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**Parsot, Sima**

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# The Methods of Assessment used by Speech-Language Therapists for Learners with Multiple Disabilities in Schools in Gauteng

**Student: Sima Parsot**

**Supervisors: Mrs M. Mophosho**

**Submitted to the**

**Discipline of Speech Pathology and Audiology**

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Johannesburg, 2012

**DECLARATION**

I declare that this dissertation is my own unaided work. It is submitted for the degree of Masters in Speech Pathology by dissertation at the University of theWitwatersrand, Johannesburg. It has not been submitted before for any other degree or examination in any other university.

Sima Parsot

11th day of October, 2012.

## Abstract

School-based speech-language therapists play a significant role in terms of education and rehabilitation in the lives of learners with multiple disabilities. Assessment forms a critical part of a speech-language therapist's post description and is the cornerstone of any type of intervention. The assessment of learners with multiple disabilities poses as a great challenge to speech-language therapists. These challenges include a lack of guidelines, resources, appropriate standardized tests and the heterogeneity of the group of learners labelled as multiply disabled. This research project aimed at describing the methods of assessment that school-based speech-language therapists use when assessing learners with multiple disabilities. Additionally, these methods were compared to international best practice. The first phase of the study consisted of compiling a set of guidelines with the purpose of providing a framework for a proposed set of guidelines for the assessment of learners. These guidelines were based on the principles as recommended by the literature regarding best practice. Because a qualitative approach was adopted for this research project, the second phases consisted of data collection, utilising eight focus groups as well as document reviews**.** On average, each focus group consisted of two to four participants. The data was then analysed thematically and compared to a checklist. The results indicated that speech-language therapists encountered many obstacles when assessing learners with multiple disabilities. It was evident that the participating speech-language therapists assessed within a multidisciplinary team and that they used formal as well as informal methods of assessment with learners with multiple disabilities. Discrepancies were found between the collected data and the guidelines. The guidelines were then used to propose a way forward for speech-language therapists when assessing learners with multiple disabilities in schools in Gauteng.


Keywords: assessment, multiple disabilities, schools

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**Definition of terms**

**Communication disorder**- impairment in the ability to receive, send, process and comprehend concepts of verbal, non-verbal and graphic symbol systems (Hedge & Pomaville, 2008).

**Disability** - the loss or limitation of opportunities to take part in society on an equal level with others due to social or environmental barriers (WHO, 2006).

**Dysphagia** -a disorder of the normal swallowing function whereby people have difficulty in controlling food, liquid or saliva (Wehmeyer, Bashinski, & Lance, 2002).

**Impairment** - an injury, illness or congenital condition that causes or is likely to cause a loss of physiological or psychological functioning (WHO, 2006).

**Inclusion** - engendering a sense of community and belonging and encouraging mainstream, special schools and others to come together to support each other and pupils with special educational needs (Frederickson, Simmonds, Evans, and Soulsby, 2007).

**Multiple disabilities** - concomitant impairments, the combination of which causes severe educational needs (Carnaby, 2007).

# Chapter 1

# Introduction

## 1.1 Rationale

School-based speech-language therapists play a vital role in the education and rehabilitation of learners with multiple disabilities. Their role begins at the stage of assessment, since this is the starting point of intervention. The assessment of learners with multiple disabilities, however, poses a great challenge to speech-language therapists. The challenges lie in the justification of the assessment, the methods used to carry out such an assessment, the interpretation of the results, and the implications of the findings. The complexity of the assessment is due, in part, to the heterogeneity of the group of children labelled as multiply disabled as well as to the context in which they learn and live. Literature, however, provides few clinical guidelines for speech-language therapists regarding assessment of these learners. Guidelines are important, especially in the South African context, where one is confronted with many additional factors such as the history of the country, poverty, HIV/AIDS and the multi-cultural and multi-linguistic nature of the South African population. There is a need for a uniform protocol to be used in all schools.

The aim of this study was to determine the methods of assessment that speech-language therapists use to assess learners with multiple disabilities who attend specialized public schools in Gauteng. Currently, there is a lack of information regarding the assessment methods used by school-based speech-language therapists (Caesar & Kohler, 2009). According to Caesar and Kohler (2009) this information is important for determining the quality of current practice as well as for ensuring the implementation of evidence-based practice. Furthermore, in attempting to provide exemplary services to their clients, speech-language therapists regularly seek new or improved evaluation and treatment models (Hargrove, Griffer, & Lund, 2008). Guidelines for clinical practice are widely available in the literature of related health care professions (for example, medicine and nursing), but are relatively uncommon in communication sciences and disorders (Hargrove et al., 2008). Data obtained from this research project is therefore important, since it will provide information on the methods of assessments currently used within the context of the South African school system that caters for children with multiple disabilities.

Numerous models of assessment are available to speech-language therapists for the assessment of people who present with communication impairments that result from disorders such as deaf-blindness (for example, COACH: Giangreco, Edelman, Dennis & Cloninger, 2006). In addition, there are guidelines that have been published internationally as well as locally for recommended practice in early childhood intervention (for instance, Bagnato & Neisworth, 2004, *Authentic Assessment,*) and for practice in the field of Alternative and Augmentative Communication (for example, Beukelman & Mirenda, 2005, *Participation model*). These models assist speech-language therapists in making appropriate decisions by providing guidelines for assessment, but the question of their appropriateness in the South African context still remains. Currently, there are no models or guidelines for assessing the communication of learners with multiple disabilities in a school setting in South Africa. For the purpose of this study it should be noted that "school" refers to a school for learners with special educational needs.

Two questions arise from the above: Is there sufficient literature to guide the practice of assessment of learners with multiple disabilities? What are the current practices of qualified speech-language therapists in South African schools?

In an attempt to answer these questions this research project was divided into two phases. Phase 1 includes a literature review of the assessment of learners with multiple disabilities internationally, in order to extract guidelines for their assessment. Phase 2 involves data collection from focus groups and assessment reports.

However, prior to reviewing the literature on assessment of learners with multiple disabilities, it is important to emphasize the context in which the study is conducted. The following section therefore includes the nature of multiple disabilities in South Africa the history of specialized schooling in South Africa; the unique context of South Africa and the work of speech-language therapists in special needs schools. Figure 1 illustrates the layout of Chapter 1.

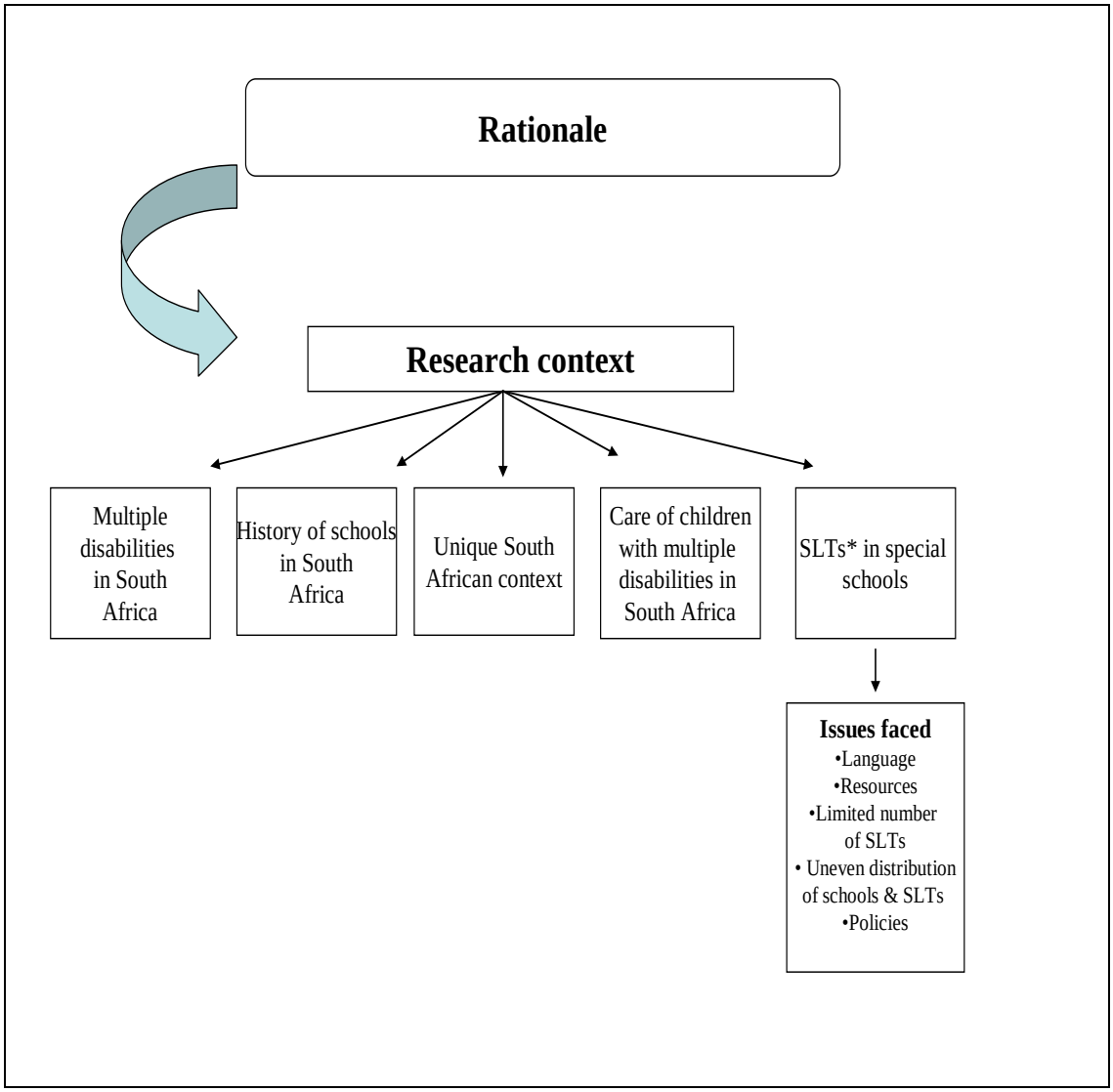


*Figure 1.*Layout of Chapter 1 (* SLTs = Speech-language therapists)

## 1.2 Research context

### 1.2.1 Multiple disabilities in South Africa

Multiple disabilities refer to two or more impairments occurring at the same time (Nakken & Vlaskamp, 2007). Since learners with multiple disabilities form such a heterogeneous group, the primary impairment was, for the purpose of this study, defined as a motor or physical impairment accompanied by a second or third impairment. All questions posed in the focus groups emphasized this definition.

Learners with multiple disabilities vary in terms of the severity and characteristics of their impairments (Hogg, 2007). They have various impairments

that may include speech, physical mobility, intellectual, visual and hearing impairments and, additionally, they may also exhibit behavioural or social problems (Nakken & Vlaskamp, 2007).

In 40% of cases of multiple disabilities there is no identifiable cause (Carnaby, 2007). In cases where the aetiology is known, multiple disabilities are in most cases due to prenatal biomedical factors. Other possible causes may be linked to genetic metabolic disorders or any disease or infection that could occur in the pre-natal, peri-natal and post-natal phase. Cass, Price, Reilly, Wisbeach, & McConachie (1999) added that, whilst learners with multiple disabilities have relatively rare neurometabolic or syndromic diagnoses, a large number of the disabilities arise from common conditions such as prematurity or cerebral palsy of unknown aetiology.

In South Africa, malnutrition, accidents, violence, cerebral malaria, tuberculosis and HIV/AIDS are among the causes of multiple disabilities (Statistics South Africa, 2010). In addition, a lack of resources may also contribute to disability. For instance, if women in labour had better access to health services in rural areas there would be fewer instances of birth trauma which may result in a disability. The prognosis of learners with multiple disabilities is dependent on the specific impairment of each individual (Vlaskamp, Hiemstra, & Wiersma, 2007).

The incidence and prevalence of learners with multiple disabilities is thought to be high in South Africa, despite a lack of scientific evidence to prove this phenomenon. Statistics have been poorly recorded, with different reports indicating different numbers. Statistics South Africa (2010) determined numbers according to the following sub-grouping: sight disabled, hearing disabled, physically disabled and mentally disabled. According to these statistics, disabilities affect 1091022 people (Statistics South Africa, 2010). However, one example of the inaccuracy of these statistics is evidenced by the data on visually impaired people. When the figure provided by Statistics South Africa, (2010) is compared to the figure reported by the Federation for the Blind, there is a total surplus of 689,011 (Signgenius, 2011). It is possible that Statistics South Africa, (2010) categorized people who wear glasses as sight disabled even though they are not visually impaired or blind. Furthermore, it is unclear which people are classified as mentally disabled. It is likely that epilepsy sufferers are included in the figure of 192554 (Signgenius, 2011). The unreliability of the provided statistics is due to a number of factors: The limitations, for instance, include different definitions of disorders, different methods for collecting information

and a poor service infrastructure for persons with disabilities in underdeveloped areas (Statistics South Africa, 2010).

Many, but not all, learners with multiple disabilities attend specialized schools. This can be attributed to the history of South Africa and the process of change the country is currently undergoing.

### 1.2.2 History of specialized schooling in South Africa

Formerly, South Africa was dominated by an Afrikaans-speaking government that created a political system called Apartheid (Gwalla-ogisi, Nkabinde & Rodriguez, 1998). Apartheid was a system of legal racial segregation under which the rights of the majority "non-white" inhabitants were curtailed and minority rule by White people was maintained. During the Apartheid era, the South African education system discriminated against learners who needed special education needs. There were fewer schools for learners with special educational needs and those schools were not easily accessible to all learners with disabilities because they were mostly found in urban and rural areas. In addition, Apartheid promoted race, gender and ethnic divisions and emphasized separateness. However, South Africa experienced a dramatic political transformation with the beginning of the post-apartheid era after the first democratic elections in 1994. This political transformation affected all aspects of life in South Africa, necessitating major political, social, economic and educational changes.

Change in the South African Department of Education started in 1994. The documentation of the South African Department of Education reflects a model that acknowledges the fact that different learning needs arise from a range of factors including physical, mental, sensory, neurological and developmental impairments. Consequently, these documents have put forward a framework for transformation and change which aims to ensure inclusion of learners with disabilities (Department of Education, White Paper 6, 2001). The key feature of this approach is a philosophy of inclusion. In order to achieve the inclusion goals, various strategies are described that include strategies for the provision of various levels of support to learners and educators (Department of Education, White Paper 6, 2001).

In special schools, priorities are proposed to include orientation of therapists to new roles within district support services to neighbourhood schools (Department of Education, White Paper 6, 2001). The policy of the Department of Education advocates that new approaches will be adopted that focus on problem solving and the

development of learners' strengths and competencies rather than focus on their shortcomings only (Department of Education, White Paper 6, 2001).

Underpinning the envisioned changes, the Department of Education hold the view that the key to reducing barriers to learning within all educational and training lies within a strengthened education support service (Department of Education, White Paper 6, 2001). Accordingly special schools will be converted to resource centres and integrated into the district based support team in order to provide specialized professional support in curriculum assessment and instruction to neighbourhood schools (Department of Education, White Paper 6, 2001).This process, however, is still in progress, since the said document focuses on a strategy of twenty years.

In the past, special needs schools assessed a learner for candidacy to the school. These assessments were administered by a multidisciplinary team of therapists, including a speech-language therapist. The Department of Education, White Paper 6, (2001) indicates that therapists should make a shift from a medical model, where the learner is at the centre of focus, to a social model where the family and the learner take the central role. Presently, according to the said document, the South African Schools Act excludes testing for admission purposes by schools. However, the current organization of special schools in terms of the category of disability persists, despite it being a contravention of this act. This is due to the latency or delay in the application of the revised legislation causing lags in the transformation of previous school policies. Hence there are some centres in which learners are still assessed for candidacy. It is therefore evident that policies and practice are not in agreement.

Currently, the South African education system offers specialised schooling for children with multiple disabilities and has a policy of moving towards inclusive education so as to redress the policies of the apartheid regime and the legacies of the past. All policy documents, guidelines and processes of the Department of Education in South Africa have been developed to bring about a more inclusive education system based on the concept of removing barriers to learning. Many factors were considered in planning a new approach for the assessment of special education needs in South Africa. The system used to identify and assess learners with special needs is known as the National Strategy on Screening, Identifying, Assessment and Support (Department of Education, 2008) and it aims to respond to the needs of all learners in South Africa, particularly of those who are vulnerable and most likely to be

marginalized and excluded.

One of the key objectives of the strategy referred to above is to provide clear guidelines on enrolling learners in special schools (Department of Education, 2008). The National Strategy on Screening, Identifying, Assessment and Support (Department of Education, 2008) has two key purposes, namely, 1) to screen and identify learners who experience barriers to learning and development and 2) to establish a support package to address these barriers (Department of Education, 2008).

There are four stages in the National Strategy on Screening, Identifying, Assessment and Support. Stage one includes creating a learner profile. This is where the school and the teacher gain background information of learners to understand basic needs, talents and aspirations. Stage two is to determine the barriers to learning and development. The third stage involves the assessment of support requirements, that is, determining the level and nature of support needed. Stage four comprises action planning, provisioning and monitoring of additional support (Department of Education, National Strategy on Screening, Identifying, Assessment and Support, 2008).

However the National Strategy on Screening, Identifying, Assessment and Support has not yet been fully implemented in all school settings. This strategy is an ecosystemic approach. It therefore has no profession-specific guidelines, since it is not a profession- specific tool.

### 1.2.3 The unique South African context

In South Africa speech-language therapists have to face and deal with significant issues surrounding health and wellness that are associated with poverty. There is a very high incidence of hearing loss associated with otitis media with effusion, and also of malaria, tuberculosis, gastro enteritis and meningitis (Strasheim, Kritzinger, & Louw, 2011). Furthermore, South Africa's HIV and AIDS epidemic has had a devastating effect on learners in a number of ways. In cases where the virus is transmitted from mother to child, the infected child is born into a family where the virus may have already had a severe impact on health, income, productivity and the ability to care for each other.

After the apartheid era South Africa is still in a process of change and transformation and therefore poverty is still rife, posing huge implications for learners

with multiple disabilities because the condition imposes additional costs such as medical expenses, specialized equipment and specialized services. Due to various levels of socio-economic status in South Africa not all learners have equal access to services and limited access to special services has led to learners being excluded (Department of Education, White Paper 6, 2001). However, according to the Constitution of the Republic of South Africa (Act 108 of 1996), everyone is equal before the law. Equality includes the full and equal enjoyment of all rights and freedoms and therefore unfair direct or indirect discrimination against anyone with a disability is unlawful. Learners with multiple disabilities therefore have the right to education and therapeutic services. Speech-language therapists have acknowledged the rights of individuals to services as is emphasized in the policy documents of the South African Speech Language-Hearing Association, (2010).

In addition to poverty, the South African speech-language therapist has to take into consideration the different family structures that she/he may be confronted with. Having a child with a disability may cause unwanted strain and stress on a family or a marriage, which may result in a home consisting of a single parent (Lynch & Hanson, 2004). There are also family structures where the child occupies the central place and is raised in a close family group. This family group usually include several generations plus cousins, uncles and aunts (Lynch & Hanson, 2004) who, as a family, are responsible for the care and upbringing of the child.

### 1.2.4 Care of children with multiple disabilities in South Africa

Working parents of children with a disability often face difficult choices on how to take care of their children while they at work. Finding childcare can be especially challenging for these families as they need a provider who can accommodate their child's special needs and who is, in, addition, affordable and of good quality (De Vore & Bowers, 2007). This problem is a serious one for low income families for whom it may be a real struggle to find affordable quality care (Neas & Mezey, 2003). Such families may seek advice from various professionals regarding their child's spectrum of disabilities, but they are often confronted by a vast array of conflicting advice from multiple sources of information (Cass et al., 1999). A special needs school or a stimulation centre is usually the only answer for these families' needs. Some of these schools or centres may provide therapeutic services to the child. Private intervention can be costly and accessing intervention in the public

health sector may not always be possible; sometimes the only therapeutic services a child has access to, is at a special needs school.

### 1.2.5 Speech-language therapists in specialized schools

South Africa is still in the process of change and there are currently little to no provincial or national profession-specific standards or protocols regarding the assessment and management of learners with multiple disabilities by school based speech-language therapists. The absence of guidelines and protocols has therefore led to vast discrepancies in the delivery of services in schools (Khoza-Shangase & Masoka, 2009). The speech-language therapist plays an important role in education, since education takes place through communication. According to the World Health Organization (cited on the American Speech and Hearing Association guideline, 2006), school based speech-language therapists prevent, identify, assess, evaluate and provide intervention for learners with speech, language and related disabilities. The ultimate purpose of a school based speech-language therapist is to address communication and related disorders and to effect functional and measurable change in a learner's communication status so that the student may participate as fully as possible in all aspects of life. In addition, the speech-language therapist is also involved in the assessment and management of feeding and swallowing disorders of children in the school systems (Bailey, Stoner, Angell, & Fetzer, 2008; Gerety, Hutchins, & Mulligan, 2011).

The ability to communicate in some way is one of the most important functions a child needs for adjustment to life circumstances and for intellectual progress; difficulties in this respect are often amongst the greatest disabilities that children with multiple disabilities present with (Law, Garett, & Nye, 2004). Learners with multiple disabilities show a high incidence of language and communication deficits because these children do not have a sufficient quantity of successful communication interactions through which they can discover the function of language (Pirila, Van der Meere, Pentikanen, Ruusu-Neim, Korpela, Kilpenin, & Niemenen, 2007). Moreover, learners with multiple disabilities may have visual and auditory acuity deficits as well as tactile motokinesthetic feedback problems that limit and distort the information received, therefore reducing the experience upon which language is based (Pennington & McConachie, 2001). In addition, the presence of stereotypic behaviour interferes with or disrupts the communicative flow (Pawley &

Carnaby, 2009). The role of the speech-language therapist in the intervention process of these learners is therefore pivotal. When a learner with multiple disabilities is enrolled at a school it is the responsibility of each professional working with the leaner to assist the learner to achieving his/her full potential. Learners with multiple disabilities are often dependent on others for the gratification of their needs and therefore their quality of life (Petry, Maes, & Vlaskamp, 2002). Therapeutic intervention is therefore important and the first step to intervention is assessment. Given the complexities of communication, the question of how best to establish the communicative repertoire and potential in learners with multiple disabilities points to the need for continuous assessment and avoidance of a once off test situation (Pawlyn & Carnaby, 2009).

The American Speech-Language-Hearing Association (2006) has acknowledged the importance of ongoing, reflective approaches to assessment. The association has therefore created new roles for speech-language therapists which they term “responsiveness to intervention”. These new roles are specific to changes in terms of assessment approaches. It suggests that speech-language therapists undertake the shift from traditional standardized approaches to a more pragmatic, educationally relevant model focused on measuring change in individuals’ performance over time. The Royal College of Speech-Language Therapists (2004) supports this view and encourages the use of both standardized and non standardized measures. The application of these principles in South Africa is not without complication. Learners with multiple disabilities form part of the school-based speech-language therapist’s caseload. The Health Professions Council of South Africa does provide guidelines, but these guidelines are not specific to the assessment of learners with multiple disabilities.

In South Africa, school-based speech-language therapists face huge challenges including language (Pascoe & Norman, 2011), resources (Pascoe & Norman, 2011), a limited number of speech-language therapists (Khoza-Shangase & Masoka, 2009), uneven distribution of specialized schools(Khoza-Shangase & Masoka, 2009) and the fact that policies and reality are not congruent. There are policies that guide practice but, unfortunately, the required systems are not in place. These issues are discussed in the following section.

### 1.2.6 Issues in the current South African context

#### 1.2.6.1 Language

One of the biggest challenges facing speech-language therapists is multilingualism. South Africa has 11 official languages. Most speech-language therapists in South Africa are trained in English or Afrikaans only (Pascoe & Norman, 2011). In a school environment, however, they are confronted with learners who speak different languages. A survey conducted by Khoza-Shanagse and Masoka (2009) showed that therapists employed in schools are mainly White, with minimal representation of Indians and Blacks. The lack of speech-language therapists who speak African languages does not promote an education environment conducive for learners that foster multilingualism and multiculturalism (Pascoe & Norman, 2011). During assessments of such learners, speech-language therapists may have to use interpreters or translators who are not always trained. If present, speech-language therapists sometimes use a family member of the learner. The use of an untrained interpreter may either lead to too much or too little information being conveyed and this can ultimately result in the validity and reliability of the assessment results being questioned (Friedland & Penn, 2003).

#### 1.2.6.2 Resources

Another obstacle that speech-language therapists face is the one of limited resources. Although the Department of Education annually allocated a budget to speech-language therapists in schools, this budget is reported to be inadequate to be able to establish, develop and sustain services provided in schools (Khoza-Shangase & Masoka, 2009). Furthermore, schools have reported having to raise funds for running costs, which in turn detracts the speech-language therapists from performing their core duties (Khoza-Shangase & Masoka, 2009). According to the survey conducted by Khoza-Shangase and Masoka (2009), equipment needs for school-based speech-language therapists range from basic equipment such as puzzles to advanced equipment such as hi-tech devices. Moreover, there is a lack of current and relevant original speech-language assessment tests**.** Resources are vital when working with learners with multiple disabilities. These learners may require assistive devices such as customized wheelchairs, alternative and augmentative communication devices and access to specialized switches. These assistive devices ultimately become a part of the

learner. These assistive devices may allow the learner to become independent in carrying out certain tasks (Calculator & Black, 2009). Resources are therefore vital when assessing learners with multiple disabilities since they assist in determining the learner's needs.

#### 1.2.6.3 Limited number of speech-language therapists

It is evident that there is currently a high learner to therapist ratio in special schools, with a significant amount of therapy being provided in groups (Khoza-Shangase & Masoka, 2009; Norman & Pascoe, 2011). Learners with multiple disabilities seldom progress in a large group size they usually require assistance on a one-to-one basis because the individual needs of these learners may differ (Edgar, & Rosa-Lugo, 2007). Current post structures limit the therapists' ability to conduct regular one-to-one assessments, to objectively monitor progress and to write comprehensive progress reports on learners receiving therapy (Khoza-Shangase & Masoka, 2009). The numbers of speech-language therapists employed differ from school to school and although there are however, vacant posts available at schools, these posts are not always filled. The amounts of time for which posts remain vacant are reported to range from three months to over five years (Khoza-Shangase & Masoka, 2009). Therapists' posts allocated to schools are insufficient to meet the needs of all learners that require therapy services, leading to large case loads (Katz, Maag, Fallon, Blenkarn, & Smith, 2010).

#### 1.2.6.4 Uneven distribution of schools and therapists

Not all special schools within districts that accommodate children with special needs have speech-language therapists; this implies inequitable access to services (Khoza-Shangase & Masoka, 2009). The distribution is clearly skewed towards the more affluent suburbs with very few schools available in traditionally segregated townships. There are currently no provincial guidelines for the number of special schools that should be present in each district, because there does not seem to be clear statistics regarding the burden of disability in the province. Gauteng Province currently has 97 special schools unevenly distributed throughout the province (Khoza-Shangase & Masoka, 2009). Therapists' posts are not equal in number at each school. This leads to few multidisciplinary teams. When assessing learners with multiple disabilities, each discipline plays an important role in the assessment, since

professionals from different disciplines are specialized in different areas of development.

#### 1.2.6.5 Policies

One of the major challenges facing the speech-language therapist is the slow transformation from the historical specialized school system to the modern inclusive school system that is being advocated by the national government. School-based speech-language therapists therefore experience doubt and confusion with regard to policy and practice and hence face barriers to the implementation of effective assessment protocols. However, limited information regarding whether the needs of learners are being met is available. Against the background of the context of service provision by speech-language therapists in relation to learners with multiple disabilities in schools and in order to develop contextually relevant guidelines for the assessment of learners with multiple disabilities, the question that is asked in this study, is: What are the current practices of speech-language therapists?

## 1.3 Summary of chapter

The speech-language therapist in schools in South Africa face many challenges in regarding the assessment of the child with multiple disabilities. This chapter provided the rationale for the study; discussed some of the broader issues that influence the education of the learner with multiple disabilities in South Africa; and highlighted the challenges that South African school-based speech-language therapists face in their roles within the school system. In addition, it emphasized the need for future guidelines for speech-language therapists in the assessment of learners with multiple disabilities in schools.

## 1.4 Organization of this thesis

Figure 2 presents a guide to the content of each following chapter in this thesis.

Chapter 2 provides a literature review of assessing learners with multiple disabilities in South Africa. In this chapter the definition of assessment in its broader terms is discussed, followed by specific information regarding the importance of assessment, particularly in the context of education in South Africa. This chapter concludes with a literature review of best practice internationally.

