced in the following responses obtained:

- ***"I have tried to like it...Because the teachers here are not serious and the deaf learners are always naughty. They are not serious here."***
- ***"I don't want to be at this school, it's not nice...There is a lot of fighting and it is very boring."***
- ***"...Because the boys are very naughty and there is a lot of fighting."***
- ***"I try, but they tell us that we are all naughty because some of the boys are."***

Negative school experiences have been identified by Sznitman et al. (2011) as having the potential to impact emotional well-being of learners which in turn has been found to negatively impact academic performance. This finding further supports the need for an educational psychologist and/or a social worker at the school.

Comments regarding apprehension in terms of teaching and learning at the school included:

- ***"This school...I think and I see that it is not good enough and the adults are not there."***
- ***"I want the teachers to teach more..."***
- ***"I don't like this school. I need to learn more, we do not learn here. They do not teach..."***
- In response to being asked whether he likes the identified school, participant six responded thus: ***"This school? No! I see the teachers, they do not teach."***

It was observed by the investigator, that often the learners would stand outside the classroom waiting for the educator when the teaching period should have already started. Alternately, the learners would be lead into a classroom by the educator, but then would be required to sweep and conduct classroom maintenance in preference to being taught. Once again, it should be noted that this was not the case for all educators and a number of seemingly well-prepared lessons were also observed. It is possible that some of the educators at the research

site are unmotivated to teach the pupils which may be linked to limited proficiency in the language of education and consequent poor academic outcomes by the learners.

As a result of the negative experiences identified, numerous participants reported a desire to change schools. At the parent-teacher meeting, as attended by the researcher, several of the parents also reiterated this sentiment however the parents further cited financial constraints as preventing a change in educational setting taking place. Some of the responses obtained by the participants regarding a desire to change schools included:

- ***"I would change between schools. I like [school name] or [school name]. I would think about changing schools."***
- ***"I would like to change from this school."***
- ***"I asked my uncle to take me to a different school."***
- ***"...I am moving to [name of school] next year."***
- ***"I want to move to another school where they teach more. I will be able to learn a lot."***
- ***"I get depressed to come here."***

It is distressing to note that the low socio-economic status of the participants poses as a barrier to accessing the desired educational opportunities. Limited access to effective learning environments has further repercussions in terms of attaining tertiary education and the acquisition of employment. It is evident from the participant reports above that a number of the learners are not happy at the school at which the current study was conducted. Furthermore, Sznitman et al. (2011) suggest that depression is strongly related to poverty which in turn has negative implications for academic performance. This finding is in agreement with Buckner et al.'s (2001) finding suggesting low academic achievement is strongly correlated with low socio-economic status.

It was disconcerting to note that a number of the participants reported being unhappy at school as a substantial portion of the day is spent within the school environment, particularly for those students residing in the school hostel. Interestingly, of the five participants that expressed dissatisfaction at school, only one was a hostel scholar at the time of the interview. In terms of the participant that reported depression, the researcher once again experienced an ethical dilemma. In order to resolve this dilemma, the researcher approached the participant's class teacher without mentioning the name of the participant. However, the educator was

aware that a pupil, more specifically, the participant, was experiencing depression and further suggested that this may be related to some health difficulties.

4.2.2. Positivity and hope for the future

Despite having identified some negative variables in terms of the participants' educational experiences, positive experiences, expectations and outcomes were also reported by five of the participants. With regard to residing in the hostel, positive feedback was provided by one of the participants. When asked whether he liked staying in the hostels, participant six responded ***"Yes, they are great."*** Furthermore, when asked to elaborate, he explained ***"Because commuting everyday is very tiring. If you stay here, you can do your homework and rest."***

A number of the learners attending the school at which the research was conducted, reside a considerable distance from the school and consequently wake very early each school day to access both rail and road transport. Resultantly, the learners are often tired and experience difficulty in concentrating during lessons (Grade Three Educator, personal communication, May 12, 2011.).

The researcher also enquired about the participants' hopes for the future and five of the participants shared a desire to study at a university after having completed school. The responses were expressed as follows:

- ***"I'd love to go to university in the future to study. I would love to study to teach children."***
- ***"I want to go to university."***
- ***"I want to (long pause)...I want to study at university***
- ***"I want to finish school and then study at university. I will look for work after that."***

The above remarks and aspirations, in opposition to negative experiences and depression, suggest that a number of the participants, despite the obstacles associated with their educational context, are happy at school. Associated with these positive experiences, when asked whether they would like to change anything about themselves, two of the participants relayed to the investigator that there was nothing about themselves that they wished to change as is evidenced by participant six ***"...I'm good...No, I wouldn't change anything."***

With regard identity development, it is thought that either a highly positive or a highly negative experience of the school may instil a feeling of pride and Deaf culture affiliation or a sense of resentment and disability respectively.

4.3. Affiliation

"The central issue in raising a Deaf child is language: the human capacity for language, and the roles that language fulfils in a social existence" (Lane et al., 1996, p. 41).

4.3.1. 'Silent' affiliation with Deaf culture

Two opposing theories with which to describe deafness have been detailed by the investigator. As recognized by McIlroy (2008) in his study regarding the impact of education on deaf identity development in South Africa, as well as by Smiler and Locker McKee (2006) in their study ascertaining the perceptions of *Maori* Deaf identity amongst deaf citizens in New Zealand; an affiliation with one/both of these schools of thought on deafness will in turn impact an individual's identity development. Thus the researcher sought to discover with which of these perspectives on deafness the participants best identified.

It was interesting to note that only two of the ten participants displayed recognition of the term Deaf culture. However, the understanding of Deaf culture, when considered in relation to the definition cited in the literature review was relatively rudimentary. Furthermore, not one of the participants recognised the signs for DEAF-COMMUNITY. This lack of awareness of these terms was expressed in the following extracts of dialogue between the researcher and various participants below:

- *R: "Do you know about Deaf culture?*

  P4: (Shakes head 'no')

  R: "...And the Deaf community? Have you heard of that?"

  P4: "I don't know."

- *R: "Please tell me a little bit about the Deaf community."*
  (P1 does not recognise the sign for community therefore the researcher finger spells COMMUNITY).
  P1: "Communicate?"
  R: "No, um...Deaf groups."
  P1: "You get groups of deaf people and groups of hearing people maybe?"

- *R: "Are you part of the Deaf community?"*
  (P3 doesn't recognise sign for community therefore researcher finger spells COMMUNITY).
  (P3 still unsure of question)
  R: "Are you part of a Deaf group or culture?"
  P3: "Culture...Sotho."

Despite not being able to recognise or define the terms Deaf culture or Deaf community, six of the 10 participants made reference to Deaf culture and Deaf community practices such as the use of SASL, having deaf friends and assigning 'sign names'[3]. These references included:

- ***"Maybe because I like the deaf. I just love the deaf, and sign language."***
- ***To me, deaf means that I only have deaf friends at school...I am able to explain things to them and they can add their ideas and they can support me better than a hearing friend. And we are able to teach each other new signs."***
- ***"...I would want to meet them. I would give them a sign name."***
- ***"When I meet a deaf person I become friends with them. We talk together and we grow up together."***

Additional comments supporting the notion of Deaf culture practices are evidenced as follows:

- ***"Yes, Deaf culture uses sign language."***
- ***"In Deaf culture, I feel relieved...I feel relieved when I am with Deaf people because they sign and they are able to understand me and I enjoy it."***
- ***"Deaf means...deaf means... you go to school and get taught in sign language. Deaf people talk by sign language.***

- ***"I am deaf so I use sign language. I get taught and learn in sign language. Deaf people talk by sign language."***
- When asked what it means to be deaf, participant ten replied: ***"You have deaf friends***."

3. The exchange of name signs is an essential event in acculturation in the DEAF-WORLD. Two classes of name signs exist; those which are purely descriptive and those that integrate a hand shape from the manual alphabet (Lane et al., 1996). Name signs often speak quite candidly about a person's conduct or appearance with no intention of offence and serve a marker or as an identifier for the individual (Lane et al., 1996).

The investigator found the observations to support these findings, as SASL was used almost exclusively during break times when the learners conversed amongst themselves, with the exception of some accompanying vocalisations. In addition, when referring to either peers or educators, the participants utilised 'sign names'. Lane et al. (1996) regard sign language competency as the most prominent indicator of Deaf culture membership. All ten of the participants are fluent in South African Sign Language and thus also assumingly display some level of membership or affiliation with Deaf culture and subsequently, the socio-cultural rhetoric of deafness (Lane et al., 1996, p.6). Furthermore, the practice of assigning and possessing sign names (sometimes referred to as name signs in the literature) reveals a tendency by all ten participants towards the socio-cultural model of deafness.

It has been found in the current study that the majority of the participants were not familiar with the terms Deaf culture or Deaf community. This finding is not consistent with McIlroy's (2008) findings, nor is it consistent with Smiler and Locker McKee's (2006) findings which do not report unfamiliarity with these concepts even if the participants did not necessarily affiliate with these concepts. Heap (2006) in describing networks of deaf people in Cape Town also does not make reference to the terms of Deaf culture and Deaf community being foreign to the participants in her study. Despite the participants in the current study lacking formal definitions of these terms, it was found that numerous practices derived from the Deaf community existed in the educational setting, thus suggesting some affiliation with the socio-cultural perspective of deafness. In terms of identity development, a view of one's self as a member of a cultural group or community may result (Leigh, 2009). The Social-Minority model as described by Mackelprang and Salsgiver (1999) or the Racial Identity Development paradigm as described by Ladd (2003) may be implicated to describe the construction of a

"culturally Deaf" identity but are not exhaustive in terms of the explanation of adolescent identity construction as these models account for only those individuals who identify *solely* with the cultural model of deafness thus excluding those individuals who may too affiliate with the hearing world.

