

**CHARACTERISTICS OF PERSONS WITH MENTAL RETARDATION  
PRESENTING AT POLOKWANE/ MANKWENG HOSPITAL COMPLEX: AN  
ARCHIVAL STUDY**

by

**POOPEDI MOLEPO HOPE**

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**SUPERVISOR: PROFESSOR THOLENE SODI**

## **DECLARATION**

I declare that the dissertation hereby submitted to the university of Limpopo for the degree of masters in clinical psychology has not been previously been submitted by me for degree at this university or any other university. That it is my own work in design and in execution, and that all material contained therein has been duly acknowledged.

**Poopedi M.H.**

**Date:**

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## **DEDICATION**

This study is dedicated to my parents Cathrine and Timothy Poopedi who have always believed in me.

To my grandmother Elizabeth Mokgwebo and my siblings Given and Granny Poopedi for the support they gave me.

To my Daughter Bokamoso Poopedi, for the joy she always give me.

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## ABSTRACT

The aim of this study was to profile the characteristics of children with mental retardation presenting at the Clinical Psychology Unit of Polokwane/Mankweng Hospital Complex over a period of five years. A descriptive methodological approach was chosen as a study design for the purpose of data collection and subsequent data analysis. Using the archival data method, the clinical files of all children presenting with mental retardation at this facility were retrieved and studied. A total of 326 (male = 169; female = 157) files covering the period under review were retrieved. The Statistical Package for Social Sciences (SPSS) was used to analyse the data. Categorical data were analysed by using frequency tables, descriptive statistics and crosstabulations.

The study showed that 314 cases (96.3%) were reflected as Black, whilst the remaining 12 cases (3.7%) were reflected as White (2.15%); Indian (1.23%); and Other (0.30%). Several clinical methods that included clinical interviews, psychometric tests, clinical observations and collateral information sources were used by the psychologists for the purpose of making a diagnosis. The study further revealed that a huge number of cases (35.6%) were diagnosed with mental retardation. It was also found that 45.4% of the cases were diagnosed to have comorbid clinical conditions such as epilepsy, Down's syndrome, visual problems etc. The majority of the persons were referred to the Clinical Psychology Unit to be assessed for school placement (50%) and disability grant (38.7%). With regard to interventions, psychologists who saw these persons tended to frequently refer them to special schools and other health professionals. Psychotherapy was the least utilised intervention method used by the psychologists.

The findings of the present study reinforce the importance of and value of high quality management and treatment of mental retardation and related comorbid conditions. Based on these findings, it is recommended that more efforts be made to strengthen the working relationship between Polokwane/Mankweng Hospital Complex and the respective special schools where these persons that are diagnosed with mental retardation are referred to. It is further recommended that consideration be given to strengthening the relationship between Polokwane/Mankweng Hospital Complex and the social security agency so as to obviate any potential problems that

could be associated with the allocation of the disability grants to persons with mental retardation.

## CHAPTER ONE

### INTRODUCTION

#### 1.1. Background

Mental retardation (MR) has been reported as a serious problem in the entire world. For example, the World Health Organisation (WHO) has estimated that people with mental retardation constitute 1 to 3 percent of the general population (World Health Organisation, 2001). Epidemiological surveys indicate that up to two thirds of children and adults with mental retardation have co-morbid disorders such as cerebral palsy and epilepsy (Christianson, Zwane, Manga, Rosen, Venter, & Down, 2002; Croen, Grether, & Selvin, 2001). A recent epidemiological study found that 40.7 percent of intellectually disabled children between 4 and 18 years of age also met the criteria for at least one physical disorder (Sadock & Sadock, 2003).

A study by the American Association on Mental Retardation (2002), has estimated that mental retardation is high in school-age children, cerebral palsy affects most of Americans, and millions of individuals in the United States of America have epilepsy (Sue, Sue & Sue, 2006). A number of studies have indicated that environmental, genetic or multiple factors can cause mental retardation. In a number of cases, mental retardation has been associated with some congenital malformation of the brain whilst in other cases intellectual disability has been attributable to brain damage at a critical period in pre or postnatal development. Acquired causes of retardation include near drowning, traumatic brain injury and central nervous system malignancy. The most common cause of mental retardation in industrialized nations is fatal alcohol syndrome with an incidence rate of 1 in 100 births. The second leading known cause of mental retardation is Down's syndrome, or trisomy 21 (Campbell, Morgan & Jackson, 2003).

According to McLaren and Bryson (1987), behavioural or societal factors such as poverty, malnutrition, maternal drug and alcohol use, as well as severe stimulus deprivation can contribute to mental retardation. A study by Christianson et al.

(2002), has suggested that mental retardation was rarely found in the highest socio-economic groups, unless accompanied by evidence of organic damage. Unfortunately, in approximately 30 to 50 percent of cases, the aetiology of the mental retardation is not identified even after a diagnostic evaluation (Curry, Stevenson, Aughton, Byrne, Carey, & Cassidy, 1997).

In South Africa, the 1996 census data indicated that there is high rate of mental retardation (Statistics South Africa, 1996). The same census data indicated that there were a high percentage of people with mental retardation in Limpopo Province. The 2001 census indicated that the total number of people with mental retardation in South Africa was reported to be increasing, while the total figure for Limpopo Province was also found to be increasing (Statistics South Africa, 2001). This indicates that since 1996 there have been other additional cases of mental retardation. Based on the statistics, it is evident that there is a need for more studies to be conducted to understand the nature and patterns of mental retardation in South Africa in general and in Limpopo Province in particular.

## **1.2. Aim of the study**

The aim of the study was to profile the characteristics of persons with mental retardation presenting at the Clinical Psychology Unit of Polokwane/Mankweng Hospital over a period of five years (i.e. from 2005 to 2009).

## **1.3. Objectives of the study**

- To explore the demographic characteristics of persons seen during the period under review (January 2005 to December 2009).
- To explore the clinical record of these persons with a view to identifying and documenting the referral information contained in these files.

- To establish clinical methods which were used by the psychologists in assessing these persons.
- To establish the kind of diagnosis which were given by the psychologists to these persons presenting with mental retardation.
- To identify and document the nature and type of interventions that are suggested by the psychologists who have seen these persons.

#### **1.4. Assumptions**

- The majority of the persons presenting at Polokwane/Mankweng Hospital Complex during the five-year period under review are referred for assessment for the purposes of being considered for financial support by government.
- More than one psychological assessment methods are utilized by the clinical psychologists in the Unit for the purposes of making a diagnosis.
- Most of the persons with mental retardation seen during the five-year period under review will have been given multiple diagnoses.

## CHAPTER TWO

### LITERATURE REVIEW

#### 2.1. Introduction

Mental retardation begins in childhood or adolescence before the age of 18. In most cases, it persists throughout adult life. A diagnosis of mental retardation is made if an individual has an intellectual functioning level well below average, as well as remarkable limitations in two or more adaptive skill areas. Intellectual functioning level is defined by standardized tests that measure the ability to reason in terms of mental age intelligence quotient (Sadock & Sadock, 2003). Mental retardation is defined as an intelligence quotient score below 70–75. Adaptive skills are a term that refers to skills needed for daily life. Such skills include the ability to produce and understand language (communication); home-living skills; use of community resources; health, safety, leisure, self-care, and social skills; self-direction; functional academic skills (reading, writing, and arithmetic) and job-related skills (Howard, 2004).

In general, mentally retarded children reach such developmental milestones as walking and talking much later than children in the general population. Symptoms of mental retardation may appear at birth or later in childhood. The child's age at the onset depends on the suspected cause of the disability (Barlow & Durand, 1999). Some cases of mild mental retardation are not diagnosed before the child enters pre-school; this is because they can function effectively at early age. They struggle when the demand of living increases (American Psychiatric Association, 2004).

In this chapter, the researcher will start by presenting the levels of mental retardation, trends and issues in mental retardation in South Africa and assessment and management of mental retardation. This will be followed by a discussion of the biological, psychological and African perspectives on mental retardation.

## **2.2. Levels of mental retardation**

Mental retardation is subdivided into several categories which include mild, moderated, severe, profound, other mental retardation and severity unspecified (Silka, & Hauser, 1997). Approximately 3 percent of the population has an intelligence quotient (IQ) of less than 70 (Howard, 2004).

### **2.2.1. Mild mental retardation**

The intelligence quotient score of people with mild mental retardation ranges from 50 to 75. People classified as mildly retarded can acquire academic skills up to the sixth grade level. They can become fairly self-sufficient, and in some cases live independently with community and social support. Mild mental retardation may not be diagnosed until the affected children enter school; their social skills and communication may be adequate in the preschool years (Sue, Sue & Sue, 2006). As they get older, however, cognitive deficits such as poor ability to abstract and egocentric thinking may distinguish them from others of their age. Although mildly retarded persons can function academically at the high elementary level and their vocational skills suffice to support themselves in some cases, social assimilation can be difficult. Communication deficits, poor self-esteem, and dependence can contribute to their relative lack of social spontaneity. Some persons who are mildly retarded may fall into relationships with peers who exploit their shortcomings. In most cases, persons with mild mental retardation can achieve some social and vocational success in a supportive environment. Mild mental retardation can achieve some social and vocational success in a supportive environment (American Psychiatric Association, 2002).

### **2.2.2. Moderate mental retardation**

Moderately retarded individuals have intelligence quotient scores ranging from 35 to 55. They can carry out work and self-care tasks with moderate supervision. They typically acquire communication skills in childhood and are able to live and function

successfully within the community in a supervised environment such as a groups and home (American Psychiatric Association, 2000). Moderate mental retardation is likely to be diagnosed at a younger age than mild mental retardation; communication skills develop more slowly in persons who are moderately retarded and their social isolation may begin in the elementary school years. Although academic achievement is usually limited to the middle-elementary level, moderately retarded children benefit from individual attention focused on the development of self-help skills (Barlow & Durand, 1999). Children with moderate mental retardation are aware of their deficits and often feel alienated from their peers and frustrated by their limitations. They continue to require a relatively high level of supervision, but can become competent at occupational tasks in supportive settings (American Psychiatric Association, 2000).