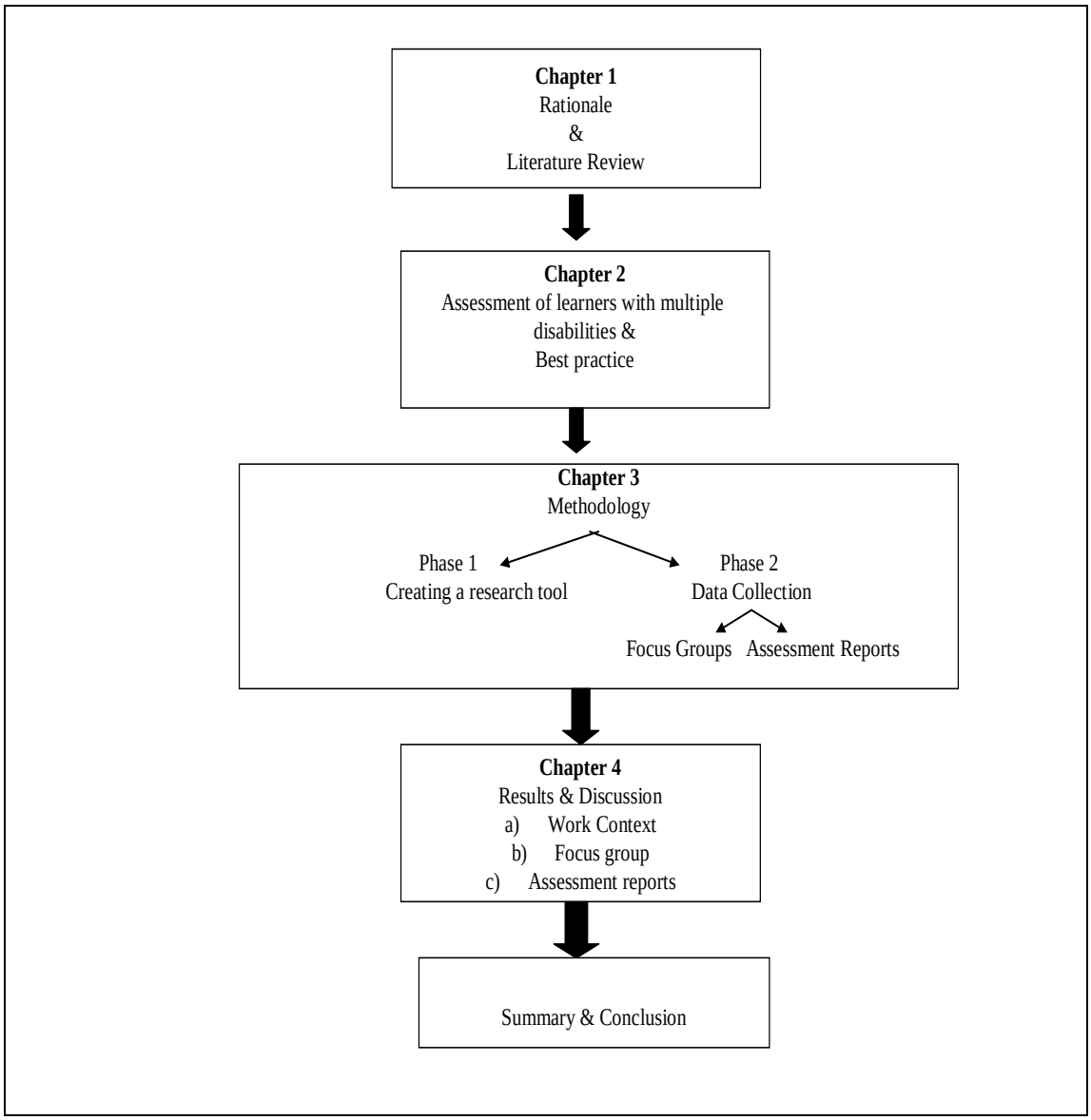


*Figure 2.*Guide to the chapter content of this thesis

The research methodology is discussed in Chapter 3. In this chapter the aims and sub aims are outlined. This was a two phase study. The first phase involved the development of the research tool. The second phase was the actual implementation of the research plan. The research design, sampling strategy, data collection method, as well as the research procedure will be presented. This includes a discussion of the pilot study. Furthermore, the methods of analyses of the data will be explored. This chapter concludes with the researcher's reflections as a researcher and a participant.

Chapter 4 presents the results and discussion of the study. This chapter is divided into three parts: a) results obtained regarding the work context; b) results

pertaining to the information gathered from the focus groups and interviews and c) results obtained from the assessment reports.

Chapter 5 presents the summary and conclusions, including clinical implications, areas for future research; limitations of the study and concluding remarks.

# Chapter 2

## Speech-language therapists' assessment of learners with multiple disabilities

This chapter primarily focuses on the assessment by speech-language therapists on learners with multiple disabilities. In this chapter the definition of assessment is discussed in broad terms, followed by specific information regarding the importance of assessment, particularly in the context of education in South Africa. This chapter concludes with a literature review of best practice internationally in terms of assessment.

### 2.1 A broad overview of assessment by speech-language therapists in school contexts

Assessment is a flexible but systematic process of testing hypotheses and evaluating the quality of learners' developmental progress (Hedge & Pomaville, 2008). The task of assessing the areas of interest to speech-language therapists (for instance, language, auditory processing, feeding, literacy and cognition) would be a relatively simple task if these areas were relatively easily quantified like, for example, as height and weight. These domains, however, are multidimensional and dynamic and involve interrelated processes and abilities (Carter, Leed, & Murira, 2002).

Assessing learners' communication abilities forms a critical and central element of school-based speech-language therapist's post descriptions. The assessment produces results that may be used for many purposes. Assessment is the process by which speech-language therapists determine if a communication disorder is present or absent; issues of severity are considered; and, in addition, speech-language therapists may examine the effects of the communication disorder(s) on aspects of functioning (Beukelman & Mirenda, 2005; Carter, Leed, & Murira, 2002). Additional reasons for assessment include determining candidacy for therapy, informing relevant stakeholders and making decisions about the learners' future (McCauley, 2001). In assessing learners with multiple disabilities, speech-language therapists are expected to measure a learner's abilities and attain insight into their

compensatory strategies that will optimize the success of intervention efforts (Langley & Lombardino, 1991).

## 2.2 Current assessment models used with learners with multiple disabilities internationally

Assessment and the results of assessment form the foundation of effective and valid intervention (Cater, Leed, & Murira, 2002). This is according to the traditional medical model (Lomofsky & Lazarus, 2001). In this model assessment is conducted for the purpose of candidacy for intervention, this may not however relate to current best practice. In addition this is in contrast with the South African context, as the South African context is moving toward inclusivity. Another model, referred to as the curriculum- relevant model (Catts & Kamhi, 1999) identifies learners with functional needs that stem from speech-language disorders and helps them develop language skills to function better within curricular contexts. A third model of assessment that is described in the literature is the responsiveness-to-intervention model (Staskowski & Rivera, 2005). This model's primary focus is to prevent reading failure and the need for special education. Additionally these models differ in their implications for service delivery. Whilst services within the curriculum-relevant model draw on the content and context of the curriculum, whether provided in the classroom or the therapy room, the responsiveness-to-intervention model recommends that before any special educational services are implemented, it should be determined that the learner finds it difficult to benefit from high quality services within the general classroom, within intensified small group instruction; or from even more intensive individualized instruction (Staskowski & Rivera, 2005).

A universally accepted model of best practice for learners with multiple disabilities when considering communication and alternative and augmentative communication is the participation model (Beukelman & Mirenda, 2005). This model encourages speech-language therapists to use procedures that solicit valid, representative and generalizable behaviour. A therapeutic setting may limit generalizability. The participation model emphasizes the importance of the communication partners. An example of such an assessment is an ecological inventory. The inventory might include a brief description of the setting, including who was present and the extent to which the individual was afforded opportunities and reasons to participate (Beukelman & Mirenda, 2005). When administering such

an assessment, a peer is first observed in a setting participating on the event of interest. The speech-language therapist then lists the various communication behaviours that were required in the activity. The abilities of the learner who is being assessed are measured against the peer. The learner is then taught the skill or provided the necessary technological support (Beukelman & Mirenda, 2005).

Cass et al. (1999) created a model for the assessment and management of children with multiple disabilities. This model looked at the hierarchical relationship between areas of functioning. An important aim of the model was to generate a logical sequence of assessment of the different areas of functioning and to identify factors contributing to 'under perform' in higher level functioning (Cass et al., 1999). For learners with multiple disabilities careful evaluation of underlying functional issues is crucial before management strategies aimed at the development of complex integrated skills can be commenced. A six-tier model was therefore designed. This model is illustrated in Figure 3.

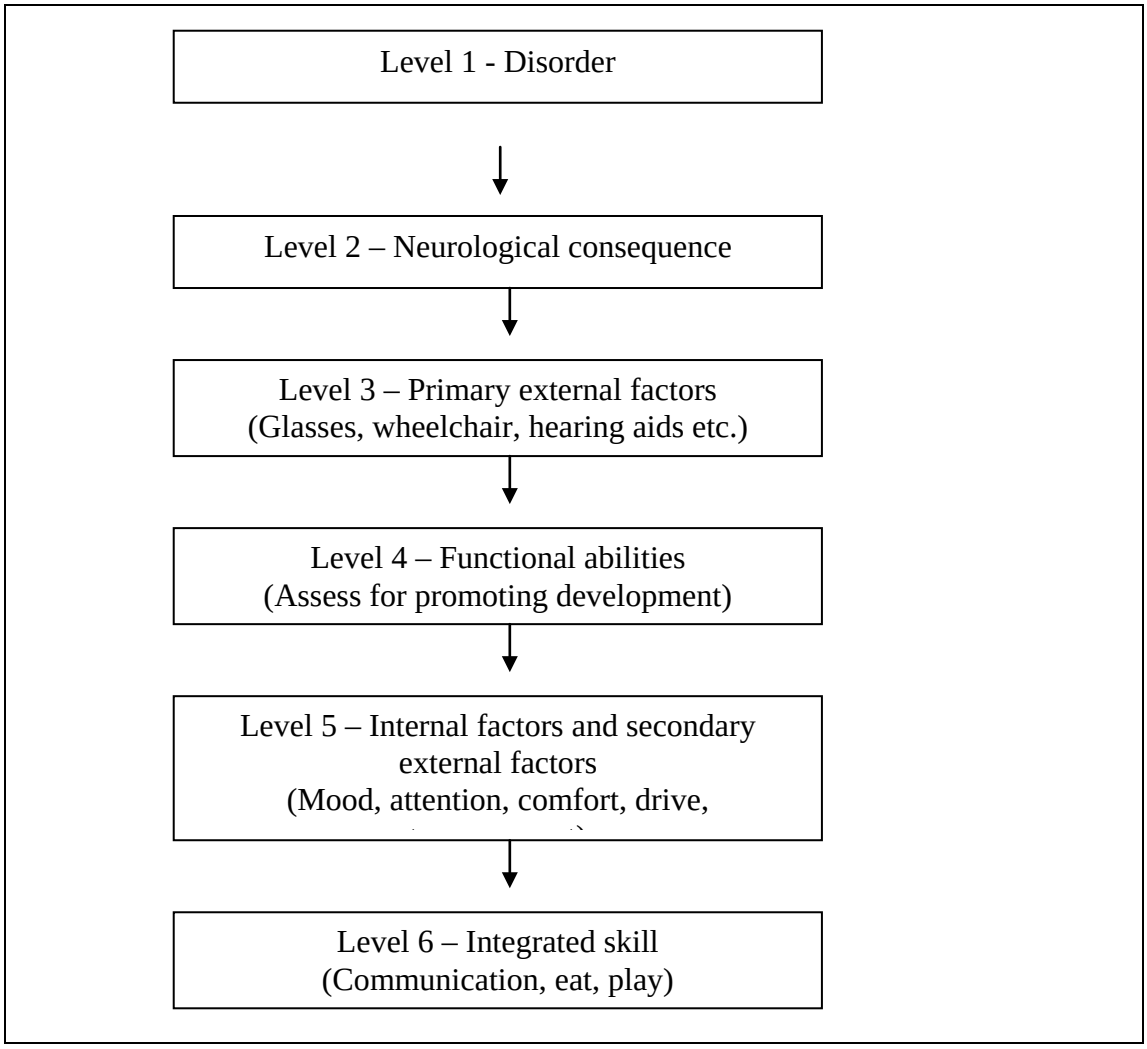


*Figure 3*. Six-tier model

Since assessment is central to speech-language therapists' post description (Health Professions Council of South Africa, 2005) it is incumbent on them to constantly revisit the methods they use, their motivations and the implications of their assessment. This is particularly true when working with vulnerable populations, especially in under-resourced settings. In these contexts there is no such thing as "traditional" practice; additionally, there is almost no literature to guide clinical work. Data collected in this research project is therefore particularly important as it could add to the literature as well as guide future policies.

## 2.3 Core aspects of the scope of assessment by speech-language therapists in relation to multiple disabilities in special needs schools

Speech-language therapists' practice varies in different contexts, and the theoretical models in which assessments are carried out vary tremendously. Nevertheless, the scope of practice of the speech-language therapist is internationally relatively well defined. Regarding the learner with multiple disabilities, speech-language therapists carry out assessments in broad areas, as depicted in Figure 4.

In a school setting, the ability to communicate in some way is one of the most important functions a learner needs for adjustment to life and for intellectual progress. Difficulties that result from communication disorders are often amongst the greatest disabilities learners with multiple disabilities experience (McCauley, 2001). A communication disorder may range in severity from mild to profound; furthermore it can be developmental or congenital. As depicted in Figure 4, speech-language therapists are interested in a learner's language abilities; this includes expressive and receptive language. Moreover, they assess a learner's cognitive abilities, auditory processing, speech, literacy and hearing. It should however be emphasized that Figure 4 only highlights the core aspects of the scope of the speech-language therapist when assessing learners with multiple disabilities in a school setting. It has to be noted that speech-language therapists are also interested in functional communication as well as psychosocial aspects related to speech and language.

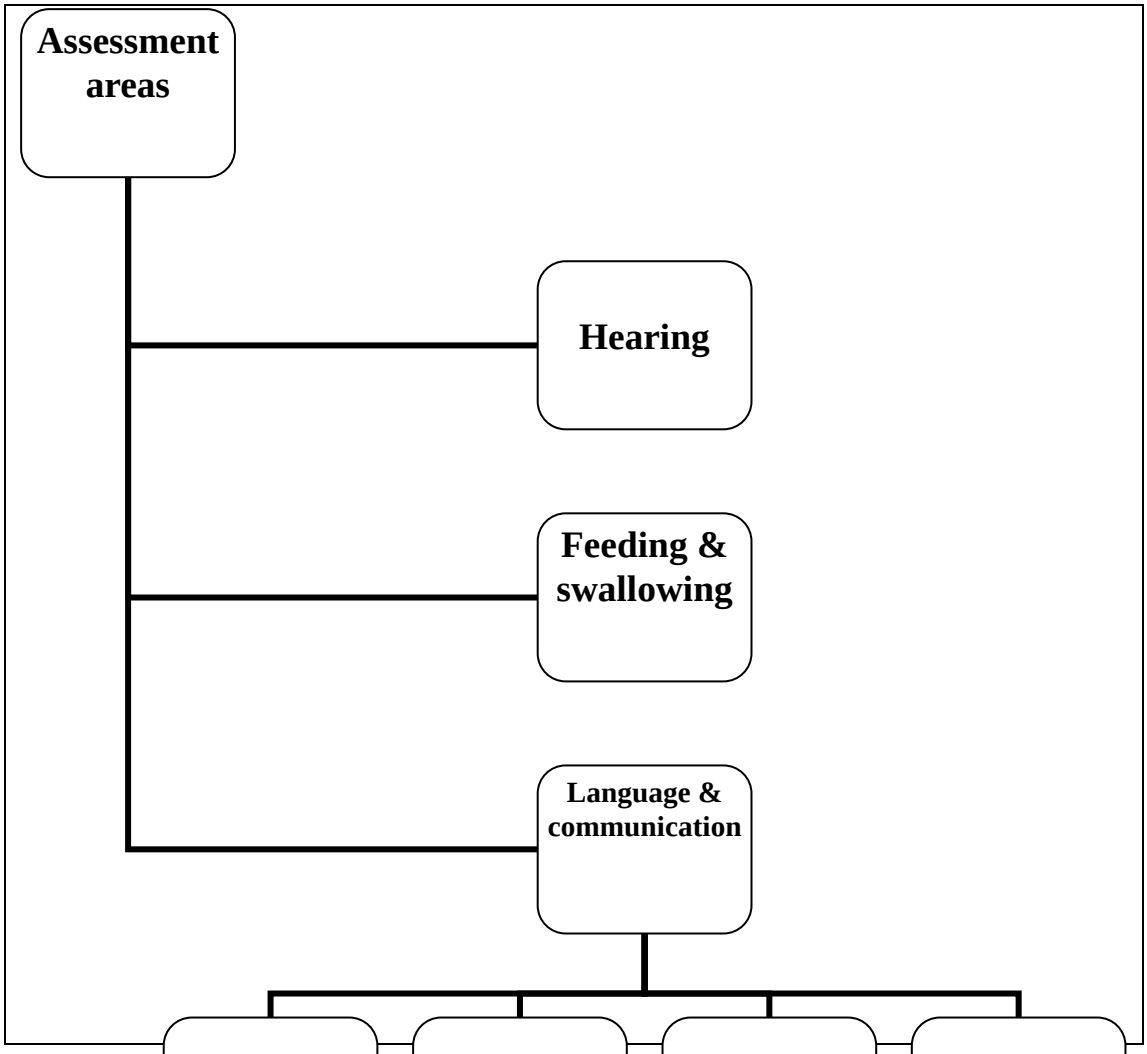


*Figure 4.* C the ce ge assessing le tipl

In addition to an assessment of learners' communication abilities, the assessment of feeding and swallowing also falls within the scope of practice of the speech-language therapist, particularly in an environment servicing children with multiple disabilities. An assessment of feeding is conducted to test for dysphagia. It is important to assess feeding, since dysphagia is a common problem in children with multiple disabilities. Recognized complications include aspiration, recurrent pneumonia and chronic lung disease (Hutchins et al., 2011), these complications could be fatal.

Assessment of the above domains may take many forms and approaches, and the speech-language therapist's work with a child with multiple disabilities is guided by the theoretical framework in which the speech-language therapist works. These frameworks may include a dynamic assessment, continuous assessment or a

multidisciplinary approach to assessment. These frameworks may be used in different settings for varying reasons. A theoretical framework for assessment is chosen if it has strong evidentiary bases in the literature or simply because the speech-language therapist feels comfortable with that approach.

## 2.4 Best practice and assessment

Best practice is important because it may contribute to an improvement in clinical services, make clinicians more accountable, decrease the gap between research and practice and reduce the variation of services provided to clients (O'Connor & Pettigrew, 2009). Best practice guidelines require that speech-language therapists not only act in accordance with the knowledge, principles and philosophies of their own profession, but also with a larger set of beliefs in mind (National Council of Social Services 2007). Best practice is the process of seeking out and studying the best internal practices that produce quality performance. Additionally, it is known to improve client care, define the role of the speech-language therapist; enhance growth of individual speech-language therapists; provide a systematic and scientific process for delivery of therapy services; and to be used as a model for the development of policies (National Council of Social Services 2007).

Furthermore, evidence- based practice requires speech-language therapists to a) critically self-examine their own practices; b) consider alternatives that may have stronger evidence bases; c) justify their uses of approaches that have weaker support from research investigations than other available approaches; and d) integrate available evidence from published literature with existing evidence concerning client and family preferences and needs as well as clinicians, experience, expertise and theoretical perspectives (Fey, 2006). Research on assessing learners with multiple disabilities is, however, limited. According to O'Connor and Pettigrew (2009), the lack of research in some areas of speech language pathology may have led to practice which is not evidence based. As a result of the lack of research in some areas speech-language therapists have come to rely on trial and error and common sense problem-solving when evidence is not available (O'Connor & Pettigrew, 2009). There is therefore a need for more research regarding learners with multiple disabilities and a need for evidence based practice in assessment.

The North Carolina Department of Public Instruction, (2000), the Virginia Department of Education, (2011) and the Kansas Department of Education, (2005)

have specific guidelines for assessment; however not all these guidelines are appropriate for the South African context. Current literature regarding best practice and assessment has highlighted many significant aspects in assessment. These aspects are discussed in the following section.

### 2.4.1 Fair, bias free and sensitive

The first aspect is that assessment should be fair, free from bias and sensitive. The rights based approach to education, such as advocated in South Africa, claims that everyone has the right to basic education (Department of Education, White Paper 6, 2001). Assessment should therefore be fair, bias free and sensitive in respect to age, gender and cultural background. A fair and bias free assessment ensures that no learner is excluded and this in turn supports inclusive education (Department of Education, White Paper 6, 2001; National Strategy on Screening, Identification, Assessment and Support, 2008). In the past, during the apartheid era, the South African education system discriminated against learners with special educational needs. There were fewer schools for learners with special educational needs and those schools were not easily accessible to all learners with disabilities because they were mostly found in urban and rural areas. Furthermore, apartheid promoted race, gender and ethnic divisions and emphasized separateness. Learners with multiple disabilities were therefore excluded. Current South African policies and strategies are emphasizing fairness and sensitivity, the movement away from the notion of separateness and promote and support fairness.

### 2.4.2 Learner centred approach

It is generally agreed that assessment should be learner-centred. A variety of conceptual models have been proposed to understand and explain the concept of disorder and functioning. These may be expressed in a dialect of “medical model” versus “social model”. The medical model views disease as a problem of the person, directly caused by disease, trauma or other health conditions (Jelsma, 2009). The social model, on the other hand, sees the issue mainly as a socially created problem and basically as a matter of the full integration of individuals into society (Jelsma, 2009). In 2001, the revised classification of health and disease by the World Health Organisation, and the International Classification of Functioning, Disability and Health (International Classification of Functioning, Disability and Health: World

Health Organisation, 2001) was created with a strong focus on the individual in society; it is based on an integration of these two apposing models (International Classification of Functioning, Disability and Health: World Health Organisation, 2001). In order to capture the integration of the various perspectives of functioning, a "bio-psychosocial" approach is recommended by the International Classification of Functioning, Disability and Health.

The International Classification of Functioning, Disability and Health provide a multi-perspective approach to the classification of functioning and disability as an interactive and evolutionary process (International Classification of Functioning, Disability and Health: World Health Organisation, 2001). In this model, an individual's functioning in a specific domain is viewed as an interaction or complex relationship between the health condition and contextual factors (International Classification of Functioning, Disability and Health: World Health Organisation, 2001. There is a dynamic interaction among these entities. Working within this model, speech-language therapists are encouraged to view the learner's "health condition" together with contextual factors when assessing their communication and feeding/swallowing, thereby adopting a learner centred approach.

In terms of speech pathology, the International Classification of Functioning, Disability and Health provide a multidimensional approach to the investigation of various communication disorders including developmental language impairments (McLeod, 2006). The comprehensive view of health and communication offered by the framework of the International Classification of Functioning, Disability and Health is useful for guiding clinical practice within speech-language pathology (Threats, 2006). Some sub-specialties (for instance, aphasia and traumatic brain injury) have already begun to use this framework to guide assessment and treatment practices. Decreased application of the International Classification of Functioning, Disability and Health may be attributed to its failure to adequately cover all the important developmental aspects particularly in the population from birth to five years (Washington, 2007). This limitation has been addressed in a version of the International Classification of Functioning, Disability and Health called the International Classification of Functioning, Disability and Health for Children and Youth.

Apart from the International Classification of Functioning, Disability and Health, current literature has pointed to the importance of learner centeredness (Cole,

Dale, & Thal, 1996; Ferguson, 2000; Ehren & Nelson, 2005, Hebbeler & Rooney, 2009; Hedge & Pomaville, 2008; Staskowski & Rivera, 2005). DiLollo & Favreau (2010) have studied person-centred therapy and speech and language therapy. They found that person-centred care has become the foundation for practice in many areas of health care provision. Research has suggested that providing person-centred care may improve therapy outcomes, client satisfaction, and perceived quality of care; it may also address aspects of evidence-based practice (DiLollo & Favreau, 2010).

In working with learners with multiple disabilities, each learner is found to be different in terms of his/her disabilities, abilities and learning style. For this reason an assessment needs to be conducted with the learner as the central point when aiming to collect all the relevant data.

### 2.4.3 Collaboration

The importance of collaborative practice between those who provide services to learners with special educational needs is regarded as essential in many of the publications that were reviewed (Bailey et al., 2008; Carnaby, 2007; Paradise, Bailey-Wood, Solomon, & Davies, 2007, Paul & Roth, 2011; Smith & Jones, 1999). Learners with multiple disabilities require a high level of support from family, educators, related service providers, classmates and others to be effectively included while also meeting the demands of daily living and enjoying the best possible quality of life (Calculator & Black, 2009). The attainment of best practice is conceptualized to be dependent on effective collaboration between speech-language therapists, teachers, administrators, parents and other stakeholders who share a common vision and an overall mission (Calculator & Black, 2009). Speech-language therapists are encouraged to operate in a collaborative model of service delivery (Ainscow, Booth & Dyson 2004). Working in a team is important when assessing learners with multiple disabilities; this team should not only consist of therapists, but should include the parents/caregivers and teachers. This is also emphasized in the response-to-intervention approach (Staskowski & Rivera, 2005).

There are a range of models of collaboration described in the literature. These include multidisciplinary, trans-disciplinary and interdisciplinary models (Zascavage & Keefe, 2007). A learner with multiple disabilities may experience a delay in two or more areas of development; therefore, when an assessment is conducted by a team, each professional's expertise can be shared and discussed by the team. Bagnato &

Niesworth (2004) proposed that it is neither feasible nor sensible for one person to observe and record a learner's functioning across developmental domains and across several everyday settings and over several occasions. Teamwork is therefore emphasised. This may be difficult in a South African society, however, because of a shortage of therapists (Khoza-Shanagse & Masoka, 2009).

### 2.4.4 Viewing the learner as a whole

Literature suggests that the goals of assessments should be guided by viewing the learner as a whole (Cole et al, 1996; Ferguson, 2001; Hedge & Pomaville, 2008; Carnaby, 2007, National Strategy on Screening, Identifying, Assessment and Support, 2008; Staskowski & Rivera, 2005). The ecological model, especially, emphasizes the contributions of multiple environmental variables at multiple levels of social organization to multiple domains of child development (Brofenbrenner, 1974). In other words, parents, families, neighbourhoods, cultures, and socioeconomic influences play a vital role in a learner's development.

In an assessment, it is important to understand the learner's past and current problems. Additionally, information on the family constellation is relevant (Hedge & Pomaville 2008). This information can be gathered through a case history. A case history is highly valued in the field of Speech-Language Pathology (Ferguson, 2000) and generally consists of the following information: basic identifying information, referral source, statement of the problem, developmental history, medical history, and family, social and educational background (Hedge & Pomaville 2008). A case history coincides with the first stage of the National Strategy on Screening, Identifying, Assessment and Support process which is creating the learner profile. During this stage the school gains background information about the learner to understand basic needs, talents and aspirations (National Strategy on Screening, Identifying, Assessment and Support, 2008). This information is gathered through an interview with the parent/caregiver. A case history is an important part of the assessment, since information gathered during this process may guide the assessment.

### 2.4.5 Language of assessment

The more diverse the population, the more likely it is that speech-language therapists will encounter families from cultural, ethnic and linguistic backgrounds that

differ from their own (Ceasar & Kohler, 2009; Hasson & Jeffee, 2007; Laing & Kamhi, 2003). A particularly important issue in the South African context is that of the language of assessment. Most speech-language therapists in South Africa do not speak the indigenous languages of South Africa (Khoza-Shanagse & Masoka, 2009). The issue of multilingualism, however, is an issue that is under discussion in international literature, within the dynamism of societies around the globe (Konhert, Yim, Nett, Kan, & Duran, 2005). This issue has significant implications for speech-language therapists, particularly in SA, in their dealing with children with communication impairments.

When administering standardized tests on learners from diverse cultural backgrounds speech-language therapists should be aware of two types of bias, namely content bias and linguistic bias. Content bias occurs when test stimuli, methods or procedures reflect the assumption that all learners have been exposed to the same concepts and vocabulary or have had similar life experiences (Laing & Kamhi, 2003). Linguistic bias refers to a disparity between 1) the language/dialect used by the examiner; 2) the language/dialect used by the learner and; and 3) the language/dialect that is expected in the learners' responses. In addition Laing & Kamhi (2003) warned that attempts to make adjustments to standardized tests in order to reduce linguistic bias may lead to both over- and under-identification of impairments.

The Royal College of Speech And Language Therapists' Guidelines (2004) advised that speech and language assessment should be carried out in both (all) languages spoken by a bilingual or multilingual learner. It also highlights the importance of offering speech and language therapy in the learner's language of choice. Since it is not always feasible to assess a learner in all languages he or she knows, it is always best to assess in the learner's home language as this may give a truer reflection of his or her abilities. The Royal College of Speech And Language Therapists' Guidelines (2004) highlights that assessing in a learners' home language may however require a translator. Literature suggests that the speech-language therapist should not only provide translators with information about the aims materials, methods and procedures that will be used in the assessment but they should also share more specific information about the evidence and data on which assessments and diagnosis are based (Kambanaros & Van Steenbrugge, 2004). Once again, due to a lack of resources, a trained translator may not always be readily available to the speech-language therapist in a school setting.

### 2.4.6 Utility

For an assessment to be reliable and valid it should have an aim (Bagnato & Niesworth, 2004). As previously stated assessment is the process by which speech-language therapists determine if a communication disorder is present or absent. In a school setting in South Africa assessment is conducted for the consideration of school placement, to determine if therapy will assist the learner, to determine progress in therapy, and/or to determine if therapy should be terminated. The aim of the assessment is vital because it may guide the assessment methods.