The use of the word 'silent' in the title of this sub-theme was selected not because of the generally non-verbal nature of the participants, but rather because an affiliation with Deaf culture exists despite the lack of a name or definition. The affiliation is thought to be almost subconscious with a list of 'unspoken' rules and its impact on identity development virtually unnoticed.

4.3.2. Disability – The often unknown term, the often known negative experiences

Similar to the responses regarding the Deaf community and Deaf culture, were the responses regarding the terms 'disability' or 'disabled'. Again, this was a concept with which few (three) of the participants were familiar. When the remaining eight participants were asked whether being deaf meant being disabled, a number of the responses were as follows:

- ***"I don't know that sign."***
- ***"I don't understand that word disabled."***
- ***"What does that mean?"***
- ***"Disabled?"***

It was interesting to note that the three participants who were familiar with the concept of disability reported that deafness *should* be viewed as a disability. The justifications for these views included:

- ***"I see hearing people, they see deaf people and they laugh...call you stupid...and so I think it is a disability. But it's wrong!"***
- ***"Yes, I think it is a disability. It's something people don't want to be...It's hard to understand everyone and it's something people don't want."***
- When asked to elaborate on why she felt that deafness was a disability, participant 10 answered thus ***"Because communication isn't comfortable."***

Despite lacking a formal definition for disability, participants often reported the negative connotations associated with a vulnerable population (Child Welfare Information Gateway, 2001). Remarks referring to name-calling as above as well as the reported abuse as identified

in the theme of ‘dissatisfaction with school placement’ strongly correlate with the experiences of persons with disability (Mitchell & Buchele-Ash, 2001). An additional reference to teasing was made by participant nine when he said ***“They like to tease deaf people. I would change that.”***

In addition to the experiences of mockery and abuse, the participants demonstrated an affiliation with the medical model of deafness through the use of hearing aids. Assistive devices are strongly associated with the deficit model of deafness (Lane et al., 1996, p. 41). Participants one, five, nine and 10 were in possession of bilateral behind the ear (BTE) hearing aids. Participants three, four, six, seven and eight reported owning a single BTE hearing aid and participant two wears bilateral bone conducted hearing aids due to having mictrotia and aural atresia. Despite all ten participants reporting unilateral or bilateral hearing aid ownership, a number of the participants were observed to not be wearing hearing aids during the interviews which was attributed to powerless batteries, hearing aids in need of repair or experiencing limited benefit from the aids.

Since 2007, bilateral behind the ear or body-worn hearing aids have been available to the learners attending the identified school on an almost annual basis, as a result of donations made by an American hearing aid company. All the participants in this study (1 to 10) were recipients of these donated hearing aids in 2010 and select participants received new hearing aids again in July 2011. Despite having acquired hearing aids, these donations were made at a time in the participants’ lives after which they had all already acquired language (be it oral or signed language) (Pinker, 2007) and hence it may be assumed that these hearing aid donations did not bear impact on parents’/guardians’ decisions regarding language modality for the participants.

An affiliation with the medical rhetoric by the participants in the current study has been identified by the researcher. The medical rhetoric defines hearing loss as a disability, thus implying that these individuals construct personal identities in the same way in which a person with a physical disability would (Leigh, 2009). The four main models of identity construction for persons presenting with disabilities, as summarised by Leigh (2009) include the deficit model, the dominance model, the cultural difference model and the narrative model. These four models by no means provide exhaustive explanations of the way in which a disabled individual may construct his/her personal identity however, these models provide sound explanations of identity construction and acknowledge cultural difference despite the

term ‘disability’ being associated with the medical rhetoric. Nevertheless, in the same manner in which the models of identity development related to ‘culturally Deaf’ identities may develop, these provided frameworks do not accommodate for individuals who may affiliate with both the medical *as well as* the socio-cultural models of deafness, thus limiting individual identities as being shaped by either one rhetoric or the other.

4.3.3. A Hard-of-Hearing sub-culture

As explained by Israelite et al. (2002) individuals with significant hearing loss who do not affiliate with the Deaf community, who make use of assistive devices in order to exploit residual hearing and show preference for oral language, are defined as hard-of-hearing (HH). In a similar manner to Israelite et al’s (2002) findings, suggesting the presence of a HH community at a school in Toronto; within the context of the current study, the existence of a hard-of-hearing ‘sub-culture’ was repeatedly reported. Having discussed the often limited SASL capabilities of the educators at the particular school, the participants further explained the “roles” that have arisen out of necessity in order to cope in the classroom, of the deaf versus the HH learners. Explanations and comments obtained included:

- ***“Those who are deaf ask me what was said because I am hard-of-hearing so I have to help them.”***
- ***“Because deaf people sign and then one of the hard-of-hearing girls who knows sign language will explain to the teacher what is said by talking to them. If the teacher doesn’t understand, then they can ask*** *‘What is that new sign?’****.”***
- ***“Yes, if I lip read what the teacher said, then I will help the other deaf people.”***

Of the 10 participants, six reported to be “hard-of-hearing” in one or both ears. When asked by the researcher whether the participants were deaf, the responses included:

- ***“I have deaf friends. I’m the only hard-of-hearing one, but my friends here are deaf.”***
- ***“In this ear, (points to right ear) I am hard-of-hearing, I can hear half-half.”***
- ***“...Ja, in the left ear because I am hard of hearing in this ear (points to left ear).***
- ***“...I am only hard of hearing, not deaf.”***
- ***“I am not deaf because I can hear if a car hoots or if they crash into each other and when people flush the toilet.”***
- ***“No. I am hard of hearing in the right ear.”***

Although the participants' definition of the term hard-of-hearing was not explored, it appears from the responses above, to be limited to the presence of residual hearing. It is not likely that the participants' understanding of the term HH refers to a preference for oral language as only two of the participants are verbal.

The HH culture, separate to that of Deaf culture or the 'hearing' culture as proposed by Israelite et al. (2002) in their study pertaining to HH individuals' identity development, appears to be mirrored in the school at which the current study was conducted. Although it may not be in totality with regards to the definition of HH as described by Israelite et al. (2002) above, an appreciation for residual hearing and a reliance on those who are able to hear and converse with the educators, was evident.

When comparing reported residual hearing with the participants' audiological information, the perceptions of being HH in a particular ear were very closely matched to the audiograms obtained, with the exception of participant three who presented with a bilateral, symmetrical profound sloping sensorineural hearing loss.

This finding regarding the existence of a HH sub-culture within the identified school has implications on identity development for adolescents as would an affiliation with the medical versus the socio-cultural models of deafness (Israelite et al., 2002). Israelite et al., (2002) propose that individuals who consider themselves to be HH, have constructed this identity by establishing differences between themselves and individuals presenting with normal hearing as well as differences between themselves and those affiliating with the Deaf community. These authors reiterate that Woodward's (1997) "identity-as-difference-perspective" as an appropriate framework with which to consider the identity development of a HH individual by highlighting "the opposites we construct in relation to hearing status: normal hearing/ hearing impaired, hearing/hard of hearing, hearing/deaf. Such pairs demonstrate the prevailing view of hearing loss as a difference that alienates the individual from 'normal' or usual everyday life" (Israelite et al., 2002, p. 135).

4.3.4. A desire to be hearing

Related to the disability (medical) model of deafness was a strong desire on the part of three participants to be hearing. This desire was expressed as follows:

- ***"I would like to change to become hearing ...because hearing people go further. Deaf people, they do ok. When I was small and hearing, I was improving all the time but now I am doing ok. I want to be hearing."***
- ***"I am happy here, school is fine. But when I am with hearing people, then I feel like I need to and want to be hearing. But I got sick and became deaf and that's ok."***
- ***"I want to be hearing. I want to be hearing because then I can just speak rather than signing. Signing is tiring"***
- ***"I want to be at a hearing school...I like the hearing school. The deaf school is boring."***

Interestingly, it was only the postlingually deafened participants who wished to be hearing, possibly because they have experienced life as a hearing individual and subsequently draw comparisons between the two lifestyles.

It should be noted that no relationship between a desire to be hearing or for oral education and severity of hearing loss could be observed. Participants one, four and 10 presented with hearing losses of varying degrees. Participant four and 10 had Pure Tone Averages (PTA's) depicting a profound hearing loss bilaterally (as could be observed in table 3 of the participant profile), while participant one presented with a profound hearing loss in the right ear and a moderately severe hearing loss in the left ear (also as per PTA) and thus it can be assumed that residual hearing is not related to the participant's desires to be competent in speech, but rather a trend towards being postlingually deafened was identified.

This finding from the current study regarding a desire to be hearing on the part of the three postlingually deafened participants suggests an affiliation with the medical rhetoric of deafness (Lane et al., 1996). This tendency towards the medical model may be due to these three participants having experienced a "loss" of hearing, as opposed to their prelingually deafened counterparts who were born without hearing (Leigh, 2009). Despite the desire to be hearing, two of the three postlingually deafened participants made reference to incorporating Deaf culture practices such as SASL and the bestowing of 'sign names' in everyday interactions, thus suggesting a degree of association with the socio-cultural model of deafness.