### **2.2.3. Severe mental retardation**

About 3 to 4 percent of the mentally retarded population is severely retarded (Harper, 1993). Severely retarded individuals have intelligence quotient scores of 20 to 40. They may master very basic self-care skills and some communication skills. Many severely retarded individuals are able to live in a group home. Severe mental retardation is generally obvious in the preschool years. By adolescence, if language is poor, nonverbal forms of communication may have changed; their inability to articulate needs fully may reinforce the physical means of communicating. According to Sadock and Sadock (2003), behavioural approaches can help promote some self-care, although those with severe mental retardation generally need extensive supervision.

### **2.2.4. Profound mental retardation**

People in this category have intelligence quotientscores under 20 to 25. They constitute approximately 1 to 2 percent of people with mental retardation. Most people with severe mental retardation have identifiable causes of their condition (Sue, Sue & Sue, 2006).

Their retardation is often caused by an accompanying neurological disorder. They may be able to develop basic self-care and communication skills with appropriate support and training. Their retardation is often caused by an accompanying neurological disorder. The profoundly retarded need a high level of structure and supervision (Silka, & Hauser, 1997).

### **2.2.5. Other mental retardation**

This category should be used only when assessment of the degree of intellectual retardation by means of the usual procedures is rendered particularly difficult or impossible by associated sensory or physical impairments, as in blind, deaf-mute, and severely behaviourally disturbed or physically disabled people (American Psychiatric Association, 2000).

### **2.2.6. Severity unspecified mental retardation**

This diagnosis is given when there is a strong presumption of mental retardation, but the person's intelligence is untestable by standard tests (Sadock & Sadock, 2003).

## **2.3. Current trends and issues in mental retardation**

### **2.3.1. Problem with terminology**

Debate about the terminology of developmental disability in general and mental retardation in particular continues and practitioners can feel at times that they are in a linguistic minefield. It is widely accepted that terms or labels used for certain conditions can have potentially damaging effect (Eayres, Ellis & Jones, 1993). In some countries, mental retardation has been largely discarded in favour of learning disability or intellectual disability because the term mental retardation is regarded by some as judgmental. Others argue that mental retardation has a definition, unlike alternative terms, and should therefore ensure clarity of communication. A study by Panek and Smith (2009), in the Midwestern United States, found that there was some evidence favouring mentally challenged as a term, although the difference in

how positively it was seen in comparison to the other terms was not large. Panek and Smith believe that poorly timed use of the term mental retardation can harm therapeutic relationships and that the use of alternatives is generally preferable when speaking with affected individuals and their families.

Other people believe that this could also lead to stigmatization, for example people called idiots will be denied space at school. Developmental delay is defined by some as applying only to children under 5 years of age and mental retardation to older children, but the reality is that each is often applied outside those age ranges. If a practitioner uses the diagnosis of mental retardation, it is best to clarify with families their interpretation of the term and their feelings about it, rather than assuming a shared understanding. Regardless of which term is used, good communication requires that any term be accompanied by appropriate explanation, including how it applies to the child's developmental profile, and by information about prognosis, to the degree that it is known and sought by the family (Sarah & Shea, 2006) .

### **2.3.2. Ethical and legal issues around Mental Retardation**

The question of sexuality for people with mental retardation has undergone an evolutionary change over the years (Craft & Craft, 1978). Initially it was felt that people with mental retardation should not be engaged in sexual activities. The reason for this was that they were considered children and felt that people would take advantage of them. It was also thought that they are unable to reason about the consequences of their sexual behaviours. Later though, there was a tolerance in some cases, but its expression needed to be controlled and sexual boundaries had to be maintained between them and the general population. With the human right movement came an acceptance of sexuality as an integral part of a personality (Sodi, 1998). Later on, there was importance of education of people with mental retardation regarding their bodies and those of others recognized. Finally, there is a realization that sexuality can be used to promote development and to enhance self-esteem. Majority of people with mild and moderate mental retardation have low self – esteem which is perpetuated by their intellectual limitation.

In South Africa, there is still some prohibition regarding sexual activities with persons with mental retardation. The Mental Health Act of 1973, for example, states that any person who has carnal intercourse with a female who is detained in an institution shall be guilty of an offence (Chapter 10 s 66). Similarly, section 15 of the Sexual Offence Act of 1957 states that a person who has or attempts to have sexual intercourse with a male or female "idiot" or "imbecile," which is not rape, shall be guilty on an offence. However, the Act is intended to protect them from the community. There is much that needs to be done in South Africa concerning the issue of people who are mentally challenged and their being eliminated from sexual activities. People who are mildly retarded can benefit from education regarding sexuality and socially acceptable practices. Issues also arise about whether a person who is mentally retarded can testify in court.

#### **2.4. Demographic characteristics of mental retardation**

The incidence of mentally retardation is difficult to calculate because mild mental retardation sometimes goes unrecognized until middle childhood.

##### **2.4.1. Gender**

A study done by Christianson et al. (2002), in Bushbuckridge, Limpopo Province, South Africa, has suggested that there is a remarkable gender difference in mental retardation. Mental retardation is about 1.5 times more common in amongst male than amongst female (American Psychiatric Association, 2004).

It is also reported that the marked gender difference in prevalence among the children of Canada, apparent before the age of 12 years become insignificant after the age of 12. In terms of biological factors, the gender difference in prevalence is often attributed to X link conditions (Tariverdian & Volgen, 2000) including both Fragile X as well as unidentified X linked conditions (Partington, Mowat & Einfeld, 2000). Zaren, Lindmark and Bakketeig (2000), found that maternal smoking had a

proportionally greater detrimental effect on the male than female foetal growth. A male disadvantage was also seen in relation to neonatal mortality. Amongst males with low birth weight mortality was high as compared to females (Stevenson, Venter & Fanaroff, 2000). There is a great association between low birth weight and low IQ score which was high in male than in female (Matte, Bresnahan, Begg & Susser 2001).

#### **2.4.2. Age**

In older persons, the prevalence of intellectual disabilities is lower because of the higher mortality rate, which is due to complicated associated physical disorders, especially those with severe and profound range of mental retardation, as they experience a high mortality rate. Highest incidence of mental retardation is in the school age children, with the peak at age 10 to 14 years, declined slightly among adolescent, and then fell markedly by among adults (Wen, 1997). This pattern is consistent with the findings from other international studies (Kiely, 1987; McLaren & Bryson 1987). The age variation may also be due to the ability of old people with mild mental retardation to adapt to the demands of the society with the passage time.

#### **2.4.3. Socio-economic background**

It has also been established that the prevalence of mental retardation is strongly associated with the socioeconomic status. For example, a study by Kromberg, Zwane, Manga, Venter, Rosen, and Christianson (2008), has suggested that mental retardation is rarely found in the highest socio-economic groups, unless accompanied by evidence of organic damage. Factors that are observed to be causing a high rate of mental retardation are poor living conditions, malnutrition, limited factor intellectual stimulation of infants and children and unattended home births. This is due to poor socio-economic background Kromberg et al. (2008). Poor socio-economic background has been found to be one of the factors that contribute to mild mental retardation and severe mental retardation (Kromberg et al., 2008).

Mild mental retardation may result from remarkable deprivation of nutrition and nurturance. Children who have endured these conditions are subjected to long-lasting damage to their physical and emotional development. Children who live in poverty and suffer from malnutrition, unhealthy living conditions, and improper or inadequate medical care are at a higher risk (Molteno, Smart, Viljoen, Sayed, & Roux, 1997).

Other studies have also found that ignored or neglected infants who are not provided the mental and physical stimulation required for normal development are more likely to suffer irreversible learning impairments when compared to infants who are not exposed to these kinds of disadvantaged conditions (Howard, 2004). This may also apply to children who are raised by children as their parents have left for migrant labour. Psychosocial stressors are extreme at the present time. The many effects of the apartheid era, including family disintegration and dysfunction, crime, violence, unemployment and substance abuse, are impacting on children (and their families) to a marked degree (Vogel & Holford, 1999). The study of Vogel and Holford (1999), confirms that unemployment and a lack of income are among the factors influencing South African clients to seek assistance in the form of disability grants. This also has led many people to fake their disability so that they are considered for a disability grant (Govender & Mji, 2009).

The study of Pillay, Kometsi and Siyothula (2009), also confirmed that disadvantaged communities are consulting with psychologists to be considered for disability grants. Such consultations in non-urban or disadvantaged communities commonly involve large numbers of assessments for disability or care dependency grants relating to intellectual deficit. The finding that 13.2 percent of the patients' expectations of clinical psychologists were the facilitation of a state grant confirms this. One of the many consequences of the apartheid-based health service deficiencies in rural areas has been inadequate prenatal and peri-natal care services, which are obvious risk factors for the development of mental retardation in children (Pillay et al., 2009).

#### **2.4.4. Ethnicity**

Generally there is high prevalence of mental retardation amongst black children as compared to other racial groups. These differences among blacks and other ethnic groups are due to greater usage of special school by other ethnic groups which stimulate their intellectual functioning (Yeargin-Allsopp, Drew, Decoutle, & Murphy, 1995). Murphy, Yeargin, Decoutle and Murphy (1995), found that mild mental retardation was more common in African American children in Atlanta, which it was believed is caused by socio-economic and demographic factors such as sex, maternal age, birth order, educational level and economic background. As noted by Yeargin-Allsopp et al. (1995), children from minority cultures are also more likely to be labelled as having mental retardation as a result of cultural differences, including socially different behaviour and culturally inappropriate IQ tests (Zigler,1987). In South Africa, it has been noted that the highest prevalence is amongst blacks who make up the majority of the population, followed by whites, coloureds and then Indians.

