Practitioners' Experiences of Cross-Cultural Issues in the Assessment of Cognitive Functioning in Culturally and Linguistically Diverse Learners for whom English is a Second Language (CLD L2): Theoretical, Ethical and Practical Implications

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2014

A dissertation submitted in partial fulfilment of requirements for the degree of Master of Social Science in Research Psychology in the Discipline of Psychology, School of Applied Human Sciences, University of KwaZulu-Natal, Pietermaritzburg.

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DECLARATION

Submitted in partial fulfilment of the requirements for the degree of

Master of Social Science, in the Graduate Programme in Research Psychology,

University of KwaZulu-Natal, Pietermaritzburg, South Africa.

I, Annastasia Zandile Zuma, declare that:

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2. This thesis has not been submitted for any degree or examination at any other university.

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Annastasia Zandile Zuma

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Date

Name of Supervisor: Ms Phindile Mayaba

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Signature

DEDICATION

I dedicate this thesis to my late parents, Washelela Stimela samaMpondo and Mntombiza

Langa, for always believing in me. The seed of love you planted in my life, the faith you had

in me and your unfailing support has kept me going in life.

ACKNOWLEDGEMENTS

ABSTRACT

This study sought to explore practising psychologists' experiences of cross-cultural issues in the assessment of cognitive functioning of culturally and linguistically diverse learners for whom English is a second language (CLD L2). The study focused on theoretical, practical and ethical implications of such an assessment. This was a qualitative study. The population of the study was practising psychologists in the Pietermaritzburg region of KwaZulu-Natal. The sampling method used was convenience sampling. The study was conducted on six selected psychologists that fell within three practicing categories: clinical, educational and counselling psychology, who were currently in practice, administering psychometric tests and assessment measures and registered with the Health Professions Council of South Africa (HPCSA). An interview schedule was used as a data gathering instrument. The participants were asked their views about the assessment measures that they commonly use, challenges they encounter in their day-to-day practice and how they deal with these challenges. In analysing data, the method of thematic analysis was used. The findings indicated that practising psychologists see clients from diverse cultural and linguistic groups and use a variety of assessment measures, mostly internationally developed with only a few developed locally. The nature of assessment tools used pose a number of challenges and the majority of these tools are perceived to be inappropriate for use in a multicultural South African context. The findings highlighted the dire need for assessment measures that will cater for culturally and linguistically diverse South African community. It is recommended that there should be adaptation and review of assessment tools and development of new local assessment tools appropriate for the South African context. Ongoing training as well as the review and evaluation of the academic training of psychologists is highly recommended in order to prepare psychologists for cross-cultural testing.

TABLE OF CONTENTS

CONTENT   **PAGE**

CHAPTER 1: INTRODUCTION

1.1   Introduction and Background to the Problem

Assessment measures for cognitive functioning can be used for a variety of purposes. They assist with the identification of specific developmental delays in children, monitoring the impact of disease, reviewing possible changes in cognitive abilities due to treatment, and providing important information regarding cognitive functioning of children struggling within the school setting (Griffin & Christie, 2008). Intelligence tests are administered for a number of reasons including making decisions for academic purposes, planning for intervention as well as educational placement (Miller, 2011) and are necessary to identify specific strengths and weaknesses of children in their development (Griffin & Christie, 2008). Therefore assessment with appropriate tools is a necessity.

South African children are culturally diverse and vary in such aspects as cultural heritage, degree of acculturation, language, rural and urban location, socio-economic background, educational background of parents, health, preparation for schooling and many other respects that influence human development (Foxcroft, 1997 as cited in Van Heerden, 2007; Shuttleworth-Edwards, et al., 2004). Psychological assessment is facing a plethora of challenges in this multicultural and multilingual society (Foxcroft, Paterson, Le Roux & Herbst, 2004), which emanate from the type of assessment measures that are used which are deemed to be unsuitable for the South African context. There is a need for high quality, culturally appropriate assessment measures that are standardised for the South African community and designed for use with all age groups and various cultural and language communities (Foxcroft, 2004).

Assessing for intelligence is complex and can be controversial especially in culturally and linguistically diverse contexts (Milller, 2011). The situation is further complicated by a lack of consensus on the definition of intelligence, with diverse views concerning the true nature of cognitive functioning and how cognitive functioning should be measured (Foxcroft & Roodt, 2005, 2013; Pretorius et al., 2009). Practitioners are concerned with the

appropriateness and effectiveness of Western developed assessment tools with South African children (Pretorius et al., 2009), in particular the validity and reliability of these measures when they are used with a population group different from the normative group, in terms of cultural, socio-economic, educational, or linguistic background (Padilla & Borsato, 2008). The argument put forward by practitioners is that instruments normed on one population cannot be arbitrarily used with individuals who differ from the normative population (Padilla & Borsato, 2008), because such a practice could result to significant errors in assessment. It is important to use assessment tools that are standardised for groups that are being used with, such that results are interpreted in a culturally fair manner (Foxcroft & Roodt, 2005).

Research has shown that cultural, linguistic and educational differences as well as political and ethical concerns are factors that contribute to lower the validity of cognitive assessment measures (Parker, Philp, Sarai, & Rauf, 2007; Pretorius et al., 2009). The effects of culture and language have been identified as two interacting challenges when assessing culturally and linguistically diverse (CLD) learners (Cormier, 2012). Assessment of learners in a language in which they are most proficient is of paramount importance (Cormier, 2012; Foxcroft et al., 2004). Challenges pertaining to language in assessment include lack of practitioners that are bilingual and limited resources in terms of the availability of cognitive assessment measures in a variety of languages. In order to accommodate CLD learners for whom English is a second language (L2) psychologists have to consider modifying various factors including time, instructions, context, familiarity with task, test-taking skills as well as language delivery, so as to provide a better framework in which to interpret scores (Thomas-Presswood, Sasso & Gin, 1997). However, deviation from test instructions given in the test manual is considered unethical.

Practitioners are facing significant barriers when assessing CLD learners for cognitive abilities. Besides the lack of culturally appropriate instruments, there is also the issue of culturally sensitive interpretation of test profiles, lack of bilingual psychologists, lack of ongoing culturally competent training programmes, use and misuse of interpreters, insufficient knowledge of second language acquisition and meagre selection of reliable and valid language proficiency and intelligence tests (Miller, 2011; Thomas-Presswood et al., 1997). There is also lack of culturally sensitive training from different universities (Goupal-

McNicol & Armour-Thomas, 2002; Miller, 2011), which is required to improve the quality of assessment practices in South Africa tests (Paterson & Uys, 2005).

Many psychologists often opt for the use of translators in translating test instructions and learners' responses or opt for non-verbal assessment measures to minimise biases and ensure reliable and valid results (Cormier, 2012; Schaap, 2011). Significant concerns have been raised regarding the practice of test translations and assessment in multiple languages, which include bias resulting from inaccurate translation, alteration of stimuli, and unfamiliarity with the content of assessment (Cormier, 2012). Linguistic and cultural differences have been identified as the two integral aspects that must be considered when adapting a test (Aston, 2006). Research has shown that not only verbal but also non-verbal tests may be culturally biased as indicated in the study conducted by Roselli and Ardila (2003), where the authors analysed the effects of education on non-verbal psycho-educational test performance in participants with diverse cultural backgrounds. They warned that great caution is needed in using non-verbal tests with individuals from cultures different from the one that provided the normative sample (Roselli & Ardila, 2003). Moreover, it is deemed unfair to use timed non-verbal tests that score speed of performance with cultures where time restrictions are not important values (Roselli & Ardila, 2003).

Legislation and ethical codes have been developed to ensure ethically and culturally competent assessment practices, but despite these measures, assessing CLD L2 learners has continued to remain a complex process (Foxcroft et al., 2004; Miller, 2011). Issues of informed consent, confidentiality and test wiseness remain concerns in cross-cultural assessment. Practitioners need to be sensitive to learners' culture and language in test selection, administration and interpretation, to avoid unnecessary stigmatising labels (Miller, 2011).

Very little research has been carried out to test the impact of cross-cultural issues in the assessment of cognitive functioning on CLD L2[1] learners in the province of KwaZulu-Natal,

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[1]CLD L2 refers to culturally and linguistically diverse learners for whom English is a second language.

South Africa. This research was conducted in the province of KwaZulu-Natal. KwaZulu-Natal is the province with the second largest population in South Africa and 86.8% of the population is Black Africans with 77.8% having isiZulu as their first language, just above 13.2% having English, 3% having isiXhosa and 2% having Afrikaans as their home languages (Statistics SA, 2011). IsiZulu is the most frequently spoken language by most households (Statistics SA, 2011). The province is mostly rural. The population and language trends in Pietermaritzburg are almost the same as the provincial ones. A national study conducted by Foxcroft et al. (2004) on psychological assessment, forms the basis of this research project.

1.2   The Research Problem

The impact of culture on cognitive development has received special attention from psychologists and its impact on psychological assessment cannot be ignored anymore. It has been recognised widely that no knowledge is acultural and this warrants close examination of the content for assessment and the extent to which it advances the normative group's values, beliefs and interests over those of other population groups (Suzuki & Ponterotto, 2008). Language and culture have been identified as pivotal concepts in the assessment of cognitive functioning in a multicultural and multilingual South African context (Foxcroft et al., 2004).

Intelligence has been found to be context specific and needs to be interpreted within a specific cultural context, therefore the use of static, conventional, universal intelligence tests and assessment tools has been queried (Davidson & Downing, 2000). In South Africa, most of the assessment tools that are used to assess cognitive functioning were developed within the Western theoretical framework and normed on the White middle class population (Knoetze, Bass & Steele, 2005; Laing & Kamhi, 2003). Some locally developed assessment tools and those adapted for certain population groups have old and outdated norms and yet they are still in use. This is due to the lack of relevant and culturally appropriate tools (Foxcroft et al., 2004). This research project focuses on cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners with particular focus on theoretical, ethical and practical implications.

1.3   Research Objectives

The following are the objectives of the study:

1) To explore the challenges faced by practicing psychologists in the assessment of cognitive functioning on CLD L2 learners.
2) To investigate how practicing psychologists address these challenges in their day-to-day practice.
3) To find out from practicing psychologists if they can recommend measures that can be taken to address cross-cultural issues in psychological assessment.

1.4   The Research Questions

The study is guided by three critical questions:

1) What challenges are practicing psychologists faced with in the assessment of cognitive functioning on CLD L2 learners?
2) How do practicing psychologists deal with these challenges in their day-to-day practice?
3) What measures should be taken to address cross-cultural issues in psychological assessment?

1.5   Methodological Approach

The methodological approach adopted in this study is discussed in detail in Chapter Three. The research uses a qualitative approach to explore the perceptions of practitioners regarding cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. This study is guided by the principles of an interpretive framework. The research design for this study is a descriptive and interpretive analysis of practicing psychologists' experiences using qualitative methods. Interpretive researchers believe that there is no single correct route or particular method to knowledge (Silverman, 2010). The objective of qualitative research is to describe and explain events and experiences, but not to predict (Willig, 2008, 2013).

The research population is practicing psychologists registered with the Health and Professions Council of South Africa (HPCSA) and conducting psychological assessment. The

sample is from three practicing categories: clinical, counseling and educational psychology chosen from the Pietermaritzburg area of KwaZulu-Natal province. Non-probability and purposive sampling was used to recruit participants. Data was collected by means of an open-ended interview schedule.

1.5.1 Aims and Rationale of the Study

The primary aim of the study was to explore challenges that practicing psychologists are faced with in the assessment of cognitive functioning on CLD L2 learners. The specific aims derived from the primary aim of the study are as follows:

1) To identify assessment measures that are commonly used by psychologists to assess cognitive functioning on CLD L2 learners;
2) To determine the appropriateness and fairness of these assessment measures to the multicultural and multilingual South African society as assessed by practitioners; and
3) To explore theoretical, ethical and practical implications in the assessment of cognitive functioning in a multicultural society from the perspective of practitioners.

To be able to meaningfully respond to the many challenges facing psychological assessment in South Africa, it is important to get a full grasp of the challenges as experienced firsthand by practitioners and get full grasp of ways in which the practitioners deal with these challenges. Therefore, the aim of the present study was to get a full grasp of the challenges as experienced firsthand by practitioners and how they deal with these challenges in their daily practice, so that best practices can be shared and ways of dealing with these challenges developed and formalised.

In order to meet this aim the opinions of the practitioners currently involved with assessment of cognitive functioning have been sought. The present study analyses the responses of practicing practitioners to open-ended questions adapted from the study by Foxcroft et al. (2004) which was a needs analysis pertaining to psychological assessment in South Africa. Perceptions regarding the use of tests, their fairness and appropriateness in South African context, and challenges experienced prior to, during and post administration of the tests are

explored and specific themes are identified. The focus is mainly on theoretical, practical and ethical implications.

1.5.2   Research Design

This study adopted a qualitative interpretive approach (Silverman, 2010) to look into the practitioners' experiences of cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. This study explored psychologists' first hand experiences in respect of challenges they encountered in their daily practice with CLD L2 learners and provided a summary of practitioners' experiences on cross-cultural psychological testing.

1.5.3   Sampling

The intended sample comprises of six practicing psychologists in the clinical, educational and counseling categories, from the Pietermaritzburg area of KwaZulu-Natal. These practicing psychologists were selected because they currently render psychological services to clients, which include psychological testing. The sampling strategy was non-probable and purposive.

1.5.4   Data Collection

Data was collected by means of individual, one-on-one, semi-structured interviews. An interview scheduled was used as a guide in conducting individual interviews.

1.5.5   Data Analysis

Data was analysed through thematic interpretive analysis. The full account of the methodology used in this study is provided in Chapter Three. Chapter Three will discuss the purpose of this study, research design, research approach, data collection, data analysis, validity, reliability and rigour and ethical considerations.

1.6　Delimitation and Scope of the Study

The study has included the experiences of practicing psychologists registered with the HPCSA from Pietermaritzburg area of KwaZulu-Natal province. The sample mainly comprised of female psychologists from the white population group. Perceptions of cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners may be unique to the circumstances of Pietermaritzburg region.

1.7　Chapter Outline

Chapter One outlines the broad field of this study, the research problem and the research questions, the methodological approach and the outline of this study. Chapter Two discusses theories and empirical literature relevant to the study. Chapter Three addresses methodological issues including the aim, research questions, and the research design adopted in this study. Details of the sample, data collection, and data analysis, validity, reliability and rigour as well as ethical considerations in this study are also discussed. Chapter Four presents the findings of the results derived from the analysis of the participants' responses during the interviews. Chapter Five gives a discussion of the findings in relation to literature. Chapter Six presents the conclusions of the study, implications for theory and recommendations.

1.8　Definitions

Psychological assessment. Psychological assessment is defined by Foxcroft and Roodt (2005) as *"a process-oriented activity aimed at gathering a wide array of information by using assessment measures and information from many other sources"* (p. 4).

Cognition. Gander and Gardiner, as cited in Gardiner (2004) define cognition as the act or process of obtaining knowledge, including perceiving, recognising, reasoning, and judging. Cognition involves thinking, knowing, remembering, categorising, and problem solving (Gardiner, 2004).

Tests and assessment measures. Psychological tests are measuring instruments that are constructed according to strict scientific rules and which evaluates the degree to which certain attributes of personality are present or absent (Louw & Edwards, as cited in

Moletsane, 2004). Psychological tests that are standardised remain the most widely used method for gathering psychological data. Foxcroft and Roodt (2005) define assessment measures as standardised measures used to gain understanding of an individual's functioning. There are two approaches to test development; theory-based approach and empirical approach.

Cognitive Ability. Cognition is defined by Malda (2009) "*as the mental processes of knowing and cognitive abilities as including memory span, word fluency, reading comprehension and visualisation*" (p. 11).

Cognitive assessment measures are developed to assess cognitive abilities of a person. Assessment measures can be culture specific, culture fair, or culture friendly. Most cognitive assessment measures are not applicable to all cultures and contexts. Bias can be due to culture, language, educational differences and socio-economic status background and this bias can lower the validity of the assessment measure (Parker et al., 2007)

Culture. Maschinot (2008) defines culture as a shared system of meaning which includes values, beliefs, and assumptions expressed in daily interactions of individuals within a group through a definite pattern of language, behaviour, customs, attitudes and practices.

Bilingual Psychologists. Psychologists who are able to speak their primary language and to speak or sign at least one other language, at least a competent level of proficiency (Peña, 2012). In a South African context a bilingual psychologist is a practitioner who speaks English and one of the African languages.

1.9   Conclusion

The introduction and background to the study was presented in this chapter. The research problem, research questions and methodological approach were discussed. The chapter also presented the outline of the study and definition of important concepts in this study. Chapter Two will cover literature relevant to the study.

CHAPTER 2: REVIEW OF LITERATURE

2.1   Introduction

This chapter provides a critical analysis of the literature on cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. This chapter will discuss i) the theory of successful intelligence; ii) culture and intelligence; iii) education and the theory of successful intelligence; iv) language; vi) multiculturalism; vii) cross-cultural assessment; viii) psychological assessment in South Africa; ix) assessment measures commonly used for cognitive functioning in South Africa; and x) proper training of psychologists.

Issues raised in cross-cultural psychological assessment internationally are of great concern and cannot be ignored in a society as culturally and linguistically diverse as South Africa. Bias and equivalence have become common terms as issues in cross-cultural psychological assessment (Van de Vijver & Rothmann, 2004). Section 8 of the South African Employment Equity Act (No. 8 of 1998) prohibits the administration of psychological measures and other similar assessments unless the tests are valid and reliable, can be fairly applied and are not biased against any employee or group (RSA, 1998; Van de Vijver & Rothmann, 2004). The challenge for equity and fairness in assessment is to ensure that the judgements made by practitioners about people's behaviour are accurate and valid and that the decisions made are not culturally biased (Goupal-McNicol & Armour-Thomas, 2002). The complexity and controversy around psychological assessment requires that practitioners ensure ethical considerations in their practice to render it fair across cultures.

There is little agreement concerning the true nature of cognitive functioning and the measurement of an individual's cognitive functioning (Foxcroft, 2005). Van der Vijver and Tanza (2004) found that most intelligence tests put emphasis on reasoning, acquired knowledge and memory and ignore the social aspects of intelligence which are more prominent in non-Western countries. In a study by Grigorenko et al. (2001) in Kenya, the researchers found that Africans envisage intelligence in a broader way including cognitive abilities and social qualities like, among others, respect, willingness to share, innovativeness, creativity and the ability to complete tasks. This is in line with Sternberg's (2005) triarchic

theory of intelligence which views intelligence as encompassing a range of aptitudes, skills and talents.

2.2   Theoretical Framework: The Theory of Successful Intelligence

Sternberg (2003, 2005) is critical of the 'g' factor theory and assessment of cognitive functioning related to the g-factor theory, which focuses on testing prior knowledge and skills that are acquired in a school setting. Conventional intelligence testing which favours learners from the Western schooling background puts learners from non-Western countries at a disadvantage because their knowledge and skills are not necessarily learned from school settings (Sternberg, 2005). Furthermore, conventional intelligence tests favour learners that are strong in memory and analytical abilities – abilities which are valued by Euro-American communities. Such testing may result in learners from non-Western backgrounds being misdiagnosed as unintelligent because they lack academic capabilities when they actually are capable of leading successful lives (Sternberg, 2003).

Sternberg (2005) proposed a triarchic theory of successful intelligence which comprises three different factors: analytical intelligence, creative intelligence, and practical intelligence (Walsh & Betz, 2000). According to this theory intelligence can be increased by study and practice and learners can excel in both study and practice or can be successful in either of the two. This observation is consistent with the work of Vygotsky who argues that learning within a school setting is different from learning outside the school setting (Walsh & Betz, 2000). This study is informed by the theory of successful intelligence.

Sternberg (2005) defines intelligence as:

> the ability to achieve one's goal in life, given one's socio-cultural context, by capitalising on strengths and correcting or compensating for weaknesses, in order to adapt to, shape, and select environments, and through a combination of analytical, creative and practical abilities (p. 189).