From the findings of the current study pertaining to sub-aim two; affiliations with either the medical or socio-cultural rhetorics of deafness, it can be seen that seldom did the participants' experiences adhere solely to one explanation of deafness. Although these associations may be 'silent' often lacking a firm definition or even understanding, the majority (nine of the 10) of the participants displayed an affiliation with both the medical model of deafness as well as the socio-cultural model of deafness. Participant four made reference to the medical model of deafness exclusively with no mention or allusion to the socio-cultural model of deafness. Participant four further expressed a strong desire to be hearing which is thought to be linked to the fact that she was postlingually deafened at a school-going age and thus experienced emotional difficulty with this transition. Often, an affiliation with the medical model by the remaining nine participants was expressed through the use of hearing aids (Lane et al., 1996) while associations with the socio-cultural model of deafness were expressed through the giving of 'sign names' and the application of SASL to communicate (Lane et al., 1996). As a result of the participants attending the identified school presenting with an association with *both* perspectives on deafness, Brueggemann's (2009) "inbetweenity" model enabling affiliation with both the medical and the socio-cultural model of deafness may be considered more appropriate than the binary model (Fernandes & Myers, 2010) in describing the identity of the deaf adolescents attending the school at which the current research was conducted. McIlroy's (2008) dialogue model, which describes personal identity as being fluid as opposed to static and refers to individuals being bicultural also provides a more holistic perspective on the identity of a deaf individual.

However, both Brueggemann's (2009) model of "inbetweenity" and McIlroy's (2008) dialogue model do not account for socio-economic contexts and access to services and resources as factors affecting the development of an individual's identity. These factors are thought to be of immense importance particularly within the South African context, based not only on the premise that South Africa is a developing country (Tucci et al., 2009) but also based on the volatile political history and the related inequalities in access to services from South Africa's past.

Socio-economic status and access to services and resources were implicitly noted as influential factors on individual identity construction from the current study with the participants' parents often citing financial constraints as a barrier to transferring their child to a different school which in turn may result in an alternate educational experience (e.g.: placement at a school favouring oral education) which in turn may result in an altered

personal identity. Furthermore, the hearing aids owned by the participants in the current study, were a donation due to the school being situated in what the donors deemed an impoverished community as opposed to the participants having actively sought the hearing aids as a result of an affiliation with the deficit model, thus this affiliation was almost "impressed" upon the participants. Conversely, attendance at a school utilising Total Communication and where oral language and speech reading are not taught consequently resulting in the learners conversing in SASL may be due to proximity to or affordability of, the school as opposed to the informed choice on the part of the learners' parents to favour manual communication as the mode of communication for their child.

Additionally, these models of identity construction fail to account for the cultural diversity of South Africa which may result in a deaf child being raised in a home in which their parents/caregivers affiliate with different cultures rather than the homogenous "hearing culture", thus rendering the potential for a tricultural individual (e.g.: isiZulu [father], Tswana [mother] and Deaf culture). It can thus be seen that a model of identity development allowing the encompassment of multiple cultural identities, particularly within the South African context and taking into account socio-economic status and access to resources and services as well as educational contexts needs to be devised.

Thus, the current researcher proposes the "multicultural -experience" model of identity construction for a deaf individual. This proposed model of identity construction is embedded within the theory of social constructivism hence highlighting the essential role that language plays in the development of personal identity (Braun & Clarke, 2006). The constructivist approach further emphasises the individual's *experiences* as being pivotal in constructing the individual's reality as well as the meaning of objects or things (Braun & Clarke, 2006).

The multicultural-experience model is of the premise that personal identity is ever-changing, in the same manner in which McIlroy's (2008) dialogue model suggests that identity construction is fluid. However, the multicultural- experience model asserts that there is no end point to identity construction, thus enabling an individual who has affiliated with the cultural model of deafness for most of his/her life, to in the late stages of adulthood for example, opt to be fitted with hearing aids and *experience* sound and the hearing world. Furthermore, the multicultural-experience model stipulates a reciprocal or symbiotic relationship between the identity development of a deaf individual and his/her life experiences, thus suggesting that one's personal identity will too impact the way in which

one's life is experienced. The degree to which a certain experience impacts an individual's identity will vary across the lifespan. Similarly, the identity of an individual will impact one's various life experiences to greater and lesser degrees. As can be seen in Diagram 2 overleaf, the multicultural-experience model makes reference to five predominant influential aspects identified in the current research to be impacting development of the participants' identities, these being:

1. The cultural heritage and the associated underpinnings of the deaf individual's caregiver/s.
2. The educational setting and subsequent experiences and cultural influences thereof.
3. Socio-economic status and access to services and resources, including early identificaton and subsequent counselling allowing for informed decision-making.
4. Prelingual versus postlingual onset of hearing loss.
5. The presence of comorbidities to the hearing loss.

The researcher has included prelingual versus postlingual onset of hearing loss based on the findings of the current research which suggested that participants who were born hearing and subsequently "lost" their hearing abilities were more likely to consider deafness as a disability and hence view themselves as disabled as opposed to culturally different.

Additionally, the presence of comorbidities was excluded from this study and hence cannot be accounted for in the identity development of deaf individuals. However, it is thought that the presence of additional 'disabilities' such as visual or physical impairment may result in an individual viewing his/her hearing loss as one of his/her disabilities (i.e.: multiple disabilities) rather than being culturally different in light of the hearing loss and disabled due to the physical disability.

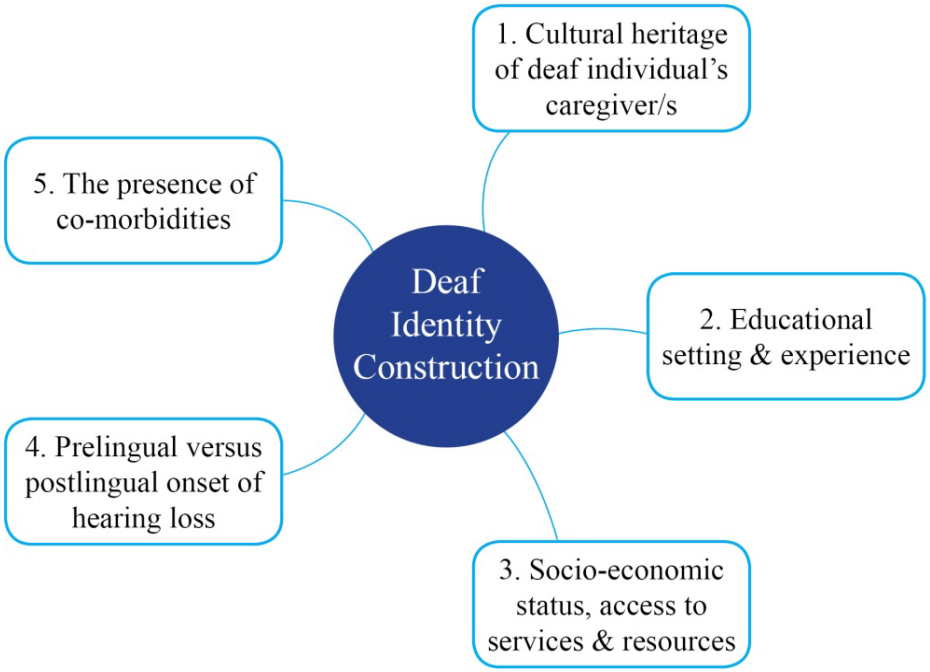

Diagram 2: The "Multicultural-Experience" Model of Identity Construction

Chapter 5: General Discussion and Conclusions

The implications of the findings of the current study in terms of policy implementation, theoretical frameworks and clinical practice will be detailed in chapter five. Furthermore, a critical evaluation of the current study as well as recommendations for future research will be included in this section.

In its aim to establish the educational experiences of deaf adolescents attending a school for the deaf in Gauteng, South Africa, the current study has revealed the diversity of these experiences both positive and negative, as well as the complexity of the identity development of the deaf individual. These findings have implications not only for government education policies and educators, but also for health care professionals, parents and caregivers of deaf children and deaf individuals themselves.

It has been identified by the current researcher that deaf adolescents attending a school for deaf learners in Gauteng, South Africa report educational experiences that suggest affiliation with both the medical model as well as the socio-cultural model of deafness, influenced significantly by language models or lack thereof both at school and at home. Firstly, it was found that the learners at the current research site are taught by educators presenting with limited SASL proficiency. Limited sign language proficiency was also acknowledged to be a barrier to the academic achievement of deaf scholars in Scotland by Grimes et al (2007). Additionally, these authors also attribute low sign language proficiency of educators to few sign language learning opportunities made available to teachers of deaf children (Grimes et al., 2007). This finding has implications in the South African context in terms of educator training not only for curricula at teacher training institutes but also at a government policy level, where more stringent employment criteria such as SASL proficiency as well as cultural competency on the part of the educator, should be enforced.

In a similar manner to which Lenihan (2010) outlines the required educator competencies in the United States of America for teachers of deaf pupils, it is recommended that the South African Government Department of Education (GDE) insist on educators possessing advanced SASL skills and Deaf culture knowledge in order to be employed at a school for the deaf favouring manual communication. In the event that the school favours Total Communication or oral language, then so too should the educator possess a qualification in the appropriate use of TC as opposed to ad hoc voicing and signing, or the use of assistive devices such as digital hearing aids and FM systems, respectively.

Additionally, it is suggested that existing teachers of the deaf should be incentivised and motivated to acquire further qualifications in SASL and/or the mode of education favoured at the school at which the educator is employed. Furthermore, the inclusion of deaf adults either as educators and/or as deaf mentors within the school setting should be enforced (Magongwa 2010; Parkin, 2010) as exposure to proficient users of SASL will have significant implications on the academic outcomes of deaf individuals (Magongwa, 2010; Parkin, 2010). The presence of well-integrated, competent deaf individuals will also prove valuable in providing the deaf learners with role models (Magongwa, 2010) particularly in the case where parent-child communication at home is inadequate. It is further recommended that deaf individuals are consulted or employed by the Government Department of Education so as to inform policies regarding curricula as well as teaching methods for deaf learners. The current research did not investigate the academic outcomes related to the educational experiences reported by the participants however, further research in this regard is recommended.