#### **2.5. Mental retardation and co-morbid illnesses**

People with mental illness, like anyone else, can become ill and the condition could have originated from an illness. Epidemiological studies have documented an increased prevalence of conditions such as schizophrenia and mood disorders in people with mental retardation compared with the general population (Reid, 1995). When a major psychiatric condition occurs in a person with mental retardation, the term dual diagnosis is used. Some of the most common illnesses and developmental conditions associated with mental retardation are Down syndrome, epilepsy, cerebral palsy and Autistic.

##### **2.5.1. Epilepsy**

Comorbid disorders are increasing in individual with mental retardation and who also have known neurological conditions such as seizure disorders. Rates of

psychopathology increase with severity of mental retardation; thus, neurological impairment increases as intellectual impairment (Kaplan & Sadock, 2007). A study by Rwiza, Kilonzo, Haule, Matuja, Mteza, and Mbena (1992), found that the rate of epilepsy was 3.7 per 1, 000 in the cases of mental retardation in Tanzania. In the same study, it was also found that the rate of Down syndrome was 1 per 1339 children presenting with mental retardation.

### **2.5.2. Cerebral palsy**

Cerebral palsy is reported in 6% to 8% of children with mild mental retardation and up to 30% of children with severe mental retardation (Sarah & Shea, 2006) this was a study of children aged 6 to 16. A study of Christianson et al. (2002), found that cerebral palsy is the second most common disorder associated with mental retardation at 8.4%. These associations are more common in children with severe mental retardation (25.6 %) than in those with mild mental retardation (4.1%) (Christianson et al., 2002). This study was conducted in Limpopo Province, South Africa.

### **2.5.3. Down syndrome**

Down syndrome is the most common genetic syndrome and occurs in 1 of 800 to 1000 live births. This is one of the disorders that are associated with mental retardation and occur mostly in severely mentally retarded people. In the A study by Christianson et al. (2002), they have found that only five children were diagnosed with Down syndrome). This has indicated that is not easy to establish the association between mental retardation and Down syndrome due to their mortality rate. The prevalence of Down syndrome in two to nine-year-old children in Bushbuckridge was 0.75 per 1000 (one per 1339).

Co-morbidity of Down syndrome and mental retardation cannot be fully discussed because most children with Down syndrome die before the age of two. A birth incidence of 2.09 per 1000 live births (one per 480) in a rural hospital approximately

200 km from Bushbuckridge has been recorded, suggesting that two out of three children with Down syndrome die in this area prior to two years of age (Venter et al., 1995).

#### **2.5.4. Autism**

Autistic-like behaviours, for example, stereotyped behaviour, may be seen in some children with severe mental retardation. Recently it has been shown that approximately 15% to 20% of children with known severe mental retardation may also meet full criteria for autism. Although not mentioned in practice guidelines published in the mid-1990s, it is now thought that about 7% of children with Down syndrome meet criteria for autism. In these children, social (in particular, joint attention) skills are remarkably more delayed than skills in other domains. Language skills are also more delayed than skills in other domains (Sarah & Shea, 2006).

### **2.6. Theoretical perspectives**

#### **2.6.1. Biological perspective**

According to the biological model, genetics play an important role in the development of certain abnormal conditions (Folstein & Rutter, 1977). Family studies have demonstrated a 50 to 200 times increase in the rate of mental retardation disorder in siblings of an index child with mental retardation disorder. According to Gate and Beacock (1997), psychological disorders such as mental retardation are linked to anatomical or biochemical problems in the brain. Researchers have found that abnormalities in the activity of certain neurotransmitter-chemicals released into the synapse between two neurons are often connected with specific psychological disorders. Some of the biological conditions that have been found to be associated with mental retardation include inborn abnormalities like perinatal factors and maternal bleeding after the first trimester. Other studies have suggested that immunological incompatibility (maternal antibodies directed at the foetus) may

contribute to developmental disorder that may include rubella, syphilis and other infectious diseases (American Psychiatric Association, 2000).

Genetic factors in mental retardation include variation and genetic abnormalities (Tharpar, Gottesman, Owem, O'Donovan, & McGuffin, 1994). The most common inhibited form of mental retardation that is caused by genetic anomalies is called the Fragile X Syndrome because an abnormal gene is present at the bottom end of the X chromosome (Hagerman, 1996). Down syndrome is caused by an abnormality in the development of chromosome 21. It is the most common genetic cause of mental retardation. About 10 percent of children with severe or moderate retardation show this genetic anomaly. People with Down syndrome who live past the age of 40 are at a high risk of developing early onset dementia of the Alzheimer type (Bush & Beail, 2004) because the gene responsible for the amyloid plaque and neurofibrillary tangles found in Alzheimer's disease is located on chromosome 21, indicating a possible relationship between Down syndrome and mental retardation (Clarke & Clarke, 1987).

## **2.6.2. Psychological perspectives**

Psychological factors are implicated in many disorders, but they do not seem to be involved in mental retardation (Louw & Edward, 1995).

### **2.6.2.1. Psychodynamic theory**

The psychodynamic theory is one of the oldest theories in psychology in which clients are viewed within a model of illness that attempts to identify something that may be lacking. The founder of psychoanalysis, Sigmund Freud, formulated the theoretical basis for psychoanalysis in the late 1800s (Louw & Edward, 1995). Each individual is perceived to be made up from a dynamic that begins in early childhood and continually progresses throughout life. This way of thinking, however, is generally considered a watered-down version of the more conservative and rigid

psychoanalytic school of thought. Psychoanalysis in itself emphasizes the belief that all adult problems are directly related to events in one's childhood (Louw & Edward, 1995). Mental illness is believed to be the result of an unsuccessful progression through childhood development, which in turn results in problems with the personality structure. Sex and aggression are emphasized as being the unconscious motives for most human behaviour. Early psychodynamic theories have stressed the importance of deviant parent-child interaction in producing these conditions (Louw & Edward, 1995). Cold and unresponsive parents are seen as responsible for the development of mental retardation disorder (Louw & Edward, 1995). This is caused by unconscious unresolved childhood conflicts. According to Sigmund Freud the unconscious is a person's reservoir of feelings, thoughts, urges, and memories that lie outside of his or her conscious awareness. Feelings of pain, anxiety and conflict found within our unconscious can affect our behaviour and experience even though we are not consciously aware of why we are doing what we do.

#### **2.6.2.2. Behavioural theories**

According to this theory, a person's current difficulties are viewed as the result of a complex learning history, whose effect has both the form of the current behaviour and the remarkable environmental influence on the person's behaviour. The behaviourist focuses on the descriptions of current behaviour and the environment. The history is not regarded as a central aspect of programme development. There is no assumption that historical factors and current factors are necessarily related. The behaviourist seeks to develop an explanation for a person's behaviour in terms of the internal and external conditions which contribute to the occurrence of that behaviour (Sue, Sue & Sue, 2006). According to the behaviourist, the limitations of a person with mental retardation reflect the effect of an inappropriate or limited learning in their environment. Studies have demonstrated a relationship between environmental and certain abnormal behaviours (Corey, 2005; Sommers-Flanagan & Sommers-Flanagan, 2004). For example, self-inflicted injurious behaviour, such as head banging, is a dramatic form of psychopathology that is often exhibited by mentally retarded people. According to this model some behavioural problems are linked to

reinforcing features in the environment. In one classic study, experimenters used bananas as a reinforcement to shape a self-injurious behaviour, head hitting, in two monkeys (Schaefer, 1970). The experimenter rewarded the monkey for successive approximations of the behaviour: first, for raising a paw; then for holding the paw over the head; and finally for bringing the paw down on the head. This sequence of behaviour was shaped in about 16 minutes in both monkeys. Each time before the investigators gave the reinforcement, they said, "Poor boy. Don't do that. You will hurt yourself." The head hitting later occurred whenever these words were spoken. It seems clear from these findings that self-injurious behaviours in mentally retarded children are developed and maintained through reinforcement.

### **2.6.3. African perspectives**

In South Africa, two major models of illness causation are prevalent. The Western (biomedical) model ascribes illness to chance and heredity or lifestyle. African countries, including South Africa, explain events in terms of God, ancestors, pollution and witchcraft (Sodi, 1998). African traditional healers, such as diviners, herbalists and faith healers, mainly use the latter model both diagnostically and therapeutically, though they do also recognize the difference between natural and supernatural causation (Ngubane, 1977). Traditional healers are widely consulted by both urban and rural black South Africans of all classes. Furthermore, it has been suggested that consultation of traditional healers for psychological disturbance is higher than for somatic/physical ailments (Behr & Allwood, 1995). In cases of witchcraft, it is believed that some people (known as witches) have the ability to manipulate some mystical forces and to use a variety of concoctions that have the potential to inflict some form of illness and disabilities on the people they intend to harm (Hammond-Tooke, 1981).

## **2.7. Management of mental retardation**

Clearly the management of mental retardation requires an intersectional approach. People with medical complications such as dual diagnosis, epilepsy, cerebral palsy need medical attention. Management of the child with mental retardation, as with any chronic condition, should not only focus on the child and his condition, but also on the family. The family is the child's best resource. Supporting the family and ensuring its emotional and physical health is an extremely important aspect of overall management (Chris, William, Walker, Paloma-Gonzalez, & Curry, 2006). Most parents try to hide the fact that their children are mentally retarded until it becomes apparent to all. There are plenty of child guidance centres and special schools to provide an environment to aid in the development of the child. But if these facilities are not utilized, a mentally deficient child will definitely develop severe social and emotional problems (Barlow & Durand, 1999).