This definition of intelligence has four key elements, namely, that intelligence is always conceptualised within a socio-cultural context; success is achieved through capitalising on strengths and correcting or compensating for weaknesses; intelligence involves balancing one's abilities so as to adapt to, shape and select environments; and success is attained through a balance of analytical, creative and practical abilities (Sternberg, 2003, 2005).

The theory of successful intelligence views intelligence as a concept that is individually determined but always within a socio-cultural context. Although processes are universal, what constitutes success in life is not universal. For example being a traditional healer may be viewed very highly in one culture but as a worthless pursuit in another culture. Sternberg (2005) uses the term 'successful intelligence' to give emphasis to the fact that intelligence does not only predict academic performance but also success in life in general. The theory is meant to widen the traditional narrow definition of intelligence as a general, universal, common factor. The theory also serves to emphasize the importance of evaluating the appropriateness of an assessment measure before its application in different cultural locations (Sternberg, 2003). This study explored the practising psychologists' experiences of cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. Included in this exploration is the practitioners' perception of intelligence and whether the assessment measures that they use cover a wide range of cognitive abilities as proposed by the theory of successful intelligence and as perceived by different cultural communities.

2.3   Culture and Intelligence

Classical theories of intelligence presume that cognitive development is universal among cultures (Sternberg, 2007), however researchers have found cross-cultural differences in cognitive development (Kuwabara & Smith, 2012). Sternberg (2004) and Pretorius et al. (2009) propose that the conceptualisation, assessment and development of intelligence can be fully and meaningfully understood within a cultural context. Sternberg (2004) proposed four basic models of the relationship between culture and intelligence. These models are shaped around the concepts of cultural absolutism, universalism and relativism (Malda, 2009). Model 1, which is based on absolutism assumes the use of universal intelligence and universal intelligence tests and assessment tools which can be translated where necessary without

regard to culture. Model 2 assumes that intelligence is perceived differently across cultures and although assessment tools for cognitive functioning are the same, cultural differences are acknowledged. The theory of successful intelligence uses Model 3 which assumes that the processes of intelligence are similar but their assessment is culture specific, and if the same intelligence tests and assessment tools are used, they require adaptation to new socio-cultural context (Sternberg, 2005). Model 4 assumes that the nature of intelligence is different across cultures and intelligent is largely a cultural invention and assessment measures for cognitive functioning are particular to a given cultural context (Sternberg, 2004).

Studies conducted by Sternberg (2004) revealed that different cultures have different views of intelligence such that children considered intelligent in one culture may be considered not so intelligent in another culture. Likewise, behaviour that is considered intelligent may vary from one culture to another (Sternberg, 2007). Sternberg (2004) also found that most psychological research is done within a single culture, which is highly individualistic (Maschinot, 2008) and such research has been proven to be hazardous (Sternberg, 2004). Hofstede's study, as cited in Maschinot (2008) found that of the 53 countries surveyed, people in the US scored highest on individualism whereas Asian and Latin American countries scored highest on measures of interdependence, with European countries in the middle of the continuum. The mainstream US culture emphasises individualism (Maschinot, 2008) and children are encouraged to make choices and strive assertively to achieve them; there is also emphasis on individual success. On the other hand *sociocentric* cultures emphasise the well-being of the group and successful relations with others in a group. Personal assertiveness is discouraged because it upsets group harmony (Maschinot, 2008).

Culture exists in every individual at different levels. The highest level of culture reflects ideologies, norms and values, and the lowest level reflects the child's direct living environment such as education, language, daily activities, parental behaviours, games and playing toys (Malda, 2009). Membership in a culture defines intelligence based on the expectations and demands culture places on its members, which makes it imperative to consider cultural factors in assessment (Cronbach & Drenth, 1972; Malda, 2009). What the child experiences in his or her immediate physical and social environment has a direct effect

on the child's cognitive development and the range of appropriate materials with which intelligence can be measured (Carter et al., 2005).

Stockman, as cited in Laing and Kamhi (2003) found that significant discrepancy in performance between children from CLD backgrounds and Western children may be attributed to variations in life experiences, socialization practices and early literacy. Similar findings were made by Rosselli and Ardila (2003) where Australian Aboriginal children and Amazonian Indians were found to have significantly better visual-spatial memory abilities than their Western counterparts and Carter et al. (2005) attributed this finding to the children's environment which constrains them to develop an aptitude for direction finding. Kuwabara and Smith (2012) also found that the performance of preschool children from the West is more individual object focussed attention compared to the more relational attention in preschool children from the East. The study emphasised the existence of a competition between object and relational centred perception of scenes and suggest that this perception may be at the core of East-West cognitive differences. The cognitive differences do not necessarily indicate that children in one culture are more advanced than children in another culture but suggests a bias for object centred comparisons by Western children and for more relational centred comparisons by Eastern children. The study also shows the presence of cross-cultural differences in cognitive development and functioning early in life (Kuwabara & Smith, 2012).

Research has shown that across Africa, Africans value social roles and development of social responsibility and place less emphasis on some aspects of cognitive proficiency. For example in a study by Jukes and Grigorenko (2010) in Gambia the researchers found that cooperative production in subsistence agriculture leads to communities valuing compliance, respect and obedience. Moreover, qualities that are required for proficiency in cognitive tests may be less valued in African culture. For example, in a study by Mulenga, Ahonen, and Aro (2001), Zambian children performed speeded tasks more slowly than children in the US and were less responsive to requests to increase speed.

Research studies in Africa have revealed one thing in common, that intelligence has both social and cognitive aspects. Grigorenko et al. (2001), working among the Luo in Kenya reported that the Luo conceptualized intelligence in four ways; i) rieko (academic intelligence), ii) luoro, (social qualities, respect, responsibility, consideration), iii) winjo, (comprehension) and iv) paro (practical thinking). Rieko was found to be the only aspect that correlates positively with scores from Western cognitive tests (Grigorenko et al., 2001). These studies show that the African conception of intelligence differs markedly from the Western conception of intelligence.

In a study conducted by Dasen et al., as cited in Nsamenang and Tchombe (2011), exploring the emic definition of intelligence in Nigeria through interviewing the parents of the Baoule children on how they describe an intelligent child, it emerged that the definition of intelligence was based on a number of behaviours with 63% of these behaviours considered social. Baoule parents valued a child who fits in with the community norms just like an adult (Nsamenang & Tchombe, 2011). Parents appreciated the cognitive component of intelligence if it was used in favour of the social component. For example, most parents considered successful learning at school as part of intelligence "as long as the child would not use it for individual promotion but to further community goals" (p. 169). It is clear that the different '*ethnotheories*' of intelligence (Nsamenang & Tchombe, 2011) have implications for assessment of culturally diverse populations.

Assessment tools are constructed and validated within a specific cultural framework and used within the context of a value system, whether made explicit or implicit (Walsh & Betz, 2000). Imported tests used in South Africa were developed by psychologists comfortable with a Western value system (Malda, 2009; Sternberg, 2005; Van de Vijver & Tanzer, 2004) which puts emphasis on reasoning, acquired knowledge and memory (Van de Vijver & Tanzer, 2004). African communities value family, home and community more highly than jobs, career or occupation (Walsh & Beltz, 2000). Such values impact on life decisions and problem solving and therefore in assessment culturally specific values held by the individual should be taken into consideration (Walsh & Betz, 2000).

Walsh and Betz (2000), differentiates between intercultural and intracultural differences which must be considered and suggests avoiding uniformity assumptions that all individuals of a given culture have the same values, goals and experiences. Differences occur not only with one specific ethnic group but across groups generally lumped under one ethnicity. Acculturation may result in a change of value system and moderate performance in cognitive tests. Language and culture are closely associated and they both present a source of bias in cognitive assessment (Padilla & Borsato, 2008; Matthews & Bouwer, 2013). As with language bias, education also impinges upon the fairness of cognitive assessment.

2.4   Education and the Theory of Successful Intelligence

Successful intelligence involves the use of analytical, creative and practical abilities to attain success in life and success is defined by the individual within his or her sociocultural context (Sternberg, 2005). Traditional measures of cognitive functioning measure primarily analytical abilities whereas success in life does not require analysis of a learner's own ideas and those of others but also to generate ideas and to persuade other people of their value (Sternberg, 2005). In order to attain successful intelligence the learner has to recognise his/her strengths and make the most of them and his/her weaknesses and correct or compensate for them. Underperformance can be corrected but outstanding performance in all fields is not for everyone (Sternberg & Grigorenko, 2004; Sternberg, 2005). A learner can find his/her own unique path to being intelligent through adaptation, shaping and selection (Sternberg & Grigorenko, 2004).

Not all people have equal opportunities to adapt to, shape and select environments. Socio-economic status, the economy, political situation, race, religion and education are among factors that determine how well people adapt to, shape and select environments. Intelligence must always be viewed in terms of the opportunities available to people and how these influence behaviour (Sternberg & Grigorenko, 2004). Opportunities available to individuals from different groups in South Africa are not the same. For example, although the Constitution of South Africa puts all 11 official languages on an equal footing, English is the primary language used in Education and in South Africa as a whole (Van Wyhe, 2009). Since almost all assessment measures are in English, many learners for whom English is a

second or third language are tested in a language that differs from their home language. These learners are immediately put at a disadvantage (Van Wyhe, 2009). Not even a single test in South Africa has been validated in each of the eleven official languages (Van de Vijver & Tanzer, 2004). The Department of Basic Education has acknowledged in its draft policy on the incremental introduction of African languages, that poor learning outcomes in South Africa are to a great extent a result of poor language proficiency and utility (DoE, 2013). This has implications for assessment of cognitive functioning on CLD L2 learners.

In South Africa not all learners have equal education opportunities. Ostrosky-Solis (2006), Rosselli and Ardila (2003), and Shuttleworth-Edwards et al. (2004) found that differences in the structure and quality of education impacts upon the development of certain cognitive abilities and this might affect performance on a test that measures those abilities. In a study conducted by Shuttleworth-Edwards et al. (2012) on cross-cultural effects on IQ testing using the WAIS III test, the quality of education was found to be impacting on the learners' performance. The scores of a group of African Grade 12 learners and graduates with disadvantaged educational backgrounds were found to be significantly lower than the US standardisation by 20-30 points. Another study by Van Der Merwe (2008) showed that the quality of education had the most significant effect on IQ test performance impacting significantly on verbal performance. The study comes with a warning that practitioners should exercise caution when interpreting test results of learners from different language and cultural groups particularly those with disadvantaged education. In a study conducted by Jinabhai et al. (2004) investigating the mental abilities of rural Zulu primary school children in South Africa, they found that the lower scores obtained by the learners in this study were linked to educational deficits. They associated this deficit with poor educational system that Zulu children have been subjected to during the apartheid era. The conclusion that was drawn from this study was that the combination of a poor educational system coupled with rural poverty, deficiency and under-development has negatively impacted on the mental ability and scholastic performance of the Zulu children.

Studies by Shuttleworth-Edwards et al. (as cited in Shuttleworth Edwards, 2012) on WISC III revealed that the quality of education impacts on testing. Participants with an advantaged quality of education performed considerably better in Verbal, Performance and Full Scale IQ

scores than participants from disadvantaged education. A replication of the same study on WISC-IV by Shuttleworth-Edwards, Van der Merwe, Van Tonder, and Radlodd (2010), revealed the same results with massive 20 to 30 IQ points lowering for the participants with disadvantaged education.

Western schooling prepares learners to take tests of intelligence whereas in other countries learners learn what they need to know in order to succeed in life. The latter children might perform poorly in Western intelligence tests. Tests for cognitive functioning are required to take into account how children were schooled and should measure knowledge that is specific to the population group (Sternberg, 2007). In South Africa there is a need for assessment measures that are appropriate for the South African context (Foxcroft et al., 2004) and this is echoed by Sternberg (2007). Education is mediated through language. Language and culture are closely associated (Finchilescu, 2005; Padilla & Borsato, 2008) and they both present a source of bias in cognitive assessment (Matthews & Bouwer, 2013).

2.5 Issues of Language in Psychological Assessment

In a study by Foxcorft et al. (2004) language was identified as an important issue that required urgent attention in psychological assessment. Foxcroft et al. (2004) found that psychologists use English and Afrikaans mostly to communicate with their clients "with a small percentage of African languages being used" (p. 34). Although the majority of South Africans are multilingual, practitioners are not fully meeting the linguistic needs of the multilingual clientele (Bethlehem, De Picciatto & Watt, 2003; Matthews & Bouwer, 2013). It has been shown that testing a client in a language in which he or she is not proficient may affect performance and poses a serious threat to fair testing practices (Foxcroft & Aston, 2006; Koch, 2005; Visser & Viviers, 2010). In a study conducted by Matthews and Bouwer (2013), on cross-cultural influences on projective assessment with subjects from different language backgrounds, language was found to be a barrier, with linguistic misunderstanding between the practitioner and client being the major problem. It is a fundamental right for a client to be assessed in a language that he or she understands and speaks fairly well (Ahmed & Pillay, 2004) therefore the issue of the client's language of choice in psychological

assessment has to be addressed. English is the lingua franca in South Africa despite that it is the first language of only 8.2% of the population (South Africa.info, 2011).

Demographics in South Africa inform us that of the 51.77 million people approximately 41 million speak one of the nine indigenous African languages and yet Solarsh and Alant (2006) found that there was only a handful of mother tongue African language speech-language therapists and Matthews and Bouwer (2013) found that a negligible number of psychologists have an African language as a home language. The vast majority of psychological assessments that are conducted in English take place in a first or second additional language of the client. The statistics also show lack of capacity to develop psychological tests in African languages but this does not rule out completely the possibility of developing tests in African languages. Researchers need to engage in a discourse over culture fair and non-biased assessment and to develop assessment measures that are culturally appropriate for the children they test (Laing & Kamhi, 2003; Solarsh & Alant, 2006). Laing and Kamhi (2003) found that content bias, linguistic bias and disproportionate representation in normative samples are problems that practitioners grapple with in the assessment of CLD populations and like Solarsh and Alant (2006) suggested that the only certain way to eliminate bias is to develop an assessment instrument that is designed for specific culturally and linguistically diverse groups.

English is the primary language used in Education and in South Africa as a whole (Van Wyhe, 2009). Before democracy English and Afrikaans were the two official languages and indigenous languages had no valuable status in South Africa (Van Der Merwe, 2008). The majority of Afrikaans speaking whites and coloureds as well as some African learners attend English medium schools and are being educated in the language that they do not speak at home or in their community (Van der Merwe, 2008). Learners are tested in a language that differs from their home language because almost all commonly used tests and assessment tools were developed in English-speaking countries such as UK and US. For most people English is a second or third language and assessment in a second or third language puts these people immediately at a disadvantage   (Van Wyhe, 2009). Language may introduce test bias when tests are administered to learners with a different first language (Van der Merwe, 2008)

Learners may find it difficult to understand the instructions or from adequately expressing themselves (Van der Merwe, 2008).

Van Wyhe (2009) suggested methods and strategies that can be used to overcome the language-based difficulties encountered in assessment sessions. These are as follows: i) In case of a language mismatch between the practitioner and the client, the assessor can test the learner in English, make a note that the learner's home language differs from the language of the test and then adjust the test interpretations accordingly, or ii) Use an interpreter, or iii) Translate the English instrument and conduct the assessment in the client's language, taking into cognisance possible implication of test translation in order to ensure linguistic and conceptual equivalence with the original test (Van der Merwe, 2008), or iv) Formulate a new set of psychometrically sound tests based on the language of the client or v) Eliminate language-based testing altogether and use non-verbal tests. (Van Wyhe, 2009). Stead, as cited in Van der Merwe (2008) proposes the development of norms for tests which correct for education level and English. Each of the above strategies has its own challenges.

The rules of conduct pertaining specifically to the profession of psychology in the *Handbook for Intern Psychologists and Accredited Institutions* (HPCSA, 2010), Part 4, Annexure C regarding unfair discrimination states that:

> a psychologist shall make every effort to ensure that language appropriate and culture appropriate services are made available to a client and that acceptable standard of language proficiency are met in rendering a service to a client whose primary language differs from that of a psychologist (p. 89).

It is evident from the above-mentioned statement that language and culture are interlinked. The following section thus discusses issues relating to multiculturalism that ought to be considered in psychological assessment.

2.6   Issues Pertaining to Multiculturalism

Multiculturalism has become an international trend (Van de Vijver & Phalet, 2004; Van de Vijver & Rothmann, 2004). This is as a result of globalisation and migration processes including labour migration and refugee streams (Van de Vijver & Rothmann, 2004) and has led to cultural diversity which in turn has impacted the field of psychological assessment. Paul Pederson as cited in Mio, Barker-Hackett and Tumambing (2006) proposed the idea that multiculturalism is the fourth force in psychology suggesting that it will have just as big an impact on the field of psychology as the first three forces-psychoanalysis, behaviourism and humanism. For example, the population in the US has gradually become ethnically and racially diverse and future projections suggest that this trend will continue for years to come (US Bureau of the Census, 2000). This trend suggests that practitioners will encounter families from cultural, ethnic and linguistic backgrounds that differ from their own. The service will require practitioners that are culturally sensitive to provide unbiased and accurate assessment.

Cultural sensitivity requires that practitioners have an awareness of different cultures as well as specific experiences interacting with individuals from different cultures, have knowledge of customs, beliefs and values of different cultures as well as specific language differences that characterise the dialects or the different languages CLD children speak. For example in USA in 1980, about 80% of the population was classified as White; by 2008 the percentage decreased to 66% (Goh, 2013). There was an increase in other population groups. The 2010 census showed that 74.8% of the US population was White, 13.6% Black African American, 1.7% American Indian and Alaska Native , 5.6% Asian and 0.4% Native Hawaiian and other Pacific Islander (United States People Stats, 2013). There has been a dramatic increase in the total number of languages with English being the dominant language spoken by 82.1% of the population followed by Spanish at 10.7%, other Indo-European at 3.8%, Asian and Pacific Island at 2.7% and other languages at 0.7% (Goh, 2013; United States People Stats, 2013).

The same trend can be noticed in US schools. Approximately 44% of students of school going age come from racially, ethnically and or linguistically diverse backgrounds (Styck, 2012). The changing demographics demand a rapid solution to both the scarcity of culturally

valid and reliable assessment instruments for CLD populations (Laing & Kamhi, 2003) and the severe shortage of trained bilingual psychologists to conduct cognitive assessments (Miller, 2012).

In African countries cultural and linguistic diversity abound with an estimated 3000 spoken languages and 8000 dialects (Jukes & Grigorenko, 2010; Owino, 2002) For example Gambia, a small country with a population of 1.7million, has eight indigenous languages in addition to English which is regarded as a colonial language (Jukes & Grigorenko, 2010). South Africa has long been a racially and ethnically diverse country with the population standing at 51.77 million (Stats SA, 2011). The Africans are in the majority and account for 79.2% of the population while the Coloureds and Whites each make up 8.9% of the total population and the Indians/Asian people make up 2.5% of the population. Other population group makes up 0.5% of the total (Stats SA, 2011). The African population is made up of four broad groupings; the Nguni, the Sotho-Tswana, the Tsonga and the Venda. White South Africans include Afrikaners, English-speakers and immigrants from Europe. The majority of coloureds speak Afrikaans. The majority of South Africa's Asian population is Indian in origin and they are largely English-speaking, although many also retained the languages of their origin. There is also a significant group of Chinese in South African (SouthAfrica.info, 2011).

Over and above racial diversity there is multilingualism. South Africa has 11 official languages with equal status as guaranteed by the South African democratic constitution which came into effect in 1997. Besides the 11 official languages, scores of other languages are spoken in South Africa for example, African, Asian and European languages. IsiZulu is the most common home language, spoken by just over 20% of the population, followed by isiXhosa at 16%, Afrikaans at 13.5% and English and Setswana each at 8.2%. English as a first language is spoken by 9.6% of the population (Stats SA, 2011). Most South African are multilingual, able to speak more than one language. English and Afrikaans-speaking people tend not to have much ability in indigenous languages, but the majority are fairly fluent in each other's language. A large number of South Africans speak English which is ubiquitous in official and commercial public life. The country's other lingua franca is isiZulu. An additional shortcoming of intellectual assessment among CLD learners internationally is the lack of culturally sensitive training programs, as a significant number of psychologists fail to

receive adequate training from their respective graduate institutions in the area of bilingual assessment (O'Bryon & Rogers, 2010 as cited in Miller, 2012).