Limited parent-child communication in the homes of the deaf adolescents was an additional finding from the current research. Related to this finding regarding inadequate communication in the home, were financial constraints and access to services. This finding has clinical implications for audiologists serving in the public health sector, as it is these audiologists who have a higher likelihood of providing the diagnosis of a hearing loss and subsequently providing feedback and counselling to parents in these communities. It is essential that feedback and counselling is provided to caregivers in a language that is accessible to them such that an informed decision may be made (Young et al., 2006). It is also the responsibility of the community-based audiologist to assist the caregivers in accessing the necessary services and resources to support the mode-of-communication-decision made (e.g.: Ear, Nose and Throat specialist referrals, providing hearing aids, referral to schools for deaf learners). Additionally, audiologists should readily refer caregivers of newly diagnosed deaf infants to programmes such as HI HOPES and EHDI in order for caregivers of newly diagnosed deaf infants to receive additional support and information thus facilitating caregiver empowerment and informed decision-making.

Limited parent-child communication in the home also necessitates SASL workshops to be hosted by schools favouring manual communication, in the same manner in which an educational institute favouring TC should offer caregivers the opportunity to learn this mode of communication so as to facilitate parent-child interactions. Additionally, the services of an educational psychologist or social worker should be incorporated into the school's staff

component to address issues that may arise from poor parent-child communication (Socha & Stamp, 2009). A paucity of knowledge exists regarding the implications, both academic and psychosocial, of inadequate parent-child communication in a dyad comprising a deaf child thus further research in this regard is required. Sznitman et al., (2011) reiterate the necessity of adolescent emotional well-being for academic achievement thus reinforcing the need to attend to the mental health and general well-being of adolescents.

Findings regarding dissatisfaction with school placement further support the need for a social worker and educational psychologist in the educational setting to facilitate in addressing negative occurrences in the hostels. Additionally, in the same manner that educators of deaf learners should be scrutinized in terms of their proficiency in both the language of education as well as the subject matter taught, so too should support staff require the necessary child care skills and at least, the capacity and the willingness to learn the primary mode of communication of the hostel scholars. It is thought that dissatisfaction in terms of the level of teaching may be remediated by confronting the educators' shortfalls in SASL as well as addressing employment criteria for educators of deaf learners.

It was positive to note that while numerous negative experiences were relayed to the researcher, optimistic experiences were also reported and a number of the participants expressed a desire to obtain tertiary qualifications. It is thought that in order for these participants' aspirations to be met, intervention at a grass roots level within deaf education needs to take place. Improved government Department of Education Policies as informed by deaf individuals, paired with teachers proficient in the mode of education (Magongwa, 2010) will facilitate deaf learners in reaching their full academic potential, thus enabling higher education acquisition. It is thought by the researcher that by providing deaf learners with quality education, empowerment of the deaf population will occur thus enabling these individuals equal opportunities to sustainable employment.

The current study aimed to describe the educational experiences of deaf adolescents at a school for the deaf with the objective to establish with which rhetoric (medical versus socio-cultural) these adolescents associate and the impact of this association on identity development. It was established that nine of the ten participants reported experiences suggestive of both the medical model as well as the socio-cultural model of deafness. It has been established that one's experiences and one's context significantly influence one's identity construction (Moshman, 2005; Bronfenbrenner, 1979) thus it was deduced that the

participants in the current study affiliate with both the medical as well as the socio-cultural models of deafness. This in turn is suggestive of an identity incorporating both models of deafness to greater or lesser degrees. Additionally, the submergence of a hard-of-hearing sub-culture in response to the educational environment and the educators' often limited SASL skills was identified.

In terms of models of identity construction, Brueggeman's (2009) "inbetweenity" and McIlroy and Storbeck's dialogue model (2011) account for affiliation with both rhetorics, yet these models fail to incorporate the influence of one's context, more specifically low socio-economic status, as well as factors such as pre/postlingual onset of hearing loss on one's identity construction. Thus, the multicultural-experience model of identity development comprising five factors contributing to an individual's identity was proposed. However, the value of this model was not established, thus necessitating further research regarding this models' feasibility.

Associated with the finding that the participants in the current study affiliate to an extent with the medical model of deafness and the term "disabled", were reported negative experiences in the hostels as well as incidences of teasing outside the school grounds. Vulnerable populations are at higher risk for abuse (Mitchell & Buchele-Ash, 2001) thus it is recommended that deaf learners are made aware of their human rights and that they are encouraged to report harmful experiences such as theft or physical abuse occurring both within the school context as well as outside the school grounds. Additionally, it is thought by the researcher that the acknowledgement of South African Sign Language as the twelfth official language of South Africa in the same way that British Sign Language has been accredited as an official language of Great Britain (Young et al., 2006) has the potential to alter society's perception of deaf individuals as a disability group thus reducing the associated negative connotations and improving society's understanding of this linguistic minority, which may in turn result in fewer incidences of abuse of deaf individuals.

The current study was based on the constructivist paradigm which highlights the crucial role of one's experiences and one's language in the identity development of an individual (Braun & Clarke, 2006; Patton, 1990). Based on this paradigm, the importance of the process of diagnosing an infant as deaf, counselling the parents of this child and providing appropriate and unbiased information regarding the communicative and educational options (Young et

al., 2006) for this child cannot be sufficiently stressed, as this decision will significantly influence the environment in which the deaf individual is raised and educated.

Early identification and intervention services are considered by Swanepoel, Storbeck and Friedland (2009) as the foundation for achieving favourable results (either in verbal or manual communication) in infants presenting with hearing loss. The context in which the current study took place has been described as a low-income area where access to services and resources has, in the past and to date, been relatively limited. Thus, in order to achieve favourable results for deaf individuals, it is recommended that education of impoverished communities such as the community in which the current research was conducted, as well as of communities of higher economic status; regarding hearing loss and the related signs, symptoms and risk factors, as well as where to obtain audiological services should take place so as to facilitate early identification and subsequent early intervention. For the school at which the current research was conducted, friends and acquaintances of caregivers of the deaf learners may be encouraged to attend the quarterly annual meeting, at which information regarding hearing loss may be provided in the form of a short discussion. This information-giving opportunity is thought to have the potential to not only increase early identification opportunities but may also provide an opportunity to dispel myths regarding deaf individuals, such as “all deaf individuals are the same” (Leigh, 2009, p.1). On a short-term basis, early identification and intervention may be achieved through the adherence of audiologists and other health professionals to the position paper of the Health Professions Council of South Africa regarding targeted hearing screening of high risk infants (Storbeck & Calvert-Evers, 2008). However, on a long-term basis, sub-Saharan Africa should strive towards the international trends of universal newborn hearing screening (UNHS) (Tucci, Merson & Wilson, 2009).

5.1. Critical Evaluation of the Study

Notwithstanding the researcher’s attempts to minimise threats to the trustworthiness of this qualitative research as described in the methodology chapter of this dissertation, the use of the interview guide approach as described by Rubin and Babbie (2005) and the subsequent use of predetermined questions may have somewhat skewed the participants’ responses to the interview questions. A less formal approach to the interviews, perhaps asking only “Tell me your story” may have provided a more neutral foundation from which to ascertain the

participants' educational experiences. Additionally, using previous studies on which to base the current research questions may have limited the question set to exclude issues that may otherwise have been raised.

The researcher, despite having adjusted the interview questions based on the pilot studies, included too many "why" questions and double questions in the interviews which may have suggested an accusational tone or have posed as confusing to the participants respectively (Patton, 1990). It was also noted that too many questions eliciting only a "yes/no" type response were used thus resulting in less valuable, informative responses being obtained from the participants (Patton, 1990, p. 91). Furthermore, proficiency in SASL, superior to that of the current researcher's SASL, encompassing psychological jargon may have allowed for more insightful questions from the researcher in response to the participants' information sharing. Possible future replications of the current study should apply such adjustments to the participant interviews for improved trustworthiness of findings.

Furthermore, the strength of the current study may be increased by utilising a larger sample size which in turn may allow for improved generalisability of the current findings to similar populations (Creswell, 2003). Additionally, the experiences of deaf individuals residing in the aforementioned impoverished community in which the current study was conducted cannot be assumed to be representative of all deaf individuals, as the experiences of deaf individuals residing and/or attending a school in an area of high socio-economic status may be very different to the findings of the current research. As a result of the current researcher having only included participants of a low socio-economic status and a single race, the findings of the current study may not be fully ascribed to either of these factors. A control group of a different socio-economic status and of a different race would allow for confirmation or disapproval of the current research findings. Finally, the current study was conducted only in the Gauteng province of South Africa thus the findings may not be generalised to other provinces within South Africa where additional or different cultures may be prominent. Future research endeavours exploring similar aims to the current study should include a larger, more diverse, sample size for improved generalisability of research findings.

5.2. Study Strengths and Summary

In spite of the researcher's attempts to address bias as outlined in chapter three, the fact that the researcher was employed by the identified school for a period of one and a half years cannot be ignored as this may have resulted in the researcher, bringing to the research process, preconceived ideas about the school as well as potential bias. However, stringent measures were put in place to address these issues and it is thought that a level of familiarity with the participants and the research site may have positively influenced the research process. The participants shared their educational experiences, both positive and negative, very readily with the researcher which may have been facilitated by the existing level of rapport already established with these learners. Additionally, the majority of the learners at this school were used to the researcher's presence in the classrooms and thus were less likely to change their behaviour in response to being observed, therefore minimizing the Hawthorne Effect (Shuttleworth, 2009).