### 2.4.7 Methods of assessment

The assessment of learners with multiple disabilities is often a multidimensional, multifaceted process (McCauley, 2001; Langley & Lombardino, 1991) that encompasses standardized measures, ecologically valid observation and accounts for different response modalities (Calculator & Black, 2009; Langley & Lombardino, 1991). Additionally, Carter, Leed, & Murira (2002) suggested that the assessment process should be individualized. The guidelines of the American Speech-Hearing Association (2006) state that speech-language therapists therefore need to combine standardized tests (norm-referenced) with non-standardized (descriptive assessment) methods. Mille & Paul (2000) recommended that using multiple methods will ensure the collection of data and can furnish information regarding the learners' functional communication abilities and needs. The purpose of using multiple methods will lead to comparisons and therefore facilitate looking for similarities and/or differences that would support or refute theory building or hypothesis testing (Ferguson, 2000).

One method of assessment that can be used is criterion-referenced assessment. This type of assessment is a highly effective means of obtaining information about learners' ability to perform specific language tasks (Paul, 2006). It has an advantage over norm-referenced assessment in that it is precise in identifying what students can and cannot do with daily oral and/or written language tasks (Kaderavek, 2011). What norm referenced tests don't do particularly well is demonstrate how a child functions in a natural setting (the classroom), or how children use oral and written language in real life situations. Criterion-referenced assessments enable a clinician to plan meaningful and detailed intervention which focuses on a learner's difficulty as it

applies to his/her daily academic and social life (Paul, 2006). Also, this type of assessment is generally quick in delivering and can be used to retest a learner's performance at the end of a therapy block in order to establish whether a student's targeted language skill has improved (Kaderavek, 2011).

To gain a true insight into a student's language disorder, it is often recommended that both types of language assessments are used: norm-referenced and criterion-referenced (Paul, 2006). The information provided by both forms of assessment not only tells us how well a learner is performing in contrast to his/her peers, but also what functional language areas are best to target in language intervention (Kaderavek, 2011).

Given the heterogeneity of the group of children who are classifiable as presenting with "multiple disabilities" as well as the limitations of the methods of assessment that are available and the fact that there is no single assessment instrument that encompasses all the necessary components essential for assessing such learners (Hogg, 2007; Langley & Lombardino, 1991), it becomes necessary for speech-language therapists to be flexible in their approaches to the assessment. To this end, it is necessary for speech-language therapists to modify assessment by selecting and combining a variety of instruments to fulfil the assessment goals. Modification is dependent on the speech-language therapist's creativity and skill (Pirila et al., 2007). Modification of test instruments and developmental scales may take a wide variety of forms however, according to Langley & Lombardino (1991), it involves a) adaptation of the mode/style of presentation of stimuli; b) changes in administration procedures; c) changes in or alterations to the actual test stimuli; d) alteration of learners response mode; and e) incorporation of additional aids and equipment. Table 1 provides a summary of modifications to the assessment process that have been recommended by various authors.

Table 1

*Examples of Modifications to the Assessment Process*

| Modification | Suggestion |
|---|---|
| Positioning of the learner (Pirila et al., 2007) | The speech-language therapist needs to establish optimal positioning of the learner for looking and responding. This could be in a wheelchair/buggy or in a prone position over a wedge. |
| Response mode (Leahy, 1995) | Instead of a verbal response, eye gaze, head movement or limb movement should be considered. |
| Elimination of time limits (Cagher et al., 1992) | The learners' response may be slow due to his/her disability; therefore, no time limits should be set. |
| Test stimuli altered (Pirila et al., 2007) | The speech-language therapist will need to determine which test stimuli best suits the learner: colour pictures versus black and white pictures, the size of the picture, should pictures be placed apart, etcetera. |
| Facilitation of response (Pirila et al., 2007) | If it is a learner with a physical disability the speech-language therapist may need to stabilize the hand or shoulder to facilitate an adequate response. |
| Omission of test item (Costigan & Light, 2011) | This may be considered depending on the learner's world exposure or vocabulary. |
| Reduction of test stimuli (Zascavage & Keefe, 2007) | Instead of presenting four pictures simultaneously, two pictures can be presented depending on the learners capabilities. |
| Administration and response mode (Langley & Lombardino, 1991) | If the test requires the learner to manipulate objects, the speech-language therapist could manipulate the objects with guidance from the learner through eye gaze etcetera. |

### 2.4.6 Reporting

Reporting is a critical aspect of assessment. The assessment report moves the personal experience into the community context because the purpose of the report is to make recommendations regarding service (Ferguson, 2000). Assessment reports can take the form of a particular macrostructure. Most reports contain identifying information, background information, assessment procedure and results and, finally, recommendations/conclusions. According to Guteirrez-Clellen and Pena (2001), in the conclusions the speech-language therapist makes subjective judgments regarding which behaviours are salient and therefore need to be reported. Reports are essential because they contain the assessment results and these results must be clearly and accurately documented and communicated to those affected. This includes all professionals working with the learner (therapists and teacher) as well as the family

and the learner. Communicating the results is essential in order for all stakeholders to understand where the child is at and what the next goal is.

## 2.5 Summary

This chapter presented a broad view of assessment and highlights the scope of assessment by speech-language therapists in relation to learners with multiple disabilities. Furthermore, it discussed best practice as it relates to assessment. It is evident from the literature that there are currently many aspects that could guide an assessment. However, the question of appropriateness to the unique South African context still remains.

# Chapter 3

# Methodology

This chapter discusses the research methodology that was used for this research project. Firstly, the aims and sub aims are outlined. This was a two-phase study. The first phase was the development of the research tool. The second phase comprised the research design, sampling strategy, data collection method, as well as the research procedure, which includes a discussion of the pilot study. Furthermore, the methods of analyses of the data will be explored. This chapter concludes with the researcher's reflections of being both the researcher and a participant.

## 3.1 Research Aims

### 3.1.1 Main aim

The main aim of the research project was to determine the assessment methods used by speech-language therapists when assessing learners with multiple disabilities in public schools in Gauteng.

### 3.1.2 Sub aims

The sub aims were:

1. To describe the context in which the speech-language therapist work in terms of: contexts of the school, the experience and training of the speech-language therapist, parent involvement, individual or group therapy the role of the speech-language therapist in the school context, the availability of resources, and the uniformity of schools.
2. To explore what information speech-language therapists aim to glean from assessing learners with multiple disabilities
3. To develop an understanding of what the results of a speech-language assessment are used for
4. To identify and describe what school-based speech-language therapists describe as best practice; additionally, to determine how they have adapted their vision of

best practice given the resources and contextual factors with and in which they work

5. To determine school-based speech-language therapists' understanding of and views on governmental education policy and vision.

### 3.2 Research Design

A qualitative approach was adopted for this research project. Qualitative research, broadly defined, means any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification (Golafshani, 2003). Unlike quantitative research where the researcher seeks causal determination, prediction and generalization of findings, qualitative researchers seek illumination, understanding and extrapolation of similar situations instead (Golafshani, 2003). Furthermore, qualitative research involves the systematic collection, organization and interpretation of textual material derived from talking and/or observation (Kitto, Chesters, & Grbich, 2008; Malterud, 2000). It is used in the exploration of meanings of social phenomena as experienced by individuals themselves in the natural context. In contrast to quantitative data, qualitative data takes the form of words or pictures rather than numbers (Cresswell, 2003). Since there are no extant measures that evaluate the validity, reliability and relevance of assessment methods used by speech-language therapists with learners with multiple disabilities in South Africa, this has to be established by the use of qualitative methods.

This study employed a qualitative descriptive approach (Sandelowski, 2000). Qualitative descriptive studies tend to draw from general tenets of naturalistic inquiry. Qualitative work not is produced from any "pure" use of a method (Sandelowski, 2000). Accordingly, qualitative descriptive studies may have undertones of grounded theory since researchers may employ one or more techniques associated with grounded theory; they can also have narrative or phenomenological hues because the researcher may seriously attend to certain words and phrases or moments of experience (Cresswell, 2003). A qualitative descriptive approach also allows the researcher to examine the relevant factors about the assessment of learners with multiple disabilities in detail to arrive at an appropriate description of the reality of assessments in schools. Furthermore, the qualitative method allows the participants to describe the various methods of assessments they use.

## 3.3 Participants

### 3.3.1 Sampling

A convenience sample was used because this method of sampling deliberately targets members from a section of the population group which the researcher wishes to study (Walliman, 2001). In so doing, speech-language therapists working at eight special needs schools in Gauteng that cater for learners with multiple disabilities were approached. The number of participants was limited since there are not many schools that cater for these learners and speech-language therapists are not employed at every such school. Convenience sampling is the least costly in terms of time, effort and money; however, according to Marshal & Rossman (1999), it may result in data of poor quality and may lack intellectual credibility. The researcher endeavoured to minimize such occurrences by the criteria set for the selection of participants.

Initially, speech-language therapists who were heads of department were to form a separate focus group. This option was considered due to the fact that participants may not have felt comfortable having their head of department present at a focus group. They may have felt compelled to produce responses that they perceived to be those required by their heads of department. However, due to time constraints, the participants at certain schools preferred to be interviewed as a group that included their head of department. The researcher asked participants before the focus group if they were comfortable being interviewed with their head of department present. It was evident that all participants were comfortable with such an arrangement. The researcher was aware that heads of departments were not keen on forming a separate group. Due to the fact that schools catering for learners with multiple disabilities are scarce and that there are not many speech-language therapists employed at each school, the researcher allowed heads of departments to be part of the focus groups because it increased the number of participants and in most cases changed the group dynamic to a focus group instead of a joint interview at specific schools.

### 3.3.2 Criteria for the selection of participants

The criteria for the selection of participants were as follows:

a. The participants were required to have at least one year’s experience of working with learners with multiple disabilities. This ensured more detailed discussion in

the focus groups.

b. All participants were required to be school-based speech-language therapists currently working in schools catering for learners with multiple disabilities in Gauteng.

### 3.3.3 Participant exclusion criteria

The exclusion criteria for participants were as follows:

a. Speech-language therapists who had less than one year's experience of working with learners with multiple disabilities.

### 3.3.4 Description of participants

Twenty five speech-language therapists participated in this research. All were female. The majority (14) was White and the remaining four participants were Black and Indian. These demographics reflect the current race statistics in South Africa regarding speech-language therapists (Khoza-Shangase & Masoka, 2009; Pascoe & Norman, 2011). The participants are presented in Table 2.

Table 2

*Description of participants*

| Participant | Race | First (home) language |
|---|---|---|
| 1 | Indian | English |
| 2 | White | English |
| 3 | White | English |
| 4 | Indian | English |
| 5 | Black | Zulu |
| 6 | Black | Zulu |
| 7 | White | Afrikaans |
| 8 | White | Afrikaans |
| 9 | White | Afrikaans |
| 10 | White | Afrikaans |
| 11 | White | Afrikaans |
| 12 | White | Afrikaans |
| 13 | White | Afrikaans |
| 14 | White | Afrikaans |
| 15 | White | Afrikaans |
| 16 | White | Afrikaans |
| 17 | White | Afrikaans |
| 18 | White | English |
| 19 | White | English |
| 20 | White | English |
| 21 | White | English |
| 22 | White | English |

| | | |
|---|---|---|
| 23 | White | English |
| 24 | White | English |
| 25 | White | English |

### 3.3.4.1 Years of experience

The participants ranged in years of experience (an average of 15, 2 years) and years of experience with learners with multiple disabilities (an average of 11, 9 years). This information is provided in Table 3 below.

Table 3

*Participants' years of experience*

| Participant | Years of experience | Years of experience with learner with multiple disabilities |
|---|---|---|
| 1 | 15 | 2 |
| 2 | 2 | 2 |
| 3 | 34 | 24 |
| 4 | 2 | 2 |
| 5 | 9 | 5 |
| 6 | 4 | 3 |
| 7 | 25 | 20 |
| 8 | 38 | 38 |
| 9 | 3 | 2 |
| 10 | 23 | 23 |
| 11 | 5 | 5 |
| 12 | 22 | 20 |
| 13 | 18 | 15 |
| 14 | 16 | 13 |
| 15 | 6 | 4 |
| 16 | 2 | 2 |
| 17 | 18 | 11 |
| 18 | 33 | 28 |
| 19 | 32 | 26 |
| 20 | 23 | 18 |
| 21 | 8 | 4 |
| 22 | 4 | 2 |
| 23 | 27 | 23 |
| 24 | 12 | 8 |
| 25 | 14 | 8 |

### 3.3.4.2 Highest qualification of participants

Participants were asked about their highest qualification in Speech Pathology, be it undergraduate, masters or doctorate. Sixty six percent of participants had an undergraduate degree in Speech Pathology and 44% of participants had a master's degree in Speech Pathology. None of the participants had a doctoral degree. The

participants were also asked if they were trained in Neurodevelopment Treatment. The researcher included this question because all questions asked participants pertained to learners with multiple disabilities, the primary disability being a physical one. Neurodevelopment Treatment is one of the most available post graduate clinical training courses in the country and many South African speech-language therapist's who work with children with physical disabilities enrol for this course. The course represents a holistic approach dealing with the quality of patterns of coordination and problems of individual muscle function (Butler & Darran, 2001). It involves the whole person, not only his sensory-motor problems but also problems of development, perceptual-cognitive impairment, emotional, social and functional problems of daily life (Butler & Darran, 2001).

## 3.4 Preliminary procedure

### 3.4.1 Participant recruitment

Howe and Lewis (1993) warned that recruitment of participants can be time consuming, especially if the topic under consideration has no immediate benefit to the participant. However, because the assessment of learners stands central in a school-based speech-language therapist's post description, speech-language therapists were enthusiastic about participating.

Each school's secretary was contacted telephonically to make an appointment for the researcher to meet with the principal of the school and the head of the speech-language therapy department. At this meeting, a brief description of the research project was discussed. At the same time the researcher enquired if the school would allow the selected personnel to participate in the study and permission was asked of the school's principal to make use of the school premises to administer the focus group when required. It was made clear that the focus group would not disrupt the normal running of the school since as it would take place after school hours. Using the school premises as a location could prove to be a limitation because a neutral location may contribute to avoiding either positive or negative associations with a particular site or building (Halkier, 2010; Powell & Single, 1996). However, using the school premises to administer the focus group was convenient for the participants and thus contributed to encourage their participation. At the meeting held with the principal and the head of the speech-language therapy department the criteria for participant

selection were also discussed.

Once permission was obtained from the principal (Appendix 1)and the head of the speech-language therapy departments, each participant was contacted individually and forms for informed consent (Appendix 2) were distributed. Informed consent is required of research participants if the data are collected through any forms of communication, interaction or intervention. Information on the forms for informed consent followed the principles stated by Bailey (2008). It was made clear that participation was totally voluntary and that the decision not to participate would not have an adverse effect on their work conditions. In addition to the consent form, options of the times and venues of the different focus groups were provided. The participant therefore had the choice to attend the focus group that was most convenient for her (Blake, 2003). The researcher therefore allowed participants freedom of choice and volunteerism which are principles inherent to ethical research. Although in most research the researcher is interested in matching participants by age, gender, skills and language (Blake, 2003), the heterogeneity of participants in this research method yielded diverse data. This is due to the fact that skill and the years of experience each participant has attained over the years differed. However, there was some degree of homogeneity since all participants were of the same profession and all worked in special schools for the Gauteng Department of Education.

The researcher took into account that the number of speech-language therapists employed at each school differed. Some schools had a speech-language department that consisted of four to six therapists and these therapists found it easier to all attend the same focus group. The researcher foresaw that other focus groups could consist of speech-language therapists from many schools and that the quality of data obtained from these focus groups may differ from the data collected in focus groups that consisted of speech-language therapists working together at a school. However, the participants opted to attend the focus group that was conducted at their own school which resulted in each school forming its own focus group. According to Bloor, Frankland, Thomas, and Robson (2001) the advantage of discussions involving pre-existing social groups has become increasingly recognizable. Furthermore, this arrangement proved to be an advantage; Marshall and Rossman (1999) found that the fact that research participants already knew each other had an additional advantage. Colleagues could relate to each other’s comments to actual incidents in their shared

daily lives. This became evident in the focus groups. However, the researcher found that due to the fact that participants worked together in the same school, the participants of each focus group used the same methods of assessment. This led the group to discuss a single method with minimal difference of opinions.

To ensure attendance at the arranged time, Silverman (2004) suggested that the researcher should over-recruit by 50% and issue reminders. This recommendation was followed because the quality of the data could depend on the number of participants present at the focus group (Morgan, 1996).

## 3.5 Data collection method

The research was conducted in two phases. The first phase entailed the development of a set of guidelines against which the data could be evaluated. The aim of these guidelines were to provide a skeleton of a proposed set of guidelines for the assessment of learners, based on the principles that have been recommended in international and local literature. The second phase entailed qualitative data gathered through focus groups and interviews. In addition, this phase consisted of a review of assessment reports.

### 3.5.1 Phase one

Phase one involved the development of the research tool, which is a set of guidelines. These guidelines were created from the literature review presented in Chapter 2. Table 4 describes the different journal articles that provided the theoretical background to the checklist presented. The inclusion criteria of these journals were that the article should focus on assessment or multiple disabilities; additionally, they were journals published in English and were peer reviewed. Most importantly, these articles were published recently (between 2007 and 2011) and focused on the assessment of children of school going age. One article (Smith & Jones, 1999), was included since it contained essential information regarding assessment in the South African context.

Table 4

*Journals that provided a theoretical background to the checklist*

| Author | Date | Journal | Topic | Recommendation |
|---|---|---|---|---|
| Smith, P.& Jones, L. | 1999 | South African Journal of Communication Disorders | Assessment of intellectually disabled learners, aged 4-8 years | Collaborative model recommended |
| Costigan & Light | 2011 | Language, Speech & Hearing Services in Schools | Functional seating for school aged children with cerebral palsy | Modifications are important |
| Bailey, Stoner, Angell, & Fetzer | 2008 | Language, Speech & Hearing Services in Schools | School-based speech-language therapists' perspective on dysphagia management in the schools | Collaboration |
| Calculator & Black | 2009 | American Journal of Speech Language Pathology | Validation of an inventory of best practice of alternative and augmentative communication services to students with severe disabilities in general education classrooms | Collaboration, learner centred approach |
| Zascavage& Keefe | 2007 | Journal of Disability Policy Studies | Students with severe speech and physical impairments | Collaboration, learner centred, modifications |
| Paradice, Davies,& Solomon | 2007 | Child Language Teaching & Therapy | Developing successful collaborative practices for children with speech and language difficulties | Collaboration |
| Hebbeler & Rooney | 2009 | Language, Speech & Hearing Services in Schools | Accountability of services for young children with disabilities and the assessment of meaningful outcomes | Collaboration, learner centred, modifications |
| Caesar & Kohler | 2009 | Communication Disorders Quarterly | A survey of language assessment procedures used by speech-language therapists | Collaboration, language of assessment |
| Hasson & Jeffee | 2007 | Child Language Teaching & Therapy | The case for dynamic assessment in Speech and Language Therapy | Learner centred, language of assessment |
| Hogg | 2007 | Journal of Policy & Practice in Intellectual Disabilities | Complex needs and complex solutions: the challenge of profound intellectual and multiple disabilities | Collaboration, client centred, modifications |
| Carnaby | 2007 | Journal of Policy & Practice in Intellectual | Developing good practice in the clinical assessment of people | Collaboration, client centred, modifications |

| Author | Date | Journal | Topic | Recommendation |
|---|---|---|---|---|
| | | Disabilities | with profound intellectual disabilities and multiple impairments | |
| Paul & Roth | 2011 | Language, Speech & Hearing Services in Schools | Guiding principles and clinical applications for Speech-Language Pathology practice in early intervention | Collaboration |

In addition to published peer reviewed journals, policy documents that describe assessment of learners with multiple disabilities were included. These are described in Table 5.

Table 5
*Policy documents used in the theoretical background to the guidelines*

| Policy | Date | Recommendation |
|---|---|---|
| White Paper 6 | 2001 | Assessments should be fair, bias free and sensitive.<br>Learner centred<br>Collaboration |
| National strategy on screening, identification, assessment and support | 2008 | Assessments should be fair, bias free and sensitive.<br>Learner centred<br>Collaboration<br>Holistic |

Figure 5 presents a summary in the form of a schematic diagram of all the relevant information discussed in literature regarding assessment that was used in the creation of the guidelines.

The guidelines that were developed by the researcher are presented in Table 6**.** The purpose of the guidelines was to provide a framework for the assessment of learners, based on the principles that have been recommended by the literature. The primary function of these guidelines was to assist the researcher in evaluating and analysing the data gathered in Phase 2. The guidelines were organized into eight usable categories. These categories were further subdivided into relevant and detailed questions that cover all the important aspects of the category. Furthermore, the guidelines were arranged in a logical sequence in terms of steps taken when assessing learners with multiple disabilities. Moreover, the guidelines include a comment

column in which the data could be recorded.

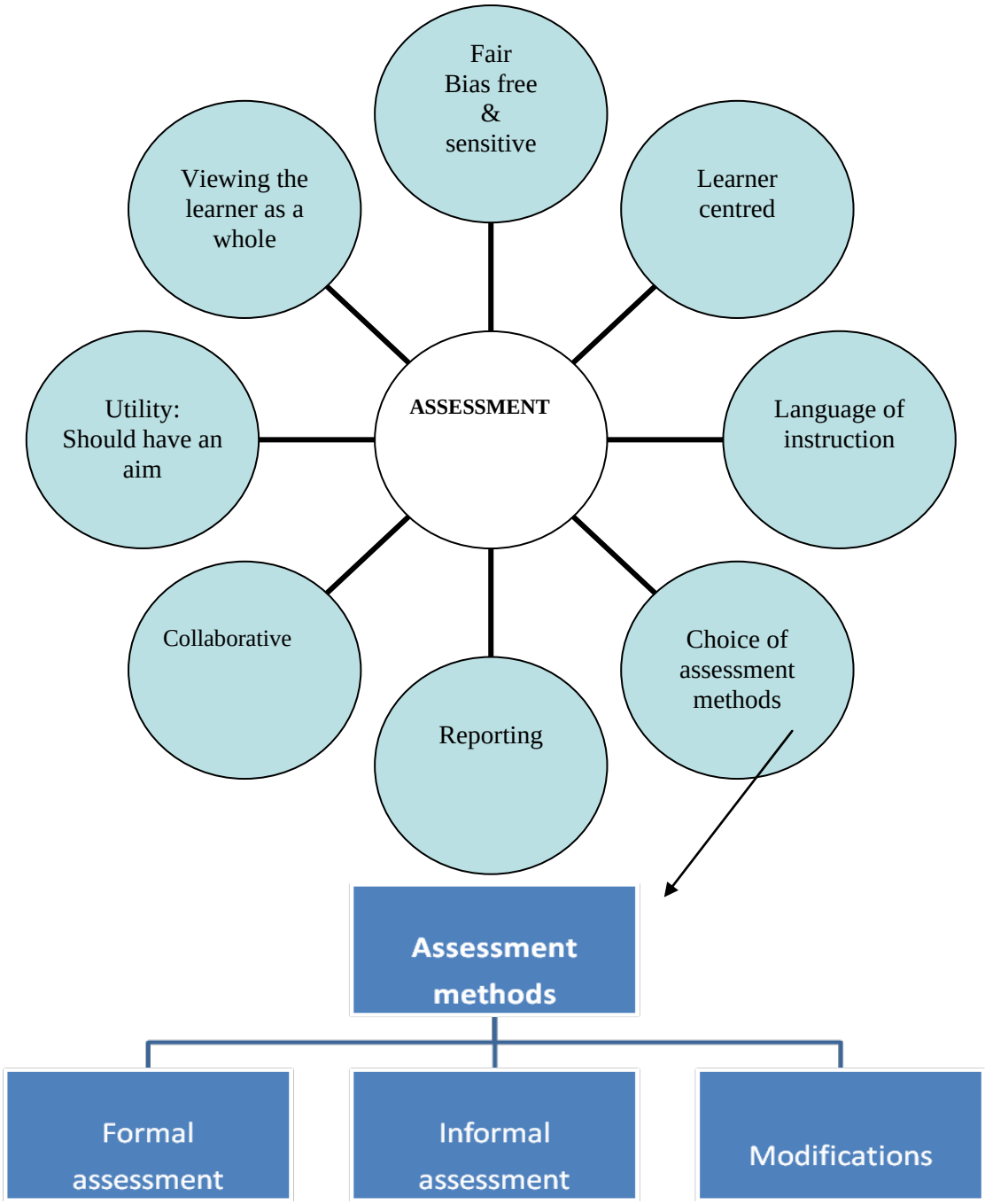


*Figure 5*. Significant aspects for speech-language therapist in the assessment of learners with multiple disabilities

Table 6

*Guidelines for best practice when assessing learners with multiple disabilities: Research tool for analysing data*

| **Categories** | **Questions** | **Comment** |
|---|---|---|
| Fair and bias free assessment | Assessment of every learner? | |
| | Protocol for assessment? | |
| | Sources of potential bias? | |
| Aim of the assessment | To determine candidacy to the school? | |
| | To determine goals for intervention? | |
| | For placement in a class? | |
| | For the termination of therapy? | |
| | To monitor the learner's progress? | |
| Language of assessment | Assess using the language of teaching at the school? | |
| | Assess using the learners' home language? | |
| | Assess using an untrained, casual translator? | |
| | Assess using a trained translator? | |
| Viewing the learner as a whole | Take into account the learners' impairments and modify accordingly? | |
| | Take into account the learners' likes and dislikes? | |
| | Take into account the learners' worldly exposure? | |
| Learner centred | Employ optimal positioning during the assessment according to the learner's abilities? | |
| | Consider medical conditions? | |
| | Consider social contexts:<br>- Has the learner previously attended a school?<br>- Lives with parents or guardians? | |

| Categories | Questions | Comment |
|---|---|---|
| | Adapt assessment according to the learners needs:<br>- Size of pictures?<br>- Colour of pictures?<br>- Object verse pictures?<br>- Time allocation?<br>- Method of response? | |
| Collaboration during assessment | Involvement of parents? | |
| | Involvement of other therapists? | |
| | Involvement of teachers? | |
| | Involvement of other stakeholders? | |
| | Trans-disciplinary verse?<br>Multidisciplinary verse?<br>Interdisciplinary? | |
| Method of assessment: | Formal assessment<br>• Language?<br>• Speech?<br>• Hearing?<br>• Feeding? | Name of standardized test and subtest |
| | Informal Assessment<br>• Observation of receptive and expressive language?<br>• Parent interview?<br>• Dynamic assessment?<br>• Criterion referenced assessment?<br>• Feeding assessment?<br>• Hearing? | |
| | Modifications to assessments<br>• Modification to the standardized procedures?<br>• Modification to the mode of response?<br>• Alteration of the picture size?<br>• Alteration of the picture colour?<br>• Reduction of the number of pictures presented to the learner?<br>• Alteration in the spacing of the pictures?<br>• Elimination of time limits? | |
| Reporting | Reporting to parents/caregivers? | |

| Categories | Questions | Comment |
|---|---|---|
| | Reporting to therapists and other professionals? | |
| | Written report for learner's profile? | |

The guidelines were used to assist the researcher in analysing the data. The data obtained from each of the focus groups were compared to the guidelines in order to identify basic themes in the data. The guidelines were created from principles of best practice according to the literature. These guidelines were not validated as they merely represent a summary of best practice guidelines. Future research may however validate these guidelines to create a checklist for use in the assessment of learners with multiple disabilities.

### 3.5.2 Phase two

#### 3.5.2.1 Methods

Inherently, qualitative research has a multi-method focus (Walliman, 2001). The use of multi-methods reflects an attempt to secure an in-depth understanding of the phenomenon in question (Denzin & Lincoln, 2000). The researcher therefore chose to utilize focus groups and document reviews. The primary method of obtaining data was by conducting focus groups, but assessment reports were also reviewed. The combination of a multiple methodological practice as a strategy was selected because of the recommendation that such an approach adds rigor, breadth, complexity, richness and depth to an inquiry (Denzin & Lincoln, 2000) and, furthermore, triangulation contributes to the validity of the study.

#### 3.5.2.2. Focus groups

Peek and Fothergill (2007) stated that a focus group is a form of qualitative research in which groups of people are asked about their perceptions of a concept. Although focus groups are often simply used as a quick and convenient way to collect data from several people simultaneously, focus groups explicitly use group interaction as part of the method. This method is particularly useful for exploring people's

knowledge and experiences and can be used to investigate not only what people think but also how they think and why they think that way (Kitzinger, 1995). Because questionnaires can be impersonal, focus groups allow interviewers to study people in a more natural setting. They are also cost effective in that the researcher can obtain results relatively quickly. Another advantage of the use of focus groups is that listening to others verbalizing experiences stimulates memories and ideas in other participants. Although focus groups do not work well on sensitive topics, Lofland & Lofland (1984) and Blake (2003) argued that focus groups are productive if the topic is reasonably public.