Training in independent living and job skills is often begun in early adulthood. Many day schools are available to help train retarded children in such basic skills as bathing and feeding themselves. Extracurricular activities and social programmes are also important in helping retarded children and adolescents gain self-esteem. The level of training depends on the degree of retardation. Mildly retarded individuals can often acquire the skills needed to live independently and hold an outside job. Moderate to profoundly retarded individuals usually require supervised community living. Family therapy can help relatives of the mentally retarded develop coping skills. It can also help parents deal with feelings of guilt or anger (Barlow & Durand, 1999). A supportive, warm home environment is essential to help the mentally retarded people to reach their full potential. However, as of 2004, there is no cure for mental retardation but only management of it (Sue, Sue & Sue, 2006).

In South Africa it is noted that the parents and care givers of children with mental retardation frequently reported using the service of both local traditional healers and medical system for their affected children as way of treating or managing mental retardation (Kromberg et al., 2008).

### **2.7.1. Financial support**

In 1974, Social Security Administration (SSA) became available and represented the first support to families raising children with severe disabilities, including those with mental retardation, at home. However, it was, and continues to be, a “needs-based” (based on income and assets) benefit for low-income families. Eligibility during childhood depends on a disability-severity criterion and a financial criterion for the family. If the child meets both criteria, the family will receive a monthly income; additionally, in most states, the child will automatically become eligible for Medicaid. The benefit amount has steadily increased over its 30-year existence. Qualification for any amount of stipend makes the child Medicaid-eligible. Older teens with severe mental retardation may first become eligible for Medicaid benefits at the 18th birthday, when they are considered adults and their parents’ income and financial assets are no longer considered in the eligibility process. Additionally, some families, depending on their financial circumstances, may also be eligible for Food Stamps and subsidized housing; these options are available to low-income families with typically developing children as well as to those with Mental retardation (Chris et al., 2006).

There is a range of social insurance benefits available to eligible persons in South Africa. Disability grant (DG) is a social grant aimed at individuals who are poor and who are unable to support themselves through work due to their disability. A disabled person is defined within the 1992 Social Assistance Act as any person who has attained the prescribed age and is, owing to his or her physical or mental disability, unfit to obtain by virtue of any service, employment or profession the means needed to enable him or her to provide for his or her maintenance. There is a temporary and a permanent disability grant (DSD, 2005 & SSA, 2005). The temporary disability grant is paid to individuals whose disability will last for a continuous period of between six and twelve months. The permanent disability grant is paid to individuals whose condition will continue for a continuous period of greater than twelve months. These people are attended to because of their mental or physical condition. There is Care Dependency Grant (CDG) also, which is a grant for disabled children aged between 1-18 years of age and who have a medical report and other supporting

documentation confirming the child's disability. In order to be eligible to receive the CDG parents (except foster parents) and children must be South African citizens, must satisfy the means-test, and all parents and the child must be resident in South Africa (Whitworth, Wright & Noble, 2006).

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1. Research design**

This is a descriptive study which employed archival research approach, in particular the document analysis method. According Fouche and Delport (2005), archival research approach emerges from the diplomatic disciplines and is based on theory of the safe storage, cataloguing and retrieval of document and items. Document analysis or document image analysis is the process that performs the overall interpretation of document images and gives them a meaning. This process is the answer to the question, thus document analysis is concerned with the global issues involved in recognition or understanding of written language in images (Fouche & Delport, 2005).

#### **3.2. Sampling**

All clinical files of persons diagnosed with mental retardation who presented at Polokwane/Mankweng Hospital Complex during a five-year period were accessed, retrieved and studied. This hospital complex was selected for the purposes of this study for two reasons: firstly, the researcher was an intern at the hospital complex at the time of the study. The researcher, was therefore, fairly familiar with the environment. Secondly, all the clinical information in the files of the clients presenting at the hospital complex was in English. This made it easier for the researcher to collect and interpret the data contained in the clinical files.

#### **3.3. Data collection instrument**

A clinical file review protocol was designed by the researcher in order to code and record the information that was gleaned from all clinical files (see Appendix C). It consisted of five separate sections which are as follows: demographic characteristics, referral information contained in the files, psychological assessment methods used in making the diagnosis, the kind of diagnosis given and lastly types of intervention suggested by the psychologists who saw the clients.

### **3.4. Procedure**

Before the researcher could start with data collection, ethics approval for the undertaking of the research project was requested and granted by the University of Limpopo Research Ethics Committee, Limpopo Province's Department of Health and Social Development Ethics Committee and Polokwane/Mankweng Hospital Complex Ethics Committee. The researcher then familiarized herself with the clinical files at Polokwane/Mankweng Hospital Complex before data collection for better understanding and planning. Because the researcher was reliant upon secondary data, the quality of data reflects the quality of the clinical files. In order to minimize underreporting and related errors the researcher supplemented clinical files by collecting data from clinical files which consisted of the following information: confidential psychological reports, clinician notes, and clients' answer sheet during the assessment. The researcher conducted extensive reviews of clinical files for all clients assessed or treated at Polokwane/Mankweng Hospital Complex, starting from January 2005 to December 2009. During this process, the clinical file review protocols were completed for each client's file. In order for the researcher to avoid double counting and under counting, every client's clinical file was assigned a number which is different from other client's clinical files. Using this system the researcher could easily identify the files that were not retrieved and studied. Moreover, because the files for each year were placed in one locker and arranged alphabetically, it was easy for the researcher to work with the files.

### **3.5. Data analysis**

Document analysis is the systematic exploration of written documents or other artefacts' such as films, files, videos and photographs. According to (Fouche & Delport, 2005), documents are unobtrusive and can be checked and re-checked for reliability. The following guidelines are given by Fouche and Delport (2005), regarding data analysis in archival research: (i) the researcher firstly establish clear criteria before the documents are analysed. In other words, how deeply the documents are analysed will depend on the central question(s), that is, what the researcher seeks to answer; (ii) the researcher establishes clear criteria for ratings such as "none," "little," "medium," or "extensive" and concretely defines the relative importance of each criterion. The present researcher followed these guidelines to

ensure that all the important data were captured. Statistical analyses were completed using computer software known as Statistical Package for Social Science (SPSS). Categorical data were analysed by using frequency tables and cross tabulations.

## CHAPTER FOUR

### RESULTS

#### 4.1. Introduction

In this chapter, the results of the study are presented. In the first section, the demographic characteristics of the clients whose clinical records were analysed will be presented. The second section will focus on the referral information contained in the clinical records. In section three, the clinical methods and psychometric tests that were used by the psychologists will be presented while section four will focus on the findings regarding the diagnosis given by the psychologists. In the last section, the results pertaining to the nature and types of the interventions employed by the psychologists will be presented.

#### 4.2. Demographic profile of the clients

*4.2.1. Race and nationality:* A total of 326 clinical records of persons presenting with mental retardation at Polokwane/Mankweng Hospital Complex during the period January 2005 up to and including December 2009, were retrieved and studied. This number constituted all the clinical records pertaining to cases of mental retardation that were seen by the psychologists in the hospital complex during the period under review. With regard to race, the clinical records showed that 314 cases (96.32%) were reflected as Black, while the remaining 12 cases (3.7%) were reflected as follows: White = 7 (2.15%); Indian = 4 (1.23%); and Other = 1 (0.30%) (Table.1). In terms of nationality, 321 cases (98.5%) were reflected as South African while only 5 cases (1.5%) were reflected as Other (Table 1.).

*Table 1: Race and nationality*

Race	Frequency	Percentage
Black	314	96.32
White	7	2.15
Indian	4	1.23
Other	1	0.3

<b>Total</b>	<b>326</b>	<b>100</b>
<b>Nationality</b>	<b>Frequency</b>	<b>Percentage</b>
South African	321	98.5
Other	5	1.5
<b>Total</b>	<b>326</b>	<b>100</b>

4.2.2. *Gender and age:* With regard to gender, there was a relatively even distribution, with 169 of the cases (51.8%) being male, while females constituted 157 cases (48.2%) (Table 2). In terms of age, the clinical records show that the persons who presented at the hospital complex were between the ages of 4 and 60 years (Table 2). The cases that were below the age of 10 years were 75 (23.0 %). There were a total of 130 cases (39.9%) that were in the age category of 11 to 20. There were a total of 77 cases (23.6%) that were in the age category of 18 to 24, and a total of 9 cases (2.8%) that were in the age category of 25 to 31. A total of 35 cases (10.7 %) were above the age of 32.

Table 2: *Gender and age*

<b>Gender</b>	<b>Frequency</b>	<b>Percentage</b>
Male	169	51.8
Female	157	48.2
<b>Total</b>	<b>326</b>	<b>100</b>
<b>Age (years)</b>	<b>Frequency</b>	<b>Percentage</b>
10 & below	75	23.0
11 – 17	130	39.9
18 – 24	77	23.6
25-31	9	2.8
32 and above	35	10.7
<b>Total</b>	<b>326</b>	<b>100</b>

Looking at the above results, it emerges that the majority of the cases were in the age range of 11 to 17 followed by the age range of 18 to 24 and 10 and below .The age range 25 to 31 constituted the smallest number of persons who presented at the hospital complex with mental retardation.

*4.2.3. Level of education:* The results of the study show that the majority of the cases of persons with mental retardation, 35.9% had schooling up to Grade 3. This was followed by the category of those who had no schooling at all at 31%. The third group at 24.2% was that of cases that had schooling up to Grade 7. It can therefore be concluded that many people, that is, 91.1% presenting at the hospital complex either had no schooling or had schooling only up to Grade 7 as indicated in Table 3.

*Table 3: Level of education*

<b>Level of education</b>	<b>Frequency</b>	<b>Percentage</b>
No schooling	101	31
Up to Grade 3	117	35.9
Up to Grade 7	79	24.2
Up to Grade 12	25	7.7
Beyond Grade 12	1	0.3
Unknown	3	0.9
<b>Total</b>	<b>326</b>	<b>100</b>

*4.2.3. Family circumstances:* The results show that most of the cases (94.8%) were not married while only 5.2% were cases of persons who were married (Table 4).