Multicultural assessment involves assessment of individuals taking into consideration their cultural context (Suzuki & Ahluwalia, 2010) using culturally appropriate tests and assessment tools and ethical testing practices. The multicultural and multilingual nature of the South African society has impacted on the cultural appropriateness of assessment measures (Blumenau & Broom, 2011). South Africa has experienced test bias stemming from test development along racial lines and the use of adapted tests without determining the appropriateness of these tests on the multicultural South African society (Joseph & van Lill, 2008; Van de Vijver & Rothmann, 2004). Foxcroft (2011) acknowledges that the core ethical consideration facing psychologists in Africa relates to how best to cater for diversity so as to be sensitive to test takers' cultural background. The Employment Equity Act of 1998 requires that practitioners use psychological tests that are not biased against any cultural group (Meiring, van de Vijver, Rothmann, & Barrick, 2005; RSA, 1998). Bias in multicultural assessment can be in different forms, for example content bias, construct bias, as a result of unfamiliarity with material used, test measuring different construct from what it was designed and standardised for and inadequate representation of all groups in the standardisation samples used to derive norm tables.

To deal with issues of bias and validity in multicultural assessment Van de Vijver and Rothmann (2004) suggest the following procedure: establishing the equivalence of the currently used assessment measures, defining new norms, developing new instruments and studying validity-threatening factors in multicultural assessment. Parker et al. (2007) identified culture, language and educational differences and Van de Vijver and Rothmann (2004) identified nutrition, socio-economic background, urban and rural backgrounds and home environment as contributory factors that lower the validity of cognitive assessment.

2.7   Cross-Cultural Assessment

Cross-cultural assessment takes place when a psychometric measure is used in different cultural settings to assess clients from different cultural backgrounds (De Klerk, 2008). Tests and assessment tools are created in a particular context for a particular culture and society and for a specific purpose (Foxcroft and Roodt, as cited in Ramaahlo, 2010). The normative information used to interpret test performance is limited to the characteristics of the normative sample. It cannot be assumed that the test or assessment tool will be appropriate in another context, culture or society without investigating possible test bias or considering adapting and renorming the test (Ramaahlo, 2010). Ramaahlo (2010) assumes that every assessment tool is context-bound and is therefore appropriate for use with the population from which it came. For example there are no local norms for the Wechsler Adult Intelligence Scale 4th Edition (WAIS-IV) since the test was standardised on UK and US populations and does not have specific WAIS-IV normative indications for use on South African CLD populations (Shuttleworth-Edwards, 2012). In a study conducted by Van Heerden (2007) on the applicability of British norms for the South African population, comparing and exploring the performance of the South African and British children aged 5 and 6 years on the Griffiths Mental Development Scales-Extended Revised (GMDS-ER) the author found a significant difference between the SA and British children's overall developmental profiles as measured by the GMDS-ER, and attributes this finding to the diverse nature of the South African society. Van Heerden recommended further investigations into the applicability of the GMDS-ER for the SA context and the establishment of SA norms for clinical utilisation.

Furthermore, caution has been recommended regarding to the utilisation of the British-based norms in the South African context and emphasis has been made on the importance of using culturally relevant tests with appropriate norms to enhance the ethical and fair practices of psychological testing and assessment in a multicultural and divergent SA society (Van Heerden, 2007; Van de Vijver & Rothmann, 2004; Van de Vijver & Tanzer, 2004). The use of assessment measures cross-culturally can be discriminatory if the construct measured differs across cultures, for example intelligence, and if the assessment tools are not standardised for use across all cultural groups through a representative sample (Reynolds & Suzuki, 2008; Van de Vijver & Rothmann 2004). Practitioners in SA have called for the

undertaking of more cross-cultural studies, as the assumption of test portability raises many questions (Van de Vijver & Rothmann, 2004; Van Heerden, 2007). It is ethically incorrect to use an assessment measure normed on one cultural group universally especially in the assessment of cognitive functioning which is deemed to be culture specific and a wider concept than what assessment measures postulate to measure.

Shuttleworth-Edwards (2012) found that specifically differing levels of educational attainment and quality of education, varying levels of acculturation to westernised influences, and associated levels of test sophistication and test-wiseness, all serve to impact on psychometric test performance in general including IQ performance. The same finding was made by Aston (2006), in her study in which she investigated the item content of the South African adaptation of the Wechsler Adult Intelligence Scales, Third Edition (WAIS- III), in order to identify potential bias with specific reference to cultural and linguistic issues, she reported that item content unfamiliar to racial groups other than white, concepts used advantaging white westernised test takers, unfamiliar stimulus material and testing skills that were not necessarily valued by diverse cultures like speed and individual problem-solving ability impacted on test performance (Aston, 2006).

In a study conducted by Matthew and Bouwer (2013) in mono and cross-cultural assessments that involved participants from Afrikaans, English, German, Gujarati, Hindi, Ndebele and Shona home language groupings and a combination of English and another home language, indications of cultural influence were found in the projections especially in the remarks during the conversation on culture. More themes with a Western orientation of individualism occurred in the stories of Afrikaans and German speaking female participants. These two participants interacted with a large number of Agency than Communion themes. By contrast, more Communion than Agency themes were projected by the Indian and Ndebele female participants.

Mushquash and Bova (2007) provide guidelines for a culturally sensitive assessment. These include dealing with one's biases and prejudices, thorough study of the client's culture and acknowledging stereotypes that one might have about the client's culture, determining the

client's preferred language and referring the client to another practitioner if there is a language mismatch or as a last resort using an interpreter, establishing rapport, establishing cooperation, motivation, interest in the assessment process from the client, using a multi-method assessment approach combining interviews, observations, standardised measures and informal assessment procedures to provide a comprehensive assessment, interpreting the standardised measures appropriately taking into account the client's cultural and linguistic background and using only valid tests (Mushquash & Bova, 2007). For assessment of cognitive functioning in CLD clients intelligence tests with the lowest cultural loadings and lowest linguistic demand should be selected (Mushquash & Bova, 2007).

2.8   Psychological assessment in South Africa

South Africa has a long history of psychological assessment dating back from the beginning of the 20th century (van de Vijver & Rothmann, 2004; Foxcroft & Roodt, 2005; Aston, 20 06). Due to South Africa's colonial legacy psychological measures that were used between 1920 and 1960, were either adaptations of foreign tests or were developed and standardised specifically for the white population (Foxcroft, 2004; Foxcroft & Roodt, 2013; Joseph & van Lill, 2008; Van de Vijver & Rothmann, 2004). The initial plan was to use these tests with white English-and Afrikaans-speaking communities but ended up being used with all sectors of the community (Lindsey & Burger, 2008; Van de Vijver & Rothmann, 2004) without taking into consideration cultural appropriateness, without investigating test bias or establishing the validity and reliability of these tests for African communities.These tests could not be ruled out as undiscriminatory (Van de Vijver & Rothmann, 2004).

During the apartheid era the results of these tests and assessment tools were often used to draw conclusions about differences among racial groups also used to propagate the ideologies of the then government, without investigating the appropriateness of the instrument and without considering the impact of cultural, socio-economic, environmental and educational factors on test performance (Joseph & van Lill, 2008). Tests were used to validate exploitation of black labourers, to deny black individuals access to education as well as limiting black individuals from gaining access to economic resources (Van der Merwe,

2008). Psychological testing and IQ tests in particular were also used to promote white supremacy and to claim genetic inferiority of black individuals (Van der Merwe, 2008).

The process of globalisation in the 1980s and 1990s saw a need for more culturally approved measures and thus a shift to cross-cultural test adaptation (Foxcroft & Roodt, 2005; Ramaahlo, 2010). This was a promising move for South Africa, however, Ramaahlo (2010) noted that test bias is still widespread and many professionals dealing with assessments are faced by a number of controversies. Psychological testing at this time became unpopular and was viewed in a negative way because people viewed testing exercise as a means of excluding blacks from occupational and educational opportunities. There was growing scepticism regarding the value of psychological tests especially among the Black South Africans. To deal with this problem two approaches were followed: i) tests were developed for more than one racial group and test performance was interpreted in relation to an appropriate norm group and ii) test results from psychological measures developed and standardised on only white South Africans and those imported from the West were interpreted with caution.

In 1994 with the advent of democracy, the new government banned the use of psychological testing in schools as testing was seen as being exclusionary and perpetuating discriminatory policies of the past. Inclusive education also rejects the use of psychometric tests for diagnostic purposes either on groups or individuals (Mayaba, 2008) for diagnosis and development of support programmes for learners who experience barriers to learning.

There are few tests for use with CLD learners since very few of the existing tests have been standardised in South Africa and very few have been examined for bias. Test users have little empirical certainty that the tests they are administering are as free from bias as possible. Foxcroft et al. (2004) found that there was an urgent need to develop and norm culturally appropriate tests for the South African population "so as to enhance the fair and ethical use of tests" (p. 231). There is a growing demand by practitioners for assessment measures for use with CLD clients that are more appropriate for South African context that can yield valid results (Van de Vijver & Rothmann, 2004) since this will enhance fair and ethical use of tests

(Foxcroft et al., 2004, p. 231). More research is required before psychology as a profession can live up to the demands implied by legal prescripts regarding fair testing (Van de Vijver & Rothmann, 2004).

The Constitution of South Africa Act (1996) and the Labour Relations Act (1996) prohibit any discriminatory practices in the workplace and protects both applicants and employees as they all have similar rights. Psychologists are also governed by the Employment Equity Act 55 of 1998, Section 8 (Government Gazette, 1998) (Van Der Merwe, 2008) which prohibits psychological testing and other similar forms of assessment unless the test or assessment being used has been scientifically shown to be valid and reliable, and can be applied fairly to all and is not biased against any employee or group. This Act has major implications for practitioners in South Africa where both local and imported assessment measures have not been investigated for bias and have not gone through cross-cultural validation. Test users need to be more mindful of test bias and discriminatory test practices, as this has been legislated against (Van de Vijver and Rothmann, 2004).

The Ethical Rules of Conduct for Practitioners registered under the Health Professionals Act 56 of 1974, Annexure 12, Section 48 (Government Gazette, 2006), requires sensitivity with regard to cultural diversity and stipulates that any psychologist using assessment methods should not only be familiar with the reliability and validity of a test, but also with standardisation procedures and the proper application and uses of such tests (Van der Merwe, 2008). Also, psychologists should recognise the predictive limitations of tests with regard to individuals from different linguistic, cultural and socio-economic backgrounds, and should make every effort to identify situations in which particular assessment methods or norms may not be applicable or may require adjustment in administration, scoring and interpretation because of various demographic, cultural and socio-economic factors which are known to impact on test performance (Van der Merwe, 2008).

2.9   Assessment Measures Commonly Used for Cognitive Functioning in South Africa

Assessment measures for cognitive functioning have been used for a variety of purposes; to monitor children in education systems, to assess proficiency or non-proficiency in certain skills or abilities in educational institutions and private sector, to identify learner strengths and weaknesses, to plot development, to make diagnoses, to outline and plan intervention strategies, therapy or education requirements, and to collect data for research studies (Foxcroft & Roodt, 2013; Murphy 2002; Rothmann & Cilliers, 2007). Cognitive assessment is widely used by school psychologists in school settings for several reasons and Salvia, Ysseldyke & Bolt (2007) sees the primary purpose of cognitive assessment as that of making eligibility, exceptionality, and educational decisions about individuals (Salvia et al., 2007). Assessment measures for cognitive functioning have been used by psychologists to assess learners' ability to perform in school and to guide decisions about special services or support learners may need to succeed in life (Salvia et al., 2007). Practitioners have also used measures for cognitive functioning to identify learners with superior intellectual ability and those with intellectual challenges Salvia et al. (2007). Although assessment measures for cognitive functioning are used frequently by practitioners, Du Plessis (2008), Murphy & Maree (2006), Sternberg (2005), Sternberg & Grigorenko (2004), argue that classical assessments tools that emphasise prior learning are inadequate and might lead to misdiagnosis and marginalisation of learners .

In South Africa psychological testing is actively used for various purposes, mostly in therapeutic, educational, sociological and occupational applications (Dhladhla & De Kock, 2008). As much as the principles of Outcome-Based Education (OBE) and the new curriculum directions of South African Department of Basic Education does not allow reference of children for psychological assessment, it is common practice that children are referred to psychologists with the request that assessment outcomes should inform scholastic planning and establish scholastic expectations through the assessment of cognitive functioning level (Knoetze, Bass & Steele, 2005) .Referral to psychologists happen when there are concerns about possible underachievement or significantly slow scholastic progress. Psychologists facing these referrals mostly use assessment measures and psychometric tests standardised on Western populations. Although this practice is unethical it is rather common

among psychologists and raises concerns. Psychologists also make a note that the results obtained from this assessment should be used with caution or interpreted cautiously and yet the meaning of these two phrases is not clear.

Cognitive tests have been used widely in Africa to assess the impact of health and nutrition interventions in early childhood and in school age (Jukes & Grigorenko, 2010). There has been an increase in the use of school readiness tests and other measures of cognitive functioning since the expansion of early childhood care and educational programs in Africa (Jukes & Grigorenko, 2010). Research has shown that assessment in the child's mother tongue produces a more valid measure of child's abilities and these results have led to the increased recognition of the importance of mother tongue as a medium of instruction for the early grades of primary school (Jukes & Grigorenko, 2010). The Department of Basic Education in its language policy has also followed suit by recommending to schools the use of mother tongue as the language of learning and teaching (LOLT) in the foundation phase.

In the study conducted by Foxcroft et al. (2004) psychologists indicated that the majority of assessment measures for cognitive functioning that they commonly use were internationally developed and none had been developed or adapted within a multicultural context. Among these assessment measures were; The Bender Visual Motor Gestalt Test, Junior South African Individual Scales (JSAIS), Senior South African Individual Scale-Revised (SSAIS-R), South African Wechsler Adult Intelligence Scale (SAWAIS), Goodenough Harris Draw-A-Person Test (Foxcroft et al., 2004). Some of these assessment measures, like the Bender, lacked appropriate norms. No full scale national normative studies have been undertaken to develop local norms. It was also found that some of the assessment measures developed in South Africa had outdated norms like the SSAIS and the JSAIS (Foxcroft et al., 2004).

The study showed that there was a reasonable degree of similarity among test use patterns of clinical, counselling and educational psychologists (Foxcroft et al., 2004). Practitioners tended to use tests that were developed or adapted by the HSRC but others used tests that were not listed by the HPCSA, like the Rey Auditory Verbal Learning tests, which are international tests that have not been normed or adapted for the South African context (Foxcroft et al., 2004).

The use of assessment measures developed for one group on another has been found to be problematic and raises issues of appropriateness and validity of the assessment measures for the South African society. Results from such assessment cannot be accepted as valid and free from bias especially if the assessment is cross-cultural.

Most of the tests used by psychologists were identified as in need of revision due to the language used, the outdated nature of the test, item content and norms (Foxcroft et al., 2004). Tests were not appropriate for use in diverse cultural settings. They expressed a need for more training with regards to the adaptation, application and interpretation of tests for cross-cultural purposes (Foxcroft et al., 2004).

Miller (2011) found that a significant number of psychologists are using non verbal measures of intelligence. In Western countries, nonverbal assessment is widely used by school psychologists to CLD children (Bainter & Tollefson, as cited in Goh, 2013). Imuta, Scarf, Pharo and Hayne (2013), found that the Human Figure Drawing (HFD) has consistently ranked among the most popular assessment tools used by clinicians and psychologists over the past 50 years and has been used as a screening device, as a test battery component, and as an alternative measure of intellectual ability. HFD tests are valued as time-efficient, non-verbal assessment tools that can be used to test children with limited attention span and language difficulties. Although these tests are versatile and may be appealing to practitioners, their scientific foundation is questionable (Imuta et al., 2013). Nonverbal assessment has its own shortcomings; although they are perceived as culture-free, they have been found to be culturally loaded (Rosselli & Ardila, 2003).

Cross-cultural testing involves making comparisons between people who speak different native languages and yet the majority of tests are developed for an English speaking population. De Klerk (2008) views this practice as being unfair to second language speakers who are disadvantaged if they take a test in an unfamiliar language especially if the results are compared with learners that are fluent in English. De Klerk (2008) suggests that it is necessary to translate tests in all the home languages of learners who will need to complete

the test, or preferably adapt the test, taking into consideration the culture dependent meanings and connotations of words and determine construct validity of the adapted tests to ensure that the tests measure the same construct in various cultural and language groups. Test adaptation is necessary so as to obtain a valid measurement in each culture and to facilitate comparative studies across cultural and language groups which will then yield fair comparisons (De Klerk, 2008). In a study by Levin and Buckett (2011), there was disagreement among practising psychologists over the view that English is the language of business and that was sufficient enough to warrant testing in English. Psychologists further suggested that tests should be specifically suited to appropriate norms (Levin & Buckett, 2011). Psychologists further emphasised the importance of determining the language and culture of learners and choose the most suitable test and have alternatives when testing CLD L2 learners (Levin & Buckett, 2011). Another concern raised by psychologists was about the accuracy of translation and the control that a psychologist may have over the meaning that a translator imparts (Levin & Buckett, 2011).

De Klerk (2008), Nell, (2000) and Wallis (as cited in Van Wyhe, 2009) emphasise the importance of test equivalence in adapted tests as well as construct equivalence especially with tests for cognitive functioning because they are embedded with linguistic demand and cultural loading. Taliep and Florence (2012) have the same opinion that without test validation tests may lead to bias for particular cultural groups which can have grave consequences for people. In a study conducted by Taliep and Florence (2012), to examine the reliability and construct validity of the KIDSCREEN-52 Health Related Quality of Life (HRQoL) measure in a South African context, where 39% of participants did not have English as their first language, the authors found evidence of item bias which they attributed to cultural differences and misunderstanding of items due to language. Since the test was administered in English without any adaptation in terms of language and cultural concerns-language impacted on performance.

More research into issues of cultural and linguistic diversity and non-standardised tests is required to ensure fair, reliable and valid testing. In a study by Levin and Buckett (2011), mentioned above, psychologists stated that test development is an important part of research

into assessment that will ensure quality. This leads to the issue of proper training of psychologists.

2.10   Challenges faced by practicing psychologists in the assessment of cognitive functioning of CLD L2 learners

Several studies have been conducted to assess the practising and trainee psychologists' experiences of cognitive assessment on CLD L2 learners (Miller, 2011). Researchers have identified barriers when assessing CLD L2 learners and some of these profound obstacles include the lack of agreement among practising psychologists as to what actually constitutes valid cognitive assessment, competence regarding second language acquisition, the use of interpreters, available cognitive assessment measures and training in the assessment of CLD L2 learners (Miller, 2011).

There is lack of agreement among practising psychologists as to what measures should be taken to conduct assessment with CLD L2 learners. In a study conducted by Bainter and Tollefson (2003) on intellectual assessment of language minority students, 500 school psychologists with NASP membership gave their opinions on the acceptability of methods used to assess the cognitive ability of language minority students. About 85% of school psychologists indicated that the use of a bilingual school psychologist to administer tests in both English and the child's native language is the most acceptable assessment practice with CLD L2 learners. About 87% of the respondents also rated as acceptable the practice of administering traditional intelligence tests in English when a learner is dominant in or prefers using English. Psychologists considered as sometimes or usually acceptable the use of nonverbal tests without an interpreter when the test does not require oral instructions, the use of foreign normed translated tests, and the use of nonverbal tests with an interpreter when oral instructions are included. About 74 % of psychologists rated as unacceptable or rarely acceptable administering a test in English when a student is dominant in another language and using nonverbal tests that require oral instructions without the presence of an interpreter. Furthermore 56% of psychologists rated as never or rarely acceptable having an interpreter translating conventional tests from English to another language during the testing session (Bainter & Tollefson, 2003). This study showed that there is no complete agreement among school psychologists with NASP membership as to what constitutes 'best practice' methods in the intellectual assessment of language minority students. These are issues that need to be

addressed to ensure appropriate and valid assessment of CLD L2 learners (Bainter & Tollefson, 2003).