There are many aspects of focus groups that were taken into account before the researcher administered the focus groups. One of the issues was the influence that the researcher may have on the focus group, and therefore on the results that are obtained. The role of the moderator is critical to the research project as she facilitates interaction, promotes debate, challenges participants and, most importantly, keeps the session focused (Bloor, Frankland, Thomas, & Robson, 2001). Silverman (2004) added that the moderator's role entails posing the questions, keeping the discussion flowing and enabling group members to participate fully. In this research project the researcher also acted as the moderator. According to Peek and Fothergill (2007), the researcher has less control and therefore time can be lost in pursuing irrelevant issues. In such cases the researcher redirected the discussion to the topic at hand. In addition, the data are difficult to analyse since talking takes place in reaction to the comments of other group members (Peek & Fothergill, 2007). This was apparent during most of the focus groups. According to Jowett (2006) it takes a great deal of practice and tact on the part of the moderator to minimize group domination by the talkers and to bring less talkative members into discussion. The researcher ensured that each participant took part in the discussion; she did so by asking the quieter participants if they had anything to add. Although the results of the research project may be influenced by the researcher, thereby raising the question of validity, the researcher tried to remain unattached and listened more than she spoke.

Another issue that warrants consideration in conducting the focus groups is the behaviour of the participants. Focus groups are used as a means to promote discussion so that each participant has the opportunity to exchange ideas, to scaffold their thinking about the issues at hand and to express himself/herself as a member of the group (Jowett, 2006). During group discussions individuals may shift due to the

influence of other group members' comments; it has been observed that opinions may also be held with certainty (Lewis, 2000). When viewing the "focus", namely the assessment of learners with multiple disabilities and the "group", namely speech-language therapists, it is evident that the focus group may yield a diversified array of responses (Lewis, 2000). The discussions during the focus group stimulated new ideas and creative concepts regarding administering an assessment on learners with multiple disabilities. Howe & Lewis (1993) and Jowett (2006) add that the interaction allows the participants to ask questions of each other as well as to re-evaluate and reconsider their own understanding and their own practice. This was also evident in the focus groups in this research. Moreover, if focus groups work well, trust develops and the group may explore solutions to the problem as a unit (Kitzinger, 1995).

In addition to the cohesion of the group and the power that it can offer participants to voice their thoughts, Race, Hotch, and Parker (1994) stated that the opportunity to be involved in the decision-making process, to be valued as experts and to be given the chance to work collaboratively with researchers can be empowering for many participants. However, the researcher was aware that the focus group could be the ideal opportunity for participants to "vent" by exploiting the opportunity to express their frustrations. For example, the researcher anticipated that some of the participants may have used the focus group as a discussion for their poor working conditions, their lack of resources or even their lack of autonomy at the school. This in turn could lead to poor and heavily influenced data. When participants began voicing their frustrations to such an extent that it influenced the group members in such a way that the focus of the interview was disturbed, the researcher reminded participants of the goal of the focus group and redirected the discussion to the topic of the research project.

#### 3.5.2.2.1 Group size

The group size is central to the success of the focus group method. However, opinions regarding the ideal size vary. Frey and Fontana (1991) stated that 8-10 participants should form a focus group whereas Morgan (1997) argued that 6-12 participants are ideal. In this study 2-5 participants were used in each focus group because small groups work best in terms of maximizing participation and still maintaining order (Morgan, 1997). Moreover, smaller groups are preferable when the participants have a great deal to share about the topic or have intense, lengthy

explanations regarding the topic (Lewis, 2000).

#### 3.5.2.2.2 Description of the focus groups

Eight focus groups were conducted, meaning that speech-language therapists from eight schools participated. Two focus groups consisted of two speech-language therapists each, another two groups consisted of four speech-language therapists and the remaining four focus groups each consisted of three speech-language therapists. With the exception of two, all focus groups included heads of departments.

#### 3.5.2.2.3 Procedure followed during focus groups

When administering the focus group, the researcher, who also acted as the moderator, welcomed all participants and thanked them for their time. She then introduced herself and briefly described the purpose of the focus group and the larger research project. Thereafter, the researcher introduced the ground rules and informed the participants that the discussion would be recorded for transcription purposes only and that all names would be kept confidential (Schutt, 1996). Because the discussion was recorded, it was requested that only one person speak at a time (Peek & Fothergill, 2007). Participants were requested to identify themselves before they spoke (Howe & Lewis, 1993). As an “ice-breaker” each participant introduced himself/herself and told the group a bit about his/her experience and training (Lewis, 2000). This introduction was important for collecting data related to identifying information and number of years of experience of each participant. At the end of the discussion the participants were asked if there was anything they would like to add. The researcher then thanked the participants once again and provided them with her contact information.

Two of the focus groups were recorded on videotape with the use of accompanying field notes (Silverman, 2004). Not all participants were comfortable with such recording; therefore, if one participant chose not to be recorded on videotape, the focus group was recorded on audiotape only. Lewis (2000) suggested that notes should be complete and useable in the event that the video recorder malfunctioned. All focus groups were, however, audio taped for transcription purposes. Regardless of the method of data collection, the moderator made notes after each session to facilitate data analysis.

In accordance with Kidd & Parshall’s (2000) recommendations, a research

assistant assisted in setting up the room as well as the video camera. The research assistant was briefed on the conduction of the focus group. The assistant's primary role was to serve as an observer as well as to be on stand-by if there was a problem with the video camera. It was the responsibility of the research assistant to observe and, in so doing, to pick up verbal and non-verbal cues about the social situation and the mood of the participants (Blake, 2003). The research assistant was also briefed on confidentiality and was trained prior to the collection of any data. He was introduced to the participants as the research assistant and his role was explained to the participants.

#### 3.5.2.2.4 Focus group questions

A "funnel approach" was used when it came to questioning, that is, questions ranged from general to specific (Appendix 3). Lewis (2000) suggested this was a way of quickly engaging the interest of participants. Open-ended questions allow participants to answer from a variety of dimensions. Siedman (2005) stated that open-ended questions established a territory to be explored while allowing the participant to take any direction he/she wants. Questions that include *"how", "why", "under what condition"* and similar ones may suggest that the researcher is interested in complexity and they facilitate discussion (Jowett, 2006). However, Krueger (1988) argued that why-questions should be used sparingly in focus groups because they force participants to provide quick answers that seem rational and appropriate to the situation.

All participants were invited to a feedback session on the collected data once all focus groups and interviews were conducted and the data were analysed.

### 3.5.2.3 Document reviews

In addition to attending a focus group, each participant was requested, in the consent form, to bring along two assessment reports of speech language assessments conducted by them on learners with multiple disabilities at the school where they work. These reports were important to determine the link between what the participants described in the focus group and what they wrote up in reports. Although the researcher neglected to stipulate in the consent forms that the reports would be analysed, participants were told verbally that the assessment reports would contribute to the data collected in this research project. The participants were asked to prepare

these reports prior to the focus groups by removing any identifying information. This was done to preserve anonymity. Envelopes were provided at the focus group for these reports to be placed in. Because the focus group size was small, anonymity of the author of the reports could not be guaranteed and the participants were likewise informed in the information letter which was received prior to the study. The reports allowed the researcher to understand the discrepancy (if any) between what participants say and what they do (Howe & Lewis, 1993). Many speech-language therapists did not bring the reports to the focus group as they forgot to do so; some of them faxed the reports at a later stage. These reports were analysed privately after the focus group.

The aims of analysing the assessment reports were as follows:

1. Evaluation of the content of the case history or background information of the learner;
2. Determine the method/s of assessment used by the speech-language therapists when assessing the learners;
3. Determine which aspects of speech and language competence and development were assessed;
4. Determine the presence of a feeding and swallowing assessment, the methods used and
5. Determine evidence of a hearing assessment.

The researcher was aware that reports are written for different purposes. However, being employed at a special needs school herself, the researcher is informed that in most schools assessment reports are compiled to be read by the professionals at the school (teacher, other therapists, principal). These reports are therefore simplified and exclude any professional jargon. A more detailed report will only be compiled if it is requested by a parent for an external professional.

### 3.5.3 Pilot study

A pilot study is a small experiment designed to test logistics and gather information prior to a larger study in order to improve the latter's quality and efficiency (Marshall & Rossman, 1999). A pilot study can reveal deficiencies in the design of a proposed experiment or procedure and these can then be addressed prior

to commencement of the main study. A good research strategy requires careful planning and a pilot study will often be a part of this strategy (Marshall & Rossman, 1999). A pilot study was administered once permission was obtained from the Ethics Committee of the University of the Witwatersrand as well as from the Gauteng Department of Education.

#### 3.5.3.1 Aims of the pilot study

1. To determine if the participants understood the questions correctly

2. To determine if the researcher and research assistant were sufficiently skilled in the procedures

3. To determine the correct operation and placement of recording equipment

4. To determine the best arrangement/positioning of the chairs in the room to elicit optimal discussion

5. To establish a time frame, that is, how long the discussion would take

6. To familiarise the researcher with the technique of interviewing

#### 3.5.3.2 Participants

Three speech-language therapists who work in schools in Gauteng were invited to participate in the pilot study. They fitted the criteria for inclusion. Consent forms were distributed to the participants in pilot study and collected before the study. On the day scheduled for the focus group, the researcher was informed that one of the participants was unable to join the focus group. The focus group was therefore conducted with two participants. It could be argued that this was a joint interview rather than a focus group. The participants requested that the focus group be continued with only the two of them since they both had to make special arrangements to free the afternoon to be present. The focus group was conducted at the school where the speech-language therapists were employed. The researcher had the permission of the speech-language therapists to make a video recording as well as an audio recording of the focus group. The demographic details of the participants of the pilot study are presented in Table 7.

Table 7

*Demographic details of participants*

| | **Participant 1** | **Participant 2** |
|---|---|---|
| **Gender** | Female | Female |
| **Years of experience** | 15 | 30 |
| **Years of experience with learners with multiple disabilities** | 6 | 30 |

### 3.5.3.3 Outcomes of the pilot study

The outcomes of the pilot study were as follows:

1. The focus group was conducted in English. When the researcher asked the participants if they spoke and understood English sufficiently to participate in a focus group, both participants indicated that they were competent in English. However, in the course of the discussion, it became evident that not all questions were comprehensible. This could have been due to the fact that the participants were second language English speakers and did not understand the terminology, or that the question was indeed not comprehensible. The researcher therefore simplified the wording of the question and this made her aware of the need to check with participants in the study that they had fully understood the questions. The question of "what information do you aim to obtain when assessing learners with multiple disabilities" was changed to "when going into an assessment with a learner with multiple disabilities, what type of information do you want to elicit?" Since the participants had trouble comprehending the question, the researcher became aware that they may also have problems with expressing their views. In such cases where it was evident that they had difficulty expressing themselves in English the researcher suggested that they speak in Afrikaans. It was however evident that being part of a group; the participants often assisted each other in completing a sentence. This is a marked limitation of the study, since participants were not always able to express themselves.

2. Initially, the researcher took many field notes during the focus groups. She then realized that she should leave that task to the research assistant as this prevented her from actually listening to the participants and from further probing. It was evident that it was best to place the video recorder at a distance and therefore capture the entire group. The Dictaphone was placed between the participants. The ideal seating

arrangement was in a semi-circular manner that allowed participants to face each other; this arrangement also allowed for the best video recording.

## 3.6 Analysis of data

Analysis is an on-going process and started as soon as any data were collected (Miles and Huberman, 1994). Miles and Huberman (1994) suggested that leaving analysis to the end could rule out the possibility of collecting new data to fill in the gaps or to test new hypotheses that emerge during analysis. Furthermore, it makes analysis an overwhelming task that demotivates the researcher and reduces the quality of the end result. The researcher therefore started the analysis process as soon as data became available.

### 3.6.1 Focus groups

#### 3.6.1.1 Transcription

All focus group data were transcribed by the researcher, using guidelines from McLellan, MacQueen and Neidig (2003). In accordance with their guidelines the transcripts are a verbatim account of the focus group discussion and interviews; the researcher included contextual information regarding silence or pauses in a conversation. In addition, the researcher aimed at preserving the naturalness of the transcription.

#### 3.6.1.2 Analysis

Analysis consists of three concurrent flows of activity, namely 1) data reduction, 2) data display and 3) drawing/verifying conclusions (Miles & Huberman, 1994). Data reduction is a form of analysis that sharpens, sorts, focuses, discards, and/or organizes data in such a way that “final” conclusions can be drawn and verified. Display of data is a compressed assembly of information that permits drawing conclusions and action.

An important aim of analysis with focus groups is to identify areas of agreement and controversy to better understand how perspectives arise (Kidd & Parshall, 2000). Kidd and Parshall (2000) recommend that an important issue with focus groups is gauging whether an issue constitutes a theme for the group or merely a strongly held viewpoint of one or a few members. Kitzinger (1995) supported this

by stating that it is not appropriate to give percentages in reports on focus group data; it is however important to try to distinguish between individual opinions expressed in spite of the group and the actual group consensus. As in all qualitative research, deviant case analysis is important, that is, attention must be given to minority opinions and examples that do not fit in with the researcher's overall theory.

Once the data from the focus groups and the interviews are transcribed, literature suggests that the transcribed data be read through several times to obtain a sense of the whole (Beck & Polit, 2004; Elo & Kyngas, 2008; Graneheim & Lundman, 2004). In this study, the transcripts were analysed using thematic data analysis (Miller and Dingwall, 1997). This involves identifying repeating ideas and themes and thereby condensing the data into analysable units (Averbach & Silverstein, 2003). There are three phases in this process: preparation, organizing and reporting (Elo & Kyngas, 2008). The reviewer took a closer look at the selected data and performed coding and category construction based on the data's characteristics to uncover themes pertaining to the phenomenon (Altride-Stirling, 2001; Bowen, 2009; Mason, 1996; Silverman, 2004). One challenge of thematic content analysis is the fact that it is very flexible and there is no simple "right" way of doing it.

The text was divided into meaning units and then condensed. "Meaning units" refer to words, sentences and paragraphs containing aspects related to each other through their content and context; and "condensation" refers to the process of decreasing the size while still preserving the quality (Graneheim & Lundman, 2004). The condensed meaning unit was then abstracted and labelled with a code. "Code" refers to the label of the meaning unit (Graneheim & Lundman, 2004; Jabareen, 2009). Labelling a condensed meaning unit with a code allows the data to be thought about in new and different ways (Graneheim & Lundman, 2004; Jabareen, 2009). The whole context was considered when condensing and labelling meaning units with codes. Various codes were sorted into categories and sub-categories. A category is a group of content that shares commonality (Graneheim & Lundman, 2004; Jabareeen, 2009). According to Graneheim and Lundman (2004), creating categories is the core feature of qualitative content analysis. The tentative categories were then discussed by the researchers and revised. Finally, the underlying meaning that is the latent content of the categories was formulated into a theme (Graneheim & Lundman, 2004).

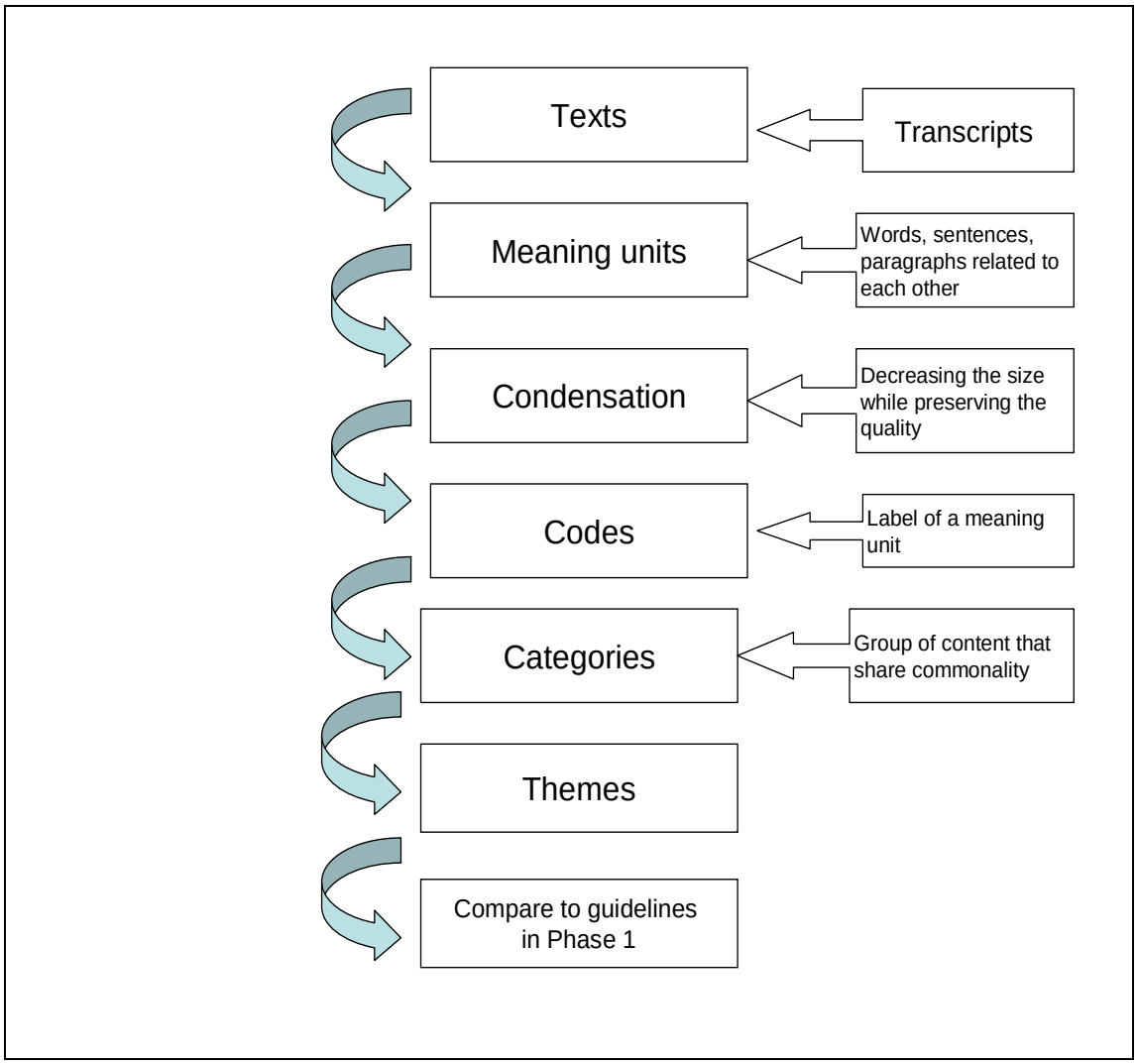


*Figure 6*. The analysis process

Once the data were analysed into themes, the themes were then compared to the guidelines that had been developed in Phase one. Differences and similarities were then explored. Finally, a proposed set of guidelines for the assessment of learners with multiple disabilities was derived, intended to be used by speech-language therapists in the South African context in Gauteng.

### 3.6.2 Document analysis

Data obtained from the assessment reports were analysed using document analysis (Bowen, 2009). This method requires that the data be examined and interpreted in order to elicit meaning, gain understanding and develop empirical

knowledge (Bowen, 2009). Bowen (2009) suggested that document analysis be used in combination with other qualitative research methods to provide a confluence of evidence that establishes credibility.

The analyses included evaluation of the content of the case history or background information of the learner since this information is regarded as pivotal to any assessment and might point to variables that contribute to the assessment methods that were selected and decisions that were made. Reports were also analysed for the method/s of assessment that was used, including (but not limited to) the use of formal tests, informal testing or a combination of both. Additionally, reports were analysed to determine which aspects of speech and language competence and development were assessed. Similarly, the reports were analysed for the presence of an assessment of feeding and swallowing, the methods used and the content and depth of reporting. The reports were scanned for evidence of a hearing assessment and the methods that were used; reporting content and depth were also analysed. The reports were analysed according to the aims (Appendix 4). Assessment reports from different schools were compared to Appendix 4. The assessment reports were not compared to each other. These results were then compared to the checklist and to the data obtained from the focus groups and interviews.

### 3.7 Ethical considerations

The researcher received ethical clearance from the Non-Medical Ethics Committee of the University of the Witwatersrand prior to the commencement of the study, with clearance certificate number H100828 (Appendix 5).Permission from the Gauteng Department of Education to conduct the study at its schools was granted (Appendix 4). Permission from the principals of the participating schools was also obtained (Appendix 6).

All participants' information was kept confidential because the researcher had an obligation to assure all participants that their identity would be protected (Bailey, 2007). The names of the participating schools were also kept confidential. Confidentiality is important because participants may feel unsafe since as their school may be functioning in terms of policies that do not articulate with the recommendations of the current Department of Education; or they might not be aware of current legislation. The retention by schools of historical school admission criterion policies could be due to a delay in the application of the revised legislation. Another

ethical consideration that the researcher took into account is that participants may not have felt confident when assessing learners with multiple disabilities and would not want to expose themselves as appearing incompetent. In the focus groups the participant's identities were not only exposed to the researcher, but also to the other participants in the focus group. As a means of protecting the participants, all participants were reminded that, as health care professionals, they are under oath to the Health Professions Council of South Africa and should respect the research process and the participants. All health care professionals are under oath that states they are loyal to their profession as well as their fellow heath care professionals.

### 3.8 Trustworthiness

Because a qualitative research method was adopted, trustworthiness was a high priority (Cooper, 2010; Golafshani, 2003). Trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability (Seale, 1999). The combination of a multiple methodological practice as a strategy may contribute to the trustworthiness of the study (Denzin& Lincoln, 2000). In this study, a combination of focus groups and document reviews were used to make triangulation of data possible and thereby adding to the reliability of the study. In addition to using multiple methods, the researcher used strategies to enhance trustworthiness suggested by McMillan & Schumacher (2001). These strategies included presenting the reader with participants' verbatim language and mechanically recording data and member checking. The guidelines created in Phase 1 contributed to the trustworthiness of the study because these were objective guidelines against which the data was compared to. In qualitative research the concepts of credibility and transferability have been used to describe various aspects of reliability (Graneheim & Lundman, 2004). According to Golafshani (2003), trustworthiness may lead to generalizability.

Credibility deals with the focus of the research and refers to confidence in how well the data and the process of analysis address the intended focus. Moreover, it involves establishing that the results of qualitative research are believable from the participants' perspective. In addition, credibility depends on the techniques and methods for gathering high quality data and on the credibility of the researcher in terms of how much experience the researcher has (Patton, 1999). Graneheim and Lundman (2004) suggested that selecting participants with a variety of experiences increases the possibility of shedding light on the research question from a variety of

perspectives. The researcher took this into account; the focus groups therefore consisted of speech-language therapists with various experiences and training. Dependability is the degree to which data changes over time and the adjustments made in the researcher's decisions during the analysis process. One can achieve this by accounting for the ever-changing context within which the research occurs. When data are extensive and the collection extends over a period of time, there is a risk of inconsistency during data collection (Graneheim & Lundman, 2004). The researcher acknowledged this fact and therefore avoided data collection over an extended period of time.

Transferability refers to the extent to which the findings can be transferred to other settings or groups. Graneheim and Lundman (2004) suggested that, to facilitate transferability, it is valuable to provide a clear and distinct description of culture and context, data collection and the process of analysis. Transferability in this research project may be limited since all schools differed in terms of the context in which they were situated. A rich and vigorous presentation of the findings together with appropriate quotations will also enhance transferability (Graneheim & Lundman, 2004). The analysis process and the results should be described in sufficient detail for readers to gain a clear understanding of how the analysis was carried out and also of its strengths and limitations. This becomes evident in chapter 4 of this dissertation. To increase the reliability of the study, it is necessary to demonstrate a link between the results and the data (Beck & Polit, 2004).

### 3.9 Researcher's reflection

The researcher has been employed at a government school that caters for learners with multiple disabilities since 2006. Ever since being employed at the school, assessment of learners with multiple disabilities has always been a concern to her. The question: "Are we doing right by these learners?" constantly haunted her.

She was employed at a school that assessed learners for two reasons, namely, for candidacy to the school and for intervention purposes. The assessment of a learner for candidacy was usually carried out within a multidisciplinary team. If the learner was able to cope with a standardized test, such a test would be conducted. In other instances observation during a selected task was done. Within 30-45minutes the team would decide whether the learner was a candidate for the school or not.

Another point of concern was the process of referral of a learner with multiple

disabilities from school to school. Most schools have certain admission criteria and most of the times these learners do not fit the criteria and are therefore referred to other schools. In some instances they are referred to another school without an assessment. Is this fair to the learner? Most families of learners with multiple disabilities that come to the school where the researcher works are of a low to average socio-economic status. These families in most cases have taken a day off work and some of them have taken many taxis to get to the school only to find out that their child is not a candidate for that particular school. Is this fair to the family?

Moreover, if an assessment is conducted it is conducted within a therapy room which is a strange environment to the learner where he/she may not feel comfortable and his/her behaviour during the assessment may therefore not reflect his/her true potential. The report and recommendations are made on the learner's behaviour and responses given at this time. Again, is this fair to the learner?

The above area few points of concern which the researcher had before registering for a Masters degree in Speech Pathology. She registered for her masters in January 2010 and knew that assessment would be her area of focus. The focus groups were conducted by the researcher from September 2010 until March 2011. Taking into consideration her concerns about assessment, it was, at times, difficult for the researcher to remain the moderator during the focus group. There were times when she became a participant as well, since she either agreed or disagreed with the participants' responses. However, she learned that, in order to avoid bringing her own bias to the collected data, she would rather take on a role as a listener during the focus groups. The guidelines provided a framework against which the data were compared. They were based on current literature and therefore eliminated the researcher's bias when analysing the data.

# Chapter 4

# Results and discussion

This chapter describes the results obtained from the data collection process and a discussion of these results. The chapter is divided into five parts:

The first set of questions posed to the participants in the focus group and interviews pertained to the context in which speech-language therapists assessed learners with multiple disabilities and the context in which they worked. Therefore, sub aim 1 will be discussed first. These results are integral to the results that follow in part two of this chapter since as they set the research context within which the subsequent results can be interpreted.

Part two describes the analyses of eight audio-recorded focus groups conducted with speech-language therapists from eight different schools in Gauteng. These interviews are analysed according to the main aim and three sub aims of the study.

Part three describes the analyses of assessment reports. The lack of reports submitted by participants proves to be a significant limitation in this study; this matter will be discussed further in the concluding chapter.

Part four compares the data received from the focus group and the data received from the assessment reports. The comparison is tabulated and then discussed.

Part five compares all the data collected in this study to the research tool that was created in Phase 1 of the study.

## 4.1 Part 1: Sub aim 1: To describe the context in which the speech-language therapist work in terms of: contexts of the school, the experience and training of the speech-language therapist, parent involvement, individual or group therapy the role of the speech-language therapist in the school context, the availability of resources, and the uniformity of schools.

In this section the results from the eight audio-recorded focus groups with speech-language therapists from eight different schools in Gauteng which cater for learners with multiple disabilities are described. On average, the interviews were 50 minutes long, ranging between 40 and 60 minutes per interview. The interviews were

all conducted in the privacy of a room within the various Speech-language Therapy departments at the different schools. At times, as is commonplace in a school setting, there were interruptions from colleagues. The duration of the interview appeared to be determined by the amount of information the speech-language therapists were willing to provide and was, to some extent, related to the participant's knowledge of the under discussion.

Participants were required to provide information regarding: a) the society and context in which their school is based; b) their years of experience as well as their highest qualification; c) whether they provided individual or group therapy, d) their role as a speech-language therapist at the school and e) whether their departments were well resourced for assessment and therapy.

### 4.1.1 Context of the schools

At the time of the study all participants were employed by the Gauteng Department of Education; all schools were therefore government funded schools. The location of the school (urban or rural), affected the level of socio-economic status of the learners attending the school. The majority of the participants (80%) reported that the socio-economic status of the learners varied from low to average. This also became evident when participants were asked to describe the society or context in which the school was based. The participants' responses are presented in the text block below:

> *"When we require the parents to come in for meetings with School Management Team, they're not even willing to come in for those meetings"* interrupted by a participant *"they don't have money for transport."*
>
> *"In regards to the socio-economic status I'd say that most have disability grants so one can detect from that…. I'd say it's poor."*
>
> *"Many many of our children come from disadvantaged homes. I don't think we know the half of it because we obviously don't get to do home visits but where we have done home visits on some occasions we've really been amazed at how… the conditions under which some of our kids live."*
>
> *"Just off the top of my head I would say at least 90% of the children…and a lot of them from disadvantaged homes; a lot of them from homes where there's lots of social problems…"*

From these statements, it became clear that the participants were of the

opinion that most of the children in the schools were from poor backgrounds. They also identified some of the factors that are associated with poverty or poor socio-economic living conditions, such as the dependency on disability grants, the unavailability of money for transport, and multiple social problems. These conditions were identified by the participants as having a significant influence on all aspects of the children's school experiences and should form the background against which the results of the study had to be viewed.

The context in which the participants worked had an effect on the type of learners seen at the school, as well as on the level of service they delivered. From the results obtained regarding socio-economic status, it was clear that the majority of learners seen at the schools come from low socio-economic and disadvantaged backgrounds. These results mirror the general socio-economic status of the country. As discussed in previous chapters, the impact of Apartheid in South Africa prior to 1994 cannot be underestimated and many of today's pressing social issues, like poverty, is linked to its legacy. Due to the low socio-economic status of the learners, many of these learners are unable to pay school fees. This has a direct implication on speech-language therapists in terms of funding for resources. The budget of many school's are limited. Schools need to prioritise this limited budget and in most instances monies are spent on necessary resources required for classroom use.

Poverty may also contribute to a child's disability because it is related to malnutrition, accidents, violence, tuberculosis, HIV/AIDS and a lack of medical resources. Poverty and low socio-economic status have implications for families of learners with multiple disabilities; for example, disabilities incur additional costs. These costs include extra medical expenses, specialized equipment, specialized services and expenses for the care of the child with the disability (Statistics SA, 2010). Due to the low socio-economic status of many of the learners, they may not have access to specialized services and may not always have access to the specialized equipment they require.