*Table 4: Marital status of the persons with mental retardation*

<b>Marital status</b>	<b>Frequency</b>	<b>Percentage</b>
Married	17	5.2
Never married	306	94.8
<b>Total</b>	<b>326</b>	<b>100</b>

In terms of home language, it was found that the majority of the cases, 96.3%, were speakers of Northern Sotho, with English being the distant second commonly spoken language at 2.1% (Table 5). The results are not surprising if one considers the fact that the largest population group in Capricorn District, where the hospital complex is located, as per Census 2001 (Statistic South Africa, 2001), is Northern Sotho (96.3%).

*Table 5: Home language of the persons with mental retardation*

Home language	Frequency	Percentage
Northern Sotho	314	96.3
English	7	2.1
Tsonga	1	0.3
Afrikaans	3	0.9
Venda	1	0.3
<b>Total</b>	<b>326</b>	<b>100</b>

With regard to history of mental retardation in the family, only 11% of the cases were found to have come from families that had this condition. The majority of the cases, 88.3%, did not have any history of mental retardation in the family (Table 6).

*Table 6: History of mental retardation in the family*

History of MR in the family	Frequency	Percentage
With MR	36	11.0
Without MR	288	88.3
<b>Total</b>	<b>326</b>	<b>100</b>

With regard to the number of siblings in the family, the results of the study showed that the majority of the cases, 48.2%, came from families with 1 to 3 children. The second highest category, 34%, was that of cases that come from families with 4 to 6 children (Table 5).

*Table 7: Number of siblings in the family*

Number of children in the family	Frequency	Percentage
1 to 3	162	48.7
4 to 6	111	34.0
7 to 9	38	11.7
10 and more	10	3.1
Unknown	5	1.5
<b>Total</b>	<b>326</b>	<b>100</b>

In terms of the number of siblings with mental retardation, only 4.6% of the cases were reported to come from families where one or more of the siblings had a similar condition (Table 6).

*Table 8: Number of siblings with mental retardation*

Number of siblings with MR	Frequency	Percentage
1 to 3	10	3.1
4 to 6	3	0.9
10 and more	2	0.6
0	305	93.6
Unknown	6	1.8
<b>Total</b>	<b>326</b>	<b>100</b>

With regard to the presence of related conditions of disability, it was found that only 4.6% of the cases had related conditions of disability, while 92.9% had no related conditions. It was only 2.5% of the cases studied that could not show whether or not there was a related disability (Table 7).

Table 9: Number of siblings with related conditions

Number of siblings without MR	Frequency	Percentage
1 to 3	174	53.7
4 to 6	80	24.5
7 to 9	28	8.6
10 and more	10	3.1
0	28	8.6
Unknown	5	1.5
<b>Total</b>	<b>326</b>	<b>100</b>

Regarding the level of family income, it was found that the majority of the cases came from families with a total income of up to R12 000 per annum, which translates to about R1 000.00 per month. The second highest group in terms of income level was that of cases that come from families that are reported to have no income (13.2%). There were, however, a remarkably large percentage of cases, 24.2%, where the level of family annual income could not be established (Table 8). This means that the actual income levels of families with mental retardation that presented at the hospital complex may be different from what is reflected in the results of the present study.

Table 10: Level of family income

Level of income	Frequency	Percentage
No income	43	13.2
Up to 12000	199	61.0
Up to 36000	4	1.2
Above 36000	1	09.3
Unknown	76	24.2
<b>Total</b>	<b>326</b>	<b>100</b>

Regarding the employment status of the parents, it was interesting to note that while most mothers of the persons with mental retardation were unemployed, 62.3%, the

employment status of the fathers of these persons could not be established (53.4%)(See Table 9).

*Table 11: Employment status of parents*

<b>Mother's employment status</b>	<b>Frequency</b>	<b>Percentage</b>
Unemployed	203	62.3
Employed	36	11.0
Deceased	43	13.2
Unknown	44	13.5
<b>Total</b>	<b>326</b>	<b>100</b>
<b>Father's employment status</b>	<b>Frequency</b>	<b>Percentage</b>
Unemployment	53	16.3
Employment	55	16.9
Deceased	44	13.5
Unknown	174	53.5
<b>Total</b>	<b>326</b>	<b>100</b>

### 4.3 Referral information reflected in the clinical records

The study found that the people are assisted by many other health professionals in addition to the psychologists. These other health professionals include: general medical practitioners, psychiatrists, social workers, occupational therapists, speech therapists and nurses. Most of the cases were referred to the hospital complex by other health professionals like medical officers, social workers, occupational therapists, speech and hearing therapists, nurses, psychiatrists and local clinics (34.4%), with those referred by their schools, 31.%, being the second highest. The third highest category, 27%, was that of cases referred to the facility by their families. Those that were referred by the courts constituted 4.3%, while those who referred themselves to the facility constituted 3.1% (Table 10).

Table 12: Source of referral

Who referred the child	Frequency	Percentage
School	101	31.0
Self- referral	10	3.1
Family members	88	27.0
Court	14	4.3
Friend	1	0.3
Others	112	34.4
<b>Total</b>	<b>326</b>	<b>100</b>

For the majority of the cases (50%), the reason for referral to a psychologist was for psychological assessment with a view to school placement. The second highest category of the cases, 38.7%, was referred to the psychologist for psychological assessment to assist in a disability grant application. A smaller number of the cases, (3.4%), were referred to the psychologists for assessment by the courts (Table 5).

Table 13: Reason for referral

Reason for referral	Frequency	Percentage
School placement	163	50
DG application	126	38.7
Court purpose	11	3.4
Both school placement and DG application	17	5.2
Other	9	2.9
<b>Total</b>	<b>326</b>	<b>100</b>

Another finding related to referral information was that most of the cases (50%) were seen during the years 2005 and 2006. It was interesting to note that cases referred to the hospital complex with mental retardation have been steadily decreasing from the years 2007 up to 2009 (Table 12).

Table 14: Year client seen

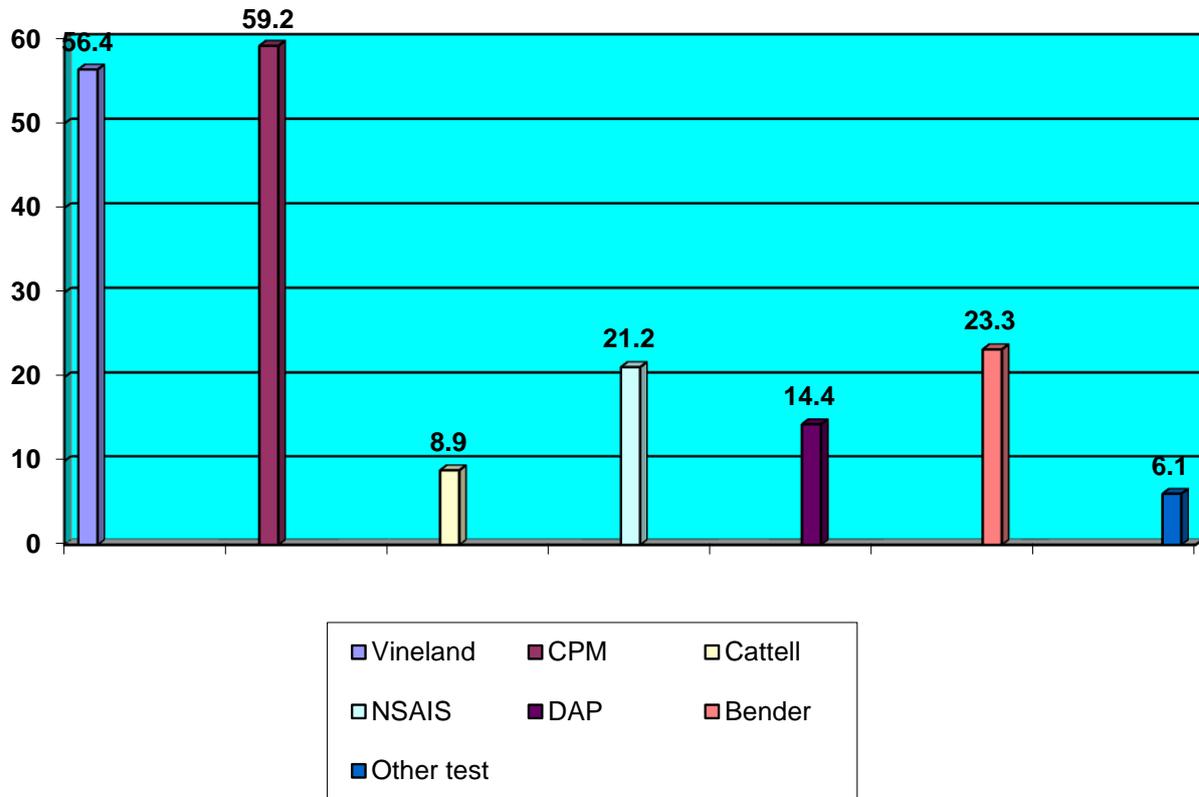
Year client was seen	Frequency	Percentage
2005	80	24.5
2006	83	25.5
2007	65	19.9
2008	55	16.9
2009	43	13.2
<b>Total</b>	<b>326</b>	<b>100</b>

#### 4.4. Clinical methods and psychometric tests used by the psychologists

There were several clinical methods that were used by the psychologists for the purpose of making diagnoses. The methods included clinical interviews, psychometric tests, clinical observations and collateral information sources.