Despite acknowledging that additional SASL proficiency on the part of the researcher may have been favourable, it is thought that the one-to-one interview setting, without the presence of an interpreter, not only made the interview setting less threatening but also enabled the participants to share information more readily; as having an interpreter employed by the school present during the interviews may have resulted in the participants sharing their experiences less readily out of fear of the potential consequences.

The current study, by employing qualitative research methods described the educational experiences of ten deaf adolescents attending a school for deaf learners in Gauteng, South Africa. The findings were presented and discussed according to the three sub-aims of the study specifically formatted according to the identified themes in an effort to undertake the main aim of the study.

Findings included concern on the part of the participants regarding educator SASL proficiency, limited parent-child communication as well as negative experiences associated with vulnerable populations. The participants, despite these negative experiences, also reported positive experiences and aspirations for the future. These findings in turn revealed that the participants experienced a level of association and dissention with both the medical and the socio-cultural models of deafness. The subsequent impact of this dual affiliation on identity construction was thus explored and an additional model of identity development, the multicultural-experience model, was proposed.

While on paper, South African Sign Language and multiculturalism are relatively well represented by government policies, in reality, the education of deaf individuals in South Africa displays room for considerable growth. By developing government education policies for deaf education as well as supporting the goals of early identification and intervention, deaf learners can reach their full cognitive, psychosocial, linguistic and emotional potential regardless of the mode of communication favoured.

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Appendix A

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

Division of the Deputy Registrar (Research)

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49/1 van Zyl

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER H100921**
PROJECT	The educational experience of deaf adolescents attending a school for the deaf in Gauteng
INVESTIGATORS	Ms N van Zyl
DEPARTMENT	Speech pathology
DATE CONSIDERED	17.09.2010
DECISION OF THE COMMITTEE*	Approved Unconditionally

NOTE:

This ethical clearance is valid for 2 years and may be renewed upon application

DATE 19.11.2010 **CHAIRPERSON** .....
(Professor R Thornton)

cc: Supervisor : Dr K Shangase/Barratt

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10004, 10th Floor, Senate House, University.

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

Signature

This ethical clearance is valid for two years from date of approval.

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

Appendix B

UMnyango WezeMfundo
Department of Education

Lefapha la Thuto
Departement van Onderwys

Reference No: D2011/53

Enquiries: Diane Buntting (011) 843 6503

Date:	9 November 2010
Name of Researcher:	VAN ZYL N.
Address of Researcher:	P.O. Box 1000
	Pinegowrie
	2123
Telephone Number:	011 021 4043 / 084 800 4747
Fax Number:	086 541 0535
Email address:	Nicolvanzyl08@gmail.com
Research Topic:	The educational experience of deaf adolescence attending a school for the deaf in Gauteng
Number and type of schools:	ONE LSEN SCHOOL
District/s/HO	EKHURULENI SOUTH

Re: Approval in Respect of Request to Conduct Research

This letter serves to indicate that approval is hereby granted to the above-mentioned researcher to proceed with research in respect of the study indicated above. The onus rests with the researcher to negotiate appropriate and relevant time schedules with the school/s and/or offices involved to conduct the research. A separate copy of this letter must be presented to both the School (both Principal and SGB) and the District/Head Office Senior Manager confirming that permission has been granted for the research to be conducted.

Permission has been granted to proceed with the above study subject to the conditions listed below being met, and may be withdrawn should any of these conditions be flouted:

1. ***The District/Head Office Senior Manager/s concerned must be presented with a copy of this letter that would indicate that the said researcher/s has/have been granted permission from the Gauteng Department of Education to conduct the research study.***
2. ***The District/Head Office Senior Manager/s must be approached separately, and in writing, for permission to involve District/Head Office Officials in the project.***
3. ***A copy of this letter must be forwarded to the school principal and the chairperson of the School Governing Body (SGB) that would indicate that the researcher/s have been granted permission from the Gauteng Department of Education to conduct the research study.***

Office of the Chief Director: Information and Knowledge Management
Room 501, 111 Commissioner Street, Johannesburg, 2000 P.O.Box 7710, Johannesburg, 2000
Tel: (011) 355-0809 Fax: (011) 355-0734

4. *A letter / document that outlines the purpose of the research and the anticipated outcomes of such research must be made available to the principals, SGBs and District/Head Office Senior Managers of the schools and districts/offices concerned, respectively.*
5. *The Researcher will make every effort obtain the goodwill and co-operation of all the GDE officials, principals, and chairpersons of the SGBs, teachers and learners involved. Persons who offer their co-operation will not receive additional remuneration from the Department while those that opt not to participate will not be penalised in any way.*
6. *Research may only be conducted after school hours so that the normal school programme is not interrupted. The Principal (if at a school) and/or Director (if at a district/head office) must be consulted about an appropriate time when the researcher/s may carry out their research at the sites that they manage.*
7. *Research may only commence from the second week of February and must be concluded before the beginning of the last quarter of the academic year.*
8. *Items 6 and 7 will not apply to any research effort being undertaken on behalf of the GDE. Such research will have been commissioned and be paid for by the Gauteng Department of Education.*
9. *It is the researcher's responsibility to obtain written parental consent of all learners that are expected to participate in the study.*
10. *The researcher is responsible for supplying and utilising his/her own research resources, such as stationery, photocopies, transport, faxes and telephones and should not depend on the goodwill of the institutions and/or the offices visited for supplying such resources.*
11. *The names of the GDE officials, schools, principals, parents, teachers and learners that participate in the study may not appear in the research report without the written consent of each of these individuals and/or organisations.*
12. *On completion of the study the researcher must supply the Director: Knowledge Management & Research with one Hard Cover bound and one Ring bound copy of the final, approved research report. The researcher would also provide the said manager with an electronic copy of the research abstract/summary and/or annotation.*
13. *The researcher may be expected to provide short presentations on the purpose, findings and recommendations of his/her research to both GDE officials and the schools concerned.*
14. *Should the researcher have been involved with research at a school and/or a district/head office level, the Director concerned must also be supplied with a brief summary of the purpose, findings and recommendations of the research study.*

The Gauteng Department of Education wishes you well in this important undertaking and looks forward to examining the findings of your research study.

Kind regards

November 9, 2010

Shadrack Phele MIRMSA
[Member of the Institute of Risk Management South Africa]
CHIEF EDUCATION SPECIALIST: RESEARCH COORDINATION

The contents of this letter has been read and understood by the researcher.	
Signature of Researcher:	
Date:	09/11/2010

Appendix C

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Tel: (011) 717 4577 Fax: (011) 717 4572

August 2010

Dear Mr. M

My name is Nicola van Zyl and I am a Master's in Audiology student at the University of the Witwatersrand, Johannesburg. My studies require that I administer research in my field of interest. My current research title is: *The Educational Experiences of Deaf Adolescents Attending a School for the Deaf in Gauteng*.

In order to establish whether this proposed research project is feasible, I would like to perform a pilot study, with your permission, with a learner in your school. The study would entail a South African Sign Language interpreter interviewing the learner in the presence of a video camera. I will observe the interview and take notes from the discussion. Informed consent will also be obtained from the learner and his/her guardian and the participant will be supplied with the contact details of counsellors proficient in South African Sign Language in the event that participating in this pilot study is traumatic in any way. Should the pilot study be successful, I would like to undertake further research at the school.

Please do not hesitate to contact me should you have any queries regarding the above, on: 084 800 4747 or nicolavanzyl08@gmail.com

Many thanks

Ms Nicola van Zyl

MA (Audiology) Student

University of the Witwatersrand

.....

I, _____, principal of [name of school], hereby grant Nicola van Zyl permission to carry out a pilot study at my school.

Sign: _____ Date: _____/_____/2010

Appendix D

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Tel: (011) 717 4577 Fax: (011) 717 4572

Dear Mr. M

My name is Nicola van Zyl and I am a Master's in Audiology student at the University of the Witwatersrand, Johannesburg. My studies require that I administer research in my field of interest. My current research title is: *The Educational Experiences of Deaf Adolescents Attending a School for the Deaf in Gauteng*.

Thank you for allowing me to conduct my pilot study with two of the learners at [Name of the school]. Now that I have refined my research questions, I would like, with your permission, to conduct interviews with **ten** adolescent learners. I will conduct the interviews in South African Sign Language in the presence of a video camera. Informed verbal assent as well as written consent will be obtained from each participant. Permission (consent) will also be obtained from the learners' parents/caregivers and a consent form will be given to, and explained to his/her parents/caregiver. I would like, with your permission, to explain the research project and obtain consent from the participants' parents at the forthcoming parent-teacher meeting at the close of the current school term. The participants will be supplied with the contact details of counsellors proficient in South African Sign Language in the event that participating in this study is traumatic in any way.

Furthermore, I would like to request your permission to allow me to spend time at the school observing the learners in a classroom, hostel and play environment. I will observe in a manner that is as unobtrusive as possible, so as not to disrupt the normal school day. I will also conduct the interviews in times that will not disturb the participants' learning time.

I would also like to request your permission to review the school files of those learners participating in this research project in order to obtain their medical histories, hearing test results as well as their biographical information. I am aware that permission from the Department of Education also needs to be granted in order for me to carry out my research at [name of school].

It is hoped that the findings of this research project will inform multicultural education policies as well as teacher training programmes. After the completion of my research report, with your permission, I will return to the school and provide a feedback session, in which I will report my findings to you and your staff.

Please do not hesitate to contact me should you have any queries regarding the above, on: 084 800 4747 or nicolavanzyl08@gmail.com

Many thanks

Ms. Nicola van Zyl

MA (Audiology) Student

University of the Witwatersrand

.....