The study by O'Bryon and Rogers (2010), which explores bilingual psychologists' assessment practices with students identified CLD L2, involving 369 psychologists, found that practitioners were not usually the primary person responsible for conducting students' language proficiency assessment. About 15% of bilingual psychologists in this study performed language proficiency tests using a multifaceted approach by assessing native and second languages in multiple domains and using formal and informal methods, 57% use formal batteries, 83% engaged in informal methods such as parent interviews and student interviews, teacher interviews and observations to assess for language proficiency (O'Bryon & Rogers 2010). Furthermore, bilingual psychologists reported above average knowledge regarding the process of second language acquisition. This allowed bilingual psychologists to focus on the students' skills in their native and second language, looking at past educational experiences and academic achievement performances, and using language proficiency results to discriminate between academic difficulties due to second language acquisition issues and those due to learning issues (O'Bryon & Rogers 2010). However, although bilingual psychologists use valuable and appropriate methods in language proficiency assessment, they reported feeling only 'somewhat' comfortable when performing this assessment and this reflects the difficult nature of these types of complex assessments (O'Bryon & Rogers 2010). Furthermore, bilingual psychologists use a variety of educators and professionals when conducting language proficiency assessments. About 31% of schools use second language specialists to conduct language proficiency assessments and about 20% of schools use two or more professionals. This data reports that there is significant variability within schools as to who is responsible for conducting language proficiency assessments (O'Bryon & Rogers, 2010).

In a study by Ochoa, Rivera and Ford (as cited in Miller, 2011), involving 1500 NASP affiliated school psychologists, 69% of respondents reported no or very little competency during their graduate training on how to conduct evaluations with L2 students while less than 4% reported having above average or extremely well competency in conducting evaluations with L2 students. In McCloskey and Athanasiou's (as cited in Miller, 2011) study, they found that only a fifth of school psychologists surveyed reported to be moderately to completely comfortable assessing L2 students while three fourths of respondents were significantly less

comfortable providing services to these clients. This data suggests that school psychologists vary in degree of self-perceived competence in cross-cultural assessment issues and self-confidence when assessing L2 students (Miller, 2011). A significant fraction of school psychologists surveyed reported having both low competence and low confidence when conducting assessment with L2 students and inadequate or little graduate training in regards to assessment of CLD L2 students. Overall confidence and competency for monolinguistic school psychologists appear to vary compared to bilingual school psychologists in regards to critical aspects of assessment such as second language acquisition and acculturation (Miller 2011).

The study by O'Bryon and Rogers (2010) showed that practitioners used a range of assessment instruments including nonverbal, norm-referenced, curriculum based, criterion referenced and dynamic assessment instruments for cognitive assessment of CLD L2 students. The number of measures increased when they shared the second language with their client than when they did not (O'Bryon & Rogers, 2010). Sharing a second language may have heightened their confidence in using a broad selection of instruments. According to O'Bryon and Rogers (2010) it looks like these practitioners feel freer to gather more information about students strengths and weaknesses because they are confident in their ability to interpret the findings in a meaningful way, a confidence that seem to be lacking when they do not share the second language.

School psychologists have found cognitive assessment of CLD L2 students challenging due to the linguistic complexity of these learners and have turned to interpreters for assistance (Miller, 2011). Miller (2011) has expressed the following areas of concern regarding the use of interpreters: i) There is no ample time to establish rapport with the child prior to testing possibly leading to inaccurate test results, ii) There is lack of corresponding words between the native and test languages, iii) There may be differences in dialect between the student and the translator , iv) The interpreter may alter the child's response to a task, v) The school psychologist may not have received adequate training using a translator, vi) The practitioners may deviate from accepted practices when using interpreters, and vii) The lack of intelligence tests that have been normed using translators (Miller, 2011). Regarding the use of interpreters, Ochoa et al (2005) found that 78% of school psychologists use interpreters when assessing CLD L2 students and of these school psychologists only 52% were trained to use interpreters. In the study by O'Bryon and Rogers (2010), bilingual psychologists use

interpreters nearly 15% of the time when assessing CLD L2 students, 33% use untrained translators, 29% use friends or family members to interpret and 21% used an interpreter without receiving adequate training. Only 5% reported that they learned how to use an interpreter during their graduate preparation and few reported collaborating with interpreters when working (O'Bryon & Rogers, 2010). The study by O'Bryan and Rogers (2010) showed that there are numerous shortcomings when using interpreters and a significant percentage of school psychologists are inappropriately using translators during CLD L2 assessment.

The study by Loe and Miranda (2005) showed that a large proportion of school psychologists perceive weaknesses in their preparation to work with CLD L2 students and families. Graduate students enrolled in APA accredited school psychology programs described the following areas of their training as weaknesses; i) searching about beliefs and values of different cultures, ii) teaching students to participate in multicultural research, iii) teaching students to consider religious beliefs of clients, iv) teaching students about steps taken when working with CLD L2 clients and v) teaching students about the use of translators. These are inadequacies indicated by psychology graduates in their cultural diversity training which require urgent attention so as to achieve fair, valid and reliable assessment of CLD L2 learners.

2.11   Proper Training of Psychologists

Multicultural competence is defined by Stuart (2004) as "the ability to understand and constructively relate to the uniqueness of each client in the light of the diverse cultures that influence each person's perspective" (p. 6). The need for psychologists to be culturally competent is legally and ethically mandated (Thomas-Presswood et al., 1997). According to The *American Guidelines for providers of Psychological Services to Ethnically and Culturally Diverse Populations* psychologists "should recognise ethnicity and culture as significant parameters in understanding psychological processes" (Thomas-Presswood et al., 1997, p.1). In South Africa *Guidelines for Psychometrists and Psychologists* issued by the HPCSA (HPCSA, 2004) requires that psychologists should have appropriate contextual knowledge and skills, the impact of cultural factors on test scores, and procedures to be followed when adapting tests for use in different cultures and linguistic groups. The ethical regulations of the HPCSA require psychologists to deliver culturally appropriate services that include avoidance of unfair discrimination, appropriate use of assessment methods and accommodation of cultural diversity (HPCSA, 2004). The HPCSA clearly recognises that

cultural factors may affect the psychologist's judgement or reduce the accuracy of interpretations hence the ethical regulations. Inability to acknowledge cultural and linguistic influences can lead to bias in testing CLD learners.

For a practitioner to achieve multicultural competence entails being knowledgeable about assessment issues and skilled in performing customised and sensitive evaluations, have expertise in selecting and using a wide range of assessment procedures that suit individual clients, including culture and language, and recognise the limitations of standardised instruments and the implications of using such instruments in the assessment of CLD populations (Rogers et al., 1999; Stuart, 2004).

Pillay, Kometsi and Siyothula (2009) is wary of the training given to practitioners which emphasises acquiring skills to use assessment instruments which are time-consuming, labour intensive and culturally biased. Training should sensitise practitioners to demands placed on assessment by the multicultural South African society (Paterson & Uys 2005). Moletsane (2004) found that South African universities train psychology students mainly according to the American European model of education. This training which is only applicable to selected privileged few fails to prepare students for working with the majority of South Africans (Moletsane, 2004; Pillay et al., 2009). Dana, (2005) reported that many psychologists are faced with a challenge of having to assess a diverse clientele yet they are not well equipped, by training and experience, to conduct assessment in a competent and ethical manner. Professionals who assess individuals from culturally diverse backgrounds must be trained to address the special needs of diverse populations to ensure provision of non-discriminatory assessment (Goupal-McNicol & Armour- Thomas, 2002; Paterson & Uys 2005).

A study by Miller (2011) showed that a large number of school psychologists felt less confident and incompetent when assessing CLD learners. Another study by Ochoa, Rivera and Ford as cited in Peña (2012), where the researchers evaluated the competencies of school psychologists who conducted bilingual assessment it was found that 87% felt they had not been adequately trained to optimally conduct bilingual assessment. Only 17% reported to have taken a course in bilingual assessment. The majority of practitioners stated that no

course in bilingual assessment was offered in their training programs. In the same study by Ochoa et al as cited in Peña (2012), 59% of the practitioners had received very little or no training in second language acquisition as it relates to bilingual assessment.

The rules of conduct pertaining specifically to the profession of psychology in the *Handbook for Intern Psychologists and Accredited Institutions* (HPCSA, 2010), Part 4, Annexure C, states that "a psychologist shall limit his or her practice to areas within the boundaries of his or her competency based on his or her formal education, training, supervised experience and or professional experience" (p 84). On the use of interpreters the psychologist has a responsibility to ensure that "the interpreter performs the interpretation tasks competently" (p 85). On cultural diversity a psychologist who performs interventions or administers, scores, interprets or uses assessment methods shall:

(i) Be familiar with the reliability, validation and related standardisation or outcome studies and the proper applications and uses of the methods ho or she uses;

(ii) Recognise limits to the certainty with which diagnoses, findings or predictions can be made about individuals, especially where there are linguistic, cultural and socio-economic variances; and

(iii) Make every effort to identify situations in which particular assessment methods or norms may not be applicable or may require adjustment in administration, scoring and interpretation because of factors such as age,...culture,... ethnic or social origin, gender, language,...race ...or socio-economic status (p. 105-106).

Practitioners have to engage in fair and ethical assessment practices by using assessment measures appropriately, fairly, professionally and ethically taking into account the needs and rights of clients. It is imperative that psychologists should regularly attend multicultural trainings and receive consultation with respect to the cultural values and norms of the clients they serve (American Psychological Association, 2003). These training sessions will help psychologists not to rely on interpreters as cultural guides (Miller et al., 2005, as cited in Wright,   2014).

2.12   Conclusion

Psychological assessment in South Africa has evolved over time. There has been interesting developments lately with the advent of democracy which have seen cross-cultural issues in assessment being highlighted and debated vigorously. A recurring concern pertain to the use of *monocentric* and *Eurocentric* assessment measures developed for the middle-class, Western society, in a culturally and linguistically diverse South African population with no valid norms. This practice has been seen as unfair, considering that different population groups in South Africa have been subjected to different forms of advantaged and disadvantaged circumstances due to the apartheid legacy. Inferences made from these assessments cannot be said with certainty to be valid and reliable. Assessment measures for cognitive functioning currently in use are perceived to be biased mainly because of the theoretical framework on which they are based. The 'g-factor theory' is viewed by practitioners as a very narrow definition of intelligence, based on academic abilities and disregards other cognitive abilities which are important in non-western settings for example the social skills that are common n African countries. There is agreement on that intelligence is a multivariate phenomenon that is understood differently by different cultures which can be conceptualised, assessed and understood fully within a cultural context. Literature in this chapter has shown that the multiculturalism is a growing phenomenon which impacts on psychological assessment and requires training of psychologists that are culturally sensitive and the development of tests and assessment tools that cater for the CLD communities.

CHAPTER THREE: METHODOLOGY

3.1   Chapter Overview

Silverman (2010) defines methodology as a general approach to studying research topics. Methodology refers to the researchers' choices about cases to study, methods of data gathering and forms of data analysis in planning and executing a research study (Silverman, 2010). The methodology that the researcher uses must be fit for the purpose of study and must provide information required to answer the research questions (Silverman, 2010). This chapter discusses the philosophical assumptions as well as the design strategies underpinning this research study. The qualitative interpretive paradigm was identified for the framework of the study. This chapter also covers the aim of the research, the research questions, methodological approach, data collection, data analysis, validity, reliability and rigour, and ethical considerations.

3.2   Purpose of Research

The primary aim of the study was to explore, understand and interpret cross-cultural issues and challenges that practising psychologists are faced with in the assessment of cognitive functioning on CLD L2 learners. The specific aims derived from the primary aim of the study were to:

1. To identify assessment measures that are commonly used by psychologists to assess cognitive functioning on CLD L2 learners;
2. To determine the appropriateness and fairness of these assessment measures to the multicultural and multilingual South African society as assessed by practitioners; and
3. To explore theoretical, ethical and practical implications in the assessment of cognitive functioning in a multicultural and multilingual society from the perspective of practitioners.

This study aimed to build on previous research particularly that by Foxcroft et al. (2004) by investigating cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. The study by Foxcroft et al. (2004) was the largest of its kind ever to have been

undertaken in South Africa and is comparable to projects conducted in the United States, the United Kingdom and Europe for example. However, smaller surveys that are confined to specific geographic areas have been conducted on test use patterns and test application e.g. Wagner (1987) and Aston (2006).

The particular research questions for this study were:

1. What challenges are practicing psychologists faced with in the assessment of cognitive functioning on CLD L2 learners?
2. How do practicing psychologists deal with these challenges in their day-to-day practice?
3. What measures should be taken to address cross-cultural issues in psychological assessment?

3.3   Research Design

This was a qualitative study which explored cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. This study explored psychologists' first-hand experiences in respect of challenges they encountered in their daily practice with CLD L2 learners and provided a summary of practitioners' experiences on cross-cultural psychological testing. The study also provided ways in which practitioners deal with challenges they experience in daily practice. Burns and Grove (2003) define a research design as a "blueprint for conducting a study with a maximum control over factors that may interfere with the validity of the findings" (p.195). This research study used a qualitative approach to look at the practitioners' experiences of cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. Understanding experiences requires a narrative construction.

This study was guided by the principle of an interpretive framework. The research design for this research study is a descriptive and interpretive analysis of psychologists' experiences using qualitative methods. Interpretive researchers believe that reality consists of people's subjective experiences of the external world, is socially constructed and that there is no

particular method to knowledge (Silverman, 2010). The concept of experiences derives from an emotionalist model which makes the choice of interviews as a mode of data collection appropriate for this study (Silverman, 2010). Qualitative researchers tend to be concerned with meaning; they are interested in how people make sense of the world and how they experience events (Creswell, 2003; Willig, 2008,2013). Researchers aim to understand how it feels like to experience particular conditions and how people manage certain situations (Willig, 2008, 2013). The main concern for qualitative researchers is with the quality and texture of experience and the meanings attributed to events by the research participants themselves (Starks & Trinidad, 2007; Willig, 2008, 2013). Qualitative researchers study people in their own environment within naturally occurring settings (Creswell, 2003; Willig, 2008, 2013).

This study employed a non-experimental research design. The research study is non-experimental because it is a qualitative study where participants are studied in their natural settings with no experimental manipulation. Data were collected without introducing any treatment.

The rationale for using a qualitative approach in this research was to explore and describe the perceptions of psychologists that administer assessment for cognitive functioning on CLD L2 learners. A qualitative approach was appropriate to capture the experiences of psychologists regarding cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. The context is significant in qualitative research (Silverman, 2010).

3.3.1   Research Population

Burns and Grove (2003) describe population as all those elements that meet the criteria set down in a study and Parahoo (1997) defines population as all the units from which data are collected. The initial target population were practising psychologists registered with HPCSA in Durban, Pinetown and Pietermaritzburg areas of the province of KwaZulu-Natal. The researcher encountered problems in getting practising psychologists in the three areas and ended up with a sample of practising psychologists from Pietermaritzburg area only. The

criteria for inclusion in this study were: psychologists that were currently in practice, registered with HPCSA, and have experience in conducting psychological assessment for cognitive functioning.

3.3.2   Sample

A sample is defined by Polit, Beck and Hungler (2001), as part of a population. The sample was practising psychologists registered with HPCSA from clinical, educational and counselling categories. A carefully selected sample can provide data representative of the population from which it is drawn (Starks & Trinidad, 2007). Excluded in the sample were research psychologists because they rarely administer assessment measures for cognitive functioning.

3.3.3   Sample Size

Starks and Trinidad (2007) identified five things on which sample size in qualitative research studies depends: the scope of the study, nature of the topic, quality of data, study design, and the use of shadowed data. In qualitative research the sample size has no influence on the importance and quality of the study and therefore there are no guidelines to follow in determining sample size (Holloway & Wheeler, 2013). Data from only a few individuals who have experiences the phenomenon and who can provide a detailed account of their experience might suffice to uncover its core elements (Starks & Trinidad, 2007). The number of subjects necessary depends on a study's purpose (Kvale, 1996). The purpose of this study is to understand cross-cultural issues in the assessment of CLD L2 learners as experienced by individual practising psychologists. Since the aim of the study is to obtain general knowledge, the focus should be on a few intensive case studies (Kvale, 1996).

A typical sample size ranges from 1 to 10 persons (Starks and Trinidad 2007). Flexibility allows the researcher to include new cases that can improve the generalizability of the findings as the research progresses (Silverman, 2008). As mentioned above, in this study psychologists form clinical, educational and counselling categories were sampled. There were 60 potential participants, of whom eight participated in the study. The majority of

psychologists could not partake in the study citing busy schedules as the reason, while others were just not willing to participate in the study. The sample comprised four clinical psychologists, one educational psychologist and one counselling psychologist. Two clinical psychologists were used in the piloting stage of the study.

3.3.4   Sampling Process

Burns and Grove (2003) describe sampling as a process of selecting a group of people with which to conduct a study. The group represents the whole population. In this study the sampling strategy was non-probable and purposive, which are two strategies that are central to designing a credible qualitative study (Devers & Frankel, 2000). Purposive sampling enhances understanding of selected individuals' experiences by allowing the researcher to select information rich cases, that is, individuals that provide the greatest insight into the research question (Devers & Frankel, 2000). In purposive sampling participants are selected according to predetermined criteria relevant to the research objective (Patton, 2002 as cited in Guest, Bunce & Johnson, 2006). In non-probability sampling selection of subjects to be included in the study is based on the subjects' knowledge of the phenomenon under study (Burns & Grove, 2010). The researcher wanted to interview people that conducted assessment of cognitive functioning on CLD L2 learners and practising psychologists from the three categories, clinical, educational and counselling were the most appropriate for this research project due to their vast knowledge and practising experience.

At the start of the research study the researcher had access to the names and telephone numbers of 60 practising psychologists of the target population. These psychologists were approached by the researcher and requested to participate in the research. A total number of 60 psychologists were approached to participate in the study. Of the 60 psychologists, 45 did not respond at all, seven wanted to participate but were extremely busy and could not accommodate the researcher in their busy schedules, and of these seven, two referred the researcher to their colleagues who could help, but those colleagues were unreachable, and only eight psychologists responded positively and were willing to participate in the study. Piloting was done with two psychologists and the other six formed part of the participants in the research study. A total of eight interviews were conducted, six of which were analysed.

3.4 Data Collection

In this section research instrument, piloting and data collection process were discussed.

3.4.1 Research Instrument

Interviews are particularly suited for studying people's understanding of the meanings in their lived world, describing their experiences and self-understanding, and clarifying and elaborating their own perspective on their lived world (Devers & Frankel, 2000; Kvale, 1996). The study is exploratory; the researcher wants to explore the perceptions of practitioners regarding cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. An exploratory interview is open and has little structure (Kvale, 1996). Since this is a qualitative study that seeks to explore the perceptions of practising psychologists it is ideal to use open-ended questions so that participants can express their views (Kvale, 1996). Qualitative studies are personal in nature and in-depth interviews allow the researcher to have personal contact with the participants (Creswell, 2008).

The interview schedule was adapted from the interview schedule by Foxcroft et al. (2004) and from the analysis of previous studies, discussion with practitioners during piloting and from an extensive review of literature. An interview guide indicates the topics and their sequence in the interview (Creswell, 2008). For the semi-structured type of interview, the guide will contain an outline of topics to be covered with suggested questions. The interview protocol consisted of fifteen open-ended questions (see Appendix Three) and was piloted on two practising clinical psychologists who met the same inclusion criteria as the main study sample. Piloting was followed by the refinement and finalisation of the interview schedule. All respondents were asked identical questions in the same sequence, but interviews probed inductively on key responses (Creswell, 2008). A study and analysis of related literature and past research projects (Foxcroft et al., 2004) helped to delineate the problem and provide topics and subtopics to be covered in the investigation. The topics in turn provided the main division for the interview guide.