With regard to the psychometric tests, it was found that the psychologists tended to use a number of these clinical instruments for the purposes of making a diagnosis. These included: Coloured Progressive Matrices (CPM), Vineland Social Maturity Scale, Bender Visual Motor Gestalt Test, Individual Scale for Northern Sotho-Speaking Pupil (NSAIS), Draw a Person (DAP), Cattell Culture Fair Test, Adult Neurological Questionnaires, Children Neurological Questionnaires, Junior South African Individual Scale (J-SAIS), and Wechsler Adult Intelligence Scale – Third Edition (WAIS III). (See Figure.1).

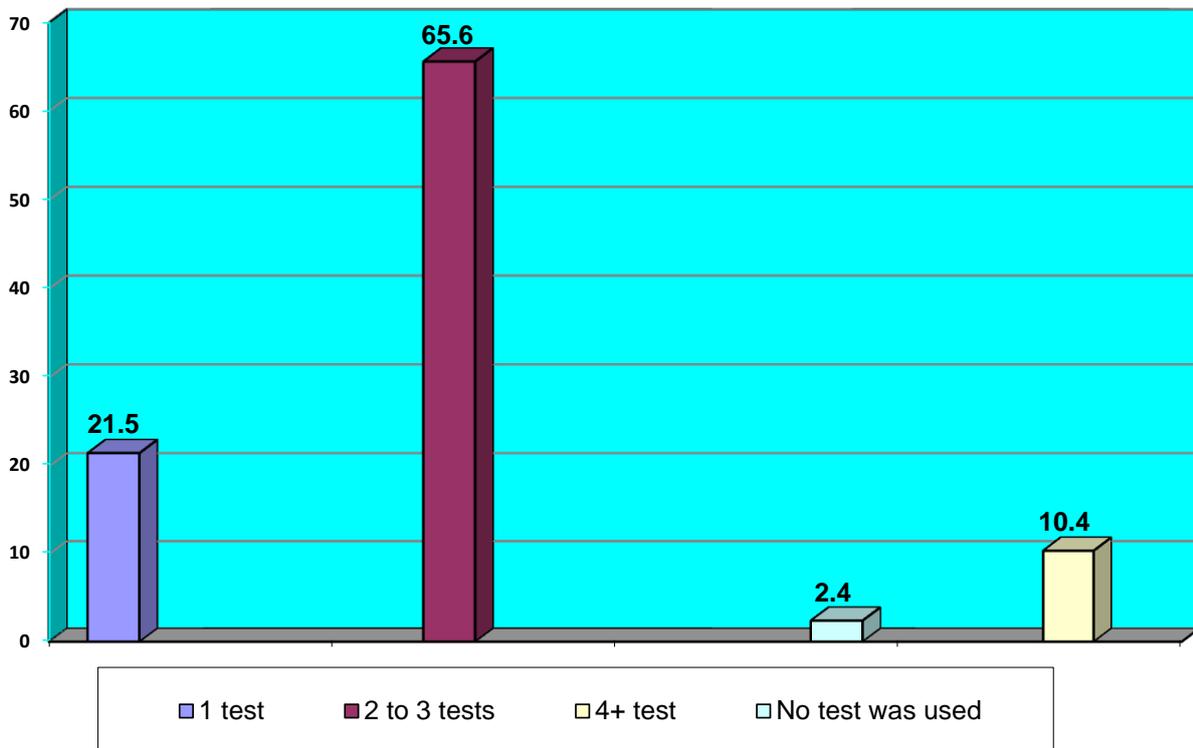
Figure 1: List of psychometric tests used by the psychologists



The CPM, which is a non-verbal psychometric test used to assess a person’s abstract, perceptual reasoning and level of intellectual development, was found to be the most popularly used clinical instrument (59.2%). The second commonly used test, at 56.4% was the Vineland Social Maturity Scale. This psychometric instrument is used to assess social adaptive skills, independence, and competence of individuals from birth to adulthood. The third commonly used psychometric test was the Bender Visual Motor Gestalt Test (23.3%) a psychometric test used to assess individual’s visual motor coordination abilities, possible brain damage as well as emotional functioning (Figure 1).

With regard to the number of psychometric tests used for each assessment, it was found that most psychologists, 65.6 %, tended to use 2 to 3 psychometric tests when making a diagnosis (see Figure 2). The results also showed that that there were also a considerable number of cases, 21.5%, where only one psychometric test was used.

Figure 2: Number of psychometric tests used



#### 4.5. Diagnoses given by the psychologists

These results indicated that 35.6% fall under the category of mild range mental retardation, while 35.6% are under moderate range of mental retardation. It was further found that 19.6% fall under severe range of mental retardation while only 3.7% fall under profound range of mental retardation. The results also showed that 0.3% of the cases were estimated to be between mild and moderate mental retardation, while 1.5% was estimated to range from severe to profound mental retardation (Table 13). There was a total of 0.6% of the cases whose severity of the mental retardation was unspecified due to the fact that no psychometric tests could be used to assess the intellectual functioning of the persons seen.

Table 15: Type of diagnosis given by psychologists

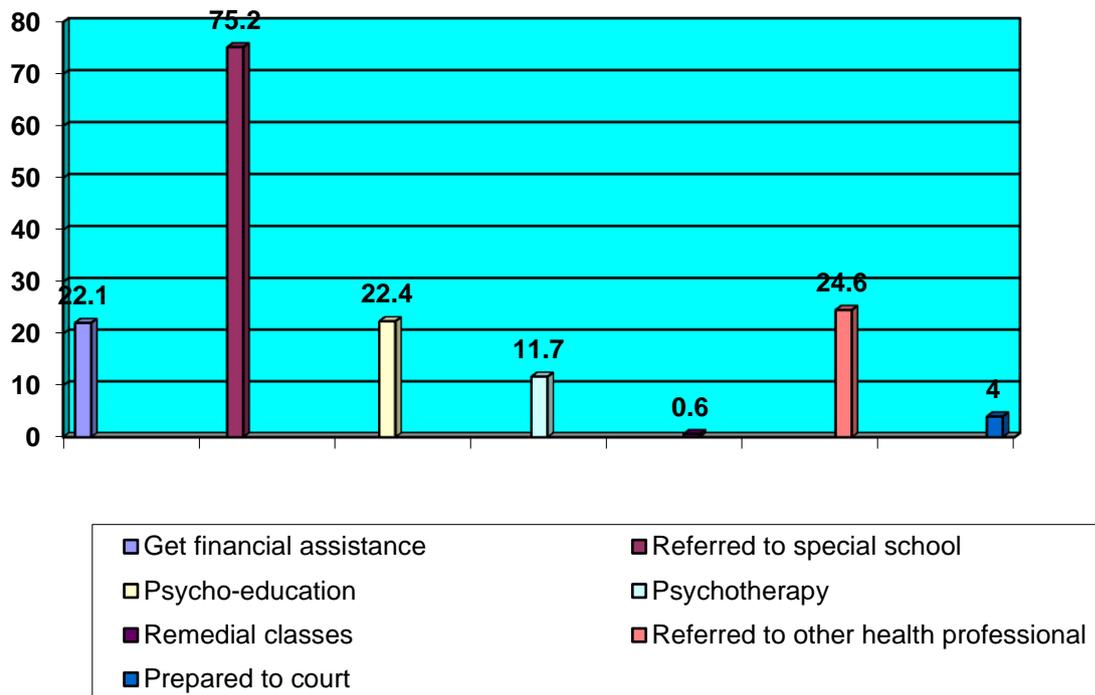
Diagnosis given by psychologist	Frequency	Percentage
Mild mental retardation	116	35.6
Moderate	116	35.6
Severe	64	19.6
Profound	12	3.7
Mild to moderate	1	0.2
Severe to profound	5	1.5
Severity unspecified	10	3.1
Malingering	2	0.6
<b>Total</b>	<b>326</b>	<b>100</b>

The study also found that the most common disorders/disabilities occurring co-morbidly with mental retardation were epilepsy (16.3%), speech and hearing problems (12.3%), emotional problems (4.0%), visual problems (3.1%), cerebral palsy (2.3%), Down's syndrome (1.2%), Attention Deficits Hyperactive Disorder (2.1%), learning disorders (1.5%), psychosis (0.9%), hydrocephalus (0.6%), cleft palate (0.6%), and autism (0.3%). It was also found that there were a further 10.7% of the cases that had other medical conditions such as malnutrition, tuberculosis, childhood disorders, and head injuries.

#### 4.6. Nature and types of interventions by the psychologists

These results indicated that several interventions were pre-arranged and recommended at the unit in assistance with management of those suffering from mental retardation. The majority of the cases, 75.2%, were referred to special schools. The second high intervention involved the referral of the persons with mental retardation to other health professionals such as medical officers, speech therapists, and occupational therapists for further intervention (at 24.6%), followed by psycho-education (22.4%).

Figure 3: Type of interventions by psychologist



#### 4.7. Summary of findings

In this chapter, the results of the study were presented. It was found that the majority of the cases were Black South Africans whose ages ranged from four to sixty years. Looking at the above results, it emerges that the majority of the cases were in the age range of 11 to 17 followed by the age range of 18 to 24 and 10 and below. There was no remarkable difference between male and female clients who visited Polokwane/Mankweng Hospital Complex for assessment. Most of them had grade 3 as their highest educational level. The majority were from poor socioeconomic background and their parents were unemployed or earning less than R12 000 as monthly income. Regarding the employment status of the parents, it was interesting to note that while most mothers of the persons with mental retardation were unemployed, (62.3%), the employment status of the fathers of these persons could not be established (53.4%). There was an increase in the number of referrals in 2005 and 2006, but the rate started to decrease subsequently between 2007 and 2009.

Most of the clients were referred for school placement or disability grant application and a limited number of cases were referred for court purposes. In terms of family

circumstances, 48.7% families of children with mental retardation consisted of 1 to 3 children followed by families with 4 to 6 (at 43%) children. Most referrals were from other health professionals such as medical officers, social workers, occupational therapists, speech and hearing therapists, nurses, psychiatrists and local clinics, followed by those who were referred by relatives and schools.