### 4.1.2 Experience and training of speech-language therapists

The results regarding years of experience show that many participants have had many years of experience and may therefore be assumed to have insight into the field of assessment and of learners with multiple disabilities. Some participants, however, have had minimal experience of learners with multiple disabilities. It was

evident during focus groups that the group often consisted of speech-language therapists with many years of experience and speech-language therapists who have qualified recently. Working in such speech-language Therapist departments proved to be beneficial to the participants as the experienced therapists supervised and guided the less experienced therapists; on the other hand, recently qualified therapists were aware of newer methods and shared this with the experienced therapists.

Figure 7 illustrates the participants' years of experience in terms of limited experience (0-4 years), sufficient experience (>4-10 years) and significant experience (>10years). The high number of years of experience of the participants may also indicate their passion for working with learners with multiple disabilities.

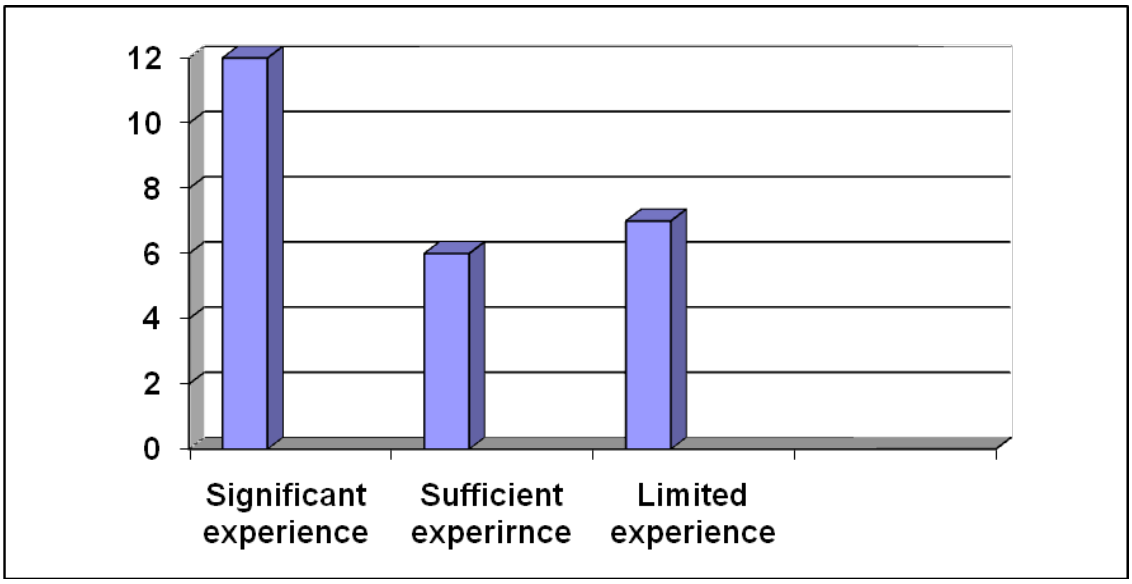


*Figure 7.* Years of experience of participants

Furthermore the results regarding training in neuro-development treatment indicated that 44% of the participants were trained in neuro-development treatment. Some participants voiced their opinions about neuro-development treatment; these opinions are recorded in the block below. It is evident that having a certification in neuro-development treatment was identified as contributing to knowledge, confidence levels and enhanced clinical skills.

*"We encourage all our therapists here at some stage to do neuro-development treatment. It just gives you such a good balanced rounding of the children that we are working with. And in our training certainly when I trained, which was many many, many years ago, we certainly kind of dealt with the children from the chest upwards. You know we didn't look at them holistically."*

*"With neuro-development treatment you assess very differently because you look at the kid as a whole. You know we assess things like breathing and voicing. You're looking at basically at what they can do and what they can't do. You're not just looking at scores."*

### 4.1.3 Parent/family involvement

There was some inconsistency regarding parental contact depending on different variables. These variables included opportunities provided for parent involvement, the burden of care for their child, socio-economic problems and a lack of exposure. This was apparent in the following comments made by the participants:

*"We often assume parents do not want to be involved; however, I was surprised this year at the amount of parent involvement when I offered the opportunity to them".*

*"Because of the difficult social circumstances that they do come from; and they look for hostel accommodation to free themselves to seek employment or to just run day to day running of their families."*

*"And another thing to take into consideration; a lot of them come here and they've been sitting at home. So they done nothing and then the parents just want to come dump them. And you can see these parents from a mile off."*

Participants also reported that parent involvement varied from very little involvement to being actively involved. Research has shown that parents play a critical role in their child's academic achievement as well as in their socio-emotional development (Eccles & Harold, 1999). The lack of family involvement in this study may stem from various parent characteristics and experiences such as lack of time, energy and/or economic resources, lack of knowledge, feeling of incompetence and a failure to understand the role parents can play. The participants used some emotive language, such as "dump them" which shows the participants' perception of some parents' actions. Yet many parents experienced the relief of having others care for their children due to the high burden of care.

The lack of parent involvement seemed to be relative to the low socio-economic status of these families. The priority of such families may lie in being employed and receiving an income every month to support their livelihood. This may result in limited parent involvement. Additionally, these families seek affordable care for the child with multiple disabilities (Neas & Mezey, 2003). For many families, placing their child in a government (that is, fully or partially subsidized) school that caters for their child's disabilities is the only solution. These schools can provide the care that they seek and they can be exempted from paying school fees. This may

therefore be cost effective for the parent or care giver.

Lack of parent involvement could also be due to the fact that they may not know how to become involved. They may be unfamiliar with schooling or how specialized schools work. This could be one of the legacies of the past and they are or feel disempowered.

### 4.1.4 Individual or group therapy

A question posed to the participants was if they provided individual therapy, group therapy or both. It was found that 92% of participants provided a combination of group therapy and individual therapy and that 8% of participants provided only group therapy. Group therapy included classroom therapy and small group therapy. The learners seen for individual therapy were learners primarily between the ages of 3 and 8 years. Moreover, in general, learners with severe or multiple disabilities and learners who received therapy for the use of augmentative and alternative communication devices received individual therapy. This was apparent from the participants' responses as reflected in Table 8.

Table 8

*Participant's responses regarding individual or group therapy*

| **Participant's response** | **Interpretation** |
|---|---|
| *"In essence all learners in the schools should receive speech therapy; however, it is just not possible. We therefore try to group them so we reach more learners*." | Speech therapy is just not possible because of the high ratio of learners in a school to the number of speech-language therapists.<br>Group therapy. |
| *"What we started this year is that we do a lot of classroom based therapy because we found that the official medium of instruction at the school is English. The majority of our kids are not first language English speakers"* | Classroom based therapy<br>Focus of therapy is on English |
| *"We found that going into the classroom is better; because at least you get some kind of therapy and some kind of strategies for all the kids to do. To do this with a small group or individual group there's just not enough time in the day to do that."* | Classroom based therapy compensates for the lack of speech-language therapists at a school.<br>Lack of time. |
| *"Most of the nursery school gets individual therapy as well"* another participant adds *"most of them, actually all of them, Grades 1 depending on their diagnosis. They will get small group or individual as well as their class group therapy. The older ones get bigger group therapy. Any* | Speech-language therapists need to prioritize therapy according to the learner's disability |

| Participant's response | Interpretation |
|---|---|
| *child that is going to be using an AAC device… individual therapy. Any kid that stutters or has a voice problem…individual. Learning disabilities, these days group therapy because our priorities are more severe…"* | |
| *"Mostly group therapy, individual therapy is not feasible."* | Group therapy |

Note: AAC= augmentative and alternative communication

The ratio of speech-language therapists to learners in a school varied from three speech-language therapists for 480 learners to four speech-language therapists for 300 learners. These ratios affected whether group or individual therapy was given. The results indicate that in all schools the numbers of learners outweigh the numbers of speech-language therapists. Speech-language therapists are therefore forced to prioritize as to which learners receive therapy and which learners do not. This is not ideal and indicates that there is a shortage of school based speech-language therapists (Khoza-Shangase & Masoka, 2009).

### 4.1.5 The role of the speech-language therapist

It was clear that the number of years a speech language therapy department existed in a school also affected service delivery. Some of the schools had well established Speech-Language Therapy departments and in these schools the role of the speech-language therapist was well defined. The speech-language therapists from these schools have policies regarding their role that were created by the school. However in other schools, participants were in the process of establishing a Speech-Language therapy department and the roles of speech-language therapists at these schools were not well defined. These participants felt that because their role at the school was not well defined, they were required to serve on every committee the school had. These committees included entertainment, discipline and building. Due to numerous meetings of the various committees they were frequently called out of therapy sessions. This affected the level of service delivery, that is, the quality and quantity of intervention the learners received. Such a situation could have major effects on the quality of the assessment of learners with multiple disabilities. Being on numerous committees that are not related to your profession may require time spent away from planning an assessment and writing of assessment reports.

### 4.1.6 Resources in speech-language therapist departments

In terms of resources, participants in general reported that although they did have sufficient resources, they would appreciate newer resources. For example, they specified that it would be good to have more recent standardized language tests and more hearing screening equipment on hand. These findings are evident from their responses to "Are you a well resourced department?" that are presented in Table 9. The results indicated that only 12% of the participants reported that they are not well resourced.

Table 9

*Participants' responses regarding resources*

| **Participant's responses** | **Interpretation** |
|---|---|
| *"We actually went earlier this year to 'TOYS R US' on a shopping spree. We bought a whole lot of stuff, game boards, bingo so we got categorisation games."* | Use toys and games |
| *"We tend to use the same thing over and over. We got enough to keep things exciting for a while"* | Content with the resources |
| *"Yes. A lot of the things are old but still functional."* | Content with the resources |
| *"We've got what we need; you know obviously there's newer and better stuff out there."* | Content with the resources |
| *"Look if we were given amounts of money we could always find ways to spend it. There are always new programs we can investigate new AAC devices that we want to get..... the other things and we hear from other people you know when you've been in a place for a long time we don't realise just how well resourced we are but other people come and visit and have a look at our equipment… But we realize how well resourced we are when therapists from other school visit our department."* | Content with the resources. This contentment is relative to others. |
| *"Yeah we would have to say yes. Even though we can make the point that nobody can be over resourced. If we could have more it would be fantastic but what we got is well resourced compared to other schools."* | Content with resources. This contentment is relative to others. |

Note: AAC=augmentative and alternative communication

It is evident that there certainly appears to be a lack of resources in terms of the assessment of speech, language, hearing and feeding. The majority of the participants mentioned that the Speech-language Therapy departments in which they work were well resourced. However, when considering the resources they use when assessing, the lack of resources becomes apparent. From the above results it is evident that a single theme emerged from the data, that is, the theme of contentment and

complacency regarding the situation. Taking into consideration the context and the socio-economic status within which the participants work, they may be content with what resources they have. Some participants thought that they were well resourced when compared to other schools; this indicated that the resources in one department are relative to others. A recent study carried out by Khoza-Shangase & Masoka (2009), found that the budget allocated is reported to be inadequate to be able to establish, develop and sustain services provided in schools.

### 4.1.7 Lack of uniformity

Apart from the disadvantaged backgrounds of the learners, one of the most salient findings regarding the context in which the participants worked was the lack of uniformity in two main areas, namely, the application of policies of inclusion, and the roles that the speech-language therapists played in the schools. Although the participants who were interviewed in this study were from one sector of one province in South Africa, the results indicate a wide range in the nature of the schools. The varying factors are discussed below.

*Adherence to inclusion and participants' lack of support for inclusion*

A factor regarding practice that the participants highlighted was the lack of uniformity amongst government schools that cater for learners with special needs. This stems from the implementation of policy documents and the current state of transformation. As highlighted in Chapter 1, the South African Department of Education is undergoing change. It has put forth a framework for transformation and change which aims to ensure inclusion of learners with disabilities (Department of Education White Paper 6, 2001). The key feature of this approach is therefore a philosophy of inclusion. It has to be noted that transformation is an on-going process and that it is not without challenges.

When participants were asked about their views on the White Paper (Department of Education, White Paper 6, 2001), it was evident that participants were not in favour of inclusion. Their views concurred with the sentiments expressed by Lindsay (2007) and Norwich (2008) and Warnock (2005). There was a time when special education was seen more as a "solution to" rather than a "problem of" social justice in education. The most frequent reason for having special schools was about the "provision available" in such schools (Norwich, 2008). The concept of inclusive

education has come to mean many things: from the very specific – for example, the inclusion of children with disabilities in mainstream schools – to a very broad notion of social inclusion as used by governments and the international community as a way of responding to diversity among learners (Ainscow et al., 2007). Research reviews over the last few decades have however been interpreted as indicating no clear support for the positive academic or social effects of either inclusion or separate schooling (Lindsay, 2007). The Department of Education is, however, moving towards inclusion, despite such research reviews.

According to the literature (Runswick-Cole, 2008; Wedell, 2008), inclusion may create a dilemma for learners with multiple disabilities who require special education. These dilemmas may include the following: a) if children with multiple disabilities (needing special education) are taught in general classrooms, they are less likely to have access to scarce and specialist services and facilities; b) if children with multiple disabilities are not taught in general classrooms, they are more likely to feel excluded and not accepted by other children.

According to the White Paper 6 (Department of Education, White Paper 6, 2001), the South African Schools Act rules out testing for admission to schools. However, the current organization of special schools according to the category for disability still leads to contravention of the act. This is due to the latency or delay in the implementation of the revised legislation that causes lags in the transformation of previous school policies. Hence there are certain schools that assess learners for candidacy to the school and others that accept any learner with the potential to learn. Some participants expressed the thought that this state of transformation affects service delivery as well as their confidence levels. Furthermore, they stated there was a lack of uniformity amongst services delivered in government schools that cater for learners with multiple disabilities. The participants were aware of the White Paper 6 (2001); however, they reported that they lacked specific information regarding the document and the implementation of these strategies. They would like more information regarding this policy through workshops and seminars.

Warnock (2005) rejected educational inclusion as being “all children under the same roof”. She prefers a learning concept of inclusion, which is about “including all children in the common educational enterprise of learning, wherever they learn best” (Warnock, 2005). It would seem that the participants of this study concurred with this statement.

### 4.1.8 Summary of Part 1

The previous section of this chapter aimed at establishing the research context of the study. It explained the low socio-economic status of most of the children in the schools, the relatively little parent involvement and the high case loads under which school-based speech-language therapists function. It is evident that the participants work in a context of low socio-economic status. This has adverse effects on the quality of life of the learner as well as on parent involvement. It further highlighted the range in the participants' years of experiences, as well as their highest qualifications. The said section also described the participants' views about their speech therapy department in terms of resources. There are varying factors that created a discrepancy in service delivery amongst schools. Some schools that have implemented the concept of inclusion and others schools have not. At present, policies and practice do not correlate. Participants seek more information regarding policies through seminars and workshops.

## 4.2 Part 2: Results from Focus Groups

The main aim of the research project was to determine the assessment methods used by speech-language therapists when assessing learners with multiple disabilities. The results of this study yielded important information regarding assessment practices of school based speech-language therapists of such learners in the context of a government school. The results are discussed in accordance with the main aims and sub aims of the study. Each sub aim will present the participants' responses that apply to that particular aim as well as a discussion of the findings.

### 4.2.1 Main aim: Determine and profile the methods of assessment that school-based speech-language therapists use when assessing learners with multiple disabilities

Speech-language therapists aim to maximize a learner's ability to communicate through speech, gesture and/or supplementary means such as communication aids and to enable them to be independent communicators (Pennington, 2005). Speech-language therapists endeavour to evaluate and provide intervention using a holistic approach. Assessment, if appropriately done, may therefore guide one in what to teach, how to teach and to determine whether

objectives are being reached (Hedge & Pomaville, 2008).

It was evident in each focus group that each school had its own protocol in terms of assessing the learners. The reason for assessment determined the protocol that was followed. One participant reported: *"We've got a protocol that we work according to. We start off with whoever refers the child then we send out a form, an information form that has to be filled in…."*

Literature in the field of child language assessment documents an on-going debate among researchers regarding the superiority of either standardized or non-standardized assessment. Some researchers strongly favour the use of both standardized and non-standardized procedures (Tyler & Tolbert, 2002). Others completely discredit the use of standardized procedures, especially for assessing the increasing number of learners from diverse economic backgrounds.

It is evident from the results presented below that the participants used a combination of formal and informal procedures. These findings somewhat mirror the findings of previous studies (Beck, 1995; Hux, Morris-Friehe, & Sanger, 1993) which showed that speech-language therapists routinely use informal procedures to supplement their formal assessment procedures. These results, however, differ significantly from previous findings by Beck (1995) in which she found that clinicians "depended more on formal assessment methods than on informal" (p. 57) for determining the presence of language disorders. Beck's study (Beck, 1995) was conducted in the United States of America and the dependency on formal methods could be due to participants having access to a variety of standardized tests and relying on the fact that the tests were standardised in that country.

A few early studies did survey child language assessment practices in various states in America. For example, Wilson, Blackmon, Hall, and Elcholtz (1991) surveyed 500 public school clinicians in the state of California regarding methods of language assessment with preschool and elementary-age children. Their results indicated that, although a clear majority of the clinicians surveyed relied on formal procedures for assessing children's language, they also used clinician-devised, informal methods as part of their protocol. Beck (1995) replicated and extended the research of Wilson et al. (1991) by surveying school-based clinicians in the state of Illinois regarding the assessment methods they used for evaluating the expressive and receptive language skills of children in three age groups. Findings of this study indicated a similarity among methods of assessment across the three age groups, with

clinicians reporting the use of up to 55 published and 14 informal assessment procedures. Regardless of age group, the formal measure with the highest reported frequency of usage was the *Expressive One-Word Picture Vocabulary Test–Revised* (Gardner, 1990) and language sampling was the most frequently used informal procedure. Other early studies (Hux, Morris-Friehe, & Sanger, 1993; Kemp & Klee, 1997) have also confirmed that language sample analysis is a well-accepted practice among school-based speech-language therapists. Similar to Beck's (1995) study, the findings of Hux, Morris-Friehe, & Sanger (1993) indicated that school-based speech-language therapists routinely supplemented their formal methods with language sample analysis and findings of Kemp and Klee's (1997) national survey of 253 speech-language therapists indicated that up to 85% of their respondents included language sampling in their language assessment protocols.

There was little variation in the use of standardized tests by the participants; there were differences in the use of informal assessment measures. For example, while parent interview was often used, the use of dynamic assessment was rare.

The following themes were prominent when analysing the audio-recorded focus groups and interviews in terms of the methods of assessments that were used.

#### 4.2.1.1 Formal methods of assessment

Twenty-one participants (84%) made use of a combination of formal and informal procedures, whilst the remaining 4 participants (16%) used informal procedures only, due to a lack of standardized tests in their departments. Table 10 highlights a few of the participants' responses in terms of standardized tests that were used.

The most commonly used standardized tests are tabulated in Table 11. Participants reported modifying and adapting the tests to best suit the learner and his/her disability. They were aware that this practice affected the validity and reliability of the test and therefore used the scores and results of the test as a guideline only. Many participants remarked that none of these tests were suitable in the South African context and therefore accepted responses if a learner confused the picture of a lettuce with that of a cabbage on the Expressive One Word Picture Vocabulary test, or used the word "light" instead of "lamp". They also indicated that they did not set time limits on the tests, that they enlarged pictures of the test and spread the pictures out for certain learners. In addition, they modified the mode of response depending on

the learners' abilities. For example, if the learner was non-verbal, they would use eye gaze or pointing as a method of response. However, Hasson & Joffe (2007) and Bornman, Sevcik, Romski, & Pae (2010) stated that modification of tests to accommodate these learners will result in the tests becoming non-standardized. Furthermore, the attempt by speech-language therapists to alter tests to accommodate cultural and linguistic differences does not meet the need of these populations. It was apparent, however, that the participants were aware of this and therefore used the results of the test as a guideline only. In addition, the use of standardized test was not done in isolation.

Table 10

*Participant's responses regarding standardized tests*

| **Participants' response** | **Interpretation** |
|---|---|
| *"We started using the CELF preschool and the CELF R in a very informal adaptable way."* | Informal way |
| *"So the kids with AAC obviously cannot do certain subtest but we've chosen certain subtests that will impact on classroom performance, things like word structure, sentence structure, being able to understand us, being able to follow directions."* | Choose certain subtests only |
| *"We don't use it as a standardized form. It's very informal just to get an idea of the child's ability in these areas. So we change things like "lamp" to "light". We change it as necessary. It gives a guideline."* | Informal way<br>Change items |
| *"….non verbal… you can use standardized tests if you can get some kind of pointing or eye gaze response or a head pointer response or if you can look at Sipho you can actually get him to point with his toe"* | Change mode of response |
| *Because a lot of these kids with multiple disabilities have visual problems. Can they pick up line drawings, can they work with coloured drawings, or can they not work with drawing."* Another participant in the group added: *"….symbolic representation and then you may have to work on objects from that."* | Choice depends on the learner's skill and deficit |

| Participants' response | Interpretation |
|---|---|
| *"Yes as long as you make a comment, you've got to clarify that these tests are not standardized on the South African population so the scores that you get and the ages can only be used as a guideline."* | You may use standardized tests as long as you comment on it in the report. |
| *"I'm not mad about standardized tests because you're assessing that child's performance on that particular day."* | Acknowledge the limitation/s of standardized tests |

Note: CELF = Clinical evaluation of language fundamentals; CELF R = Clinical evaluation of language fundamentals - revised

Table 11

*Standardized tests most commonly used by speech-language therapists when assessing learners with multiple disabilities*

| Test | Number of participants | Percentage of participants |
|---|---|---|
| Receptive One Word Picture Vocabulary Test | 7 | 28% |
| Expressive One Word Picture Vocabulary Test | 7 | 28% |
| Reynell Developmental Language Scales | 13 | 52% |
| Peabody Picture Vocabulary Test | 8 | 32% |
| Test of Auditory Comprehension of Language (R) | 2 | 8% |
| Clinical Evaluation of Language Functions (Preschool & Revised) | 3 | 12% |

Table 11 shows that the most commonly used test was the Reynell Developmental Language Scales (Reynell & Gruber, 1990). This was followed by Peabody Picture Vocabulary Test–Third Edition (PPVT; Dunn & Dunn, 1997). The least commonly used test was the Test of Auditory Comprehension of Language (TACL-R; Carrow-Woodfolk, 1999). The usage of the test was also determined by the resources or tests available at that specific Speech-language Therapy department. It is clear that most of the tests have been published in the 1990s; furthermore they have been standardized on mainstream learners in the United States of America. The appropriateness of these tests for learners with multiple disabilities in South Africa can be questioned. However, due to a lack of standardized tests for the South African context, speech-language therapists use tests that are available.

Participants used a number of standardized tests. There were cases where certain subtests were used, where the method of response was changed or where the standardized tests were used informally. Standardized tests play an important role in traditional language assessments. Participants were aware that traditional static assessment methods often failed to accurately describe the communication abilities of learners with multiple disabilities (McCauley, 2001). They were aware that standardized tests rely heavily on motor abilities (Mille & Paul, 2000) and consequently they changed the learners' method of response. Standardized tests may also assume a degree of homogeneity of exposure (Cole et al., 1996). Participants expressed the tests' inappropriateness for learners with multiple disabilities (Cole et al., 1996). Participants mentioned that, although they used the tests, the inappropriateness of the tests was mentioned in the assessment reports. However, the data obtained from the assessment reports failed to reflect this.

Participants were aware of the limitation/s of these standardized tests for the South African population. These tests, however adapted, were used on learners with multiple disabilities. Adaptations and modifications of the test affect the reliability and validity of the test results. Participants used these results as a guideline for placement of the learner and for intervention purposes. Since there is a lack of culturally appropriate standardized tests for South African learners, speech-language therapists are forced to use available tests. The inappropriateness of standardized tests is, however, an international phenomenon. Countries like United States of America where the tests were standardized have acknowledged the limitation of these tests in respect of every learner in that country.

From these results reported above it is clear that there is a lack of resources in terms of standardized tests that are culturally sensitive to the South African population. Carter et al., (2004) emphasized the need for developing culturally appropriate materials that would meet the needs of a specific culture and to take cultural variations and potential cultural bias into consideration. In South Africa, there is a great need for developing contextually relevant resources for our profession.

#### 4.2.1.2 Informal methods of assessment

All participants reported using informal procedures when assessing learners with multiple disabilities. Informal assessment has been found to adequately address the insufficiency of standardized tests (Caesar & Kohler, 2009). Activities are more

authentic, more functional and more descriptive. These procedures included parent interviews, dynamic assessments and informal observation of the learner interacting with his/her caregiver and interacting with his/her environment. This is in accordance with Hebber & Rooney's (2009) suggestion that speech-language therapists use non-standardized assessment methods to collect descriptive data about the learner's communication. The informal methods used by the participants only included a parent interview dynamic assessment and observation.

#### 4.2.1.2.1 Parent interview

A parent interview provides the speech-language therapist with a more ecological view of the learner (Hedge & Pomaville, 2008). It provides valuable information regarding the learner's health conditions, his or her developmental milestones, abilities, strengths, weaknesses and background. The assessment protocols of five schools included a parent interview where the speech-language therapist interacted with the parent or caregiver. The remaining three schools assessed the learner in the absence of the parent or caregiver; however, the participants were given access to this essential information via the learner profile at the school. The learner profile is a file compiled for each learner at a school. The profile contains concise information regarding the learner's identifying information, a case history regarding previous schools, medical history and family history. Participants' responses with regard to case history are presented in Table 12.

Table 12

*Participants' responses regarding parent interviews*

| **Participants' responses** | **Interpretation** |
|---|---|
| *"But when they come in for admissions we have as much of a case history as we can with the parents. Sometimes it's not the parent that's bringing them because the parent has passed on, it's granny who doesn't have the info or caregiver from the community that's brought the child and doesn't have any of the info. We try and get as much info as possible from the parents. We don't always get the truth either."* | Lack of essential information<br>Kin or caregiver reports<br>The validity of information is questioned |
| *"Well the very first thing that we always do is we get the learner profile … And you* | Use of learner profile<br>Work from previous assessments |

| | |
|---|---|
| *obviously read through there because your assessment is going to depend on what's in that file and if they just recently had a completed full assessment by another therapist then you're not necessarily going to do an assessment.…"* | |
| *"Always get the history and the background"* | Case history is emphasized |

The parental interviews, although common practice, provided the participants with little useful data; and yet, this information is of great importance. Perhaps there is a need for the speech-language therapists to adapt, even at this basic level.

A case history generally consists of the following information: basic identifying information, referral source, statement of the problem, developmental history, medical history, family and social background and educational background (Hedge & Pomaville 2008). For assessment it is important to understand the learner's past and current problems. Additionally, information about the family constellation is relevant and therefore that is required. To determine the family constellation and past problems, a face to face interview with the people concerned is usually conducted. Speech-language therapists should be aware of a possible language barrier. The participants reported that face-to-face interviews were conducted in the language of teaching at the specific school. Due to this barrier, the parents/guardians may not always understand the meaning of the questions and therefore may not always provide relevant and correct information.

Hedge & Pomaville (2008) stated that the purpose of a case history was to gather information about the learner. Ferguson (2000) added that the case history is highly valued in the field of Speech-Language Therapy.

#### 4.2.1.2.2 Dynamic assessment

Participants reported that many learners whom they assessed have been under-stimulated, have never been in a school and are unfamiliar with a testing environment. In such instances, speech-language therapists resorted to dynamic assessment involving test-teach-test methods. Within this paradigm, the speech-language therapist first identifies deficient or emerging skills that may be related to a lack of mediated learning experiences with that skill. Then, the speech-language therapist provides an intervention strategy designed to modify the child's level of functioning in the targeted areas. By teaching the principles of the task, the test situation changes from

an evaluative interaction (typical of traditional test situations) to a teaching interaction where the speech-language therapist maximizes the child's feelings of competence. The performance on the post-test (retest phase) serves as an indicator of the child's modifiability following training. The test-teach-retest method has been used with children with disabilities as well as with children from diverse ethnic groups (Gutiérrez-Clellen & Pena, 2001).

During assessment speech-language therapists should be culturally sensitive. Culturally sensitive speech-language therapists have an awareness of differences as well as specific experiences of interaction with individuals from different cultures. They also have knowledge of customs, beliefs and values of different cultures as well as knowledge of the specific language differences that characterize the dialects or language/s that culturally and linguistically diverse learners speak (Laing & Khami, 2003).

Laing & Kamhi (2003) recommended that test bias should be reduced for culturally and linguistically diverse learners. This can be done by placing more emphasis on processing abilities and less emphasis on prior language knowledge or experience, for example, memory tasks (Laing & Kamhi, 2003).

Participants reported that, during informal assessment, they used any available resources, from charts to toys to pictures. However, participants did not mention the use of criterion-referenced testing or adapting or creating checklists. Checklists and criterion referenced-testing guides the informal assessment process and creates more structure during the assessment. The lack of information shared by participants on this topic could be a limitation in the research design. The research questions failed to probe any further regarding criterion-referenced testing.