A semi-structured interview guide was constructed for the purpose of data collection. A semi-structured interview is based on a set of broad questions that guide the interview, but allows one to expand upon and probe deeper into the unique issues that the individuals raise, which seem to contain useful information (Creswell, 2008, 2013; Kvale, 1996; Smith, 2003; Starks & Trinidad, 2007). Semi-structured interviews involve a series of open ended questions based on the topic areas the researcher wants to cover. The open ended nature of the questions provides opportunities for both the interviewer and interviewee to discuss the topic in more detail (Creswell, 2008, 2013; Hancock, 1998). The researcher collected open ended emerging data with the primary intent of developing themes from the data (Creswell, 2003).

3.4.2 Pilot Study

A pilot study can be conducted to develop and test the adequacy of a research instrument and to determine in advance whether the proposed instrument is appropriate for the study (Van Teijlingen & Hundley, 2001). Silverman (2010) lists three advantages of a pilot study; it allows the researcher to practice interviewing, it helps the researcher to find out whether they will get interesting and substantial data from the participants and it helps the researcher to develop an interview schedule that will be used in subsequent interviews. Since the researcher was using an adapted instrument for collecting data, it was imperative to conduct a pilot study so as to ascertain the appropriateness of the instrument to the research study and to get used to the kind of data to be collected. The pilot study was conducted with two participants who met the selection criteria, a female clinical psychologist in private practice and a male clinical psychologist in public practice. Piloting was done at their workplace. The interview schedule was discussed with the participant after each interview and the researcher was able to make informed changes and adjustments to the interview schedule before the collection of main data.

3.4.3 Data Collection Process

Interviews were conducted in English. All interviews were audio-recorded and verbatim responses to each question were transcribed by the researcher. Audio taping allows the researcher to listen to and study the tapes of conversations focussing on the actual details of the phenomenon under study (Silverman, 2008). Tapes and transcripts are a public record,

available to the scientific community. The researcher can replay the tapes and make improvements on the transcripts. Data analysis can take off immediately and is not limited by the original transcript. The researcher can go back to the complete transcript rather than relying on extracts (Silverman, 2008). The use of the voice recorder was preferable because it allowed the interviewer to concentrate on listening and responding to the interviewee, which in turn allowed for a flow in discussion (Hancock, 1998). Audio recording further ensured that the whole interview was captured and provided complete data for analysis. Cues that were missed the first time could be recognised when listening to the recording (Hancock, 1998).

3.5   Data Analysis

Analysis of data in a research project involves summarising data collected and extracting the important features that are presented in the results (Hancock, 1998; Silverman, 2010). Data analysis started soon after the first interview was conducted. Interviews were transcribed verbatim as they were gathered and analysed. Since the aim of analysis was to summarise practitioners' perspectives on cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners, interpretive thematic analysis was used. Transcripts were analysed using thematic analysis, which is described by Braun & Clarke (2006) as "a qualitative method used for identifying, analysing and reporting patterns or themes within data" (p. 79).

Interpretive analysis is an iterative, inductive process of decontextualisation and recontextualisation (Starks & Trinidad, 2007). During decontextualisation the analyst separates data from the original context of individual cases and assigns codes to units of meaning in texts (Starks & Trinidad, 2007). In recontextualisation the researcher examines the codes for patterns, and then reintegrates, organises, and reduces the data around central themes and relationships drawn across all the cases and narratives (Starks & Trinidad, 2007). Coding involves the analysis and categorisation of specific statements into clusters of meaning. During this process special attention is given to descriptions of what was experienced and how it was experienced (Starks & Trinidad, 2007). The researcher use writing to compose a story that captures the important elements of the lived experience (Starks & Trinidad, 2007).The whole analysis process is subjective because the researcher is

the instrument of analysis. The researcher makes all the judgments about coding, categorising, decontextualising and recontextualising the data (Starks & Trinidad, 2007).

Data analysis involved coding, categorising, decontextualising and recontextualising, whereby data was coded and sorted to identify themes and relationships from which conclusions were drawn (Starks & Trinidad, 2007). Through coding specific statements were analysed and categorised into clusters of meaning that represented challenges as presented by psychologists (Silverman, 2010; Starks & Trinidad, 2007).

3.6   Credibility, Dependability and Transferability

Through purposive sampling only participants with experience in the phenomenon under study were considered because they yielded rich data (Starks & Trinidad, 2007). The use of semi-structured interviews enhanced the credibility and dependability of the study. Interviews were used in order to obtain rich and thick descriptions from the participants. Furthermore credibility enhancing recommendations by Silverman (2010) which included adhering to the refutability principle, the constant comparison method, comprehensive data treatment, deviant case analysis were followed. All data was analysed scientifically to avoid the problem of anecdotalism whereby findings depend on a few well chosen examples (Silverman, 2008).

To ensure dependability and trustworthiness of data, the researcher engaged in the self-reflective process of 'bracketing', which is described by Smith (2003) as a process whereby the researcher sets aside his or her a priori knowledge and assumptions, and focus on the participants' accounts with an open mind. Moreover the researcher consulted with colleagues and mentors and wrote memos throughout the analysis which served as an audit trail (Smith, 2003). Since the research study was qualitative and explored experiences of psychologists in KZN, the findings were not generalisable but could be extrapolated to psychologists in KZN, not in the entire country.

3.7   Ethical Considerations

Wassennaar (2008) identified four philosophical principles that guide ethical research which enhance the ethical standing and the scientific value of research, which are, autonomy and respect for the dignity of persons, nonmaleficence, beneficence and justice. Autonomy requires that research participants be informed well in advance about the research so that they could make an informed decision to participate in the research and be assured of confidentiality (Wassenaar, 2008). An information sheet was given to all practising psychologists that were approached during recruitment. After receiving confirmation to participate in the research project, participants were requested to sign a consent form (see Appendix two). The information sheet gave a full explanation of the nature and purpose of the research study and assured participants of confidentiality and anonymity and further made the participants aware that they could withdraw from the study at any time and that they participated in the study willingly (Silverman, 2008; Wassenaar, 2008)). The information sheet clearly stated that data would be treated with strict confidentiality and used for research purposes only. In line with the principles of nonmaleficence and beneficence, it was explained to participants that there were no risks in the study and that participation will benefit the participants in terms of valuable knowledge and information that will be obtained in the research study (Silverman, 2008; Wassenaar, 2008).

Consent must be formalised in writing, that is, the researcher must provide potential participants with clear, detailed and factual information about the study, its methods, its risks and benefits, along with assurances of the voluntary nature of participation, and the freedom to refuse or withdraw without penalties (Wassenaar, 2008). A cover sheet was provided where each participant entered the demographic information which included gender, race, professional classification and type of practice. Participants were assured that their interviews would remain confidential, that their anonymity would be maintained throughout and that the interview information would remain confidential. Participants were referred to under a pseudonym throughout the research project. This is in line with the principle of ongoing respect which requires that participants are treated with respect during the study and that their individual information remains confidential (Silverman, 2010; Wassenaar, 2008). Interviews were conducted in the office of the participant, which was a familiar environment where challenges were actually experienced. This created an environment where psychologists

could express their opinions without feeling uncomfortable and also promoted openness (Silverman, 2010). All interviews were conducted by the researcher, audio-taped with the permission of the participant and transcribed verbatim in preparation for data analysis which began immediately after the first interview (Silverman, 2010).

3.8   Conclusion

In this chapter the research design, data collection, data analysis, validity, reliability and rigour as well as ethical considerations were discussed. The research design covered research population, sample, sample size, and sampling process. Discussion on data collection data collection covered pilot study, research instrument, and data collection process. In the next chapter, Chapter Four, the results of the research study will be presented.

CHAPTER FOUR: RESULTS

4.1 Introduction

South Africa, with its multicultural and multilingual population, has experienced a number of challenges in psychological assessment. The main issue is the validity and reliability of the assessment instruments that are widely used by psychologists in their daily practice. Assessment of cognitive functioning has not been spared in this debate. Practising psychologists assess learners from diverse cultural and linguistic backgrounds and yet very few tests have been developed or adapted for and normed on South Africa's linguistically, culturally, educationally and economically diverse population (Foxcroft, 2004; Robbins et al., 2013; Setshedi, 2008). The aim of the study was to explore practitioners' experiences of cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners focussing on theoretical, practical and ethical implications. Practising psychologists in both private and public practice actually administer assessment measures and have first hand information on cross-cultural issues the study wished to address.

This chapter presents the results obtained from the analysis of the interviews conducted by the researcher on practising psychologists. Participants included six practising psychologists from clinical, psychological and counselling categories, comprising one male clinical psychologist, three female clinical psychologists, one female counselling psychologist and one female educational psychologist. All participants were from the Pietermaritzburg area of KwaZulu-Natal. Semi-structured, one-on-one interviews were conducted to get first hand experiences of practising psychologists in the assessment of cognitive functioning on CLD L2 learners. Participants described the nature and type of tests they administered to assess cognitive functioning, the purpose of testing, limitations and strengths of the tests, the clientele they service, the appropriateness and fairness of tests, challenges they experience in day-to-day practice and how they deal with these challenges, and their needs relating to psychological testing. The analysis of data revealed the following main themes: i) Participants' clientele profile, ii) Types of tests and assessment tools commonly used, iii) Theoretical implications, iv) Practical implications, v) Ethical implications.

4.2 Participants' Clientele Profile

Most of the participants indicated that their clientele was very diverse with the majority being isiZulu-speaking South Africans from both rural and urban areas, and occasionally groups from other South African language groups including isiXhosa, Sesotho, English and Afrikaans speaking groups. The majority of these clients were African learners from disadvantaged backgrounds with families from low socio-economic status backgrounds. One participant's clientele was mainly from the middle class and attending ex-model C schools and could afford expensive consultation paid for or covered by medical aid schemes. This clientele was proficient in English because they had attended preschool where the language of learning and teaching (LOLT) was English or had English as a home language. Her clientele was only diverse in terms of race group and home language but not that diverse in terms of socio-economic status. This particular participant only saw clients from low socio-economic background when she was doing psycho-legal work for the Road Accident Fund and these clients only formed 10% of her clientele.

One participant in private practice had seen clients from outside South Africa. This participant had clientele that included immigrants from neighbouring African states who spoke French and Portuguese. To most of her clients English was a second or third language. For all participants the clientele was gender balanced and ranged between 3 years and 18 years of age. The level of education varied and it could be noticed that most of the clients referred to participants in public practice were struggling at school and experienced barriers to learning:

> P6: *Most of them were either in primary school or high school and had failed multiple times or eventually condoned and were like sixteen in Grade 4, ja that is quite common.*

To all participants the reason for referral was very important, and forms the basis for the decision taken on the type of test to be used.

4.3   Tests and Assessment Tools Commonly Used by Psychologists

Participants used a variety of tests and assessment tools. Participants from the public service have access to a limited number of assessment tools, mainly non-verbal tests, whereas practitioners from private practice have access to a variety of tests and assessment tools, including both non-verbal and verbal tests. Participants in the public service cite bureaucratic limitations in the procurement of resources, expensive tests and time constraints, as the reasons for the limited number of tests at their disposal.

> *P3*: *To get these tests, it took me months and months of putting in requisitions, I had to go and get quotes myself from the various tests suppliers...I had to go and nag the stores for months and months, and to just get a test was a major mission.*

Assessment measures mostly used in public practice included Bender Gestalt Visual Motor Integration Test II (BGT-II), the Draw-a-Person Test (DAP) and Raven's Coloured Progressive Matrices (CPM). Participants in private practice use a variety of assessment measures which include the BGT-II, CPM, DAP, Herbst Test, Junior South African Individual Scale (JSAIS), Kinetic Family Drawing (KFD), McCarthy Scales of Children's Ability (MSCA), Rey Complex Figure Test, Senior South African Individual Scale – Revised (SSAIS-R), Wechsler Intelligence Scale for Children – Fourth Edition (WISC-IV), and other projective drawings. Most participants also use the Vinelands Social Maturity Scale and informal testing methods.

> *P5*: *We use the Vinelands Social Maturity Scale especially with kids to assess whether their social maturity is appropriate or equivalent to their age, whether a child is functioning according to her age at that particular time, or social age and chronological age have got that discrepancy.*

These assessment tools are reportedly used for various purposes including screening for mental retardation or intellectual disability, school placement, disability grants, developmental neuropsychology, learning difficulties, attention problems, emotional problems, neurological problems, poor performance at school, clinical relevance to inform team decision, IQ assessment, educational determination and prediction of academic performance and for various intervention purposes.

All participants mentioned that they use psychological assessment measures every day in their practice for various purposes as mentioned above, except for two participants; one of whom used to use them most frequently in the past and since she now had a small practice and her focus had shifted to academic work, she administered tests occasionally; and another who used these assessment measures most frequently in public practice in a state setting, where he used to do clinics, and one of the common referrals was for cognitive assessment, but since he moved to private practice he had not used them frequently. Both these participants had more than fifteen years of experience in administering cognitive assessment measures. When asked about the frequency of test use, participants had the following to say:

P3: Most of our referrals for intellectual cognitive assessments are for either because the child is not performing well at school or for purposes of someone applying for disability grant and we do quite a lot of that ehm probably on daily basis with people requiring that kind of assessment.

P4: Everyday. I practice purely in neuropsychology, so I'm testing people every day.

These statements confirm the frequency of test use by psychologists and the increase in the number of referrals indicating confidence in psychological assessment practices. Participants considered test use as central to their work as psychologists.

4.3.1   The Appropriateness/Inappropriateness of Currently Used Tests and Assessment Tools

All participants use international tests of Western origin and some use locally developed tests. Most participants perceive both national and international tests as being inappropriate for the South African context. The main concern is the use international tests without valid South African norms. Another concern is that national assessment tools have old and outdated norms that have not been reviewed in a long time.

P1: It's a... I would say it's an ongoing problem in our country that we don't have appropriate instruments that we can say...are valid and fair and reliable...there are many factors that impact on ehm...the child's performance in an assessment.

P6: Other tests like the WIISC, McCarthy scales, the NEPSY are either from UK or America and do not have South African norms, based on South African children.

From the above extracts it is clear that South Africa has been struggling with the problem of inappropriate assessment measures for a long time. Participants are aware that the use of inappropriate instruments impact on the learner's performance in assessment.

P4: None of them are South African tests with South African norms...all these tests are UK or American tests, they don't have South African norms, so even the norms are not based on South African children.

P5: They were not developed here. Ravens is developed in England, Bender in America, human figure drawing,,,I don't know where but it's used internationally.

The extract below shows that norms are not portable, that is, norms developed for one group could not be used with any another group for which the test was not normed.

P4: I had a friend who in her Masters dissertation studied the Ravens Coloured Progressive Matrices and tried to norm it on isiZulu first language speaking children group... she found that there was actually a statistically significant discrepancy between the given norms in the manual and the averages she was getting in terms of the children she was assessing. This research points towards that the norms are not just, you know, widely applicable to just everyone.

For most of the participants the CPM is found to be culturally inappropriate. When asked whether the tests that she used have been adapted for the South African context, one participant gave the following response:

P3: No, they haven't, they are generally considered sort of not culture free but culture friendly because they don't draw specifically from cultural constructs... ehm, what

those depend on is the person's educational background, so for someone who has never been to school it can be problematic especially the CPM.

From this response the participant perceived tests as culturally inappropriate and problematic to administer especially with the illiterate communities, although the test is said to be culture friendly. For most participants the Vinelands Social Maturity Scale lacks content and item validity and is inappropriate for the South African context.

P6: There were problems, take for instance the Vinelands Social Maturity Scale...I mean it had some very inappropriate, ehm, questions and things like 'does your child still believe in Santa Claus?' Things that were inappropriate in a Zulu setting and very culturally English. There were some difficulties with that.

One participant felt that although the JSAIS and the SSAIS are South African tests with South African norms, they are theoretically inappropriate for use in the South African context.

P2: The JSAIS and the SSAIS are based on fairly westernised concept of assessment.

Some participants feel strongly about culture fair or culture free tests.

P1: The instruments that I prefer like the McCarthy Scales have norms for some South African children, Herpst test was designed for Black South African children, but even though those tests have been adapted bearing in mind our South African context, there's still difficulties with them and problems with them, eh so that I would say that any test that claims to be culture fair is being naive.

Participants felt that tests from the West are culturally inappropriate because they lack construct and content validity.

P4: In terms of cultural inappropriateness em the tests are all westernised and quite a few of them have phrases or pictures that wouldn't be recognised by even an average westernised African child...like in one aspect of the NEPSY, which is a narrative in the assessment of auditory memory or story, so one of the phrases at the end was 'was

puppy a smart dog?' Now in South Africa we don't use smart as clever. We would say:
'wasn't puppy a clever dog?', so even children who have been born and raised in a
high socio-economic group, very westernised, English home language, wouldn't really
understand what the phrase was really about. Often these tests also use the terms
'store' instead of 'shop', you know, we don't use that term for shops in South Africa. So
usually I do a little bit of adaptation, just informal adaptation of certain phrases or
sentences as I go, which are commonly accepted substitutions and because of those
kinds of small cultural differences.

Participants have to adapt tests during administration to make them suitable for their clientele, taking into consideration language, level of education and cultural background. Test translation is not free from language bias.

P3: I can say they are not appropriate. Vinelands is in English, which as the
administrator of the test you have to try to adapt the test in a way that will be suitable
to the client taking into cognisance cultural background, level of education, and such
things because most of them are not well educated, so you have to adapt those tests to
their level of education and to the language that suit them best so they'll be able to
understand, which at some point then it won't give... you know when you interpret the
test something you can't interpret directly as the test was developed in English but
when you administer it you have to administer it in Zulu. Interpretation is not always
100%, so you as a clinician at some point know when you interpret the test something
you can't interpret directly as the test was developed in English but when you
administer it you have to administer it in Zulu. Interpretation is not always 100%, so
you as a clinician at some point you have to use your judgement taking into cognisance
the background of the patient, the level of education and culture and all those things
before you can make your own recommendation.

4.3.2   The Usefulness of Currently Used Tests and Assessment Tools

Participants identified strengths and weaknesses of assessment measures they used. They all agreed that assessment measures are useful because they give baseline information.

P1: I think they are better than nothing, that's the problem. We have to make decisions about the people, we have to try and assess people, eh, and having some sort of guideline is better than just using your intuition...and from my work with schools there are thousands of children sitting in classrooms with difficulties that are not diagnosed and they are not having any treatment.

The participants felt that some form of assessment is required to know the level at which the child is functioning. Cognitive assessment is essential in making recommendations for the granting of concessions to learners where necessary, and to make a diagnosis one has to base his or her findings on 'something'.

P3: I think we need to continue...most of the assessment I'm doing are for school purposes and school based depend on that academic concept of intelligence, so what my assessment of someone's cognitive abilities does impact on their future schooling, so for that purpose its useful, whether or not I agree that's the most important kind of intelligence or not is immaterial, its being useful so I think we need to continue with it but I do think that we need to be more creative...

From this response it can be noted that even though the assessment tools that are commonly used by participants are perceived to be inappropriate and unfair, and based on the academic concept of intelligence, they are regarded as an essential part of the assessment.

4.3.3 Test Preference

Participants prefer to use certain tests over others for various reasons. Most of the reasons centre around the structure of the test and how easy and quick it is to administer within the limited time participants have to conduct assessment.

P6: "We could have got more in-depth tests like the WAIS and the SSAIS but then that tended to be normed on English speaking population and very, very long to administer and in a clinic setting where you are pushed for time you see a whole bunch of people that you have to get through, it just wasn't efficient enough"

4.3.4 Strengths and Limitations of Tests and Assessment Tools Commonly Used by Psychologists

The table below is a summary of strengths and limitations of tests and assessment tools that are commonly used by practitioners from the practitioners' point of view.