## CHAPTER FIVE

### DISCUSSION

#### 5. 1. Introduction

The purpose of this study was to explore the characteristics of persons presenting with mental retardation at Polokwane/Mankweng Hospital Complex during the period January 2005 to December 2009. The majority (88.3%) of the people presenting at Polokwane/Mankweng Hospital Complex during the five-year period under review are referred for assessment for the purposes of being considered for financial support by government. More than one psychological assessment methods are utilized by the clinical psychologists in the Unit in order to make a diagnosis. Most of the persons with mental retardation (45.5 %) seen during the five-year period under review will have been given multiple diagnoses.

#### 5.2. Demographic characteristics

In summary, there is established evidence that mental retardation differs by age, race, socio-economic background, educational status, home language and history of mental retardation in the family, although the size of the effects varies among the studies. Demographic characteristics of the persons seen during the period under review (January 2005 to December 2009) were investigated. The study by Richardson, van der Lans, and Derek (1986), revealed that there are more males with mental retardation than females. These findings contradict the findings of the present study, which indicates that there are no differences as far as gender is concerned. The present study showed that age- specific prevalence rate increased with age. It peaked at age 4 to 17, falling markedly among adults. In older persons, the prevalence of mental retardation is lower; as those with severe or profound mental retardation have a high mortality rate because of the complications associated with physical disorders. This pattern is not consistent with the studies by Wen, 1997; Kaplan & Sadock (2007). The dramatic increase and marked fall of the reported age specific prevalence rate across age group may not necessarily reflect the actual difference of prevalence among the population. Rather, it mirrors variation in case ascertainment. The high prevalence of mental retardation among school age

children demonstrates the impact of education system on the identification of cases. Mental retardation can also be influenced by economic status. This study has revealed that individuals from poor social background are at high risk of having children with mental retardation as compared to those from higher social classes. This could be due to lack of intellectual stimulation, poor access to health facilities and poor living conditions and malnutrition. Most of the participants in this study have grade 3 as the highest grade, this could be due to the fact that they cannot cope with the demands of other grades. Many children with mild retardation are not identified until they enter school and sometimes not until the second or third grade, when more difficult academic work is required. Most students with mild mental retardation master academic skills up to about the sixth-grade level and are able to learn job skills well enough to support themselves independently or semi-independently. There is a generally higher prevalence of mental retardation among blacks than other racial groups. The cause of this high prevalence of mental retardation amongst Africans is unknown (Leonard & Wen, 2002). Positive relationships between mental retardation and both maternal smoking and maternal urinary tract infection have only been reported in small numbers in this study. The majority of people in this study are from families with 1 to 3 children, with 1 to 3 children having the condition related to mental retardation. Age of the mother during the birth of the child could not be established since majority of the cases did not report it. Other studies have revealed that, for a middle-aged mother (more than 32 years of age), the risk of having a child with mental retardation is higher than other age groups (Barlow & Durand, 1999).

### **5.3. Referral information**

Clinical records of persons with mental retardation were investigated with a view to identify and document the referral information contained. The assumption was that the majority of the persons presenting at Polokwane/Mankweng Hospital Complex during the five-year period under study were referred for the purposes of being considered for financial assistance by government. This assumption was not consistent with the result of the present study, which found that the majority of the persons were referred for school placement rather than for financial assistance. This could be that the same report used for school placement is used to apply for a

disability grant. Although they were not referred for financial assistance, they were from poor socio- economic background. This result goes against a commonly held view among observers that the Disability Grand programme has been promoting dependency by reducing labour supply. It has also been established that the prevalence of mental retardation is strongly associated with the socio-economic status. The results of this study were consistent with the study by Kromberg et al. (2008), which suggested that mental retardation is rarely found in the highest socio-economic groups, unless accompanied by evidence of organic damage. Factors that are observed to be causing a high rate of mental retardation are poor living conditions, malnutrition, limited factors for intellectual stimulation of infants and children and unattended home births. This study is also consistent with the study of Shackleton, Shackleton, Buiten, and Bird (2007), which indicated that South of Africa is one of the countries with people who are from poor socio-economic background. Overall, 70% of South Africa's poor live in rural areas, and that 70% of rural dwellers are poor. Some 5% of rural households report no cash incomes whatsoever. For 12% of the people state pensions are their only source of cash income, and 26% rely on remittances from urban centres. Despite being rural dwellers, almost one million African households have no access to demarcated arable lands. These statistics are likely to have worsened in the last decade as a result of the large job losses during the late 1990s (Shackleton et al., 2007). The findings of this study are against the currently held view that people from poor socio-economic background go for Intelligent Quotient (IQ) assessment for the purposes being considered for disability grant.

#### **5.4. Assessment methods**

Clinical methods which were used by the psychologists in assessing these persons were investigated. The assumption was that more than one psychological assessment methods were utilized by the clinical psychologists in the Unit for the purposes of making a diagnosis. The finding of this study has confirmed this assumption. More than one assessment methods were used by psychologists for the purposes of making diagnoses which included: psychometrics tests, clinical observation and mental status examination, collaterals of Information and clinical

interview. Practitioners are becoming aware of the advantages of sound assessment, and improvements in test development have led to the implementation of cross-culturally fair tests. There are two factors that are important when conducting clinical interview: interviewer attitude and manner of communicating. A successful assessment should assess cognitive ability as well as social and personal functioning known as adaptive functioning. Interviewers should not be guided by client age because a client with mental age of 10 is not a 10 year-old child.

This study revealed that, during the clinical interview information about the children's developmental milestones, birth complications, health problems, mother's pregnancy and other developmental issues was gathered. These are their clinical characteristics: delayed developmental milestones, sickly children, unplanned pregnancy, incubated after birth, low birth weight, complicated pregnancy, mother taking alcohol during pregnancy, born at home and did not go to the hospital for immunization, born through caesarean section, 7 to 8 months premature, speech, head injuries, induced labour, mothers had long labour, mother's age during the birth of the child, and some children not crying after their birth. These are the factors found to be contributing towards mental retardation in children.

Clinical observation is also important during assessment because various bodily parts may have certain characteristics that are commonly found in persons who are mentally retarded. For example, the configuration and the size of the head, short and stocky stature; oval, upward slanting eyes; the epicanthic fold; a prolongation of the fold of the upper eyelid over the inner corner of the eye; wide flat nose; protruding tongue, broad hands with stubby fingers and etc.

This study indicated that clinical observation and mental status examination tended to suggest that persons with mental retardation tended to portray the following behaviour during assessment: unable to follow instructions during their assessment, not being oriented to time and place, poor memory, speech problem, poor eye contact, poor concentration, poor social judgment, inability to interact with the therapist meaningfully, irrelevant responses, poor attention span, emotional

problems, shy, poorly groomed, restless, gave inappropriate smile, disoriented, portrayed behaviour that is younger than their age, their drawings are immature, immaturity, drooling, lacked insight into their mental deficits, were easily distracted during their consultation, lacked confidence, lacked interest, looked younger than their chronological age, hyperactive, disorganised thoughts and talkative.

There are several psychometric tests that are used by psychologists for the purposes of making diagnoses. The participants were probed on the reasons why they ceased to use particular tests, and why these tests were then in some cases replaced with another instrument. In South Africa, the use of other tests were criticized based on these reasons: (i) The tests have become outdated, (ii) The tests are not culture friendly which hampers cross-cultural application, (iii) There is poor or no research on the application of the tests, (iv) the user receives insufficient support from the distributor (v) perceived exorbitant prices of the instrument, and (vi) the test is no longer applicable in a changing population (Paterson & Uys, 2005).

To arrive at an equitable and fair decision, psychological tests are usually not used in isolation, but as part of an extensive assessment battery (Fernandez-Ballesteros, 1999). Since most of the tests are not standardized for the African population, the findings of this study indicated that more than one psychometric tests were used by psychologists in making a diagnosis. The majority of the psychologists used 2 to 3 tests. Psychologists are faced with few challenges when assessing some of the clients because there are no tests that could be used. This could be due to lack of resources or lack of standardised psychometric tests for those with physical disabilities.

### **5.5. Kind of diagnosis**

The kind of diagnoses which were given by the psychologists to children presenting with mental retardation were investigated. The assumption was that most of the persons with mental retardation seen during the five-year period under review will have been given multiple diagnoses. The results of this study have confirmed the assumption that children presenting at this hospital complexes are given multiple

diagnoses. A number of studies have found that there are several co-morbid illnesses that are associated with mental retardation. Some of the most common illnesses and developmental conditions associated with mental retardation are Down syndrome, epilepsy and cerebral palsy. For example, a study by Rwiza et al. (1992), found that the rate of epilepsy was 3.7 per 1, 000 in the cases of mental retardation in Tanzania. In the same study, it was also found that the rate of Down syndrome was 1 per 1336 children presenting with mental retardation. A study by Christianson et al. (2002), found that cerebral palsy is one of the most common disorders associated with mental retardation. The study of Bhaumik, Tyrer, McGrother, and Ganghadaran (2008), has confirmed epilepsy as a common condition among people with intellectual disability. A study by Rwiza et al. (1992), found that the rate of epilepsy was 3.7 per 1, 000 in the cases of mental retardation in Tanzania. The study by Christianson et al. (2002), found that the rate of epilepsy was recorded to be 15.5 %. A study conducted in South Africa in one of the villages in Limpopo Province revealed associated disorders such as epilepsy, speech and hearing problems, Down syndrome, childhood disorder, autism, emotional problems, visual problems, cerebral palsy, attention deficits hyperactive disorder, learning disorders, psychosis, hydrocephalus, and cleft palate. Other children had medical conditions such as malnutrition, tuberculosis, childhood disorders, and head injuries. The majority were diagnosed with mild or moderate mental retardation. The prevalence of mental retardation is lower in people with severe or profound mental retardation because of their high mortality rates which is associated with complications of other physical disorders.