#### 4.2.1.2.3 Observation

During the informal observation, participants reported looking for non-verbal communication in cases where the learner was non-verbal. Long before children learn language they communicate with gestures, vocalizations, facial expressions, and body language (Hogg, 2007). The more they are able to communicate with intention, particularly using gestures, the more they can express their feelings and let others know what they need and want. Much can be communicated with simple natural gestures that have commonly understood meanings. These gestures can include a wave, shrugging of shoulders, leading someone by the hand, moving someone's hand

to touch something, pointing to something at a distance, pointing to something by touching it, pushing someone's hand away, pushing an object away, touching someone to get attention, extending an open hand to request something, clapping to express enjoyment and choosing something by looking from an object to a person (Hedge & Pomaville, 2011). Some learners with multiple disabilities display idiosyncratic gestures that are interpreted as a means of making choices (Sigafoos & Dempsey, 1992). Providing opportunities to make choices is one way of increasing independence and improve the quality of life for persons with multiple disabilities (Hogg, 2007).

Participants used observation to determine the presence of linguistic behaviour as well as competency levels. The tools used included toys and common objects such as wind-up toys, balloons, bubble, jars, books, and toys in a bag (this is presented as communicative temptation). Participants reported that they observed whether the learner had joint attention and object permanence. In addition, the speech-language therapists were interested in observing a learner's use of objects. For example, a tea set could be presented to the learner to see if he/she is able to play symbolically. They also wanted to gain an idea of how learners communicated, be it through sounds, words or gestures.

Another common theme for informal methods of assessments was obtaining the learner's level of symbolic representation. Here the speech-language therapist is interested in determining whether a learner is able to understand an object, a photograph or a black and white picture. The learner may be asked to match the object to the photograph and the picture. The information yielded by this method may be useful for intervention purposes for alternative and augmentative communication.

These themes were extracted from the following comments made by the participants with regards to informal assessment and resources used and are reflected in Table 13.

Table 13

*Participants' comments regarding informal assessment*

| **Participants' responses** | **Interpretation** |
|---|---|
| *"Assessment have been very much diagnostic … on-going, continuous assessment basically so its observation of the child and then therapeutic kind of assessment as well. You're assessing* | On-going assessment by observation |

| **Participants' responses** | **Interpretation** |
|---|---|
| *and treating almost simultaneously."* | |
| *"Receptive language… specifically knowledge of basic concepts like colours and numbers and shapes and categorisation."* | Basic concepts of language assessed |
| *"… and then we look at receptive language just by asking show me blue. So we look at colours, we look at objects we look at object picture matching, picture identification. A little bit of if the child if the child can manage obviously, its very dependent on the child can do, we look at show me the dog that's under the chair. Just simple stuff like that and then we look at the expressive language; whether they can tell us their name where they live, what's happening in this picture."* | Assess cognitive tasks<br>Assess grammatical skills<br>Assess expressive language from simple to more complex structures |
| *"Non standardized assessment is very nice to comment on because you can say he is able to understand the words* car, cup, shoe, spoon, ball. *He is unable to respond to these words. He was able to respond to joint attention with this much facilitation. You can do a lot of in detail record keeping during the assessment. Because you are adapting your test to what the child can do there's a lot more that you can comment on. Because it's not to say he's this age or whatever you can say he can do this he can do this with this help he can follow two- step instructions with hand over hand prompting. That sort of thing so there's a lot to comment on a non-standardized assessment."* | Informal assessment offers opportunity for lots of qualitative comments |
| *"We use a lot of receptive tasks to see his understanding eye gaze. We use anything so colour pictures, cards, posters, a few objects, and body part."* | Informal assessments give opportunity for use of a variety of tasks and opportunity for lots of testing |

A few of the participants' responses in terms of the resources they use when assessing informally are recorded in the Table 14.

Table 14

*Participants' responses regarding resources used for informal assessment*

| **Participants' response** | **Interpretation** |
|---|---|
| "*We have a variety of things. We use whatever's around."* | Use many resources |
| *"Lots and lots of toys; we've got dolls' houses."* | Use of toys |
| *"The objects differ from each child. It is what is relevant to that child in their environment."* | Resources are chosen according to the learner and his environment |
| *"I will also include some whistles and some blowing toys. Because I want to see what his respiration is like. I want a* | Use resources to assess respiration |

| | |
|---|---|
| *cup spoon and a fork and some food."* | |
| *"We might use the computer ... to evaluate… are they going to be able to use a single switch with communication? We might get one of our simple communication devices... would they be able to use any of our devices.... switches, joystick and the other things."* | Use computers and switches to screen if possible AAC candidate |
| *"I would use high interest toys ... where you hit the roof of the top of the car and it goes…cause effect things. More sort of interactive games… assess things like are they able to make choices...see what interests them."* | Use of high interest toys |
| *"For the little ones, coloured pictures and it can be from the PCS symbols or it can be available pictures… from magazines. Like pictures of bedrooms, like house stuff according to themes … Especially with the cultural thing so they can relate to it a little bit easier."* | Culturally appropriate pictures used |
| *"… cards that have all the action pictures. Language structure. Sequential thinking or use a fork a sock a knife a plate a cup... You start with your body. Can they name it on themselves can they name it on one of the toys/doll's clothes. And we have that lovely old Peabody 20 years old. So it has things that they can put on a boy and a girl and hair and eyes and whatever so… a lot of objects and we have pictures."* | Use variety of pictures and toys to obtain information on a variety of language skills |

Note: PCS = Picture communication symbols

#### 4.2.1.2.4 Recording of observation

It became clear that the participants made notes while interacting with the learner. Two participants used the Strive To Achieve Results Together (START) checklist (Sunshine Centre, 1990), which is part of the START programme. This programme was designed for therapists as well as parents. The checklist is a developmental checklist that covers all developmental milestones and is used to determine if a learner is functioning at the appropriate developmental level for age. However, many participants reported that checklists were not appropriate to learners with multiple disabilities. No participant used a video recorder or a Dictaphone to record the learner's behaviour or speech quality. When asked about recording of information, participants responded as follows:

*"It is qualitative. Just getting what can the child do and where and how much of facilitation which kinds of facilitation as well. Actually our non verbal assessments written up are a lot longer."*

*"…there's a lot more to comment on. You are adapting it and you are noting down. Child reached for the ball but not the cup… you know that sort of thing."*

*"Pragmatics: we look at it qualitatively. We would comment on how the child is when they come in, are they making eye contact. Again we would bear in mind if they might have cultural differences or something...are they able to request things in some way. Things like are they able to use content functionally."*

#### 4.2.1.3 Hearing screening

Because language development, speech development and hearing are closely interrelated, there is a need to assess a learner's hearing during a speech-language assessment. A learner's response behaviour is influenced by the nature of the auditory stimulus presented. The frequency and bandwidth of the stimulus, the intensity of the stimulus and the meaningfulness of the stimulus are important variables affecting a learner's response (Massie, Dillon, Ching & Birtles, 2005).

According to the data obtained from the focus groups as well as from the assessment reports it was apparent that all participants assessed the learners' hearing. Three schools were fortunate to have the audiological equipment necessary to assess and screen a learner's hearing, such as a sound proof booth, an otoscope, a tympanometer, an audiometer and visual audiometry. However, most participants assessed a learner's hearing informally using noise makers. During an assessment a therapist aims for a conclusion and in some cases a diagnosis while, during screening, a therapist seeks to gather information to determine if further evaluation is necessary (Washington, 2001). When using noisemakers participants were looking for a reaction to sound. This procedure is subjective and can be affected by many factors.

Although participants expressed contentment regarding resources for assessment, including resources for assessing a learner's hearing, it can be concluded that a lack of objective audiological equipment was evident.

#### 4.2.1.4 Feeding

Speech-language therapists need to minimize the risk of choking (airway obstruction) and aspiration (entry of food or liquids into the airway) during oral feeding. Learners must be adequately nourished and hydrated so that they can attend to and fully access the school curriculum. A lack of intervention regarding dysphagia can be fatal. Very limited information is available in terms of the type of dysphagia management that is currently being provided at schools (Hutchins, Gerety & Mulligan, 2011), particularly in South Africa. Owre (2006) surveyed 187 American Speech and Hearing Association members to determine the most common types of service delivery in dysphagia. The data indicated that dysphagia management in schools is carried out on a variety of levels ranging from aggressive treatment to no intervention at all. In the current study, participants from six schools reported asking

the mother of the learner or caregiver questions about feeding. They then might have asked the mother to feed the learner and thereafter guide the feeding process. However, a full feeding assessment was seldom done due to a lack of resources in terms of different consistencies of food being available in the schools and perhaps due to a lack of time. The feeding assessment was conducted with the packed lunch in the learner's school bag (provided from home) or the food the school had provided, since these schools assessed in the absence of the parent or caregiver. Additionally, participants may not have had sufficient training or experience regarding the assessment of feeding. Participants' responses regarding feeding included the following:

Table 15

*Participant's responses regarding feeding*

| **Participants' responses** | **Interpretation** |
|---|---|
| *"We look at the broad areas. We ask the parents about feeding history. Especially in a school like this we ask the parent about feeding history and then we ask specific questions related to nasal regurgitation oral spillage specific utensils coughing all the dysphagia risks we would consider then we look at the speech clarity. We look at oral motor structures; we ask the child to follow a few movements and see whether they can, they have range of movement of the articulators or there's any structural problems with the mouth and the tongue."* | Broad areas assessed<br>Ask parents questions that range from broad to specific |
| *"...some children don't even have lunch. So it's just what they have in the kitchen at the school. So on that day its porridge and you see the child is coping with the porridge then on that day you testing that consistency. The next day if you go and you see if there's juice or tea or a thinner liquid and then if there's a sandwich then that's how you go."* | Assess different consistencies depending on the availability of it. |
| *"Ja where applicable we'll ask if there's any feeding problems. If they say no and you realize from when you ask "will he eat anything?" .You sort of realize and go into specific feeding problems like sensitive or textures or for different types of food. We observe no drooling... is there mouth closure, chewing, and if there's no problem you don't go into that but if there's any problem you have to assess."* | Ask parent questions about feeding.<br>Questions range from general to specific. |
| *"I will do finger feeding I want to see can they chew. Do they have lip closure, swallow… try bread, soft food do they suck or bite, is the bite reflex"* | Assess lip closure, swallow and oral reflexes. |

#### 4.2.1.5 Collaboration

The attainment of best practice is conceptualized to be dependent on effective collaboration between speech-language therapists, other therapists, teachers and other stakeholders (Calculator & Black, 2009). The majority of participants worked in collaboration with the teachers and therapists from other disciplines. Participants from six schools reported assessing in a multidisciplinary team. The team consisted of a speech-language therapist, a physiotherapist, an occupational therapist, the parent/caregiver, a nursing sister and a psychologist. The remaining speech-language therapists from two schools did not assess in a team. Speech-language therapists from one school reported that having been trained in neuro-development treatment assisted them to assess in isolation since they are able to position the learner. The speech-language therapists from this school, however, reported that although they assess in isolation, they provided therapy as a team that included a physiotherapist and an occupational therapist, depending on the goals of therapy for that particular learner. These were the following responses from participants in terms of collaboration:

*Table 16*

*Participants' responses regarding collaboration*

| **Participants' responses** | **Interpretation** |
|---|---|
| *"The assessment for the new admissions, we do it within a multi-disciplinary team as far as possible. So there's a physio, a speech therapist and an OT there. We're hoping that in the future we can take this up to management to say that we desperately need an educator here. Because we're still coming from a therapeutic point of view and the educators really have the knowledge to decide where the child goes"* | Assess in a multidisciplinary team<br>Planning to incorporate an educator in the team in future<br>Assessments are conducted from a therapeutic perspective |
| *"Because there's also a lot of us sitting here, also a lot of them have been sitting at home with no exposure. So they come here and all of a sudden there's five people staring at them, strangers"* Another participant in the group adds *"Yes. It just doesn't work, so you have to take that into account."* | Being assessed in a multi disciplinary team may not be comfortable for the learner |
| *"Yes we do but we will not necessary have the OT or the physio in while we assess. Least of all if you trained in neuro-development treatment because you trained to actually get that kid in the best position."* Another participant in the group adds *"no not assess but we do give a lot of therapy* | Do not assess in a multidisciplinary team especially if you are trained in neuro-development treatment trained |

| Participants' responses | Interpretation |
|---|---|
| *together with the OTs."* | |
| *"We have all disciplines here so it would be nice to do a holistic assessment so you can see the whole picture."* | Assessing in a team encourages a holistic assessment |
| *"Yes and always team discussions so you will know if that child is responding or not responding. Sometimes children will only respond in one place where they really form a bond or where they feel safe. Because we work as teams in the classes so all the therapists move in together and work with the kids so it gives us a very nice idea as well."* | Team work and team discussions |

When working with learners with multiple disabilities, collaboration becomes essential for positioning a learner with a physical disability. A learner with a physical disability may feel too unsafe to attend to tasks, unable to regulate breathing for speech or unable to perform oral or upper extremity motor tasks consistently due to compromised stability, mobility and respiration (Costigan & Light, 2011). Collaborating with a physiotherapist and an occupational therapist becomes essential, because they can assist with the process of positioning.

Additionally effective school based dysphagia management requires appropriate training, successful teamwork and adequate support (Bailey et al., 2008). All members of the team play a significant role in the management of dysphagia. The physiotherapist may assist with positioning during feeding; the occupational therapist assist with adapted utensils for feeding; the speech-language therapist is responsible for intervening at the feeding level and for training the general assistants when feeding.

#### 4.2.1.6 Language of assessment

As the population from a variety of cultures and language groups in South Africa grows, clinicians are faced with the challenge of providing services to persons with communication or swallowing disorders in languages other than English, or in languages in which they may not be fluent. South Africa has a diverse multicultural and multilingual population of an estimated 41 million people of whom 79% are Black, 9% coloured, 9 % White and 2,5% of Indian/Asian origin. Eleven languages are 11 officially recognised. The most widely spoken languages in the country are isiZulu (23,8%), isiXhosa (17,6%) and Afrikaans13,3%). The majority of speech-language therapists working in the country are White and English or Afrikaans

speaking; as a result, speakers of indigenous languages have invariably been underserved (Pascoe & Norman, 2011). While services are best provided by a clinician that speaks the language of the patient, this match is not always possible.

A second-language-learner is expected to score lower on standardized tests than monolingual speakers, therefore American Speech Hearing Association stipulates that, in order for second language learners to be considered as having a communication disorder, they must have limited competence in both languages (Myers, 2002). Participants reported assessing in the language of instruction at the school at which they worked; the majority of the schools' languages of instruction were English and Afrikaans. However, they did report that the majority of learners they assessed were not first language English or Afrikaans speakers. In such cases translators were used. However, none of the translators were trained; translators included therapists from other disciplines, the parent or caregiver present, general assistants in the school as well as teachers. Figure 8 illustrates the percentages of different language used for assessments, by the participants.

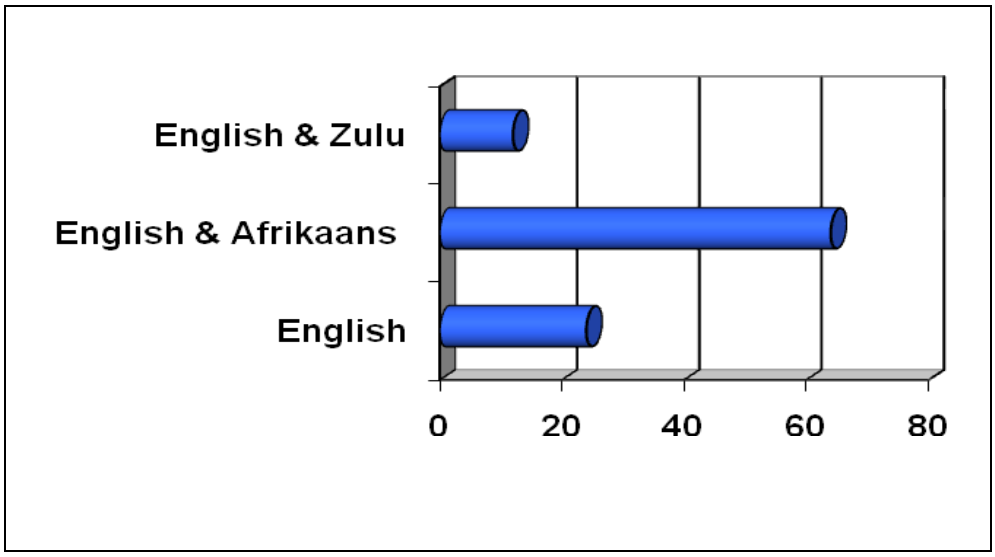


*Figure 8*. Language/s used for assessment

When asked about the languages used for assessment, participants responded as shown in Table 17.

Table 17

*Participants' responses regarding languages used*

| **Participants' responses** | **Interpretation** |
|---|---|
| *"We work through the physios and OTs as they speak other languages. We rely a lot on them."* | Use other professionals as translators |
| *"It hasn't been a huge point for us because the language of instruction is English, so you want to facilitate the process of understanding but you don't want to leave out the English."* | Assess in English as it is the medium of instruction at the school |
| *"Ja because English is the medium. It does give us an indication of how they would cope in the classroom."* | Assess in English as it is the medium of instruction at the school |
| *"We have used translators, we do sometimes if the child comes in with absolutely no English we use… some of the better general assistants who's English and Zulu or whatever is fairly good and we have on occasion worked through them."* | Use untrained translators |
| *"Working with untrained translators it's not brilliant because you can never be sure if they saying too much or too little. And really the fact what it does give you is an idea of are they at a reasonable level at their home language as oppose to otherwise there will be a language delay in English because they not exposed to English as opposed to a language problem."* | Acknowledges the limitations of untrained translators |
| *"I think it's important in this context, is also, is there the slightest understanding of English or Afrikaans. Because that is our medium of education, if there's the slightest little bit of understanding then you know we can its sort of a good sign."* | Need to obtain a level of the learner's language of the medium of instruction at the school. |

Most participants reported that they assessed in the language of learning and teaching of the school they're at. These results are in agreement with those of a small scale survey by Pascoe et al. (2010) who found that a considerable proportion of speech-language therapists were able to offer therapy in English or Afrikaans only, even when working with children for whom any of these is a second or third language. The results of this study are further supported by a study by Jordaan & Yelland (2003). They attempted to determine how South African speech-language therapists provided language intervention for multilingual language impaired learners; the results of their indicated that the majority of speech-language therapists were providing language therapy to multilingual learners in the learner's second language only– usually English. The authors attributed this finding to parental insistence and the absence of another common language between the speech-language therapist and the learner.

Children from culturally and linguistically diverse backgrounds may exhibit depressed test performances when assessed in their second or third language, and consequently their performance may not reflect their true ability or learning potential. Language is so closely linked to culture that the linguistic knowledge required by many standardized tests may not always be reflective of the learner's communication (Caesar & Kohler, 2009).

Clinicians in the study by Pascoe et al., (2010) noted that an assessment tool in the most dominant languages in the Western Cape would be of value to speech-language therapists and they suggested that this would increase their level of confidence when working with multilingual learners. These views were shared by participants of the current study. Participants reported that, due to the language barrier, their confidence during assessment was adversely affected.

The results indicated that the participants, in some instances, made use of translators. These translators were in all cases untrained. Parents, caregivers or other therapists acted as translators. Not every bilingual person has the ability to be an interpreter or a translator; there needs to be proficiency in two languages. In addition to proficiency in two languages, Langdon and Cheng (2002) stated that other necessary skills included: the ability to say the same things in different ways; the ability to shift styles; the ability to retain chunks of information while interpreting; and familiarity with medical, educational, and professional terminology. Literature suggests that ideally, the interpreter should not be a friend or family member. The information being interpreted may be misunderstood, relayed inaccurately, or omitted (Riquelme, 2002).The interpersonal dynamics between the patient and the interpreter cannot be underestimated either (Riquelme, 2002). All these factors may ultimately influence the quality of the interpretation and hence the speech-language therapist's ability to diagnose or treat a communication or swallowing disorder. Due to a lack of resources in terms of trained translators, the participants were sometimes forced to use the parents or caregivers as translators. The language of the assessment and the lack of trained translators have a direct link to the participants' confidence levels. This is illustrated in Figure 9.

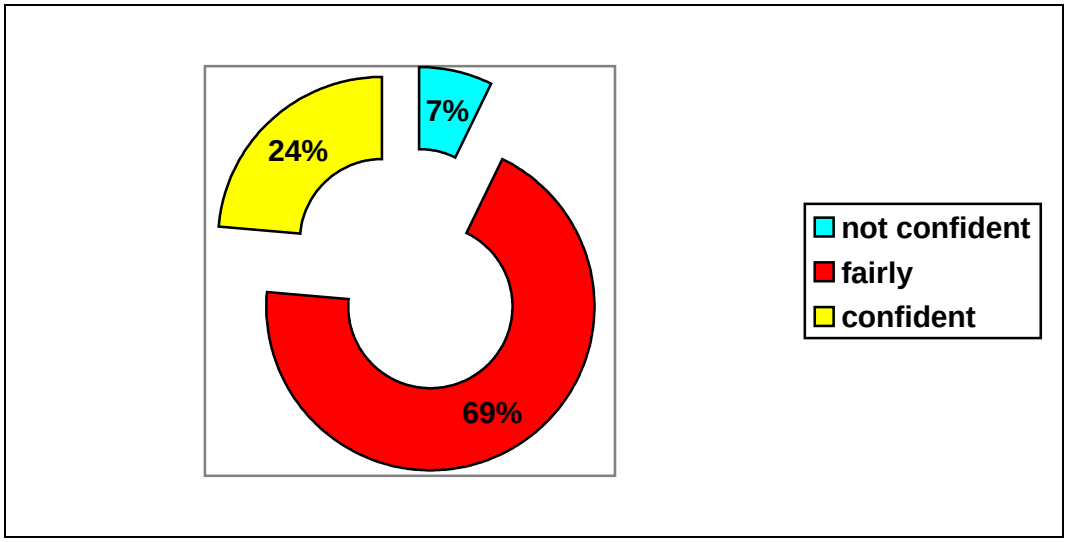


*Figure 9*.Speech-language therapist's confidence levels when assessing

As can be seen in Figure 9, the participants in general did not report that they were confident in assessing the learners with multiple disabilities. One participant reported that she *"feels like running away from assessments of learners with multiple disabilities"*. She added that *"assessing language can be so difficult; a physiotherapist is able to determine if there are contractures, if there's increased or decreased tone. But for a speech-language therapist to determine what the learner understands and doesn't when he is non verbal and when he is severely physically disabled, is a daunting task."* Other participants' responses are recorded in Table 18.

Table 18

*Participants' responses regarding their confidence levels*

| **Participant's responses** | **Interpretation** |
|---|---|
| *"…and also each assessment is individual. You can get a child that's not so physically impaired and has quite a lot of cognition. It's relatively easy to assess and then you get a completely different child like you have no idea what's going on. So I think there times when you feel uncomfortable and times when you feel completely comfy. I think it just depends on the child."* | Tremendous heterogeneity – some cases are easier than others |
| *"In terms of the severe children you get better at it"* a participant in the group adds *"with time though"* and another participant adds *"and lots and lots of practice"* | Time and practice influences confidence levels |
| *"With me because of the language barrier, I'm not always a 100% sure. Am I interpreting the info correctly."* | Language barrier affects confidence levels |

| Participant's responses | Interpretation |
|---|---|
| *"I think quite confident I think the experience does help… But certainly confident enough to say whether the child is going to benefit from therapy… I think in terms of confident I think it does come with experience I certainly don't feel I'm not daunted if I get a very severe kid… look even if they are not verbal. I think it's because I've worked in the field for a long time."* | Time and experience affects confidence levels |

Speech-language therapists reported that they did not always feel comfortable with assessments. One of the main themes to arise in relation to this point was the heterogeneity of the population group being served. The participants found some cases easier than others. They also reported that they needed time and practice in order to achieve a higher level of competence. One of the main factors that affected their feelings of competency was the language difficulties with regard to not speaking the home language of their clients, something they experienced on a daily basis.

Current literature states that a variety of sources of information should be used to obtain a comprehensive picture of the learner's functioning. In addition to information provided by the learner's family or by the learner's profile other sources of information include direct evaluation of a learner's skills, informal and structured observation by the speech-language therapist and other professionals working with the learner. Assessments blend information from these various sources to describe a child's current state of development (Hebber & Rooney, 2006). Guidelines from American Speech and Hearing Association (2006) likewise state that no single measure can provide sufficient information and therefore assessment data should reflect multiple perspectives.

### 4.2.2 Sub-aim 2: To explore what information speech-language therapists aim to establish when assessing learners with multiple disabilities

Table 19 reflects responses to the question: "What information do you aim to establish when assessing?"

Table 19

*Participants' responses regarding aims of assessment*

| **Participants' responses** | **Interpretation** |
|---|---|
| *"So we try to establish in our assessment basically put… what they can do… what they can't do… what their possibilities are."* | Determine the learner's strengths and weaknesses |
| *"From a neuro-development treatment point of view, positioning, the best positioning for the child. I'm looking at his motor ability as it relates to communication. And feeding and breathing, voicing what else oral motor skills, language."* | Acknowledge the importance of positioning |
| *"During the assessment we also look at; is this child going to require an AAC device. We don't necessary go into the full in depth assessment but we do assess… are they going to need one yes or no and then work on that at a later stage"* | Assess the need for an AAC device |
| *"Well for non verbal assessment we use non standardized methods a lot of observation and then it's a long process but we know what we looking for. Receptive syntax, receptive semantics and then we will figure out the best way to elicit that from the child and that's different for every child and that is a very individualized process"* | Receptive syntax and semantics |
| *"If we can if we can modify a response"* | Adapt a response |
| *"To start off with is symbolic representation, to see where is he and then can assume that he is on an object level. Use things like cups plates, fork, knives, spoons, cars, balls. You know that sort of thing, things that he will encounter on a daily basis. Once we see if he understands that on a receptive level; then you can say ok lets expand it. If he understands that, try photo's and he's got it, you try symbols and he's got it, then we try formal tests with modified response. But if we are only using object then yes it will because his level of cognition is also that low. Can only be functional on relative object otherwise"* | Determine the level of symbolic representation |
| *"…also looking at pre-linguistic skills. Eye contact turn taking"* a participant in the group adds *"object permanence and cause effect"* a second participant adds *"all of those thing you look at first"* | Prelinguistic skills |
| *"My biggest thing is a box for symbolic representation. Matching/identical object. Photo's of that object and then the PC symbols… Then pre-linguistic skills you need noise makers, masks, all those type of things and then your basic concepts colours, shapes and that sort of thing so you will use stuff like that. While you assessing if u see the child is going to need some form of AAC at a later stage you can use those symbols that you were using to attempt a switch and choosing with two symbols and that sort of thing."* | Level of symbolic representation<br>Pre-linguistic skills<br>Need for an AAC device |
| *"To see which level the child is at. If he's an athetoid, to find the level the child is at cognitively and in terms of his mobility so too see if you want to use an AAC device to* | Assess learner's abilities<br>Need for an AAC |

| Participants' responses | Interpretation |
|---|---|
| *see what's functioning what's not, would he cope with a head pointer."* | device |
| *"Okay so what I would want to establish first of all are things like what his feeding patterns are like. What's his eating and drinking like."* | Assess feeding patterns |

Note: PCS = Picture communication symbols; AAC = Alternative and Augmentative communication

Analysing the results revealed the following areas of assessment: a) positioning; b) oral-motor function; c) language and d) level of symbolic representation. Each of these areas is discussed below.

#### 4.2.2.1 Positioning

Learners with physical disabilities may experience abnormal or fluctuating muscle tone, impaired strength and persistent reflexes that may affect their seated position and impair their postural control. Learners therefore require seating intervention in order to achieve positions that support effective functioning in a particular environment (Costigan & Light, 2001). There are numerous positive effects of seating, including improved respiratory functions, decreased abnormal muscle tone, decreased abnormal reflexes, decreased risk of anatomical deformities, improved stability and safety and improved comfort. Optimal positioning therefore improves participation and performance (Costigan & Light, 2011).

In order to assess successfully speech-language therapists are concerned with exploring what the best position for a learner should be for optimal communication. In addition, they would like to determine a learners' motor ability as it relates to communication. In establishing the best position for a learner it was apparent that a team approach was undertaken; positioning was done with the assistance of the physiotherapist and occupational therapist. However, participants trained in neuro-development treatment would establish optimal positioning independently. A participant reported *"NDT is good especially when you the only therapist at a school. It also makes you a lot less scared; gives you a lot more confidence. It helps you facilitate modified assessment; it helps you to position and helps you elicit that response."*

#### 4.2.2.2 Oral-motor function

Participants were interested in determining the status of the oral structure and the functioning of these structures. This information is essential for feeding and articulating.

#### 4.2.2.3 Language

Participants responded that language was the main aim of the assessment. They divided language into pre-linguistic skills, expressive language, receptive language and pragmatic skills. Speech-language therapists aim to establish the level at which a learner's receptive language is, that is, how much he/she understands and whether he/she is able to follow instructions. These instructions range from simple to complex. The participants were also interested in how learners expressed themselves. The participants also reported exploration of a learner's pragmatic skills.

#### 4.2.2.4 Level of symbolic representation

In general, many participants obtained a level of the learner's symbolic representation. Knowing if the learner is functioning on a two-or three-dimensional level assists the speech-language therapist in planning the assessment. Furthermore, it assists the speech-language therapist in establishing goals for therapy.