I, Mr. M, principal of [name of school], hereby grant Nicola van Zyl permission to conduct interviews in South African Sign Language with ten of the learners at this school. I am aware that the interviews will be video recorded.

Sign: _____ Date: _____/_____/2010

I, Mr. M, principal of [name of school], hereby grant Nicola van Zyl permission to carry out observations on a number of occasions, at this school for the purposes of her research project.

Sign: _____ Date: _____/_____/2010

I, Mr. M, principal of [name of school], hereby grant Nicola van Zyl permission to review the student files of those learners participating in her research project, in order to obtain hearing test results and biographical information pertaining to these learners.

Sign: _____ Date: _____/_____/2010

Appendix E

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Tel: (011) 717 4577 Fax: (011) 717 4572

Dear parent/ caregiver

My name is Nicola van Zyl. I am a Master's in Audiology student at the University of the Witwatersrand. My studies require that I administer research in my field of interest. My current research title is: *The Educational Experiences of Deaf Adolescents Attending a School for the Deaf in Gauteng*.

I would be very grateful if you would allow your child to participate in my pilot study. Participating in my pilot study would involve your child being interviewed by a South African Sign Language interpreter while I observe the interview and write notes on the discussion. The interview will take place in front of a video camera so that I can review the interviews after it has taken place. The interview will extend for approximately one hour. The video tapes will be stored in my research supervisor's office at Wits University. Your child's name will not appear in the research report or on the video tapes.

Participation in this study is completely voluntary. Your child may choose to leave the study at any time and there will be *no* negative consequences to him/her. Your child will also be provided with a list of contact details of counsellors that are proficient in sign language should he/she find the research procedure traumatic in any way.

It is hoped that the findings of this research project will inform multicultural education policies as well as teacher training programmes. After the completion of my research report, I will return to the school and provide a feedback session in which I will report my findings to the relevant school staff. I am also happy to share the results with you should you wish to be made aware of them.

Should you have any queries regarding the above, please do not hesitate to contact me on 084 800 4747 or nicolavanzyl08@gmail.com

Thank you

Ms. Nicola van Zyl

MA (Audiology) Student

University of the Witwatersrand

.....

I, _____ (parent/caregiver)

hereby grant _____ (participant)

permission to participate in Nicola van Zyl's research project. A South African Sign Language interpreter may interview my child in the presence of a video camera.

Sign: _____ Date: _____/_____/2010

Appendix F

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Tel: (011) 717 4577 Fax: (011) 717 4572

Hello

My name is Nicola. I am a student at Wits University UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

For my course at Wits, I need to do a study in an area that I find interesting. I am interested in the school experiences of deaf adolescent learners. I would be very grateful if you would help me by telling me about your time at school.

I will need to ask you some questions about your schooling experiences and this will take about an hour of your time. I will also ask you some questions about sign language.

While I ask you these school-related questions, there will be a video camera on a stand recording the interview.

You do not have to be a part of this study, it is optional, and if you choose to leave the study at any time, this will be no problem at all.

There will be **no** negative consequences to you.

Your name will **not** be included in my written findings.

Thank you so much for your help!

Nicola

.....

I _____ (name of participant)

agree to participate in this study about the educational experiences of deaf learners.

Signed: _____ Date: _____/_____/2010

Appendix G

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Hello again

As you now know, I am Nicola and for my course at Wits I need to do a study in an area that I find interesting.

I am interested in the school experiences of deaf adolescent learners.

I will need to ask you some questions about your schooling experiences and this will take about an hour of your time.

While I ask you these questions, there will be video camera on a stand recording the interview.

I will need to keep the video of the interview so that I can write down what was said in the interview and write up a research report.

I would also like to keep these videos for 5 years after the interview for future research. These tapes will be kept at Wits University in my research supervisor's office in a cupboard that will be locked.

Your name will not be written on the video tape or in the research report. You do not have to allow me to video tape the interview, it is optional and if you choose not to allow me to keep the video tape, this will be no problem at all.

There will be no negative consequences to you.

Thank you so much for your help!

Nicola

.....

I, _____ (name of participant)

agree to allow Nicola van Zyl to video record the interview for research purposes. She may also keep the videotapes in a secure, locked cupboard at Wits University for 5 years.

Signed: _____ Date: _____/_____/2010

Appendix H

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Hello again

By now, you have kindly agreed to allow me to interview you. You have also already agreed to allow the interview to be video recorded.


For my study on the school experiences of Deaf adolescents I also need to see your hearing test results in your school file.

I would also like to look at the information in your school file so that I know important information like your date of birth and your medical history.

If the school file does not have a copy of your hearing test results, I will need to test your hearing at the school.

I will keep your hearing test results and the information from your file safely locked away in my research supervisor's office at Wits. I would like to keep these findings for 5 years for possible further research.

If you do not want me to look at your school file or to test your hearing that is no problem at all. There will be no negative consequences to you.

Thank you for your help.

Nicola

.....

I _____ (name of participant)

allow Nicola van Zyl to review my school file and hearing test results. If hearing test results are not available, she may test my hearing.

Signed: _____ Date: _____/_____/2010

Appendix I

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Tel: (011) 717 4577 Fax: (011) 717 4572

Dear parent/ caregiver

My name is Nicola van Zyl. I am a Master's in Audiology student at the University of the Witwatersrand. My studies require that I administer research in my field of interest. My current research title is: *The Educational Experiences of Deaf Adolescents Attending a School for the Deaf in Gauteng*.

I would be very grateful if you would allow your child to participate in my pilot study. Participating in my pilot study would involve your child being interviewed by a South African Sign Language interpreter while I observe the interview and write notes on the discussion. The interview will take place in front of a video camera so that I can review the interviews after it has taken place. The interview will extend for approximately one hour. The video tapes will be stored in my research supervisor's office at Wits University. Your child's name will not appear in the research report or on the video tapes.

Participation in this study is completely voluntary. Your child may choose to leave the study at any time and there will be *no* negative consequences to him/her. Your child will also be provided with a list of contact details of counsellors that are proficient in sign language should he/she find the research procedure traumatic in any way.

It is hoped that the findings of this research project will inform multicultural education policies as well as teacher training programmes. After the completion of my research report, I will return to the school and provide a feedback session in which I will report my findings to the relevant school staff. I am also happy to share the results with you should you wish to be made aware of them.

Should you have any queries regarding the above, please do not hesitate to contact me on 084 800 4747 or nicolavanzyl08@gmail.com

Thank you

Ms. Nicola van Zyl

MA (Audiology) Student

University of the Witwatersrand

.....

I, _____ (parent/caregiver)

hereby grant _____ (participant)

permission to participate in Nicola van Zyl's research project. A South African Sign Language interpreter may interview my child in the presence of a video camera.

Sign: _____ Date: _____/_____/2010

Appendix J

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Tel: (011) 717 4577 Fax: (011) 717 4572

Dear parent/ caregiver

As you now know, my name is Nicola and I am a Master's in Audiology student at the University of the Witwatersrand. My studies require that I administer research in my field of interest. My current research title is: *The Educational Experiences of Deaf Adolescents Attending a School for the Deaf in Gauteng*.

Thank you for allowing me to interview your child in South African Sign Language about his/her school experiences in the presence of a video camera. With your permission, I would like to keep these video tapes for a period of five years for possible further research. The video tapes will be stored for this five year period, in a locked cupboard in my research supervisor's office at Wits University. Your child's name will not appear in the research report or on the video tapes. Only my research supervisor and I will have access to these video tapes.

Participation in this study and allowing me to retain these video tapes is completely voluntary. The participant's may choose to leave the study at any time or they may disallow me to retain the video tapes, and there will be *no* negative consequences to him/her. Your child will also be provided with a list of contact details of counsellors that are proficient in sign language should he/she find the research procedure traumatic in any way.

It is hoped that the findings of this research project will inform multicultural education policies as well as teacher training programmes. After the completion of my research report, I will return to the school and provide a feedback session in which I will report my findings to the relevant school staff.

Should you have any queries regarding the above, please do not hesitate to contact me on 084 800 4747 or nicolavanzyl08@gmail.com

Many thanks

Ms. Nicola van Zyl

MA (Audiologist) Student

University of the Witwatersrand

.....

I, _____ (parent/caregiver)

hereby grant _____ (participant)

permission to participate in Nicola van Zyl's research project. Furthermore, she may retain the video tape depicting my child's interview for the duration of five years.

Sign: _____ Date:_____/_____/2010

Appendix K

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Tel: (011) 717 4577 Fax: (011) 717 4572

Dear parent/ caregiver

As you now know, my name is Nicola and I am a Master's in Audiology student at the University of the Witwatersrand. My studies require that I administer research in my field of interest. My current research title is: *The Educational Experiences of Deaf Adolescents attending a School for the Deaf in Gauteng*.

Thank you for agreeing to allow your child to be interviewed by a South African Sign Language interpreter about his/her school experiences in the presence of a video camera. With your permission, I would also like to observe your child at school so that I can compare what is said in the interview to what I observe in the school setting. These observations will take place in the classroom and on the playground. If your child resides in the hostel, then I would like to observe him/her in a hostel setting as well. I will aim to carry out my observations in a manner that is as unobtrusive as possible so that it does not impact on your child's learning in the classroom.

Participation in this study is completely voluntary. The participant's may choose to leave the study at any time and there will be *no* negative consequences to him/her. Your child will also be provided with a list of contact details of counsellors that are proficient in sign language should he/she find the research procedure traumatic in any way.

It is hoped that the findings of this research project will inform multicultural education policies as well as teacher training programmes. After the completion of my research report, I will return to the school and provide a feedback session in which I will report my findings to the relevant school staff.