## **5.6 Type of interventions**

The nature and type of interventions that were suggested by the psychologists who saw these persons were identified and documented. This study has revealed that there are several interventions which are suggested by psychologists after assessment. The main idea is to help people develop their potential to the fullest. This intervention included: referral to special schools, financial assistance from the government, psycho-education to the care giver, and referral to other health professionals. Clearly, the management of mental retardation requires an intersectional approach, both psychological and medical interventions. People with

medical problems such as double diagnosis, epilepsy, cerebral palsy require medical consideration. The results of the present study are consistent with the study of Barlow and Durand (1999), which indicated a number of interventions which are suggested by psychologists as a way of managing mental retardation.

There are a number of child guidance centres and special schools to provide an environment to aid in the development of the child. However, if these facilities are not utilized, mentally retarded children will definitely develop severe social and emotional problems (Barlow & Durand, 1999). Raining assists will help them to develop independent living and job skills. The level of training depends on the degree of retardation. Mildly retarded individuals can often gain the skills required to live independently and hold an outside job. Moderate to profoundly retarded individuals usually necessitate supervised community living. Psycho-education and family therapy and other kinds of psychotherapy can benefit relatives of the mentally retarded children develop effective coping skills. This can also help parents deal with feelings of guilt, anger, resentment and other psychological problems (Barlow & Durand, 1999). A supportive, warm, and caring home environment is essential to help the mentally retarded people to reach their full potential. Mental retardation is one of the developmental disorders that do not have a cure.

## **CHAPTER SIX**

### **SUMMARY AND CONCLUSION**

#### **6.1. Summary of findings**

This study has revealed that there is a high rate of people with mental retardation presenting at Polokwane/Mankweng Hospital Complex. The majority (74.2 %) are from poor socio-economic background. Their families have no income or earn approximately R12000, 00 per month. They are having grade 3 as their highest grade. These results indicated that the majority of cases (50 %) are referred for school placement, but use the same reports for disability grant application. This study also revealed that psychologists are using more than one psychometric test when assessing the clients when making a diagnosis. The result of this study has confirmed the assumption that persons presenting at these two hospital complexes are given multiple diagnoses. A number of studies have found that there are several co-morbid illnesses that are associated with mental retardation. Some of the most common illnesses and developmental conditions associated with mental retardation are Down syndrome, epilepsy and cerebral palsy. Several interventions were utilized by psychologists who assisted these individuals with the aim of managing mental retardation.

#### **6.2. Limitations of the study**

When using secondary data, the quality of the reporting of the incidents is largely dependent on the quality of the clinical files and the reports used. The researcher in the present study tried to minimise this limitation by utilising multiple sources of information. Another limitation related to the missing files or incomplete information in the files (such as ages of the mothers during the birth of their children, and date when the children were seen). Based on this, the results of the present study can only be interpreted with caution. One other limitation that makes generalizability of this study difficult relates to the fact that the investigation was conducted in a province that is considered to be one of the poorest in South Africa. The conclusion (made in the present study) that mental retardation seems to be prevalent among

persons from low socioeconomic backgrounds could have therefore been influenced by this reality.

### **6.3 Contributions and recommendations**

While acknowledging the potential limitations of our methodologies, the results speak about the characteristics of persons presenting at Polokwane/Mankweng Hospital Complex during the period under review. The results of this study confirm a high rate of mental retardation in the Capricorn district of Limpopo Province. Information contained in this study could help the Clinical Psychology Unit in Limpopo Province to further have a better understanding and awareness of the nature and patterns of cases of mental retardation presented at the Polokwane/Mankweng Hospital Complex. This kind of information could also help the Clinical Psychology Unit to tailor more diagnostic and intervention programmes that are based on the clinical information obtained about persons with mental retardation. A study of this nature could further provide useful clinical and scientific data that could help the provincial Department of Health and Social Development and the Department of Education in developing policies and guidelines on mental retardation and other related developmental disabilities.

The issue of standardization of psychological testing is a serious problem in South Africa. More studies on standardization of psychological tests need to be carried out. These will, naturally, make a positive impact to psychological tests. Studies should address the following issues: strengths and limitations of psychological tests currently in use, suggestions and requirements for the development of new tests, and finally the issue of the importance of psychometric properties such as reliability, validity and norming, monitoring and management of the quality of psychological services and tests. For example, the Vineland adaptive behaviour scale is one of the psychometric tests that are commonly used by psychologists when assessing African persons, though it is often suggested that this particular instrument is not appropriate for African people. It is important that people are diagnosed using instruments which will validate the results. When that happens, effective provision of assistance will follow.

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**APPENDIX A:**

**PERMISSION LETTER TO THE DEPARTMENT OF HEALTH AND SOCIAL DEVELOPMENT**

Department of Psychology  
University of Limpopo

Private Bag X1106  
Sovenga  
0727  
Date:

The Head of Department  
Department of Health and Social Development  
Limpopo Provincial Government  
College Street  
Polokwane  
0699

**RE: PERMISSION TO CONDUCT RESEARCH ON MENTAL RETARDATIO IN POLOKWANE/MANKWENG HOSPITAL COMPLEX**

My name is Poopedi Molepo Hope, a Masters student in the Department of Psychology at the University of Limpopo (Turfloop Campus). I am conducting a study on the profile of children with mental retardation presenting at Polokwane/Mankweng Hospital Complex over a period of five years (i.e., from January 2005 to December 2009)

I do hereby apply to be granted permission to conduct this research at the above mentioned hospital. I would like to reassure you that I undertake to maintain confidentiality regarding the identity of the participants in this research project. The methods of data collection will be retrieval of clinical information protocol of children with mental retardation who have been seen by psychologists at the hospital.

Yours faithfully

Poopedi Molepo Hope  
Masters Student

Date.....

Prof T Sodi  
Supervisor

Date .....

**APENDIX B:**

**PERMISSION LETTER TO THE DEPARTMENT OF HEALTH AND SOCIAL DEVELOPMENT**

Department of Psychology  
University of Limpopo

Private Bag X1106  
Sovenga  
0727  
Date:

The Head of Department  
Polokwane and Mankweng Hospital Complex  
Limpopo Provincial Government  
Hospital Street  
Polokwane  
0699

**RE: PERMISSION TO CONDUCT RESEARCH ON MENTAL RETARDATIO IN POLOKWANE/MANKWENG HOSPITAL COMPLEX**

My name is Poopedi Molepo Hope, a Masters student in the Department of Psychology at the University of Limpopo (Turfloop Campus). I am conducting a study on the profile of children with mental retardations presenting at Polokwane/Mankweng over a period of five years (i.e., from January 2005 to December 2009)

I do hereby apply to be granted permission to conduct this research at the above mentioned hospital. I would like to reassure you that I undertake to maintain confidentiality regarding the identity of the participants in this research project. The methods of data collection will be retrieval of clinical information protocol of children with mental retardation who have been seen by psychologists at the hospital.

Yours faithfully

Poopedi Molepo Hope  
Masters Student

Date.....

Prof T Sodi  
Supervisor

Date .....

**APPENDIX C:**

**CHARACTERISTICS OF PERSONS WITH MENTAL RETARDATION  
PRESENTING AT POLOKWANE/MANKWENG HOSPITAL COMPLEX IN  
LIMPOPO PROVINCE: AN ARCHIVAL STUDY**

<b>Reference Number</b>	
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**MENTAL RETARDATION: CLINICAL FILE REVIEW PROTOCOL**

**PART A**

**Demographic details**

1. District where client comes from

Capricorn		Vhembe		Sekhukhune		Mopani		Waterberg		Other	
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If other, specify \_\_\_\_\_

2. Age: \_\_\_\_\_

3. Gender

Male		Female	
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4. Marital status

Married		Never married		Divorced		Widowed	
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5. Children

a) Number of children

b). Number of siblings with mental retardation

c). Number of siblings without mental retardation

d). Number of siblings with related conditions

### 5. History of mental retardation in the family

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### 6. Level of education

No schooling		Up to Grade 3		Up to Grade 7		Up to Grade 12	
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Beyond Grade 12	
-----------------	--

### 6. Race

Married		Never married		Divorced		Widowed	
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### 7. Nationality

South African		Others	
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### 8. Home Language

<u>Northern Sotho</u>		<u>English</u>		<u>Tsonga</u>		<u>Zulu.</u>	
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<u>Afrikaans</u>		<u>Ndebele</u>		<u>Sotho</u>		<u>Swazi</u>	
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<u>Tswana</u>		<u>Venda</u>		<u>Xhosa</u>		<u>Other</u>	
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9. Parent employment status

<u>Employed</u>		<u>Unemployed</u>	
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10. Level of income

<u>No income</u>		<u>Up to R12 000</u>		<u>Up to R36 000</u>		<u>Above R36 000</u>	
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**PART B**

**Referral information**

Who referred the child?

<u>School</u>		<u>Self- referral</u>		<u>Family member</u>		<u>Court</u>	
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<u>Friend</u>		<u>Colleagues</u>		<u>Others</u>	
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When was the child referred? \_\_\_\_\_

When was the child seen? \_\_\_\_\_

Reason for referral?

School placement		DG application		Court purposes		Other	
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Other health professionals who saw client

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**PART C**

**Clinical assessment method used**

1. What kind of assessment methods were used?

Method	Tick	Findings	Comment on developmental milestones, birth complications, health problems and other developmental issues identified by this method
Interview			
MSE			
Clinical observation			
Psychological testing			

Other			
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2. What specific psychological tests were used?

List the tests

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**PART D**

**Kind of diagnosis**

1. Diagnosis given

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2. In the case of a co-morbid illness, what other diagnosis is given to the child?

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**PART E**

**Types of intervention**

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