Table 1

Strengths and Limitations of Assessment Tools Commonly Used as Perceived by Participants

Strengths	Limitations
• User-friendly/Child- friendly	• Too time consuming and complicated
• Time efficient	• Not dependent on language
• Not dependent on language	• Culturally inappropriate, lacked content validity
• Brief	
• Give the best idea on someone's functioning	• Based on westernised concept of assessment
• normed and validated in terms of validity and reliability for the population they were formed in	• Only accessing the non-verbal functioning of the child and not the full range of cognitive functioning.
• Widely used and internationally accepted	• Developed in English for a particular culture
• Well researched with different populations	• Instructions in English and have to be adapted for other language groups
• Suitable for all population groups	• Lack of South African norms
• Has South African norms relevant to the South African context as well as Kenyan norms	• Test in English and needs to be adapted to suit the client's cultural background and educational level
• Short and time efficient	• Instructions are not easy to understand
• Highly correlated with intelligence	• Instructions need to be translated for L2 learners that are not proficient in English
• Not language specific	
• Can be used in a multi-linguistic context	• Coaching with the first few tasks necessary to ensure thorough understanding
• Easy to administer and easy for people	• Difficult to use with the visually impaired
	• Looking at visual reasoning and did not have a verbal component

to understand	• Children tend to guess answers when it comes to difficult items
• Instructions are easy to understand	
• Quick non-threatening test	• Lack content and item validity

Participants mentioned the following about the CPM, the Bender and the DAP:

P6: Its [the CPM] strength is that it can be used in a multi-linguistic context. With the Bender the administration instructions are fairly easy, children find it an easy non-threatening test, and it was a good back-up test.

P3: The draw-a-person test is quick and non-threatening task, easy to administer.

Non-verbal tests were preferred to language-based tests in assessing cognitive functioning on CLD L2 learners and were perceived by some participants as culture fair, in terms of being able to be used with any language group. Conflicting views can be identified regarding the strengths and weaknesses of the tests, particularly the non-verbal tests:

P3: I think the strength of these tests is that they aren't dependent on language but that's probably also a weakness because it doesn't give you an estimate of someone's ability to use language... Ehm...which obviously would...is important to know especially if you're assessing for school problems or that kind of thing...and the fact that it's not based on someone's language you use them with any language group, that's definitely a strength ehm... and also the fact that they are quite brief tests and kind of give you the best idea of someone's functioning in different areas. We have to use the tests that we can administer quite time efficiently and I think these ones do that job quite well.

P4: Well the strengths are that they all are well normed and validated in terms of reliability and validity for the population they were formed in. Okay, they are widely used and internationally accepted. The validity is good in terms of what we are assessing, in terms of cognitive functioning and the reliability is good ... the tests are ...well validated...lots of research not just the manual that comes with the tests. So, particularly the WISC has been used in huge research studies and lots of different

populations. So there's lots and lots of research about how different people with different problems will be performing in these measures which is very useful.

P1: I think the strength of all these assessment instruments is that they are based on a sound conceptual like theory of intelligence and cognitive functioning, not just items pulled from anywhere to make up a test eh a conceptualisation around intelligence is behind the original test development.

From the above extract it became clear that although tests may seem inappropriate for the South African context, there is some 'good' in them.

Some participants share similar sentiments regarding the shortcomings of the non-verbal tests, while one participant felt that the CPM has one limitation, that it is looking at visual reasoning and does not have a verbal component. The other weakness is that children tended to guess the answers with it when items got difficult.

P4: When you look at the non-verbal tests you are just basically assessing the non-verbal functioning and trying tests like that to the child's cognitive functioning, so it is a little bit trickier.

P6: You choose one of the six patterns that fit into a larger pattern and often you know they start guessing, and you have this difficulty of looking at the tests and you start realising that the more difficult items they got some of them right even though they got the easier items wrong, but it's because they were just guessing and you have to decide whether that was a valid answer.

Participants also felt that some children never understood the instructions especially those with very low intellectual functioning, in which case the participant used alternative measures like the BGT or DAP test, which is easier to administer. Participants felt that sometimes there are children who cannot do any test and the participant has to go on a clinical history and try to make a diagnosis.

When asked whether to continue administering tests for cognitive functioning, the following response was given:

P1: ...there are strengths in the existing instruments based on good science, so let's not throw the baby out with the bath water.

P3: Ja there is some good in them especially the CPM and Bender. The CPM gives you what the IQ of the person is, the estimation of the IQ of that person. Obviously you don't work with only the score but you also take or consider the collateral information of the patient.

4.3.5   Language

Language was an issue for all participants and was closely related to one's level of education, especially with people from rural settings. The problem raised was that there were no suitable tests for other language groups. All tests except for the Individual Scale for Zulu Speaking Pupils (ISZSP) – the Zulu version of the SSAIS (which participants referred to as the SSAIS-Z or the Z-SSAIS) were developed in English and were not suitable for use in a multilingual South African context where English was a second or even third language for most learners.

P3: Obviously when they were developed, they were developed in English for a particular culture, but then we don't have our own so we try and use them even to our own children....when you administer them you give instructions in English but the CPM and the Bender it's better because you can try to adapt the language and give the instructions in Zulu and as soon as you see that they understand what needs to be done a child can proceed with the test because it's only drawings and patterns.

P4: Language is an issue, it's a huge issue. If I am assessing like one of my RAF cases and occasionally I get a case of someone who's been living in a more rural location and doesn't have good English and their parents now want to move them to a city school and the school said "wait, wait, wait, we need an assessment because we are not sure if this is gonna work", and that's really problematic because we don't really have any suitable tests for any other language groups. So we don't, I mean for a broad cognitive assessment we have the Z-SSAIS which is ehm, not recommended that I wouldn't recommend using.

Some tests have been adapted and translated to African languages but they are still found to be inappropriate for the South African context. According to some participants, the SSAIS-Z is available but they would not recommend using it for the following reason:

> *P4: it was formulated during the apartheid era and the era of Bantu Education when the whole concept of Black people being less intelligent than white people...I think the norms are very outdated and I think the actual way the test is put together is very outdated and I think is quite insulting test...I think it would be less valid... so in those instances I try to use language-free cognitive assessments.*

> *P6: Some of the tests, the full battery tests, which for instance are Zulu the norms are so outdated ....talking about apartheid era norms that are completely invalid.*

One participant perceives the assessment of a CLD L2 learner who is not proficient in English, in English as a violation of the rights of the learner.

> *P2*: *Personally I do not assess a child whom I cannot communicate with because of language barrier, I always refer such cases.*

Some participants stated that they use translators to explain instructions to the learner. The use of an interpreter is a common practice. When asked whether language barrier can be dealt with through the use of a translator, one participant had the following to say:

> *P1: Not dealt with but ameliorated to some extent*

This shows that the use of translators is not the solution to the challenge of language. Another participant felt that kids were struggling to understand questions and he had to explain and couch children to facilitate understanding of questions. He always used an interpreter with the instructions. One participant acknowledges the challenges that existed when using interpreters including uncertainty with the process when using untrained interpreters.

P6:...you will always not be100% sure that what you are saying is being interpreted exactly and vice versa. You know, the client would talk for five minutes and the interpreter would interpret a single sentence.

Most participants insist on using the same person for interpretation as the interpreter ended up knowing the instructions by heart and the relationship of trust developed between the interpreter and the practitioner. However, this was not always possible especially in a hospital setting where participants ended up working with a nurse that was available at the time. Participants feel that translators at times interfere with the testing process by giving answers to children when they mean to explain the instructions.

P1: I have worked with a translator before. You say: 'please ask the child to count to 10', and they will say to the child in isiZulu: 'count from 1-10 like this, 1,2, 3,...that will be answering the question for the child.

To all participants the ideal situation is to have a bilingual assessor that is fluent in both English and isiZulu. Of the six participants only one was bilingual and could communicate fluently in English and isiZulu. Two other participants could understand isiZulu and the other three participants could neither speak nor understand any African language. One participant uses a translator with a clear understanding of the psychological assessment processes now but had problems of trained interpreters while he was in public practice.

P6: I use in particular one who has an Honours degree in Psychology and another person who I work with regularly ehm I have tried to give some training about the importance of trying to follow my instructions as precisely as possible, try not to deviate too much in terms of the actual language that I use not interfering in the assessment ... I try not to use anyone from the street use anyone from the street you know obviously I try to take people who would have some kind of ....or I give them understanding of what I'm looking for in terms of translation...while I was working for the government 95% of my clients were not English speaking, I was using translators almost every day and you know it was really challenging ...just don't have the same words in English and in Zulu most of the time for different things. So ja that was it, it's tricky but you try to get regular people who can translate for me because they are familiar with that process.

4.3.6 Level of Education

Participants felt that the level and quality of education have no impact on testing with children of school going age when the assessment tasks involved making drawings, but with other tasks, like using puzzles, education had an impact on performance. Familiarity with stimuli and the socio-economic status background also impacted on testing.

> *P3*: *Education impacts too much. When you look at the Bender as long as someone is familiar with using pen and paper or pencil and paper tests its reproducing basic designs so anyone whose had like 2 years of schooling ...should be able to do that, and the human figure drawing that's something children do even if they don't have paper and pen at home... they draw on the sand, they draw in the dust or...children draw I don't think that's too much dependent on the level of education, I think they are quite good tests with context. And the CPM I know there has been research that shows that the level of education and formal schooling DOES have an impact on the results so that's why I never use the CPM in isolation because I would expect someone from a deep rural area without access to say ....I think more than schooling it's things like having puzzles and books at home, it's more socio-economic than anything else. I would expect them to score lower than someone with a similar intellectual and socio-economic privilege.*

To some participants the use of non-verbal tests and projective techniques to assess learners' cognitive functioning is found to be a limitation on its own for most of the children and more especially children with sensory deficits and physical disabilities.

> *P3:For someone who is not used to writing with pen and paper that's an extra barrier, and someone's ability to work with...familiarity with pen and paper test or whether that's the problem what's causing them to perform poorly....then the problem that I find quite ....is when you refer a patient with a disability ....like a problem with the hand or somebody with cerebral palsy, ...or something that affect their ability to use their hand or to use their body.....or sensory deficit like partially sighted, that really it makes these tests quite useless especially the partially sighted... they can't see and they can't see*

what they are drawing and if someone can't use their arm properly how do I know how much of the disability is affecting their test results?

P5: My problem comes when we are asked to assess for disabilities because a lot of them have no formal schooling and then asking them to do a pen and paper based test or to locate the designs, it's a bit too abstract. I don't think it gives us an accurate impression of their functioning and often I rely in those cases more on qualitative research than on tests.

In their practice, one participant has found that preschool education which is closely related to socio-economic status, had an impact on assessment.

P6: I would find at times that a simple task that I would take for granted like drawing a picture of a person....with a young child that hadn't attended school yet ... paper, pencil and crayons available at that context...for some even that task was almost foreign to them and that was quite difficult to do.

To a child from a high socio-economic status, with all the drawing resources available, such a task could be undertaken with ease.

4.4   Theoretical Implications

Some participants would like to see new tests being developed, tests that would be relevant to the South African context. Others preferred both test adaptation and development of new tests. They make a recommendation for the new tests to be based on wider conception of intelligence not covered by conventional tests.

P3: I would like to see some new tests coming through especially when I have seen some children here that I assess and one of the things that they tell me like they can build toys out of wire and if you think of the credible coordination and intelligence that's needed to do that and it's something that children do in poor backgrounds that they don't have access to toys, we should have a test that can capture that because that's quite an intelligence.

P6: The positive is that you then are able to draw on a welfare of previous kinds of research data and of the test development...and then you are able to have something to compare these and relate with the test results previously researched, whereas with the development of new tests you don't have that so I would go with the adaptation of new tests.

One participant noted that although the JSAIS and the SSAIS have been adapted, they are still based on the westernised concept of assessment. The following was said about the CPM:

P4: I mean it is based on the concept that cognitive functioning is the same for all people and which you know from the South African research that the concept of intelligence and what makes the intelligent well-functioning person is different in different cultures … I had a colleague who studied a year ahead of me. In her Masters dissertation she was norming the Ravens Coloured Progressive Matrices on a group of isiZulu speaking children… and she found that there was actually a statistically significant discrepancy between the given norms in the manual and the averages she was getting in terms of the children she was assessing. So I mean this research points towards the norms that you know are not just applicable to everyone.

Some participants felt that the theoretical framework on which international psychometric tests are based is not relevant to South African context and there are research findings that attest to that. The idea of intelligence as purely academic was an unfortunate situation.

P5: I know that CPM is based on the 'g' factor. Tests are very much based on the idea of intelligence as academic intelligence, which unfortunately is the thinking of many people out there.

Most participants found assessment measures for cognitive functioning to be culture loaded. This applied to both non-verbal and language-based tests.

P1: I think it is inherent in any test no matter when or where a test is developed, it's coming from a particular socio-cultural context, background, tradition, and so it carries with it those assumptions.

One participant felt that intelligence has no finite definition, but is understood differently by different communities. The assumption is that there is no one general form of intelligence but intelligence is contextual and what is intelligence in one culture or family may not be intelligence in another culture or family.

P1: I think it's a concept that is understood differently by different people no matter … my family may have a different conception of intelligence to your family. You may say that child is very bright because they do something and our family wouldn't consider it bright, so it's about cultural differences. I think it's about ehm adaptation to context and that context varies. So the concept of intelligence is very loose and it concerns me that people place so much emphasis on IQ scores as if they were gold and truthful.

P5: What intelligence is in a more western urbanised environment would not be intelligence to someone in a more traditional background because they would lead to a whole different set of skills to succeed in life and that's what intelligence is about, that's what you need and what you can do with your potential to live the best possible life, be the best you can be and be successful in your environment.

4.5   Practical Implications

4.5.1   Test Anxiety

Children's reaction to testing varied, with some children extremely worried while others enjoyed some of the tasks. One participant mentioned that the approach he uses eases the tension among children.

P6: I often start off with non-threatening tasks first to try and make them feel comfortable before we go to the more challenging tasks.

Most participants have reservations about testing in a hospital clinic setting where nurses act as interpreters, as compared to assessment in a school setting, an environment familiar to the child.

P1: Quite a lot of assessments that I've done were in hospital clinic settings which had its own dynamics, where you have a nurse assisting as a translator, not necessarily the parent bringing the child there, there are a lot of dynamics that interact with the environment that could make the child anxious and uncomfortable at hospitals, where you got injections and things like that, ehm and the assessments I have done eh in school context, the children are more comfortable. I think it depends on the test and whether the children perceive it as a nice game that we're going to play together or as something to be afraid of, ja.

All participants emphasised the important of creating rapport with the child as a measure to ease anxiety.

4.5.2   Dynamic Assessment

Most participants felt that the language of the test and not being familiar with the stimuli are the main challenges in test administration. When using the CPM, some participants have had to deviate from the procedural instructions and use the dynamic approach to assessment.

P6: I often spent a lot of time coaching them because I didn't get the sense that that was just so a foreign task and it didn't come naturally. Strictly it's against the test instructions but I felt like I almost needed to coach them a lot in those first few items. Once I get the sense that they understood the requirements then obviously I would stop coaching them and then go forward.

P6: With the Ravens, some children struggled with visual spatial and really understanding instructions, so you had to go through very slowly and carefully and make sure there's enormous coaching with the first few tasks to help them understand.

P1: You'll have to move away from the standardised ehm administration where you do not so much place emphasis on the score, but on the patterns of performance in the assessment.

Some form of adaptation is required during the assessment process to make children understand the instructions from the tests, irrespective of the form of test. When testing basic mathematical skills one participant adapted the task to the children's context.

> P1: *Trying to give the child ehm concrete ways of understanding the instructions, so for example if we are asking a child to construct a puzzle and we find that Black children often struggle with puzzles because it was an unfamiliar stimulus we would say 'see this donkey, now we're going to break him and now I want you to put him back together again', so it starts with the full picture so you will adapt the administration to try and give the child an opportunity to understand the instructions.*

> P6: *I didn't use puzzles, no, that was too time consuming. Sometimes you used to test basic concepts, I mean colours, to check if they understand colours and numbers and counting. You would have to ask "here are five stones, if I take two stones away, how many would be left?" to try and help them understand those mathematical things using something from their context.*

With one participant the use of non-verbal tests does not help much to ameliorate the language problem. Language becomes a challenge to both the assessor and client.

> P1: *All tests rely on language in some way even if it's a non-verbal test, a child will have to understand the instructions and the questions being asked, so ehm, most tests are relying on language, so there's also going to be difficulties with administration…. Language poses a challenge to the assessor as well. The ideal is to have a bilingual assessor who is fully fluent in English and IsiZulu. It's not only a challenge for the children; it's a challenge for the assessor.*

Some participants feel that the language challenge can be solved through developing tests in all 11 official languages and have norms for each language group.

> P6: *We need to develop tests that can be used in a person's mother tongue most definitely that would be the first price … to develop tests in a person's mother tongue with relevant norms.*

One participant felt that language as a barrier could be ameliorated to some extent through the use of a translator. On the question relating to the preferred language of testing, she had the following to say:

> P1: *If the assessor is a skilled person it's better to have a skilled assessor working with a translator than to have an unskilled assessor working in the first language, because the clinical judgement is important.*

Another participant indicated the advantage of being bilingual in test administration. When asked whether interpreters did not interfere with testing, her response was:

> P3: *No, they say what I say because I can also understand what they are saying when I give the instructions, I am most careful about that....Yes I have studied Zulu at University so I can understand quite a lot.*

Participants perceived tests as very expensive and hence difficult to obtain and proposed some form of test price regulation.

> P4: *The tests are very expensive...I think the price should be regulated to allow all people who can use these tests to have access to them.*

> P5: *So to begin with I was using a borrowed CPM from the other hospital and I had to go and photocopy other testing material illegally, and I've been here for two years when we got our first test.*

4.5.3 Multi-Method Approach

Most participants use a variety of tests and a combination of formal and informal assessment before making a final diagnosis.

> P3: *I will try all three of those tests...informal and qualitative assessment is what informs my diagnosis.*

P6: We could not rely on judgement based on one test but use a combination of tests to form a coherent picture.

P5: You don't work with only the score but you also take into consideration the collateral information of the child.

P1: We would get a lot of information from the caregiver about the child's functioning in daily life, and with the teacher, asking about the child's performance in the classroom.

Participants in private practice can do observation over and above conducting formal testing and informal testing. All participants found input from the teacher critical and perceived it important in ascertaining how the child was functioning, relative to the school population.

4.6   Ethical Implications

4.6.1   Obtaining Informed Consent

For most participants in public practice getting consent is not always easy. One participant would insist that consent be obtained from a caregiver or else he would not administer the test. He insisted that children be accompanied by a guardian or caregiver who was capable of providing information and consent for the assessment. Other participants reported that they struggled to get parental consent especially from referrals from schools:

P5: Sometimes you get referrals from schools and you will ask one family member to come and sign consent which take a bit of time, sometimes they don't come, giving you a problem.

With one participant partial consent or oral consent obtained directly from the child was enough for her to administer tests.

P3: Well the patient is being referred here through the doctor...so the consent is ehm...along the way they consent to being a patient and receive treatment here, that's

the partial consent. I always explain to the patient...is that okay with you and they will say 'yes'. That's consent.

4.6.2 Duration of the Assessment and Building Rapport

Conducting assessments was reported to be a challenge at times because of the work settings. Some participants have had to conduct the assessments, make a diagnosis, provide feedback and write a report in an hour. Some participants relied on informal methods for quick assessment. Observation was out of the question in public practice.

P6: ...because you are working in a rural setting, there's high pressure for those assessments...eight people to get through in a day, people are very poor, people travel from very far and spent half their monthly income for a taxi fare to get there, they can't come back again, and so it was a real challenge to try and assess in a valid and thorough way, and also you did not have a luxury to spend three hours, one hour doing intake and take another hour doing assessment or providing feedback... so ja that was a challenge.

4.6.3 Limited Resources

Participants have found themselves in a dilemma where they had to assess children to determine access to resources or refer children for intervention that is delayed due to limited resources.

P1: I was asked to do an intelligence assessment on a deaf child to see if the child could have a hearing aid, and I said to the doctor, 'but if a child is deaf surely that determines that they need a hearing aid'. He said, 'no, we don't want to waste hearing aids on children that are not intelligent'. So then I said to the doctor, 'so you might understand if I overestimate this child's intelligence, so that the child can have a chance to have a hearing aid and learn.