### 4.2.3 Sub-aim 3: To establish what the results of a speech-language assessment are used for.

In essence, the participants assess learners with multiple disabilities for three reasons. Primarily, they assess for candidacy to the school. This was reported by speech-language therapists from five schools. The participants' general response to this question was "*We assess to see if a learner will fit into this school*". Speech-language therapists from three schools reported that they did not assess for candidacy any longer as government policies forbid it. This was evident from the response: *"We've been told in terms of admission to accept anyone who has the potential to learn"*.

Another reason why speech-language therapists assess is for placement within the school. A participant responded *"We do a very basic screening to see what level they on and also to get an understanding of where to actually place them."* Another participant added *"We need to see in which class they will be placed in."* It was

evident from the participant's responses that some schools were divided into two streams. One stream focused on academic work and the catered for the learner with severe disabilities and focused more on life skills. The results were used to determine where the learner could be placed in the school and from which stream the learner would benefit most.

The third reason for assessment is therapy purposes. Assessments are conducted to determine a learner's strengths and weaknesses. The results of the assessment assist the speech-language therapist in determining goals for therapy. When asked "What do you do with the interpreted information?" a participant replied: *"It carries over straight into therapy and into class work."* Another participant supported this by adding *"We need to know where to start in therapy."*

### 4.2.4 Sub-aim 4: Determine what school-based speech-language therapists describe as best practice; additionally how they have adapted their vision of best practice given the resources and contextual factors in and with which they work.

Evidence based practice may contribute to an improvement in clinical services, make clinicians more accountable, decrease the gap between research and practice and reduce the variation in service provided to clients (O'Connor & Pettigrew, 2009). Fey (2006), however, found that in practice there are many obstacles to the implementation of best practice principles.

When participants were asked to describe best practice in terms of assessing learners with multiple disabilities, given the resources and contextual factors in which they work, their responses varied. Table 20 displays the varying responses.

Table 20

*Participants' responses regarding best practice*

| **Participant's responses** | **Interpretation** |
|---|---|
| *"Best practice is being able to adapt your assessment to suit the learner's needs."* | Adaptation<br>Learner centred |
| *"Speech-language therapists should have basic knowledge of how different disabilities present. That is the best starting point."* | Academic knowledge of different disabilities |
| *"Things are changing daily in the profession and speech-language therapists need to keep afloat on the latest happenings."* | Acknowledgement that a methods are changing constantly in the literature |
| *"Realize that each learner is different therefore each* | Heterogeneity of learners |

| | |
|---|---|
| *assessment will be different."* | and assessments |
| *"My experience up until now has been mostly children that are non verbal. The most valuable skill is phoning someone that knew better. That's how I learned. And you can't negate experience you just have to get through it. But when I didn't know something I either looked in my text book and I tried it out and if it didn't work I tried it a different way but academic knowledge is important, you have to know what you dealing with."* | Seek assistance when in doubt<br>Get experience<br>Refer to literature<br>Get academic knowledge |
| *"You have to be able to apply that academic knowledge."* | Applying academic knowledge |
| *"Most cases are not textbooks, that's the first thing you got to know."* | Heterogeneity of learners<br>Complexity of cases<br>Little literature |
| *"You have to be lateral in your thinking you can't just go according to an assessment plan you will always have to improvise. Change you going to see small changes but that's good enough, its baby steps all the way but just to be patient and more tolerant. Improvise with therapy things don't always go according to plan."* | Adapt the assessment according to the learner<br>Be creative and improvise<br>Personal attributes of therapists – be patient and tolerant and flexible |
| *"With certain type of disabilities you expect a certain kind of cognitive functioning. Your spina bifida children generally tend to be cognitively okay and with them we would try and push for standardized tests. Although language might still be a problem because English is not their first language but with certain disabilities you know we try and do these tests just to see."* | Importance of academic knowledge<br>Adapting to language of the learner |
| *"I think listen to parents more. You see a child and say never. The main thing with assessment is the child is at the centre so use all info from everyone involved. Teamwork is very vital. These children are complex and they so many factors. Listen to everybody."* | Collaboration emphasized<br>Parent involvement<br>Child centred<br>Teamwork<br>Acknowledge the complexity |
| *"Getting to know the different kids especially CP and in terms of AAC. Things change all the time. Learn about what's out there and how can it assist you bringing in a multi disciplinary team and know each others rules."* | Acknowledge dynamic nature of the work<br>Know what each team member does |

Note: AAC = Alternative and augmentative communication; CP: = cerebral palsy

In terms of how have they adapted their vision of best practice given the resources and contextual factors with and within which they work, participants responded that any resources can be used when it comes to assessing for language. Speech-language therapists use pictures in magazines, photographs and picture communication symbols. They also use common objects that are familiar to all cultures such as a plate, a bowl, a bottle, a comb and socks. Additionally, they use any and all toys from dolls to cars to tea sets. These results show that they interpreted best practice from many perspectives and drew on their knowledge and skill. Furthermore, they related best practice to the particular context in which they work.

When screening a learner's hearing, participants reported that they use rattles, and suggested that noisemakers could be easily made with stones, beans or beads in a bottle or a jar. The overall impression obtained from all the participants was that although not all schools had standardized tests for assessment, speech-language therapists used their creativity and any available resource to create stimuli to assist them when assessing. This, however, may not truly contribute to best practice.

Another important theme that was evident about contextual factors was that speech-language therapists needed to understand the culture they worked in. As highlighted in previous chapters, South African speech-language therapists are constantly confronted with learners from diverse cultural backgrounds. Participants reported that they were sensitive to cultural and linguistic differences. Such sensitivity is essential in understanding and effectively serving learners with disability from diverse backgrounds. Cultural competence has received much attention in the literature (Paul & Roth, 2008), not only for speech-language therapists in South Africa but on an international basis.

### 4.2.5 Sub-aim 5: To determine school-based speech-language therapists' understanding of and views on governmental education policy and visions.

All participants were aware of current educational policies and the shift towards inclusion. Their views on this subject were unanimous. They reported that inclusion *"looks lovely on paper";* however, they did not see it working in practice in South Africa. Their reasons included the opinion that a lack of resources in South Africa continued to be an obstacle. The resources discussed include land, space and trained personnel. Participants added that *"…not all schools are wheelchair friendly, most schools have two levels and there are no ramps"*. They also questioned the size of the current mainstream classroom to accommodate learners in wheelchairs.

Furthermore, they reported that inclusion could work for learners with learning disabilities but not for learners who required constant support. A participant reported that *"learners with disabilities require very specialized and structured environment to learn; this environment needs to be supportive to a learner's wants and needs"*. She then questioned whether the mainstream classroom with 45 other learners will provide this. Other participants' responses included the remarks provided in Table 21.

Table 21

*Participants' responses regarding government policies and vision*

| **Participants' responses** | **Interpretation** |
|---|---|
| *"We don't turn a kid away... we have to weigh up the pros and cons. I come with prior knowledge of White Paper 6; at this school we do not follow it. We need info. There has not been any workshopping about it that is why a lot of us are standing in the dark and that impacts on the assessment we do."* | Schools require more information.<br>Lack of information impacts on the assessment carried out |
| *"We also don't have a modified curriculum. So when you take the normal curriculum and enforce it on learners with SMH, then confidence goes down so what exactly are we doing."* | Absence of modified curriculum, this affects practice |
| *"I think in the education department there should be uniformity. A lot of the Elsen Schools have stuck to the admission criteria."* (Elsen schools are schools that cater for early learning special educational needs.) | Lack of uniformity among schools |
| *"…but the teachers are no way near qualified capable of coping with our kind of children and I don't know how they going to equip the teachers having said, there is definitely a place where some kids can cope in mainstream. But I think it has to be inclusion sensible."* | Lack of qualified teachers to deal with learners with multiple disabilities<br>More learners could be in the mainstream |
| *"I think the way that inclusion is described by the government its not realistic I don't think SA is ready for it. The way that it's set out its just not realistic, it's almost like a bunch of people sat together and said ah this would be a great idea but not really now"* | Against inclusion for South Africa<br>Unrealistic<br>SA not ready |
| *"Well you know they did go to overseas and they looked at inclusion overseas. At this stage it isn't going to work. If you look at the studies coming from overseas they are actually going back to specialised education."* | Overseas they are going back to specialized education |
| *"It sounds really really really nice and ja in reading it I'm obviously in favour of it. We not nearly nearly ready for inclusion in SA. The schools the mainstream schools from a structural point of view are not ready for it… The teachers don't know how to deal with them. Children with multiple disabilities or physical disabilities are not badly behaved children. They going to sit in those classes like wall flowers passively learn or not learn…you know many of them are limited in their wheelchairs. The teachers don't have the time in a full class to give them the interaction they need. And they don't have the knowledge and experience… I just don't think that it's a possibility right now. I think for the kids with minimal problems….great. I just don't think that we are ready. On paper it looks fantastic."* | Against inclusion<br>Structure of schools<br>Teacher training<br>Children's behaviour requires special input<br>Disabled children will be left behind<br>Classrooms too large<br>Teachers do not have time to interact with the kids<br>Teachers don't have the knowledge or experience<br>Perhaps inclusion is right for learners with minimal problems |

Note: SMH = School for mentally handicapped learners; SA = South Africa

**Summary of Part 2**

Information reported in part 2 explains the methods of assessment used by school based speech-language therapists when assessing learners with multiple disabilities in schools. School based speech-language therapists use a combination of formal and informal methods. The speech-language therapist generally assesses a learner for placement, be it in a class or in that particular school. The aims of the assessment include positioning, oral-motor function, language and symbolic representation. However, a lack of assessment resources, a lack of uniformity in service delivery, the heterogeneity of learners labelled as multiply disabled, the insufficient number of speech-language therapists, speech-language therapists who do not represent the linguistically and cultural diversity of the population, the lack of research in the South African context regarding assessment and learners with multiple disabilities, and the complacency have created challenges in implementing best practice.

### 4.3 Part 3: Assessment reports

As discussed in Chapter 3, in addition to attending the focus group, each participant was asked to provide two assessment reports of speech language assessments conducted by them at the school where they work on learners with multiple disabilities. This enhanced the validity of the findings. These reports were important for determining the link between what the participants described in the focus group and what they wrote in their reports. As suggested by literature, the document analysis was used in combination with other qualitative research methods. In so doing the researcher endeavoured to provide a confluence of evidence that enhanced credibility (Bowen, 2009). There was evidence of reluctance from the participants to share these reports with the researcher. This was apparent since, after numerous reminders, only eight assessment reports out of a possible 50 were submitted.

The participants submitted one report per school; as they remarked that all their assessment reports were similar. The identifying information from all reports was removed as well as the front page of the report which contained the emblem of the school. The reports did, however, show the name of the learner. The fact that no other identifying information of the learner (such as the surname, date of birth etc.) was present and that the school emblem was deleted, made each report anonymous. That only a few reports were submitted proved to be a significant limitation of the study. This was not anticipated in planning the study. All participants received

consent forms that requested that assessment reports needed to be submitted because they were part of the process of data collection. In analysing the reports it was evident that they all displayed a similar macrostructure as shown in Figure 10. The reports consisted of identifying information, a summary of the case history, behaviour during the assessment, a language assessment, an oral assessment, an articulation assessment, a feeding assessment, a hearing assessment and a summary and recommendations.

**Speech therapy report**

Name:

Date of birth:

Date of assessment:

Chronological age:

Case history:

Behaviour:

Language:

Oral assessment:

Articulation:

Hearing:

Summary and recommendations:

*Figure 10*. Macrostructure of reports submitted

The submitted reports ranged from basic screening reports to in-depth reports and multidisciplinary team reports. They will be discussed in accordance with the

aims of the document analysis. In general, the content and depth of reporting were analysed.

### 4.3.1 Sub-aim 1: Evaluation of the content of the case history of the learner

In the analysis of the reports it was found that three reports did not contain any case history or background information. Two reports contained basic background information; this information was provided in two or three disconnected sentences. One report read, *"Motor accident, January 2007. Head injuries and hospitalized for b.m. ataxia due to do multiple brain injuries. She stays with devoted care taker."* The remaining three reports contained a section that provided an in-depth case history and background. This section was further subdivided in these reports in the reason for referral, family history, an emotional image as seen by the mum/caretaker and the current development and scholastic situation. This section served as an introduction to the assessment report and established a better understanding of the learner.

Half of the reports did not include any reasonable description of the relevant background information. This information also did not concur with the data provided in terms of the methods used for assessment. The majority of the participants emphasized the importance of the information of the case history during the focus groups. Moreover, the interaction between the participants and the parents during the case history was highlighted. The lack of background information in the reports could be due to the fact that this essential information would likely be placed in the learner profile. The assessment report would in all likelihood also be placed in the profile. The participants may therefore not have seen the need for duplicating information that already was in the profile. Additionally as was highlighted in a previous aim, the participants' caseloads were high and consequently they might not have had the time to include a section on case history in the reports. Nevertheless, the findings were not related to case history information.

### 4.3.2 Sub-aim 2: Determine the method/s of assessment used when assessing

Similar to the background information section of the reports, information reported in this section varied from basic to in-depth information. It was evident that the participants used a combination of formal and informal procedures. The standardized tests that were administered and the scores obtained by the learner were

reported. However, there was no information recorded on any modifications made during the assessment or any statements made regarding the qualitative interpretation of results.

It was clear in all submitted reports that limited information was recorded on the informal assessment. One or two sentences summed up the results of the informal assessment, for example *"She understands instructions but not 2 to 3 object instructions and she is able to use +/- 5 word sentences"*. There was no mentioning of the methods used to elicit the results. Once again, information provided in this section was brief and concise. Most reports consisted of short sentences, almost in a point like form. An example of such a report is presented in Appendix 7.

### 4.3.3 Sub-aim 3: To determine which aspects of speech and language competence and development were assessed

The areas recorded for speech and language competence and development were comprehensive and lacked detail at the same time. From Figure 11 it is evident that language is divided into form, content and use. Three reports had the section on speech and language combined. Under this heading one of the reports stated, "*He uses sounds and gestures to communicate. He uses 10 words but understands simple instructions and can understand social speech. He makes eye contact during social interaction"*.

In other reports the section on language was divided in to three subsections 1) expressive language, 2) receptive language and 3) pragmatic skills. Comments under expressive language pertained to the manner in which the learner expressed himself. The section on receptive language indicated how much the learner understood and the section on pragmatic skills commented on the learner's use of language. All these comments were brief and concise.

### 4.3.4 Sub-aim 4: To determine the presence of a feeding and swallowing assessment

Two of the submitted reports had a section on feeding. The information in one of these reports was brief. Information recorded in this section was as follows: *"He drinks bottle and eats all food. The food is cut into little pieces. He starts eating by himself"*. However, the other report contained in-depth information; for instance, this report described the entire feeding process including a description of the anatomical

structures observed during feeding. In addition, there were comments about drinking, the difficulty the learner experienced when drinking and the process of intervention by the speech-language therapist to assist the learner.

### 4.3.5 Sub aim 5: Evidence of an assessment of hearing

There was a section on hearing in all the submitted reports. The information conveyed in this section was brief. Seven reports stated that *"the learner's hearing was not formally assessed however it appears to be within normal limits"*. To some degree this does indicate unethical practice, especially since the learner's response to sound and communicative attempts might have been atypical due to the disability; the high incidence of hearing loss in this population should also be considered. However, this research report does not aim to lay any blame on any participant; this matter will therefore be sensitively addressed when providing the participants with feedback. The remaining report included the results of impedance audiometry otoscopic examination. Although the majority of the participants reported that their departments were well resourced, it was evident that the lack of audiological equipment when assessing proved to be a limitation in the assessment. Speech, language and hearing are inter-related, since a learner's hearing status may have an effect on his/her speech quality and language development.

**Summary of part 3**

Even though the researcher requested assessment reports, the low return of assessment reports could be due to speech-language therapists' feelings of insecurity about their assessment practices, since they lacked suitable assessment material, experienced language barriers and because of the severity and range of the disabilities. This may also be indicative of the underlying insecurity of speech-language therapists regarding assessment practices with learners with multiple disabilities. A need for support and guidance as well as suitable assessment material is indicated. This may also have implications for undergraduate training and continued education.

### 4.4.1 Part 4: Data obtained from the focus groups compared to the data from the assessment reports

In this section the data obtained from the focus group is compared to the data obtained from the assessment reports. These results have been tabulated in Table 22. A discussion of the results will follow thereafter.

Table 22

*Data from focus groups and assessment reports compared*

| **Data** | **Focus group** | **Assessment reports** |
|---|---|---|
| **Background information** | Obtained through a parent interview. A detailed face to face interview is done. | Information in this section is brief and concise. |
| **Formal methods** Method | Use of standardized tests as well as modifications to the tests were well described. | The test used was stated. No mention made of any modification or the method. |
| **Formal methods** Results | Results of the tests were taken as a guideline only. | The results were clearly stated as well as age norms given. |
| **Informal methods** Method | Use observation and play as the primary method. | No mention made of the methods used or of the communication partners. |
| **Informal methods** Results | Participants reported qualitatively reporting of the results. | Results were reported in 2-3 disjointed sentences |
| **Language used** | Language of teaching at the school | The home language of the learner was reported. |
| **Collaboration** | Work in a multidisciplinary team | Only one report mentioned teamwork. |
| **Areas assessed** | Language (expressive and receptive) Hearing | Language (expressive, receptive, pragmatics) Majority of the reports |

| | | |
|---|---|---|
| | Feeding | mentioned that hearing was within normal limits despite any objective tests having been done. The manner in which the child feeds is mentioned. However, no feeding assessment was done. These results were obtained from observation or from information provided by the caregiver. |

The data obtained form the focus groups and the data from the assessment reports revealed many differences and similarities. The differences included the informal methods of assessments used, the modification of the assessment and feeding. These sections were omitted in the assessment report. However, the formal procedures, hearing screening and oral assessment were documented in all the reports. The most significant aspect absent in the assessment reports was the methods used to obtain the results. Results of the assessment were clearly stated. There was, however, a lack of indication of exactly how these results were obtained, what stimulants were used, who interacted with the learner and a rich description of the learners' behaviour to different stimuli. This discrepancy could be due to a number of reasons: Assessment reports are often written for a specific audience which, in many cases, maybe the primary caregiver. Speech-language therapists therefore do not necessarily include detailed information on the method of how the information was obtained. Brief and to the point reports are therefore what should have been expected. The researcher did not take this into account in planning the method of the study. This has proved to be a significant limitation of the study, since as the reports were expected to support the validity of the study. Further possible reasons for the discrepancy are discussed below.

### 4.4.1 High case workload

Participants expressed that all learners in the school required speech-language therapy. However, due to the high ratio between the number of learners at a school and the number of speech-language therapists at that school, not all learners receive therapy, indicating a high case workload. This view was also prominent in a research project from the United States of America that found that caseloads were unmanageable for school based speech-language therapists (Katz, 2010). In addition Edgar and Rosa-Lugo (2007) found that there was is a critical shortage of speech-language therapists in schools in the United States of America. However, high workloads are not an acceptable reason, especially not when they have a negative impact on service provision (Khoza-Shangase & Masoka, 2009).

### 4.4.2 Limited time for assessment reports and teamwork

Due to high case workloads and burn-out, therapists may not have had sufficient time for assessments and for writing assessment reports. Limited time may lead to brief and superficial assessment reports.

### 4.4.3 The effect of the assessment protocol of the school affects whether an assessment or rather a basic screening is conducted

It was evident from the results that different schools have adopted different assessment protocols. Some schools assess with parents present, a detailed parent interview is done, the assessment is done in a multidisciplinary team and the assessment is conducted for the sole purpose of candidacy to the school. From these reports it is evident that a basic screening rather that a full assessment is conducted. In other schools assessments are conducted for intervention purposes. These reports are slightly more detailed.

The discrepancy between the data received from the focus groups and the data obtained from the assessment reports are a concern. All participants in the study were educated professionals with a four year degree in Speech Pathology. Furthermore, 44% of the participants were trained in neuro-development treatment and 44% have a master’s in Speech Pathology. This shows that the participants are interested in the field of Speech Pathology. They may however have become complacent regarding the context in which they work and the discrepancy between school and Department of Education policies.

The data also proved that the average years of experience participants had in

working with learners with multiple disabilities was 11 years nine months. The number of years working with learners with multiple disabilities is thus extensive. Additionally, most participants have been employed by the Department of Education for many years. Participants may have assessed learners using the same methods for many years. These results also indicated a degree of complacency on the side of the participants.

**Summary of Part 4**

From the results obtained it is evident that there was a significant discrepancy between the findings. This discrepancy could be due to a number of reasons: a high case workload, an actual lack of assessment resources, limited time for assessments, complacency regarding resources and their use; the assessment protocol of the school could have determined whether an assessment or only a basic screening was conducted. It should be noted that the reports submitted by the participants were reports used internally at a school. The researcher, being employed at a school, is aware of the fact that a more detailed report is usually compiled only if a parent requested one for an external professional.

## 4.5 Part 5: Data from the focus group and assessment reports compared to the research tool

It is widely acknowledged that assessment is the cornerstone on which intervention should be built. If assessment is inappropriate or inaccurate and does not take cultural variations and the potential for cultural bias into account, assessment results will not be accurate and intervention may be inappropriate at best or harmful at worst (Pascoe & Norman, 2011).

Part 5 compares the results obtained from the focus groups and the assessment reports to the research tool. The purpose of the research tool was to provide a framework for a proposed set of guidelines for the assessment of learners, based on the principles that have been recommended by literature. Table 23 compares the obtained data to the eight categories in the research tool. This comparison assisted in determining whether current practice among school based speech-language therapists actually mirrored best practice recommendations for assessment.

Table 23

*Comparison between the obtained data and the research tool*

| Categories | Questions | Comment |
|---|---|---|
| **Fair and bias free assessment** | Assessment of every learner? | No |
| | Protocol for assessment? | Assess in a multidisciplinary team.<br>Screening rather than a full assessment. |
| | Sources of potential bias? | Learners assessed in the language of teaching at the school.<br>Lack of uniformity between schools<br>Adherence to inclusion and the participants lack of enforcing it. |
| **Aim of the assessment** | To determine candidacy to the school? | Five schools |
| | To determine goals for intervention? | All eight schools |
| | For placement in a class? | Three schools |
| | For the termination of therapy? | None of the schools |
| | To monitor the learner's progress? | None of the schools |
| **Language of assessment** | Assess using the language of teaching at the school? | All eight schools |
| | Assess using the learners' | None of the schools |

| Categories | Questions | Comment |
|---|---|---|
| | home language? | |
| | Assess using an untrained, casual translator? | Three of the schools, this was seldom done |
| | Assess using a trained translator? | None of the schools |
| **Viewing the learner as a whole** | Take into account the learners' impairments and modified accordingly? | All eight schools |
| | Take into account the learners' likes and dislikes? | None of the schools |
| | Take into account the learners' worldly exposure? | Three schools |
| **Learner centred** | Employ optimal positioning during the assessment according to the learners abilities? | Schools that assess in a multidisciplinary team |
| | Consider medical conditions? | All eight schools |
| | Consider social contexts:<br>- Has been to a school previously?<br>- Lives with parents or guardians? | Majority of the schools take the social context into account |
| | Adapt assessment according to the learners needs:<br>- Size of pictures?<br>- Colour of pictures?<br>- Object verse pictures?<br>- Time allocation? | - picture size increased<br>- colour of the pictures and object verse picture |

| Categories | Questions | Comment |
|---|---|---|
| | - Method of response? | depends on the learners level of symbolic representation<br>- there was no specified time allocation<br>- Method of response is dependent on the learner's abilities. |
| **Collaboration during assessment** | Involvement of parents? | Parents are involved in six schools with the assessment |
| | Involvement of other therapists? | Six schools work in a team |
| | Involvement of teachers? | None of the schools involve the teacher in the assessment process. |
| | Involvement of other stakeholders? | No other stakeholders mentioned |
| | Transdisciplinary verse multidisciplinary verse interdisciplinary? | Majority of the schools work as a multidisciplinary team |
| **Method of assessment:** | Formal assessment<br>• Language?<br>• Speech? | Names of the language standardized test are tabulated in Table |

| Categories | Questions | Comment |
|---|---|---|
| | • Hearing?<br>• Feeding? | 10.<br>Three schools formally assess hearing.<br>None of the schools formally assess feeding. |
| | Informal Assessment<br>• Observation of receptive and expressive language?<br>• Parent interview?<br>• Dynamic assessment?<br>• Criterion referenced assessment?<br>• Feeding assessment?<br>• Hearing? | All eight schools informal assessments and used observation as a method.<br>Five schools had a fact-to-face parent interview.<br>Three schools used dynamic assessments.<br>None of the schools used a criterion referenced test.<br>Questions were asked to the parent for the feeding assessment.<br>Five schools used noisemakers to assess hearing. |
| | Modifications to assessments<br>• Modification to the standardized procedures?<br>• Modification to the | All participants reported modifying the standardized procedure.<br>The mode of |

| Categories | Questions | Comment |
|---|---|---|
| | mode of response?<br>• Alteration of the picture size?<br>• Alteration of the picture colour?<br>• Reduction of the number of pictures presented to the learner?<br>• Alteration in the spacing of the pictures?<br>• Elimination of time limits? | response is altered to suit the learner's abilities.<br>Alterations are made to the picture size.<br>There is elimination to time limits. |
| **Reporting** | Reporting to parents/caregivers? | All eight schools |
| | Reporting to therapists and other professionals? | Reports are filed the learners profile for all relevant persons to read. |
| | Written report for learner's profile? | All eight schools |

The information reported in Part 5 assisted in determining whether current practice among school based speech-language therapists at the time of the study actually mirrored best practice recommendations for assessment. Although most principles of best practice were followed by the participants, the principles not followed have created a significant discrepancy between evidence-based practice and current practice. And this discrepancy could be attributed to a single theme.

From all the data obtained in this research project, it was evident that the most prominent theme that has emerged is that of complacency of the participants. Complacency is a theme evident when it comes to resources. Participants seemed to lay blame on others for not having adequate equipment, not being able to do feeding assessments. This theme is also apparent in terms of the assessment protocol at each school.

When taking into account the years of experience of the participants it was obvious that the majority of the participants had many years of experience in working with learners with multiple disabilities. In most cases this experience was gained at the same special needs school. The participants followed a certain assessment protocol for many years and it seemed that this protocol was almost enforced on new therapists who joined the multidisciplinary team. This may have contributed to participants basing their assessment on personal preference rather than on evidence. Although participants were aware of evidence-based practice, they were complacent and content with their current methods of assessment.

## Summary of Chapter 4

The above results that are presented and discussed in this chapter clearly show that there are many obstacles to implementing best practice guidelines when assessing learners with multiple disabilities. Lack of assessment resources, a lack of uniformity in service delivery, an insufficient number of speech-language therapists, speech-language therapists who do not represent the linguistically and cultural diversity of the population, the lack of research in the South African context regarding assessment of learners with multiple disabilities and complacency have created these challenges. However the primary challenge when assessing learners with multiple disabilities lies in the complexity of working with learners whose communicative attempts may be difficult to interpret, especially by an unfamiliar communication partner as is the case in the context of an assessment. To provide better services to learners with multiple disabilities and to these learners' families, a way forward needs to be created.

# Chapter 5

## Recommendations

The results of this study showed that, in the absence of guidelines, as well as in severely restricting contexts, the assessment of learners with multiple disabilities is not necessarily being done optimally. There is a need to develop alternative assessment practices in demanding contexts and under circumstances where the literature does not necessarily provide speech-language therapists with sufficient information to guide them in their work. In the light of the findings of this study, a proposed model that is recommended is illustrated in Figure 11. This model is proposed and discussed in this chapter.