Should you have any queries regarding the above, please do not hesitate to contact me on 084 800 4747 or nicolavanzyl08@gmail.com.

Many thanks

Ms. Nicola van Zyl

MA (Audiology) Student

University of the Witwatersrand

.....

I, _____ (parent/caregiver)

hereby grant _____ (participant)

permission to participate in Nicola van Zyl's research project. Nicola may therefore observe my child in a school setting.

Sign: _____ Date:_____/_____/2010

Appendix L

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Tel: (011) 717 4577 Fax: (011) 717 4572

Dear parent/ caregiver

As you now know, my name is Nicola and I am a Master's in Audiology student at the University of the Witwatersrand. My studies require that I administer research in my field of interest. My current research title is: *The Educational Experiences of Deaf Adolescents Attending a School for the Deaf in Gauteng*.

Thank you for allowing me to interview your child in South African Sign Language about his/her school experiences and for allowing me to observe him/her in a natural school environment. With your permission, I would also like to review his/her school file. I require information about his/her date of birth, medical history and hearing status. If information regarding his/her hearing is not available, I may need to test his/her hearing at the school.

Participation in this study is completely voluntary. The participant's may choose to leave the study at any time and there will be *no* negative consequences to him/her. Your child will also be provided with a list of contact details of counselors that are proficient in sign language should he/she find the research procedure traumatic in any way.

It is hoped that the findings of this research project will inform multicultural education policies as well as teacher training programmes. After the completion of my research report, I will return to the school and provide a feedback session in which I will report my findings to the relevant school staff.

Should you have any queries regarding the above, please do not hesitate to contact me on 084 800 4747 or nicolavanzyl08@gmail.com

Many thanks

Ms. Nicola van Zyl

MA (Audiology) Student

University of the Witwatersrand

.....

I, _____ (parent/caregiver)

hereby grant _____ (participant)

permission to participate in Nicola van Zyl's research project. Nicola may therefore review his/her school file and test his/her hearing if this is indicated.

Sign: _____ Date:_____/_____/2010

Appendix M

Pilot Study Questions:

These questions are to be asked by the interpreter in South African Sign Language, while the researcher observes the interview and takes notes.

1. Why are you attending Ekurhuleni School for the Deaf?
2. How long have you been at this school?
3. Please tell me about an average day at Ekurhuleni School for the Deaf
4. Do you stay in the hostels or do you live at home during the school term? Would you like to change this and why?
5. Which school did you attend previously? Was it a school for the Deaf or was it a mainstream school? Did you like it there and why?
6. Do the teachers at this school address you in spoken or signed language or both?
7. What language do you prefer to be taught in, and why?
8. Do you feel that hearing teachers understand what it is like to be Deaf?
9. What does being Deaf mean to you? Elaborate as much as possible
10. What is your favourite subject and why?
11. If there was one thing you could change about this school what would it be?
12. If there was one thing about yourself that you could change, what would it be?

Appendix N

Participant Interview Questions

1. I see that you are wearing hearing aids. Can you tell me a little bit more about that? / I see that you are not wearing hearing aids, can you tell me a bit more about that?
2. What made you come to this school and not another school?
3. How long have you been at this school?
4. Do you stay in the hostels or do you live at home during the school term? Would you like to change this and why?
5. Which school did you attend previously? Was it a school for deaf learners or was it a mainstream school? Did you like it there and why?
6. Are your parents/siblings deaf? What is your favourite thing to do with your family? Can anybody in your family sign? How do you communicate with each other?
7. Suppose that I was new at this school, what would you want to tell me about this school?
8. Do the teachers at this school address you in spoken or signed language or both?
9. What language do you prefer to be taught in and why?
10. Do you feel that hearing teachers understand what it is like to be deaf? What makes you say that?
11. What is your favourite subject and why?
12. What is your favourite part of the school day?
13. Do you like this school?
14. What does being deaf mean to you? Where did you learn this information?
15. Please tell me about the Deaf community/ Deaf culture. Where did you learn this information?
16. If there was one thing that you could change about this school, what would it be and why?
17. If there was one thing that you could change about yourself that you would change, what would it be and why?
18. What do you want to be when you are older? (career)
19. Do you think that being deaf means that you are disabled? Why?
20. Is there anything else that you would like to tell me?

Appendix O

SPEECH PATHOLOGY AND AUDIOLOGY
SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT
FACULTY OF HUMANITIES
UNIVERSITY OF THE WITWATERSRAND
Private Bag 3, WITS, 2050

Tel: (011) 717 4577 Fax: (011) 717 4572

Dear Miss G

My name is Nicola van Zyl. I am a Master's in Audiology student at the University of the Witwatersrand. My studies require that I administer research in my field of interest. My current research title is: *The Educational Experiences of Deaf Adolescents Attending a School for the Deaf in Gauteng*.

I would be very grateful if you would assist me in my research project. As a proficient South African Sign Language user, I would require you to assist me in ensuring that the interview questions that I have prepared for the participants are culturally sensitive and respectful in terms of Deaf culture. Furthermore, prior to conducting the interviews, your assistance in ensuring that the way in which I, the interviewer, sign the questions is grammatically correct and at a language level that is easily accessible to the participants, would be much appreciated.

Furthermore, on completion of the interviews, I would require your assistance in verifying 50% of the transcriptions by comparing the transcriptions to the video-recorded interviews for accuracy. I have assured the research participants that the interviews will remain confidential. It is therefore *essential* that everything discussed in the interviews that you verify, remains strictly private.

Please be aware that your name will not appear in the research report.

Thank you for your willingness to assist me in this research project. Please do not hesitate to contact me on 084 800 4747 or nicolavanzyl08@gmail.com should you have any queries regarding the above.

Thank you once again.

Ms. Nicola van Zyl

MA (Audiology) Student

University of the Witwatersrand

.....

I, Miss Nonhlanhla Gono acknowledge that I have agreed to assist Nicola van Zyl in her research project and therefore also agree to keep confidential, the names of the participants as well as information that is revealed in the interviews.

Sign: _____ Date: _____/_____/2010

Themes identified	**Sub-themes identified**	**Substantiating quotations**
1. Communication	*1.1. Limited parent-child communication in the home*	P1: “Well, I am hard of hearing so we talk and I lip read."
		R:" Ok, so you lip read. Do your parents try and sign?"
		P1: “Ja, they try and sign but it is easier just to talk."
		P1: " I love my mother because she lets me teach her sign language"
		P2: " They are hearing so I lip read"
		P2: " ...Ja, they try and sign, my sister is quite good"
		R: "Does your family know sign language? "
		P3: “No (shakes head). Well, a little bit. My dad knows a bit."
		P4: " I'm stupid at talking"
		R: “Does your family talk to you? When you go home, do you use sign language or do you talk?"
		P4: “Sign language".
		R: "Does your family know sign language?"
		P4: "Sign language and lip reading"
		R: "And your family tries to sign? Are they any good?"
		P4: "They are a little good".
		P5: "Me, I sign. Them, they are hearing. I am the only deaf one. They don't understand sign language".
		P5: "If my mom and dad talk to each other or to me, I don't understand it. They write it and I try understand it in sign language".
		P5: "My mom and dad are hearing and so I don't understand them and they don't understand me. When they are arguing, I don't understand what they are saying".
		P6: "I can't communicate with hearing people. They communicate and I don't know what is going on".

		P7: "...My sister is hearing, but she can communicate in sign language and I sit and I watch hearing people."
		P7: "Yes! My mom is trying to learn sign language and I help her".
		P8: "My mom and dad will talk to each other and then I will ask my mom " YOU SAY WHAT?" and then she will sign it for me so that I understand."
		R: “And do your parents know sign language?"
		P9: "I am teaching them".
		R: “You are teaching them. So they know a little?"
		P9: "Yes, they know a bit".
	1.2. Insufficient SASL role models at school	P1: "I have seen that they sign a bit and talk a lot. I'm hard of hearing so it's fine because then I can lip read....Hmmm...The teachers sign a bit but then it is just lots of talking and those who are deaf don't understand. But me, I am hard of hearing so I watch the teachers and understand and then they all ask me to help them".
		P1: "I would like to make this school perfect. I would like the teachers to be perfect, not this talking and signing. It's wrong and nobody understands it. We need perfect teachers".
		R: "Perfect how?"
		P1: " Deaf teachers or using interpreters or for these teachers to stop and ask "Ok, does everyone understand?" and the teachers should give notes to help us understand. We also wait long for the teachers, which is wrong. The teachers should be perfect. Talking and signing is wrong."
		P2: "It's half talking and half sign language. They teach in both.
		P2: "The teachers talk and then they fight with us when we don't understand and we ask them to sign, or when the hard of hearing don't understand the teachers' sign language. Some of them will say sorry and then sign again slowly or say it again but some of them just don't care."
		P2: "I would change the teachers. They shouldn't talk. I would change them. They must teach so that we understand.

		P4: "There's talking and signing and I don't understand and it's work."
		P4: "It's boring and I told I**** that the teachers can't sign and they don't understand us."
		P6: "Some of the teachers sign but some of the teachers can't. They just talk to communicate."
		P7: "Sign language [is better] because I am deaf but they talk too and I watch."
		P8: "They [teachers] just talk and talk and talk and I will ask them to sign instead of talk or at least try and sign."
		P8: "Because I don't want to hear hearing people when they talk. I need to learn in sign language, it's better for me."
		P9: "Yes, they [the teachers] talk a lot."
2. Education	*2.1. Dissatisfaction with school placement*	P2: "I don't like the hostel. I was abused in the hostel...The house mother hit me again and again, more and more. I would work so hard but she would just shout at me and hit me and I became depressed."
		P5: "I have tried to like it...Because the teachers here are not serious and the deaf learners are always naughty. They are not serious here."
		P5: "I try, but they tell us that we are all naughty because some of the boys are."
		P5: "I would change between schools. I like [school 1] or [school 2]. I would think about changing schools."
		P6: "This school...I think and I see that it is not good enough and the adults are not there."
		P6: "I don't like this school. I need to learn more, we do not learn here. They do not teach...I asked my uncle to take me to a different school. "
		R: "Do you like this school?"
		P6: "This school? No! I see the teachers, they do not teach."
		P7: "I don't want to be at this school, it's not nice... There is a lot of fighting and it is very boring."
		P7: "I get depressed to come here."
		P7: "I would like to change from this school."