P1: You discover a child in Grade 12 and they actually have a learning difficulty that has never been diagnosed and another challenge is around doing assessment and not

being able to offer any assistance for intervention. There are no remedial services available, what do you do with this child? He actually needs intensive remedial assistance to be able to learn, which is not available.

P5: that's a big frustration…because there is so little available to them and I often find myself having to refer someone to the education department knowing that in all likelihood the child is going to sit waiting for two years…one child is eighteen years old today, he's been in Grade 7 four times, but there's nothing I can do because I can't give him a grant, I can't send him to the …because his intelligence is above… and there's nothing I can do about him. So that's really frustrating.

Participants also had to accede to the pleas of parents who, out of desperation, wanted access to social grants.

P1:…parents and caregivers coming to you with the child and wanting you to say that the child is mentally retarded because then they can get access to a grant.

Historical imbalances and inequalities in the distribution of resources are also evident in the following:

P6: With my poor client population when I'm trying to get them to … things like occupational therapy or speech therapy or psychiatric intervention, that is much more tricky because they are often on waiting list, the resources, eh support isn't great.

4.6.4   Practitioner Competency

Participants raised concerns about practitioners' incompetency in assessment and the need for self-development:

P1: Practitioners need to be aware of the constraints of the test that they are using. For example people use the RCPM and make judgements about people without being aware of the limitations of that test in our context. So I would want practitioners to be more critically aware of the dangers and difficulties of some of the assessments.

For most practitioners although cognitive assessment was necessary, training was not enough for practitioners to feel competent in their practice.

> *P5: I think we need to get a bit more creative and that's where training needs to be more responsible. I don't think training is good enough especially in using tests in a sensitive and fruitful manner. I think most of the time people get caught up in this mechanistic testing that you ask questions ...and you get to results. They don't even spend time talking to the patient ...I think it's a big problem. So I think the way psychologists are trained the task has to be a tool but it can't be the whole assessment.*

Suggestions from practitioners for self-development in the assessment field included the following:

> P1*: Through research and development of tests and through appropriate training...*

4.7   Conclusion

This chapter discussed data analysis and the themes that emerged from the analysis of data. Five themes were covered which are participants' clientele profile, types of assessment tools commonly used, theoretical considerations, practical considerations and ethical considerations. There is an overlap of themes in the presentation of data analysis. Participants agreed that assessment measures for cognitive functioning were not appropriate for the South African context and therefore might yield invalid results. Therefore there was a need for the development of new tests with South African norms and the adaptation and review of existing tests to suit the diverse cultural and language groups. Chapter 5 provides a discussion of the findings of this study as well as its limitations, and makes recommendations for practice and further research.

CHAPTER 5: DISCUSSION

5.1   Introduction

South Africa as a heterogenous country is facing many challenges in psychological assessment. Practitioners are servicing a diverse clientele and are facing significant barriers when assessing for cognitive functioning (Miller, 2011). Psychological assessment has been criticised for its contribution to various barriers confronting CLD learners, including learners with disabilities (Suzuki & Ponterotto, 2008). South Africa stands out uniquely with its 11 official languages but due to the historical past some languages take precedence over others. The education system is structured such that the LOLT for the majority of learners is English, and yet the level of proficiency in the language differs depending on the quality of education received by learners and the exposure to the language on a daily basis.

Culture and language have been identified as two interacting challenges in the psychological assessment of CLD L2 learners (Cormier, 2012; Meiring, Van de Vijver & Rothmann, 2006; Paterson & Uys, 2005; Taliep & Florence, 2012). Assessment should be in the language learners are most proficient in but this is a challenge on its own, like the lack of bilingual psychologists and limited tests and assessment tools in a variety of languages (Cormier, 2012; Miller, 2011). Practitioners are expected to be sensitive to the learner's culture and language in the selection, administration and interpretation of tests to avoid making an erroneous judgement (Foxcroft, 2011; Tai, 2013). Yet there is a dire shortage of tests and assessment measures that have been tested for validity and reliability and that can be used fairly with the South African community.

Caution should be taken when assessing learners using assessment measures with British-American based norms in the South African context because contexts differ remarkably (Carter et al., 2005; Van Heerden, 2007; Van Rooyen, 2005). Research has shown that the application of monolingual norms to bilingual populations is inappropriate (Bethlehem, De Picciatto & Watt, 2003; Nell, 2000). Conventional assessment tools for intelligence contain culturally and linguistically loaded items and results obtained from these tools may not be

reflective of the learner's actual true reasoning ability (Miller, 2011). Therefore more focus should be placed on bilingual assessment.

Due to multiculturalism in many countries, there has been more focus on fair test usage with different cultural and linguistic groups. The complexity of assessing CLD L2 learners has resulted in the development of a framework of ethical codes and law prescripts to ensure equity in assessment (Miller, 2011; Foxcroft, 2011). Section 8 of the South African Employment Equity Act (No. 55 of 1998), the HPCSA and the Department of Health Ethical Code of Conduct act as ethical guidelines and should be applied in assessment of CLD L2 learners (RSA, 1998; Tai, 2013; Van De Vijver & Rothmann, 2004). The onus rests with the practitioner to ensure fair cultural assessment. Fair testing requires that a test be standardised across all cultural and language groups to avoid making erroneous inferences from invalid test results (Schaap, 2011). This can be achieved by developing new instruments, and validating existing instruments for use in a multicultural context (Foxcroft et al., 2004; Paterson & Uys, 2005; Van de Vijver & Rothman, 2004; Van Heerden, 2007).

Equivalence and bias have been found to be fundamental concepts when making cross-cultural comparisons and when comparing subgroups of populations in a multicultural society like South Africa (Meiring et al., 2005). Differences in the structure and quality of education might impact upon the development of certain cognitive abilities, which in turn might affect performance on a test that measures those abilities (Ostrosky-Solis, 2006; Rosselli & Ardila, 2003; Shuttleworth-Edwards et al., 2004). Non-verbal tests and assessment tools have been created to minimise linguistic bias and to ensure reliable and valid results (Cormier, 2012). Shortcomings with these assessment measures include one-dimensionality, measuring non-verbal intelligence only and culture loadedness (Miller, 2011). Results from such assessment might also result in significant errors (Rosselli & Ardila, 2003). It is unfair to use timed assessment measures, whether verbal or non-verbal, that score speed of performance on people whose culture does not value time restrictions (Rosselli & Ardila, 2003). The use of translators has also become common practice in multilingual assessment; however this practice is not free of bias. There is lack of culturally sensitive training of practitioners which results in lack of competency among practitioners especially in the area of bilingual assessment (Miller, 2011).

The aim of this study was to explore how practising psychologists perceive cross-cultural issues in the assessment of cognitive functioning of culturally and linguistically diverse learners whose first language is not English (CLD L2). This chapter discusses the interpretation of the findings in chapter 4. The interview schedule was used to get perceived experiences of practising psychologists in the assessment of cognitive functioning of CLD L2 learners. The emphasis was on cross-cultural issues in the assessment of cognitive functioning of CLD L2 learners, particularly theoretical, practical and ethical implications. The profile of the clientele, the types of tests commonly used, the theoretical, practical and ethical implications are discussed in relation to the reviewed literature.

5.2   Participants' Clientele Profile

Diversity in South Africa is evident culturally, linguistically, educationally and in socio-economic levels (Du Plessis, 2008). From the study conducted by Foxcroft et al. (2004) on psychological assessment in South Africa, it was gathered that psychological testing was performed across a broad spectrum of people. The results of this study showed that participants saw clients from diverse backgrounds. The majority of the clients seen by the participants in this study are L2 and almost all participants saw a large percentage of isiZulu speaking learners from all school grades. According to Cormier (2012), the extent to which a CLD L2 learner is able to adequately understand and respond to a cognitive measure in English is related to age, immersion in English and the similarity of the learner's primary language to English. Since most of the tests that are used by practitioners are in English, the majority of learners are therefore assessed in a second or third language, which in most cases is the language they are not proficient in. The implication is that the results from such an assessment may be incorrect and misleading (Cormier, 2012; Setshedi, 2008).

This study found that there is often a high number of referrals to clinical psychologists in public service. The majority of referrals are learners that are seen to be experiencing learning problems, for example, learners who have repeated grades more than once and learners that are not age and grade appropriate. Findings in a study conducted by Pillay et al., (2009) showed that such referrals reflected on the concerns by the caregivers about scholastic

performance which is viewed as a priority in disadvantaged rural communities where there is a state of hopelessness in career prospects. Pillay et al. (2009) viewed these referrals as 'inappropriate' because under normal circumstances, such referrals will be made to an educational psychologist. The implication is that there might be a shortage of appropriate resources and a severe shortage of educational psychologists in public practice (Pillay et al., 2009). Zitianellis' (2004) study also found that poorer communities have limited awareness of psychological problems, treatment or resources. Participants in this study reported that clients from disadvantaged communities are more likely to be referred for help late, mainly because of a lack of understanding of the child's condition or a lack of awareness of the resources to access. These clients have no health insurance and are not members of a medical aid scheme and parents cannot afford to have children assessed by a private psychologist. They will only be able to receive needed services through public institutions (Ochoa, Riccio, Jimenez, Alba & Sinez, 2004).

A small percentage of the client population in this study come from high to medium socio-economic levels and are referred appropriately. Lindén and Rådeström (2008) found that in South Africa psychology is not well established in the public sector such that there are few jobs available for psychologists, hence more psychologists choose to work in private practice based in urban areas (Zitianellis, 2004). Wassenaar (as cited in Lindén & Rådeström, 2008) puts the percentage of psychologists in private practice at 70% servicing only 23% of the population. Participants in public practice reported limited resources. In a study conducted by Lindén and Rådeström (2008) on ethical dilemmas among psychologists in Sweden and South Africa, psychologists reported one ethical dilemma relating to assessment as "pressure from clients and their families that assessment will result in a diagnosis which generates financial support and resources from the government" (p.22). In the same study difficulties that result from limited resources and uncertain treatment conditions in the practice of psychologists were listed which included limited time for preparation and evaluation of treatment and substantial workload which creates waiting lists.

Participants in this study felt that people with disabilities and the visually impaired were not catered for in assessment. This corroborates findings by Foxcroft et al. (2004) that people with disabilities, impairments and the illiterate were not catered for well sufficiently in

psychological assessment. The structure and design of most assessment measures is not suitable for people with disabilities and visual impairments, for example, non-verbal tests where a learner has to identify a missing piece or a pen and paper test that requires the learner to actually hold the pen.

5.3 Tests and Assessment Tools Commonly Used by Psychologists

Research has shown that intelligence tests are among the most commonly used tests internationally (Foxcroft et al., 2004; Muniz et al., 2001). The study by Muniz et al. (2001) on tests commonly used in six European countries, Belgium, Croatia, Holland, Slovenia, Spain and UK, shows a clear predominance of psychometric tests over projective ones. Participants in this study use a variety of tests and assessment tools with projective tests taking predominance. Practitioners in public practice have limited resources in terms of the tests available for use, hence the use of non-verbal assessment tools. This practice suggests that practitioners serving the LCD L2 learners may be ignoring key factors such as inappropriate norms, linguistic and cultural confounds, and other threats to validity (Prtiz & Dynda, as cited in Peña, 2012). The issue according to Peña (2012) is not about whether the test is 'right or not' but rather that tests chosen are often administered and interpreted without respect for culture and language on test performance.

5.3.1 The Appropriateness/Inappropriateness of Currently Used Tests and Assessment Tools

The participants in this study are aware of the history of international and local assessment measures that they use and controversy around appropriateness of assessment tools in the South African context. Oakland (2004) found that it was common practice in South Africa to use foreign developed psychological tests. Research has shown that there has been an ongoing concern about the relevance and effectiveness of some of the assessment measures used in South Africa (Foxcroft et al., 2004; Meiring et al., 2005; Roomaney & Koch, 2013; Schaap, 2011; Setshedi, 2008; Sibaya, Hlongwane & Makhunga, 1996; Van de Vijver & Rothmann, 2004).

Participants in this study raised concerns regarding the use of tests not standardised for South African context. Literature has shown that very little research on these tests has taken place in South Africa (Foxcroft et al., 2004). Most of the significant research aimed at identifying the weaknesses of cognitive assessment measures and how to standardise these measures was conducted in the USA (Parker et al., 2007). Lack of research lowers the applicability of these tests to different contexts, and more specifically to the South African context. Participants in this study wanted to see frequent test adaptation, updating of norms and instructions made available in all official South African languages, taking into consideration cultural variables. Similar findings on the needs of practitioners were made by Foxcroft et al. (2004).

The use of non-verbal tests was perceived as both a positive and a negative. Participants in this study felt that the non-verbal tests are useful where language is a barrier. Some participants regarded non-verbal tests like the Bender, the DAP and CPM, as culture-fair. However, Ochoa et al. (2004), found these tests (the Bender Visual Motor Gestalt Test, DAP, Kinetic Family Drawing, House-Tree-Person) to be psychometrically unsound. This study shows that the majority of participants use these non-verbal assessment measures with great frequency yet there is ample evidence that non-verbal tests are also prone to cultural bias (Jinabhai et al., 2004; Rosselli & Ardila, 2003).

Participants in this study perceive the development of cognitive abilities and their behavioural expression as influenced by cultural and environmental factors. Jinabhai et al. (2004) recommended the use of a combination of tests to measure a range of scholastic and cognitive functions. Participants in this study indicated that they never relied on a single test score to make a diagnosis but followed a multi-measures approach, including informal assessment. Participants in the public service used CPM, Bender, DAP and informal tasks together with Vineland Adaptive Behaviour Scales. Participants in private practice used the WISC, WAIS, JSAIS, NEPSY, The McCarthy Scales, Ravens CPM, and in addition review school reports, interview teachers and do observations as part of assessment. This study showed a discrepancies between psychological assessment in the public service and in the private service in terms of the intensity and duration which can be attributed to the availability of resources.

Although participants in this study perceived the CPM positively as an assessment tool with South African norms and Kenyan norms, and perceived it as highly correlated with intelligence, research has shown that there are marked differences in scores obtained by people from different cultural and language groups when cognitive ability is assessed using this measure (Knoetze, Bass & Steele, 2005; Rushton, 2001). In the Kenyan study conducted by Costenbader and Ngari (2001) on the CPM with a sample of 1370 of 6-10 year olds at primary school, the instrument was found to be reliable and valid for use in screening Kenyan children. However, the norms generated on a representative sample of Kenyan children differed significantly from norms reported for other groups in Western countries. Such differences might be attributed to differences in education and socio-economic background which is below those of Western countries (Costenbader & Ngari, 2001). The authors warned that Kenyan norms of the CPM are only valid for Kenyan children they are standardised for, and cannot be used for comparisons of children in other countries (Costenbader & Ngari, 2001).

The CPM is seen as an effective assessment tool in multicultural contexts because its construction and development is based on a sound theoretical basis; it has been researched widely internationally; is highly suited to South African children; and is internationally recognised as a reliable culture-reduced test (Knoetze, Bass & Steele, 2005). Some of the participants in this study perceived the CPM in the same manner. Anastasi and Urbina (1997) highlighted four major cultural and educational obstacles to the construction of culture-reduced assessment measures, which are, language, test content, reading and speed. The CPM was developed in a way that eradicated cultural bias and eliminated these obstacles (Raven et al. as cited in Jinabhai et al. 2004). The authors warned of the limitations of the CPM when used with children with visual impairments who might not be able to understand instructions.

5.3.2   The Usefulness of Currently Used Tests and Assessment Tools

Most participants in this study indicated that they used assessment measures frequently. The high number of referrals indicates that people view psychological assessment positively and have confidence in psychological testing (Foxcroft, 2011). The same finding was made by

Foxcroft et al. (2004). In a study conducted by Muniz et al. (2001), psychologists showed positive attitude towards the proper use of tests and would not hesitate to use tests in the exercise of their profession. Participants perceived testing as necessary so as to get baseline information about their clients. Research has shown that psychologists spend most of their time in traditional assessment (Peña, 2012) as is the case in this study.

5.3.3 Test Preference

The results of the current study showed that all participants mostly use non-verbal assessment tools and only participants in private practice used full battery tests. Research shows that projective techniques, the WAIS, WISC and Bender Visual Motor Gestalt are among the top ten of most often used tests as well as the Vinelands Adaptive Behaviour Scales (Carnara, Nathan, & Puente, 2000; Foxcroft et al., 2004; Muniz et al., 1999; Ochoa et al., 2004). Similar findings have been made by this study. Psychologists continue to use non-verbal cognitive assessment measures because they perceive these tools to be culture free or culture fair. The findings of this study are in sharp contrast to the results obtained by Muniz et al. (2001) in their study of testing practices in European countries, where, in the six European countries Spain, England, Netherlands, Slovenia, Croatia, and Belgium, where the WISC and the WAIS were the most widely used tests followed by projective tests. The reason given for this conservative attitude of the psychologists was that they were either satisfied with the functioning of classic tests or ignorant of the new alternatives that were scarce then (Muniz et al., 2001).

Ball, Archer and Imhof (1994) found that psychologists in private practice were administering longer test batteries than psychologists in other sectors. This practice raised questions as to whether financial or some other considerations might underlie test selection (Ball et al., 1994).The current study found that bureaucratic procurement procedures, time factor and the high cost of tests seem to be the reasons for the limited number of tests used in public practice. The difference in psychological service provided by practitioners in public and private practice is glaring. Ahmed and Pillay (2004) were concerned about the difference in type of psychological care provided to clients in public service from that offered in private practice context, particularly the short duration of psychological therapy conducted in the

former. This study noted that participants from the public service reported a large volume of clients that are referred to them daily and limited time to do thorough assessments, hence preference for short assessment measures. Limited resources and affordability in terms of transport prevented clients from coming back for other assessment sessions (Pillay et al., 2009).

However, short tests were perceived to be inadequate because they did not assess the full range of cognitive functioning. This concurred with the findings that short tests carry the risk of construct bias because there is "incomplete coverage of all relevant aspects of the construct" (Van der Vijver & Tanzer, 1997, p. 3). Ardila (2005) noted that in selecting tests, practitioners had to consider the specific cultural quirks because some tests are strongly culture-dependent whereas others are more cross-cultural. Participants in this study perceived some tests as universal, especially some non-verbal tests and others as more English in culture and not suitable for certain cultures even when used with the '*English proficient and Westernised children'*.

5.3.4   Strengths and Limitations of Tests and Assessment Tools Commonly Used by Psychologists

Much of the strengths and limitations have been reported in preceding discussions. Table 4.1 presented a summary of both strengths and limitations of tests and assessment tools commonly used. Most participants perceived the Bender and Draw-A-Person test to be time-efficient, short and easy to administer, instructions are fairly easy, test is easy and non-threatening. The CPM is perceived to be highly correlated with intelligence, easy for people to understand, and with South African norms. Most non-verbal tests are perceived to be culture fair, can be used with any language group and are widely used and internationally accepted. The WISC has been normed and validated internationally. Most tests are perceived to be based on a sound theory and concept of intelligence. The main weakness was that most assessment measures did not have valid South African norms and few can be administered in the language of the client. Participants in this study felt that cognitive functioning is broader than what is measured by non-verbal tests. The CPM was perceived to be looking at visual

reasoning and children tended to guess answers when items got difficult. The Zulu version of the SSAIS has outdated norms.

Cross-cultural research on both the WISC, the DAP and Bender Gestalt has shown that African children from rural areas in particular perform poorly on these tests (Serpell, as cited in Knoetze et al., 2005). The study by Knoetze et al. (2005) on the piloting of local RCPM norms for the isiXhosa-speaking primary school learners in the peri-urban Eastern Cape highlighted the urgent need for local normative data for the CPM particularly when it is administered on children populations from disadvantaged rural and peri-urban township areas. Also, conventional measures of cognitive functioning have been found to be unreliable within the South African context (Skuy & Skuy, as cited in Seabi, 2012).