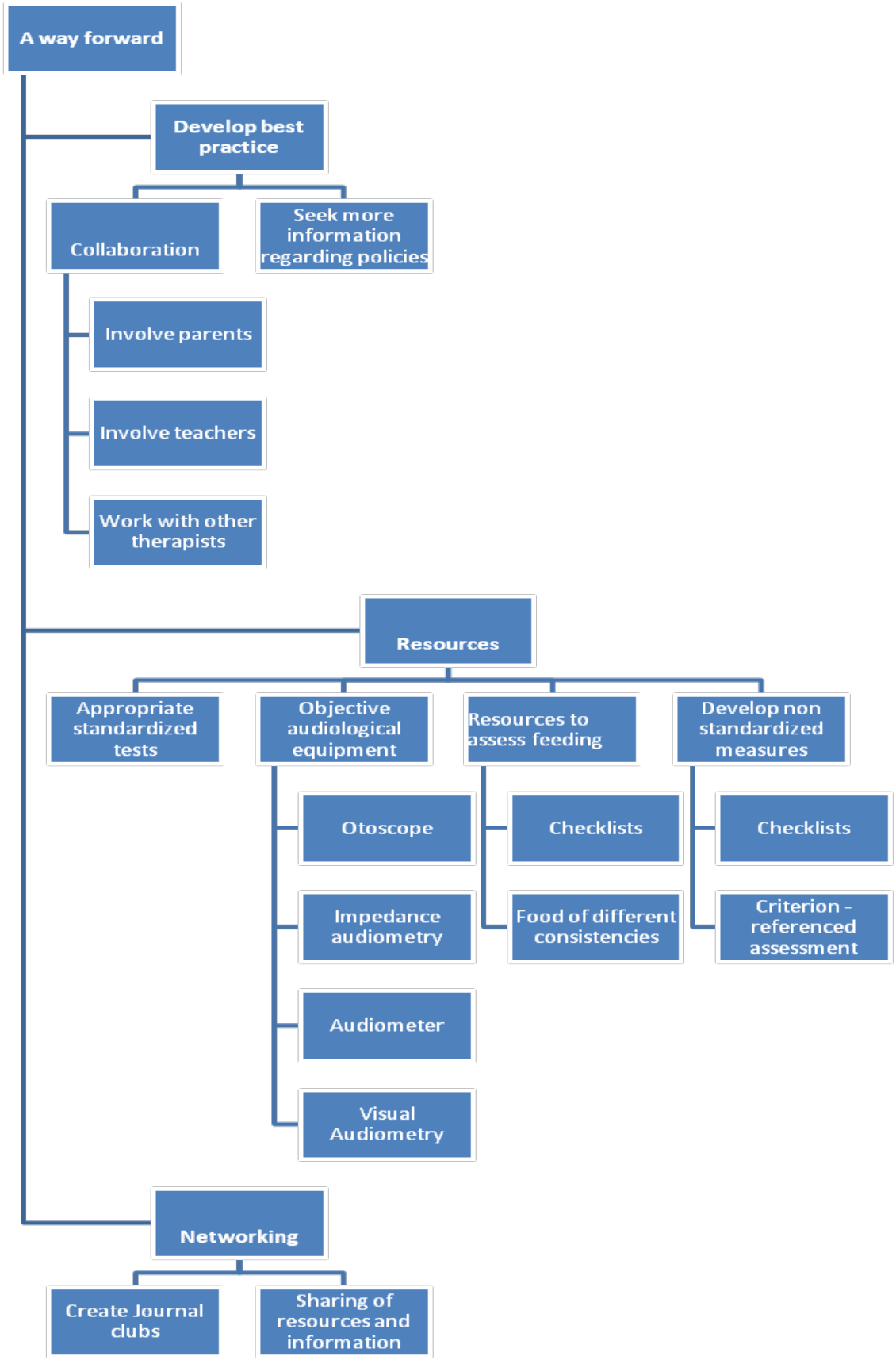


*Figure 11. Recommended framework*

## 5.1 Develop best practice

Best practice can be defined as the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individuals by integrating individual expertise with the best available external clinical evidence from systematic research (Cirrin, Schooling, Nelson, Diehl, Flynn, Staskowski, Torrey, & Adamozyk, 2010). The term “best practice” is, however, used with some reservations because that which constitutes best practice today may later be refuted and replaced as fields continue to evolve and the knowledge base continues to expand (Calculator & Black, 2009).

### 5.1.1 Increase and develop collaboration

In the current literature best practice has pointed to collaboration (Bailey, Stoner, Angell, & Fetzer, 2008; Carnaby, 2007; Paradise, Bailey-Wood, Solomon, & Davies, 2007; Paul & Roth, 2011; Smith & Jones, 1999). The importance of collaborative practice between those who provide services to learners with special educational needs are regarded as essential. Learners with multiple disabilities require a high level of support from family, educators, related service providers, classmates and others to be effectively included, while also meeting the demands of daily living and enjoying the best possible quality of life (Calculator & Black, 2009). The attainment of best practice is conceptualized to be dependent on effective collaboration between speech-language therapists, teachers, administrators, parents and other stakeholders who share a common vision and an overall mission (Calculator & Black, 2009). Speech-language therapists are encouraged to operate in a collaborative model of service delivery (Ainscow et al., 2004). Working in a team is important when assessing learners with multiple disabilities. This team should not only consist of therapists, but should include the parents/caregivers and teachers. This is also emphasized in the response to intervention approach (Staskowski & Rivera, 2005).

It is evident that most participants worked collaboratively with therapists of other disciplines. A recommendation to further improve collaborative efforts is to invite and include the teacher in the assessment process and to allow the teacher to assist with the initial assessment. One participant in this study pointed out that therapists, even when assessing in a team of other therapists, assess from a therapeutic point of view. A teacher’s assessment could add a different dimension to the

assessment. A translator could also benefit the multidisciplinary team.

Another recommendation is to include parents in the assessment. In eliciting the case history and in the parent interview, therapists could use the opportunity to educate parents in terms of the importance of their role in their child's development and to include the parents in the assessment and decision making process. Some participants reported that the parents were willing to be involved only when the participants initiated contact with the parents and provided the opportunity for them to be involved. For this reason speech-language therapists should provide more opportunities for parent involvement.

Collaboration between therapists and policy makers should be encouraged. Therapists should inform policy makers on current practise and best practice, in order for all parties to be aware of the policies and are implementing them.

### 5.1.2 Seek more information regarding policies

All participants were aware of current educational policies; there was, however, evidence of uncertainty regarding the implementation of these policies. Policies guide practice, but at the time of the study there was some despondency regarding service delivery due to an uncertainty about policies. The Department of Education should urgently provide clarity in this regard. Such clarity could be disseminated through seminars and/or workshops. Universities and professional associations can also assist in providing more information about policies.

## 5.2 Resources

From the results a definite lack of resources with regard to assessing learners with multiple disabilities it is was evident and speech-language therapists were working under strained circumstances. It is essential for speech-language therapists to try to work towards being provided with better resources. For example, increasing the visibility of the therapy services; engaging with the community and engaging with industries surrounding the service provision areas. Furthermore, speech-language therapists need to motivate and emphasize their need for better resources with the Department of Education.

### 5.2.1 Appropriate standardized tests

Speech-language therapists working with learners with multiple disabilities

should research appropriate standardized tests for learners with multiple disabilities, specifically these learners in South Africa. If there is a lack of such tests, existing standardized tests should be examined to determine which tests are the most appropriate for learners with multiple disabilities.

The majority of the schools in this study have a minimum of one standardized test. Speech-language therapists from different schools should collaborate to share information on the tests they use. Since purchasing standardized tests can be difficult, schools may be persuaded to share tests. However, purchasing tests for each school should be strongly motivated in a request directed to the Department of Education.

The obstacles pertaining to translating tests continue to remain a problem in the South African context. It was apparent from the focus groups that some schools have translated certain tests which they found appropriate for the South African context. A suggestion can be made that these translated test sheets be shared by all schools. Although the translation affects the validity of the test, it will provide the speech-language therapist with a guideline in terms of a learner's language abilities.

### 5.2.3 Development of non standardized measures

Most of the participants in this study had many years of experience in working with learners with multiple disabilities. Furthermore, some of the participants were trained in neuro-development treatment. These participants therefore had sufficient knowledge and skill to create structured, non-standardized methods such as criterion-referenced tests and appropriate checklists.

A criterion referenced test measures what the learner is able to do and it indicates what skills have been mastered (Washington, 2001). The emphasis is on assessing specific and relevant behaviours. This type of test could prove to be significant when assessing learners with multiple disabilities.

### 5.2.4 Audiological equipment

Procuring appropriate audiological equipment that would allow otoscopy, impedance audiometry, pure tone audiometry and visual audiometry for each school should be requested and motivate.

### 5.2.5 Resources to assess feeding

As highlighted previously, assessing the feeding of a learner with multiple

disabilities is of utmost importance. Failure to assess feeding and drinking and failure to provide the appropriate intervention could be fatal. Hence it is essential to motivate for resources required to administer a feeding assessment. Another critical role of the speech-language therapist is training in feeding of caregivers, class assistants and teachers.

## 5.3 Networking

### 5.3.1 Creating journal clubs

A journal club can be created between speech-language therapists from different schools. The sole purpose of such a club will be to meet regularly to critically evaluate recent articles in scientific literature and to discuss their implications for clinical practice (Dwarakanath & Khan, 2000). The advantages of a journal club include keeping abreast of new knowledge, promoting awareness of current research findings, learning to critique and appraise research, become more familiar with current clinical research and encourage-research utilization (Dwarakanath & Khan, 2000).

### 5.3.2 Sharing of resources and information

A journal club could also lead to sharing of information between therapists of different schools. Furthermore, if the Department of Education is unable to approve the budget for the necessary assessment resources required, speech-language therapists from the different schools can create a method of sharing of resources.

**Summary of Chapter 5**

This Chapter presents recommendations. This framework will however not be possible if speech-language therapists from the different schools do not collaborate. To initiate a move toward best practice speech-language therapists need to work in collaboration with parents, teachers and therapists from other disciplines. In addition, the Department of Education needs to provide clarity regarding current educational policies. Speech-language therapists also need to motivate for better assessment resources. Lastly, speech-language therapists need to create opportunities to share information and ideas. Establishing a journal club could create opportunities for meaningful interaction.

# Chapter 6

## Summary and conclusion

The results of this study indicated that school based speech-language therapists who assess learners with multiple disabilities use a combination of formal and informal assessment methods. The formal methods relied on the available resources in a particular Speech-language Therapy department. The use of informal methods consisted of parent interviews, observation and dynamic assessment, particularly the test-teach-test method. In addition to the assessment of speech and language, the participants also assessed hearing and feeding. The majority of the participants assessed these two areas informally due to a lack of resources. Additionally, the majority of the participants assessed learners with multiple disabilities in a multi-disciplinary team.

These results were compared to the research tool which was based on current literature regarding learners with multiple disabilities and assessment. The comparison indicated that, although the majority of the participants worked in collaboration, used a combination of formal and informal procedures and modified the assessment to cater for the learners' needs, assessment was not always fair and bias free; it did not always take the learner's home language into account and there was a definite lack of resources. These results should of course be viewed within the context in which school based speech-language therapists worked at the time of the study.

Based on the results obtained from the focus groups compared to the guidelines in the research tool, the researcher proposed a model for a way forward for school based speech-language therapists in the assessment of learners with multiple disabilities. This model includes the development of best practice, motivating the Department of Education for better resources and networking between therapists of different schools.

These results have implications for school-based speech-language therapists who work with learners with multiple disabilities.

### 6.1 Clinical implications

Most school based speech-language therapists know that assessment of learners with multiple disabilities can be challenging. These results therefore inform

speech-language therapists that there is always individual variation in assessment and that there is always a need for modifications that best suit the learners' needs. Furthermore it highlights best practice as internationally suggested by the literature.

Ideally, assessment should be fair and bias free; it should be aim driven; the language of instruction during the assessment should always be considered; the learner should be viewed holistically; the assessment should be learner centred; the speech-language therapist should make use of various methods of assessment; and the speech-language therapist should assess in collaboration with other stakeholders.

This study documented the challenges that speech-language therapists face. It also provided important information for university programmes and professional bodies regarding the formal and informal assessment measures which practicing speech-language therapists deem most useful when assessing learners with multiple disabilities. It also highlighted the question as to whether research informs practice, or practice informs research.

A speech-language therapists in a school context is often in the same position for a significant number of years, which "counts as experience" – however, they do not necessarily follow the correct manner of practice, but are guided by the available resources; the complacency regarding the way in which things have been done for years; the available budget and the school's attitude towards change. There is a definite need for support for speech-language therapists.

## 6.2 Research implications

The results of this study have highlighted several areas for further research. A replication of this study, with a larger number of participants from the different provinces would be of value in determining the methods of assessment that speech-language therapists from the different provinces use. Additionally, such replication may include a third aspect of data collection, namely, observing an assessment of a learner with multiple disabilities by a multidisciplinary team. During focus group discussions the participants were required to recall the methods they used and the ensuing information may not always have been accurate. It was evident that assessment reports may not have reflected actual practice, due to a number of reasons. However, this aspect may allow for an in depth view on the methods used by speech-language therapists as seen by the researcher. It may also provide information regarding the role of the speech-language therapist in the multidisciplinary team.

Likewise, a replication of this study with participants that include school based physiotherapists and school based occupational therapists to gain perspective on the methods used by different members of the multidisciplinary team will be useful. Therapists from other disciplines may experience similar issues to speech-language therapists. Since therapists work so closely in a multidisciplinary team, information gathered through research can inform all disciplines. Perhaps, in future, new models of assessment of learners with multiple disabilities can be developed for the South African context.

Future research using a national sample of speech-language therapists may be useful in providing both comprehensive and comparative data regarding assessment practices in school-based settings nationwide.

## 6.3 Theoretical and policy implication

This research project highlighted several theoretical and policy implications. This information could inform future policy makers in the Department of Education and professional bodies of speech-language therapists, such as South African Speech Language and Hearing Association and Health Professions Council of South Africa regarding the need for more guidelines and the implementation such guidelines. There is also a need for Continuing Professional Development activities that are relevant for school-based speech-language therapists.

Participants' views on current policies such as the White Paper 6 (2001) reflected a uniform perspective. The majority of the participants were unsure about the implementation of these policies as well as the practicalities surrounding it. The Department of Education should set up workshops or conferences regarding the White Paper 6 (Department of Education, White Paper 6, 2001) and inclusion. These workshops should be set up specifically for school based therapists. School based therapists may therefore have an opportunity to voice their opinions and concerns regarding the current policy.

At the feedback session planned for the participants of the study, this issue will be discussed. Participants may jointly come up with a method whereby more information can be gained regarding the policy.

## 6.4 Limitations of the study

There are a number of important limitations to this study that may have

affected the results and which may also necessitate caution in the interpretation of the findings.

Firstly, the data described the practices of speech-language therapists in a single province (Gauteng) and may not be representative of school-based speech-language therapists in other geographic contexts. Additionally, the use of a convenience, small sample precludes generalizability to the wider population.

Having Head of departments present during the focus group may have created socially desirable responses from other participants in the focus group.

Furthermore, speech-language therapists from each school formed their own focus group. This resulted in agreement between participants in the focus group regarding methods of assessment since each school has its own assessment protocol which includes the use of certain assessment methods.

Another limitation of the study is the number of assessment reports submitted. There were 25 participants in the study, but only eight reports were submitted, which proves to be a significant limitation of the study. The reports submitted may not have been representative of the research sample. Although the low number of reports submitted is a limitation of the study, it can also be seen as a challenge to the research process. Speech-language therapists may not have submitted the reports because they did not want to be criticized.

Lastly, the probing questions during the focus groups failed to probe further regarding criterion referenced testing. This limitation may have affected the results obtained regarding the methods of assessment participants actually used.

## 6.5 Concluding remarks

Assessment is a critical part of a school based speech-language therapist's post description. More importantly, it is the cornerstone for any type of intervention. A number of significant findings have emerged in this research project regarding the current practice of school based speech-language therapists in their assessment of learners with multiple disabilities. A model for a way forward has been proposed for assessment purposes.

A feedback session on the results of the study will be conducted for all participants. This feedback session will include a discussion of the proposed model for a way forward. This discussion will hopefully be the first step in moving toward best practice when assessing learners with multiple disabilities. As Henry Ford said:

*"If everyone is moving forward together then success takes care of itself."*

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# APPENDIX 1

Principal consent form

*Wits letterhead*

Name of principal
School
Address

Date

Dear Principal,

Permission for provisional acceptance to conduct research

**The Researcher**

My name is Sima Parsot. I am a student at the University of the Witwatersrand, currently doing my Masters degree in Speech Pathology. I am conducting a qualitative research study on the methods of assessment used by speech-language therapists when assessing learners with multiple disabilities in schools. I would like to invite the speech-language therapists of your school to participate in this research project.

**The Research**

The aim of the research project is to profile the assessment methods used by speech-language therapists when assessing learners with multiple disabilities in schools. South African speech and language associations are currently lacking guidelines in terms of assessment protocols. The data therefore obtained from this research project may yield useful information and may contribute to future protocols and policies.

**The Research questions**

The general aim of the research project is to profile the assessment methods used by speech-language therapists when assessing learners with multiple disabilities in schools. The sub aims of the research are to determine the methods of assessment school based Speech-language therapists use when assessing learners multiple disabilities. This will include what information do speech-language therapists aim to establish when assessing learners with multiple disabilities. As well as how do they

interpret this information? A second sub-aim would be to determine what school based Speech-language therapists describe as best practice given the resources and context factors in which they work. And the third sub-aim is to determine school based Speech-language therapists' understanding of governmental education policy and visions. Data from this research project will yield valuable to future policies and protocols for school based Speech-language therapists when assessing learners with multiple disabilities.

**The Process**

Data will be gathered through group interviews, namely focus groups as well as one-to-one interviews. Heads of the speech therapy departments will be interviewed on a one to one basis and all other therapists will participate in a group interview. The group interview as well as the one to one interview will have an estimated length of one hour. The group will consist of 4-6 school based speech-language therapists. All participants will be asked a series of open-ended questions about the methods of assessment they use when assessing learners with multiple disabilities. This interview may video recorded for later analysis. The interview will only be video recorded if all participants agree to have the focus group video recorded. In addition participants will have the right not to answer certain questions.

**Risk and benefit:**

The benefit of the therapists' participation would contribute information to speech-language therapists and other professionals about the assessment of learners with multiple disabilities. This study poses no risk to its participants. I will do my best to ensure that confidentiality is maintained by not citing participants' actual names within the study. However confidentiality cannot be guaranteed in the group interviews. All participants nevertheless will be asked by the researcher to respect the research process and respect each participant's confidentiality. All participants are expected to be registered with the South African Health Professional Council (HPCSA) and are therefore under oath as a health professional.

Participants may choose to leave the study at any time, and may also request that any data collected from them not be used in the study. The interview will be video

recorded; however, participants' name will not be recorded on the tape. Participants' name and identifying information will not be associated with any part of the written report of the research. All of the participant' information and interview responses will be kept confidential.

**Location for interviews**

All group interviews as well as one-to-one interviews will be administered after school hours. This will therefore not disrupt the normal running of the school day. The researcher would not like to pose any inconvenience to the participants to travel to the interview. The most convenient location for the interview would therefore be on the school premises. If you agree for the interview to be conducted on the school premises, please sign below. If not the interviews will then be conducted at an alternative premises.

If you have any questions or concerns, please contact me on 072 308 4362 or simaparsot@gmail.com or my supervisors Karen Levin on 083 264 1697 and Munyane Mophosho 083 442 4042.

Thank you for your consideration of this proposal

_____

Ms Sima Parsot

Researcher

_____

Mrs Karen Levin

Supervisor

_____

Mrs Munyane Mophosho

Co-supervisor

**By signing below you agree that you have read and understood the above information, and grant provisional permission for the therapists at your school to participate.**

**_____ _____**

**Name Date**

**Permission for the usage of school premises**

**I_____,Principal of_____, hereby grants permission for the interviews to be conducted on the school premises.**

# APPENDIX 2

Participant consent form

*Wits letterhead*

Date

Dear Participant,

**The Researcher**

My name is Sima Parsot. I am a student at the University of the Witwatersrand, currently doing my Masters degree in Speech Pathology. I am conducting a qualitative research study on the methods of assessment used by speech-language therapists when assessing learners with multiple disabilities in schools. I would like to invite you to participate in this research project.

**The Research**

The aim of the research project is to profile the assessment methods used by speech-language therapists when assessing learners with multiple disabilities in schools. South African speech and language associations are currently lacking guidelines in terms of assessment protocols. The data therefore obtained from this research project may yield useful information and may contribute to future protocols and policies.

**The Research questions**

The general aim of the research project is to profile the assessment methods used by speech-language therapists when assessing learners with multiple disabilities in schools. The sub aims of the research are to determine the methods of assessment school based Speech-language therapists use when assessing learners multiple disabilities. This will include what information do speech-language therapists aim to establish when assessing learners with multiple disabilities. As well as how do they interpret this information? A second sub-aim would be to determine what school based Speech-language therapists describe as best practice given the resources and context factors in which they work. And the third sub-aim is to determine school based Speech-language therapists' understanding of governmental education policy and visions. Data from this research project will yield valuable to future policies and protocols for school based Speech-language therapists when assessing learners with

multiple disabilities.

**The Process**

Data will be gathered through group interviews, namely focus groups as well as one-to-one interviews. Heads of the speech therapy departments will be interviewed on a one to one basis and all other therapists will participate in a group interview. The group interview as well as the one to one interview will have an estimated length of one hour. The group will consist of 4-6 school based speech-language therapists. All participants will be asked a series of open-ended questions about the methods of assessment they use when assessing learners with multiple disabilities. This interview may video recorded for later analysis. The interview will only be video recorded if all participants agree to have the focus group video recorded. In addition participants will have the right not to answer certain questions.

In addition, participants will be required to submit two assessment reports with all identifying information of the learner deleted.

**Risk and benefit:**

The benefit of your participation would contribute information to speech-language therapists and other professionals about the assessment of learners with multiple disabilities. This study poses no risk to its participants. I will do my best to ensure that confidentiality is maintained by not citing participants' actual names within the study. However confidentiality cannot be guaranteed in the group interviews. All participants nevertheless will be asked by the researcher to respect the research process and respect each participant's confidentiality. All participants are expected to be registered with the South African Health Professional Council (HPCSA) and are therefore under oath as a health professional.

Participants may choose to leave the study at any time, and may also request that any data collected from them not be used in the study. The interview will be video recorded; however, participants' name will not be recorded on the tape. Participants' name and identifying information will not be associated with any part of the written

report of the research. All of the participant' information and interview responses will be kept confidential.

**Location for interviews**

All group interviews as well as one-to-one interviews will be administered after school hours. This will therefore not disrupt the normal running of the school day. The researcher would not like to pose any inconvenience to the participants to travel to the interview. The most convenient location for the interview would therefore be on the school premises. If you agree for the interview to be conducted on the school premises, please sign below. If not the interviews will then be conducted at an alternative premises.

If you have any questions or concerns, please contact me on 072 308 4362 or simaparsot@gmail.com or my supervisors Karen Levin on 083 264 1697 and Munyane Mophosho 083 442 4042.

Thank you for your consideration of this proposal

_____

Ms Sima Parsot

Researcher

_____

Mrs Karen Levin

Supervisor

_____

Mrs Munyane Mophosho

Co-supervisor

By signing below you agree that you have read and understand the above

information, and you would like to participate in the study.

_____ _____

Name Date

_____

Signature

I _____, agree / do not agree for the focus group to be interviewed.

_____

Signature

# APPENDIX 3

Focus group questions

**Focus Group Questions**

**"Ice Breaker" questions**

About you school

- Describe the society/context in which you school is based
    - *Socio-economic background*
    - *Family involvement*
- Do you provide individual/group therapy
    - *why have you chosen individual/group?*
    - *what is the selection criteria?*
- What is your highest qualification (Masters/Phd/NDT)
- How many years experience do you have?
- How many years of experience do you have working with learners with multiple disabilities?
- How many learners do you see for therapy per day?
- Do you think you have a well resourced department?

**Questions pertaining to assessment**

1. Describe the setting or environment in which you assess?
    - *the room?*
    - *the atmosphere?*
2. What are the factors affecting the environment in which you assess?
    - *Noise?*
    - *Space?*
    - *Equipment?*
3. What information do you aim to obtain when assessing learners with multiple disabilities?
    - *What information do you want to get from the assessment?*
    - *Why?*
4. What methods do you use when assessing learners with multiple disabilities?

- Do you assess in a multidisciplinary team? *If so, do you think this method is advantageous?*
- *Are there disadvantages?*
- *Would you like to assess in a team?*
- Do you use a checklist? *If so, which checklist do you think is appropriate for learners with multiple disabilities?*
- *Describe the checklist?*
- *How would you use the checklist?*
- Do you use standardized tests? *If so, which standardized test do you think is appropriate for learners with multiple disabilities?*
- *Which tests do you use?*
- *Why do you use those tests?*
- Which areas of language do you assess?
- *Do you assess any other areas?*
- *How would you assess them?*
- Do you include parent/guardians/caregivers in you assessment? *If so, how do you include them?*
- *Would you like to include parents?*
- Do you have the necessary resources to assess?
- What resources do you use?
- *Why?*
- What do you need that you do not have?
- If you were to create a kit for assessing learners with multiple disabilities what would this kit consist of?
- When would you do a feeding assessment?
- *Why?*
- *What do you use for the feeding assessment?*
- *What questions do you ask the mother?*
- How do you overcome the barrier of assessing learners who do not understand English?
- *Is your translator trained?*
- What language do you mainly assess in?
- *Why do you assess in those languages?*

5. How do you interpret the information obtained from this assessment?
6. What do you do with the interpreted information?
7. Do all learners with multiple disabilities receive speech therapy at your school? *If not what is the selection criteria?*
8. What are the challenges you face providing best practice to learners with multiple disabilities at your school?
    - How could these challenges be overcome?
    - What do you perceive as best practice?
    - *Why?*
9. What is your role as a speech-language therapist at your school?
    - Is it a well defined role?
10. Are you aware of the current educational policies?
    - What are your views or opinions on them?
11. Over the years working with learners with multiple disabilities what knowledge or skill have you gained when assessing?
12. Any other comments you want to add?

# APPENDIX 4

Document Analysis

# Document Analysis Form

1 = present
0 = absent

| Reports | **1** | **2** | **3** | **4** | **5** | **6** | **7** | **8** |
|---|---|---|---|---|---|---|---|---|
| Background Info/Case History<br><br>*2 reports = basic information*<br>*3 reports = in-depth information* | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 |
| Hearing Screening<br>*1 report = detailed information regarding objective tests* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Orofacial Examination | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Feeding Assessment<br>*1 report = detailed information*<br>*1 report = brief information* | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 |
| Use of Standardized tests? | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 |
| Use of Checklists? | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 |
| Informal data?<br>*Results presented, not method* | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Language skills assessed?<br>*3 reports combined speech and language*<br>*3 reports divided language into 1)expressive; 2)receptive and 3) pragmatics* | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Qualitative or quantitative report or a combination of both | Both | Both | Qual | Both | Qual | Both | Both | Both |
| Language of assessment stated | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Summary & Recommendations | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

# APPENDIX 5

Clearance Certificate from Non-Medical ethics committee at the University of the Witwatersrand

**UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG**

Division of the Deputy Registrar (Research)

**HUMAN RESEARCH ETHICS COMMITTEE (NON MEDICAL)**
R14/49 Parsot

**CLEARANCE CERTIFICATE** **PROTOCOL NUMBER H100 828**

**PROJECT** Methods of assessment used by speech language therapists when assessin learners with multiple disabilities in schools

**INVESTIGATORS** Ms S Parsot

**DEPARTMENT** Speech pathology

**DATE CONSIDERED** 13.08.2010

**DECISION OF THE COMMITTEE*** Approved Unconditionally

**NOTE:**

**Unless otherwise specified this ethical clearance is valid for 2 years and may be renewed upon application**

**DATE** 16.09.2010 **CHAIRPERSON** .....
(Professor R Thornton)

cc: Supervisor : Ms K Levin

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**DECLARATION OF INVESTIGATOR(S)**

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10005, 10th Floor, Senate House, Universit

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 approved I/we undertake to resubmit the protocol to the Committee. **I agree to a completion of a yearly progress report.**

**Signature**

PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES

# APPENDIX 6

Permission for Gauteng Department of Education

**UMnyango WezeMfundo**
**Department of Education**

**Lefapha la Thuto**
**Departement van Onderwys**

Enquiries : Shadrack Phele [MIRMSA]
Tel. no. : +27 11 355 0285

Thursday, July 29, 2010

Ms Sima Parsot
PO Box 167
Spring
1559

Dear Ms Parson

**PERMISSION TO CONDUCT RESEARCH IN GDE INSTITUTIONS**

The Gauteng Department of Education hereby grants permission to conduct research in its institutions as per application.

Field of research : "Methods of assessment speech therapists use when assessing learners with multiple disabilities in schools "

Nature of research : M.A. [Speech Pathology]

Name of institution : University of the Witwatersrand

Supervisor : Ms Karen Levin

Upon completion of the research project the researcher is obliged to furnish the Department with a copy of the research report (electronic or hard copy).

The Department wishes you success in your academic pursuit.

Yours in Tirisano,

**Shadrack Phele MIRMSA**
**Chief Education Specialist**
Gauteng Department of Education

**OFFICE OF THE CHIEF DIRECTOR**
**INFORMATION & KNOWLEDGE MANAGEMENT**
Room 1501, 111 Commissioner Street, Johannesburg, 2001 P.O.Box 7710, Johannesburg, 2000
Tel: +2711 3550809 Fax: +27 11 355 0248 E-mail: Mmapula.Kekana@gauteng.gov.za or
Elrida.Ferlito@gauteng.gov.za

# APPENDIX 7

Example of a brief report

**SPEECH THERAPY: EVALUATION REPORT**

GENERAL

Motor accident, Jan 1997. Head injury and hospitalized for 6m. Ataxia due to multiple brain injuries.She stays with devoted caretaker.

ORAL EXAMINATION

Hypotonic in oral area.Cheeks have very low tone. No gag reflex.Little/poor movements.Dribbling at times. PDK slow speed, only two point syllable production.

HEARING

According to the mother normal and functional.

SPEECH

Slow, telegraphic speech.

LANGUAGE
LANGUAGE CONTENT

Receptive language 3y. She understands instructions but not 2 to 3 “object” instructions, e.g. put short red pencil in box.

LANGUAGE FORM

Speaks N-Sotho and some English words. Repeats words correctly and can use +/- 5 words sentences. At times she uses sign language.

LANGUAGE USE

Good facial expression. Understands humor.Can reason with mother.Good eye-contact. Communication interaction good.

AUDITORY PROCESSING

RECOMMENDATIONS

Oral treatment

Observe feeding pattern

Improve language (Eng.) ability.