		P8: " ...Because the boys are very naughty and there is a lot of fighting...I am moving to [name of school] next year."
		R: "And wouldn't you want to stay in the hostels?"
		P8: "No. They steal your clothes and take them away."
		P8: "I want the teachers to teach more and I want to move to another school where they teach more. I will be able to learn a lot."
	2.2. A Hard of Hearing (HH) sub-culture	P1: "Those who are deaf ask me what was said because I am hard of hearing so I have to help them."
		P1: "I have deaf friends. I'm the only hard of hearing one, but my friends here are deaf."
		P2: "In this ear (points to right ear) I am hard of hearing, I can hear half-half."
		R: "Do the hard of hearing learners help the deaf learners to understand speech?"
		P2: "Yes they do."
		R: "Ok and do the deaf learners help them with sign language?"
		P2: "Yes, if I lip read what the teacher said, then I will help the other deaf people."
		P3: "...Ja, in the left ear because I am hard of hearing in this ear (points to left ear)."
		R: "Can you lip read?"
		P3: "Yes, I look and I hear a little bit because I am hard of hearing in the left ear."
		R: "So you are hard of hearing in the left ear?"
		P3: "Yes, I can hear people in this ear (pointing to left ear)."
		P4: "...Yes, right is Deaf, but this side (pointing to left), I am hard of hearing."
		P5: "It improves my hearing because I am hard of hearing on this side."
		P6: "No, I am not deaf."
		R: "How are hard of hearing and deaf different?"
		P6: "I don't know, I am only hard of hearing, not deaf.
		R: "Why are you no deaf"
		P6: "I am not Deaf because I can hear if a car hoots or if they crash into each other and when people flush the toilet."

		R: "Where you born deaf?"
		P8: "No, I am hard of hearing in the right ear."
		P8: "Because deaf people sign and then one of the hard of hearing girls who knows sign language will explain to the teacher what is said by talking to them. If the teacher doesn't understand, then they can ask *"What is that new sign?"*".
		P8: "In the past, I was hard of hearing (in the right ear) but now I am deaf in this ear. I have only a tiny bit of hearing."
	2.3. Positivity and hope for the future	R: "Why do you like school in the morning?"
		P1: "Because the teacher teaches us law."
		R: "And do you want to study law in the future?"
		P1: "Yes."
		P3: "I'd love to go to university in the future to study.
		P3: "I would love to study to teach children."
		P5: "I am improving in English and I am improving at Maths."
		P5: "I want to go to university."
		P6: "...I want to work with my father one day."
		R: “And do you like the hostels?
		P6: "Yes, they are great."
		R: "They are great?"
		P6: "...Because commuting everyday is very tiring. If you stay here, you can do your homework and rest."
		P6: "I want to...(pause)...I want to study at university."
		P8: "I want to finish school and then study at university. I will look for work after that."
		R: "And if you could change anything about yourself?"
		P6: "...I'm good."
		R: "You wouldn't like to change anything?"
		P6: "No, I wouldn't change anything."

		R: "If you could change anything about yourself, what would you like to change?"
		P8: "Nothing."
3. Access to assessment and intervention	*3.1. 'Silent' affiliation with Deaf culture*	R: "...And which school do you prefer"
		P1: "The deaf school."
		R: "Why?"
		P1: "Maybe because I like the deaf. I just love the Deaf and sign language.
		R: "Why do you love signing?"
		P1: "Because the deaf sign."
		R: "Please tell me a little bit about the Deaf community".
		P1: (Participant does not recognise sign for community, so researcher fingerspells COMMUNITY)
		P1: "Communicate?"
		R: "No, um...Deaf groups."
		P1: "You get groups of deaf people and groups of hearing people maybe?"
		R: "Could you please tell me a little bit about the Deaf community and Deaf culture."
		P2: " ....um...community...do you want the name of the community?"
		P3: "To me, deaf means that I only have deaf friends at school... I am able to explain things to them and they can add their ideas and they can support me better than a hearing friend. And we are able to teach each other new signs. "
		R:" Can you tell me a little bit about Deaf culture?"
		P3: "My culture?"
		R: "Yes."
		P3: "I am Sotho."
		R: " And Deaf culture?"
		P3: "A Deaf person? Oh, they are English."
		R: “Are you part of the Deaf community?

		P3: (Doesn't recognise sign for COMMUNITY)
		R: (Finger spells COMMUNITY)
		P3: (Looks confused)
		R: "Are you part of a Deaf group or culture?"
		P3: "Culture...Sotho."
		R: "Do you know about Deaf culture?"
		P4: (Shakes head 'no').
		R: " ...And the Deaf community? Have you heard of that?"
		P4: "I don't know."
		R: "Ok, which culture do you belong to?"
		P4: (Asks for clarification for CULTURE sign).
		R: (Finger spells CULTURE)
		P4: (Looks confused)
		R: "Are you isiZulu?"
		P4: "No. Tsonga."
		P5: "Yes, I am Deaf."
		P5: "...I would want to meet them. I would give them a 'sign name'."
		P5: “When I meet a deaf person, I become friends with them. We talk together and we grow up together. I have a deaf friend that I grew up with."
		P5: "Yes, Deaf culture uses sign language."
		P5: "In Deaf culture, I feel relieved...I feel relieved when I am with Deaf people because they sign and they are able to understand me and I enjoy it."
		P6: "Deaf means...deaf means...you go to school and get taught in sign language. Deaf people talk by sign language. "
		P7: "I am deaf so I use sign language, I get taught and learn in sign language and I come to a deaf school."
		R: “And could you tell me about Deaf culture please?"
		P7: "I don't know."
		P8: "...Deaf culture...Deaf culture...I have Deaf culture.

		R: "What is Deaf culture?"
		P8: "It's like isiZulu, Sotho, Xhosa or Venda."
		R: "So it's the same as those?"
		P8: "Yes, it's the same."
		R: “Do you know about Deaf culture?"
		P9: "Yes, I know it."
		R: “Can you tell me about it please."
		P9: “Like you would speak Sotho, deaf people sign."
		P10: “What is deaf? Sign language. They tell you things and you write things down and become clever. You have deaf friends. "
	3.2. Disability - The often unknown term, the often known negative connotations	P1: “...I think it means that you were born that way or you got sick and then became deaf."
		R: “Do you think being deaf means that you are disabled?"
		P1: “Yes."
		R: “Why?"
		P1: "I see hearing people, they see deaf people and they laugh...call you stupid...and so I think it is a disability. But it's wrong!"
		R: “Do you think being deaf is a disability?"
		P3: “Yes, I think it's a disability. It's something people don't want to be."
		R: “Why?"
		P3: “It’s hard to understand everyone and it's something people don't want. "
		P5: “I don't understand that word disability."
		R: "Do you think to be deaf is to be disabled?"
		P6: “I don't know that sign." (DISABILITY)
		R: (Writes disability).
		P6: “What does that mean?"

		R: "Do you think that being deaf means that you are disabled?"
		P7: “Disabled?"
		R: "Yes."
		P7: "I don't think so."
		R: "No. Why do you say no?"
		P7: "This ear is ok. I am only deaf here (pointing to right ear). I don't know."
		R: “You don't know. That's ok. So being deaf doesn't mean that you are disabled?"
		P7: "Disabled? Deaf? Yes, I think so."
		R: "So to be deaf is to be disabled? Why do you say that?
		P7: (Signs DISABLED looking confused)
		R: (Writes word 'disabled'). " So do you think deaf people are disabled?"
		P7: "Yes."
		R: "Why is that?"
		P7: "I'm deaf, I communicate with sign language. I think because deaf people communicate with sign language."
		P8: "...Because I help the disabled. If they are naughty, I tell them to stop it and I tell them to line up for class and I encourage them not to be naughty and to clean up."
		P9: "They like to tease deaf people. I would change that."
		P9: "They are all disabled because they all sign."
		R: "Ok, so do you think that being deaf makes a person disabled?"
		P10: "Yes."
		R: "Why do you say that?"
		P10: "Because communication isn't comfortable."
		R: "Are you disabled?"
		P10: "No, because I can communicate."
	3.3. A desire to be hearing	P1: "I would like to change to become hearing....because hearing people go further. Deaf people, they do ok. When I was small and hearing, I was improving all the time but now I am doing ok. I want to be hearing."

		P1:"I am happy here, school is fine. But when I am with hearing people, then I feel like I need to and want to be hearing. But I got sick and became deaf and that's ok. "
		P4: "I want to be at a hearing school."
		P4: "I like the hearing school. The deaf school is boring."
		P4: "I want to be hearing. I want to be hearing because then I can just speak rather than signing because signing is tiring."
		P4: "I want hearing friends. Not here in [previous name of school] but outside of [previous name of school]."
		R: "Do you prefer to be taught in sign language or speech?"
		P10: "Speech."
		R: "You prefer to be taught in speech? Why?"
		P10: "Because I like speaking all the time."
		R: "Don't you like sign language?"
		P10: "I was born speaking, so it is better for me to talk. "