5.3.5   Language

Language can render certain cognitive assessment measures inappropriate for use among CLD communities (Blumenau & Broom, 2011; Van de Vijver & Rothmann, 2004). Zitianellis (2004) perceives language mismatch as a barrier to effective communication between the client and the assessor. Participants in this study identified three levels at which language could result in biases in test scores; the learner's primary language, the language of the test and the language of the assessor. Almost all assessment measures are in English which is not the home language of the majority of learners in non-Western countries including South Africa (Van Wyhe, 2009). This could present a problem in South Africa where English is a second or third language of the majority of clients (Parker et al., 2007; Van Wyhe, 2009). Such learners are immediately put at a disadvantage when assessment is conducted in a language they are not proficient in.

Herbst and Huysamen (2000) found that children from disadvantaged communities assessed in a language other than that spoken at home performed at a significantly lower level than those who were assessed in their mother tongue. The authors also found that items involving verbal comprehension were biased against children who spoke an African language at home even though they had been exposed to English on a daily basis (Herbst & Huysamen, 2000).

The above findings show that the language that is used to develop a test has important consequences because of its link to cultural and cognitive processes. Participants in this study noted that learners who struggled to understand the content of test items ended up guessing answers. Participants could detect guesswork from the fact that learners were getting difficult questions correct when they had struggled with easier ones.

Peña (2012) found that inadequate training and lack of materials may be one reason why psychologists use outdated procedures, perpetuating treatments that are of questionable validity. Bainter and Tollefson, as cited in Peña (2012) in a survey of school psychologists examining the acceptability of methods used to assess the cognitive ability of CLD L2 students found that 87% of participants responded that it was acceptable to administer a test in English when a student is dominant in English and 74% of respondents found it unacceptable or rarely unacceptable to administer a test in English when a student is dominant in another language, or to use nonverbal tests that require oral instructions without the presence of an interpreter. Of more concern in this survey was that 25% of the respondents believed otherwise. In the same study 56% of the respondents felt that the use of translators during testing was unacceptable and 44% believed that this practice was acceptable. This disparity of opinions and practice patterns is disturbing (Peña, 2012).

Language is not the only issue in communication, cultural mismatch between the practitioner and the child might result in poor performance. Communication flows easily when there is a cultural match but appears artificial and distancing with someone belonging to a different cultural group (Ardila, 2005; Laing & Kamhi, 2003). Cultural mismatch can affect rapport between the child and the assessor. Knowledge of cultural differences and appropriate use of such knowledge is helpful in making an accurate and reliable diagnosis (Guindon & Sobhany, 2001). The majority of participants in this study admitted to cultural mismatch. Of the six participants in this study, only one participant could communicate fluently with the majority of the clients in isiZulu. This indicates a shortage of bilingual psychologists to serve the diverse clientele, the majority of which are isiZulu-speaking. The Department of Basic Education is committed to bilingualism and is piloting the teaching and learning of an indigenous language in South African schools in the foundation phase.

Most participants in this study use interpreters. Ochoa et al. (2004) identified errors that might be committed by interpreters which included, among others, providing information towards answers, providing an incomplete, inaccurate or incorrect translation and providing additional information that alters the original meaning of the response. None of the participants in this study indicated that they had received training on the use of an interpreter when conducting assessments with CLD L2 learners, and a few indicated that they used trained interpreters. This suggests that the probability of error or misunderstandings occurring during translation is high.

Despite the current legislation governing the use of all official languages, the legacy of South Africa's apartheid history made some languages have a significantly higher profile than others (Ahmed & Pillay, 2004). Ahmed and Pillay's (2004) research has shown that student psychologists are willing to learn an African language but this study showed that very few psychologists are able to consult in any one of the African languages. This results in psychologists consulting in the language of their own preference or avoiding consultations with L2 clients (Ahmed & Pillay, 2004). Some participants in this study were unable to assess learners that could not understand English and referred these learners to colleagues who could speak an African language. Other participants in this study could understand isiZulu but were not proficient in the language. Cognitive assessment is therefore not geared towards the care of L2 clients.

All participants in this study agreed that it is a fundamental human right to receive assessment in a language one understands and speaks fairly well. They used assessment measures in English with all their clients, irrespective of the first language of the client, because there are no alternatives available (Ardila, 2005, Foxcroft et al., 2004; Foxcroft & Roodt, 2005). Adaptation during test administration was opted for to enhance understanding of the tasks (Carter et al., 2005; Foxcroft & Aston, 2006). Participants in a study conducted by Levin and Buckett (2011) who comprised of 108 psychologists and practitioners debating whether the argument that English was the language of business was sufficient in warranting testing in English across different language groups, it was suggested that the tests should be

'*specifically suited to appropriate norms*'. In one focus group in the same study one participant stated that "it was very important to determine the language and culture and choose the most suitable test and have alternatives when testing candidates from different cultural groups and languages" (Levin & Buckett, 2011, p. 258).

Foxcroft (1997) highlighted challenges associated with test translation in South African context which include translating tests into 11 official languages, lack of bilingual translators, cost of translation, lack of psychological expertise and lack of bilingual test administrators. These challenges however do not rule out completely the possibility of test translation in South Africa. The study mentioned above by Levin and Buckett (2011) showed that practitioners were not eager to use translators as they had concerns regarding the accuracy of the translation and may have no control over the meaning that a translator imparts.

5.3.6   Level of Education

The current study found that psychologists struggle with learners who are not proficient in the language of the test. The problem is prevalent in children from rural areas and can be associated with socio-economic status (Jinabhai et al., 2004; Knoetze, Bass, & Steele, 2005). Although education is free in South Africa for the disadvantaged communities with the number of no-fee schools increasing, attendance and completion of grades depends on the family's financial circumstances (Pretorius et al., 2009). Education of poor quality, especially in rural areas, might have an effect on cognitive performance (Aston, 2007). Children from middle class background, proficient in English, are perceived to be having no problem with testing. In a study conducted by Skuy, Schutte, Fridjhon and O'Carroll (2001), on urban African high school learners, it was found that learners scored significantly lower on most of verbal and non-verbal assessment measures than their American counterparts. The findings confirmed the need for using norms and approaches which were appropriate to a given population when interpreting performance. Significantly lower scores were yielded for both verbal and non verbal tests. The reported exceptionally poor performance of learners on many of the verbal tasks supports the argument that language has a considerable effect on test performance, because the group of learners were raised in a multilingual environment and educated in a language other than their mother tongue. In a study by Shuttleworth-Edwards et

al. (2004) on cross-cultural effects on IQ performance, it was found that the quality of education has an impact on the learners' performance in cognitive ability tests. Differences in education systems in terms of structure and quality might impact upon the development of certain cognitive abilities, thus affecting performance on a test that measures these abilities (Ostrosky & Solis 2006).

5.4   Theoretical Implications

There are quite a number of theories of intelligence from which assessment measures emanate. Western views of intelligence focus on a person's analytical and memory skills (Sternberg & Grigorenko, 2004; Sternberg, 2003; Van de Vijver & Tanzer, 2004). However, studies in Zambia, Japan, Tanzania, Russia and Kenya by Sternberg (2007), have shown that the notion of intelligence goes beyond these skills. Conventional measures of cognitive ability are not appropriate for use in non-western countries that define intelligence along social concepts (Sternberg, 2003). Participants in this study view assessment measures as based on the idea of intelligence as academic intelligence which they purport is the view held by the majority of people in South Africa. Children are referred to practitioners because they are perceived by teachers and parents as 'not intelligent' based on that they underperform academically. This is a conventional conception of intelligence which is too narrow and results from implicit theories of intelligence imposed upon children.

The majority of tests and assessment measures of cognitive ability are based on a general factor. The use of IQ and 'g' has sparked a debate among psychologists. The argument is over the sole use of test scores in assessing intelligence and ignoring many other aspects of mental ability, like the creative and practical abilities (Sternberg, 2005). Participants in this study are concerned about the emphasis that is placed on IQ scores as if they are 'gold and truthful'. Research has shown that some countries put more emphasis on intelligence needed for survival and success in life rather than intelligence needed for success in school (Sternberg & Grigorenko, 2004, Sternberg, 2007). Children in these countries may be misdiagnosed as underperforming when western tests are utilised (Jinabhai et al., 2004). Intelligence tests therefore have to be context specific (Sternberg & Grigorenko, 2004).

Participants in this study were concerned about the emphasis that is placed on IQ scores in intelligence testing. Such scores may not mean the same thing over cultures (Sternberg, 2004). Participants perceived intelligence and culture to be interlinked and intelligence as a concept that is understood differently by different people and different cultures, with the differences depending on the level of importance each culture places on different abilities. Participants in this study wanted to see new tests developed that will accommodate a broader conception of intelligence. They have assessed children who had outstanding creative abilities that are not measured by the conventional assessment measures that they used. Children had developed superior creative skills, for example designing and making wire cars, although they did not fare well at school. Coming from disadvantaged communities, with parents who could not afford to buy toys for their children, these children used their creative skills to make sophisticated toys for themselves. Sternberg (2007) in his study on tacit knowledge among Kenyan and Alaskan children found that some children may develop contextually important skills at the expense of academic skills and that children possess creative skills that are not recognised in academic tests.

This study found that participants perceived different cultural groups as having different conceptions of intelligence. For children to be considered intelligent or adaptive, they must excel in the skills that are valued by their own group. In this study practitioners with clients from outside South Africa, like the Greek and the Portuguese, found that parents of children they see defined intelligence in terms of creative abilities like being musical or artistic, whereas in South Africa parents defined intelligence in academic terms, like being good in mathematics and sciences. The CPM test is ranked among the top two or three tests having the highest 'g' loadings (Knoetze et al., 2005). The CPM is based on the theory of 'general intelligence' and measures the two components of general cognitive ability; educative ability and reproductive ability. The test has been used extensively across a wide variety of settings in South Africa (Foxcroft et al., 2004) and is the most popular tool among those commonly used by participants of this study.

Some participants in this study indicated that they prefer test adaptation to test development because existing tests are based on a sound conceptual theory of intelligence. Research has shown that theoretically derived tests have severe shortcomings (Carter et al., 2005).The

validity of the test is closely linked to the validity of the theory and if the test is applicable to a variety of cultures, the theory has to be appropriate and relevant for the various cultural groups (Ardila, 2005; Foxcroft, 2004; Murphy & Davidshofer, 1998). Participants in this study were well aware of the shortcomings of the assessment tools they used in terms of theoretical irrelevance and highlighted the need for culturally appropriate assessment measures for use in the South African context. Participants wanted to see assessment measures that capture the different aspects of intelligence.

5.5   Practical Implications

5.5.1   Test Anxiety

Lack of testwiseness is the source of anxiety in test takers (Foxcroft, 2011). Psychological testing is not indigenous to Africa. Age differences, gender and race match or mismatch between the assessor and the client might impact cognitive assessment (Ardila, 2005; Reynolds & Suzuki, 2008). For example, a younger assessor might be looked at suspiciously and an older one with respect in one culture. Isolated environments with just the child and the assessor may create anxiety in children (Ardila, 2005). In this study participants reported various degrees of anxiety shown by children prior to and during the testing process. In some instances learners were not even accompanied by parents or caregivers and had to travel long distances alone to the hospital, which made them even more anxious. Carter et al. (2005) proposed that children should be assessed in their own homes or in rooms away from a hospital or clinic setting, to minimise anxiety associated with assessment situation (Carter et al., 2005). This practice is only possible in South African context where parents can afford to pay for the home service but is not possible for the majority of children from indigent families. The hospital setting is perceived by many participants in this study to be a less ideal setting for testing. All participants in this study agreed that the challenge of test anxiety impacting on testing can be dealt with through creating rapport with the child prior to testing. Given the limited time and limited resources to conduct assessment as indicated by participants in public service, this is a real challenge.

Importing standardized tests and assessment measures from the West may seem to provide a quick solution to the shortage of culturally appropriate tests but their use in South African

context is questionable (Abubakar, Van de Vijver, Baar, Kitsao-Wekulo, Holding, 2009). One of the causes of bias in testing is stimulus unfamiliarity (Abubakar et al., 2009). Participants in this study found that most of the young children they assessed were not familiar with the testing material and testing procedures. They struggled with using paper, pencil, crayon, and puzzles, things that are taken for granted as can be used by all young children. Reasons may be non-attendance of pre-schools, and the tendency to transmit knowledge orally rather than in writing to children (Malda, 2009). Many children from the West are exposed to drawings and puzzles at preschool and therefore exhibit a high level of testwiseness (Malda, 2009).

5.5.2   Dynamic Assessment

Conventional assessment may not be adequate to capture the true level of cognitive functioning in children from diverse educational and cultural circumstances (Grigorenko, 2009) because its focus is on current ability only (Murphy & Maree, 2006). Complementing a conventional assessment measure with dynamic assessment may assist in resolving practical issues related to assessment on CLD L2 learners, and in unearthing children's future potential (Laing & Kamhi, 2003; Murphy & Maree, 2006; Saenz & Huer, 2003). This study found that practitioners reverted to task-stimulus variability method when they encountered challenges in the administration of assessment measures with children from disadvantaged background (Laing & Kamhi, 2003). This method involves using stimuli relevant to the children's context and couching during test administration. Research shows that couching, rehearsal and prompts enhance performance levels in African children previously unfamiliar with standardised testing situations and those with low level of education and reduce the chance of error due to misunderstandings of task requirements (Carter et al., 2005; Foxcroft, 2011). Test adaptations during test administration are reported by all participants in this study and one participant made it clear that she used dynamic assessment when testing for cognitive ability.

5.5.3   Multi-Method Approach

Shuttleworth-Jordan (1995) emphasised the importance of using collateral information to arrive at a holistic and comprehensive understanding of the individual's intellectual

functioning. Participants in this study did not rely solely on scores obtained from testing but used a combination of methods including intake interview, interview with parents, social and school history of the learner and observation. They adopted a multifaceted approach to assessment (Dana, 2005) which they found to be more helpful than formal instruments. Teacher reports provide critical information about the child's behaviour in a school setting and assist the assessors in dealing with the language barrier although it is difficult to establish the validity of these reports (Ochoa et al., 2005). Informal assessments provide important data about the child's functioning within his or her culture and to use this information profitably, practitioners should be culturally sensitive and culturally competent (Foxcroft, 2011; Guindon & Sobhany, 2001; Ochao et al., 2005). Foxcroft (2011) also recommends the use of general assessments when anxiety interferes with performance. In a study conducted by Levin and Buckett (2011) on discourses regarding ethical challenges in assessment, practitioners agreed that assessment results should be used in conjunction with other information, such as performance and interview data in order to form a holistic view.

5.6 Ethical Implications

Section 8 of the Employment Equity Act (RSA, 1998) requires the use of tests that are scientifically reliable and valid, fair and free of bias. The HPCSA requires that psychologists should have sufficient knowledge on the validity and reliability of the test, standardisation processes and other studies conducted in the target group. The onus for test fairness rests with the practitioner. Scientific validation of a test is one of the most common ethical dilemmas in cross cultural assessment (Bayi, 2010). Participants in this study found themselves in a recurrent dilemma whereby they had to rely on internationally developed tests that were not normed for the South African population and very few have been tested for validity. This practice has been blamed on the absence of new tests (Foxcroft et al., 2004; Foxcroft & Roodt, 2005; Miller, 2011; Nell, 2000).

5.6.1 Obtaining Informed Consent

In order for practitioners to conduct psychological assessment in an ethical manner, informed consent should be obtained prior to testing (Foxcroft, 2011). It is sometimes difficult to obtain consent from parents when a child is staying with relatives and parents cannot be

located, or when parents work in cities and leave children in the care of grandparents. This is common practice in children from disadvantaged communities. The current study found that obtaining consent was a challenge especially with children who were referred to participants in public practice. The current main caregiver is the ideal person to contact for informed consent and if the caregiver is unable to give consent he or she should direct the practitioner to the right person to give consent (Foxcroft, 2011). This study showed that almost all parents of clients seen by participants in private practice understood the processes and procedures of testing and gave consent.

5.6.2 Duration of the Assessment and Establishing Rapport

Participants perceived creating rapport with the child as an important pre-assessment activity aimed at easing anxiety and creating an environment conducive to effective assessment. Reynolds and Suzuki (2008) also stressed the need for well trained and competent examiners in administering standardised tests and the importance of creating rapport when dealing with culturally diverse communities. To engage in fair and ethical assessment practice practitioners should have interpersonal skills to establish rapport with clients and put them at ease and to maintain the interest and cooperation of the clients during the test administration (Foxcroft & Roodt, 2005). This could be done through informal interview with the child based on general questions of interest, engaging in play, using stimuli familiar to the child and interviewing the caregiver in the presence of the child prior to formal assessment. Most of the participants in this study acknowledged the need to establish rapport with clients although with some the duration of the assessment does not allow this process to take place as it should.

5.6.3 Limited Resources

In a study conducted by Lindén and Rådeström (2008) to investigate ethical difficulties and ethical dilemmas that psychologists in Sweden and South Africa experience in their practice, psychologists described difficulties concerning demands made by third parties on assessment and evaluations. Parents and clients put pressure on psychologists to produce a particular assessment result which generates financial support and resources from the government. This study showed that pressure was not only from parents and caregivers but also from fellow

professionals, like doctors, who due to limited resources for distribution to clients who experience barriers to learning, like hearing aids for hard of hearing or deaf learners relied on assessment results on which to base distribution of limited resources. In the study by Levin and Buckett (2011) psychologists felt that as an ethical practice and to address the expectations of the clients, both primary and secondary clients should be educated as to the purpose of the assessment and what it can and cannot do.

5.6.4 Practitioner Competency

Psychologists are being asked to assess an increasingly diverse clientele and yet most of them had not received enough training on cross-cultural psychological assessment and had not accumulated enough experience to understand, assess and treat CLD clients competently and ethically (Dana, 2005; Foxcroft, 2011; Foxcroft et al., 2004; Miller, 2011; Ochoa, 2004). Participants in this study agreed that there was a need for culture-sensitive assessment. The study by Ahmed and Pillay (2004) found that the utilisation of psychometric instruments formed a major part of training and yet psychometric assessments are time-consuming and labour intensive, culturally biased and based on universality assumptions. A paradigm shift in training with more emphasis on taking history, background information and observation is required (Ahmed & Pillay 2004). Professional competence and ethical conduct have a significant impact on clients (Levin & Buckett, 2011). Practitioners in Levin and Buckett's (2011) study suggested that proper training maintains standards, quality, control and best practice and ideally training should be ongoing, and as part of continuous professional development training should be life-long (Levin & Buckett, 2011). Participants in this study also emphasised the importance of ongoing training so as to establish competency and sensitivity in cross-cultural psychological assessment.

5.7 Conclusion

It is very crucial to get perceptions of practising psychologists regarding the challenges that they face in their daily practice when conducting assessment for cognitive functioning of CLD L2 learners. Such an understanding will move psychological testing to another level where the body of psychologists will have a common understanding of challenges that they

face in the country and start working on ways to deal with these challenges in order to achieve an ideally culture sensitive and all encompassing assessment strategy.

Studies in South Africa reported education, language, and socio-economic status background, as the core effects impacting on performance in cognitive tests (Meiring et al., 2005). There is a dire need for the training of psychologists in South Africa who will serve the multicultural and multilingual community with confidence and with the sensitivity that the community deserves. There is also a dire need for assessment measures that will take into consideration cultural variables relevant to the multicultural population in the country that will cater for all language groups and will be standardised for the South African community. Leung and Barnett , (as cited in Levin & Buckett, 2011) state that there is a great need for culturally sensitive and appropriate psychological assessment where relevant issues include competence of administrators, test selection, adaptation and translation, administration, application and assessment result interpretation. It is the duty of a practitioner to carefully consider which assessments are appropriate, given the differences in culture and language as well as level of education of the client. Assessment tools and tests should not be selected because of their convenience to the practitioner or because they offer the latest technology even though they may not be classified (Paterson & Uys, as cited in Levin & Buckett, 2011). Selection should be based on merit.

CHAPTER 6: CONCLUSION

6.1   Introduction

This study was undertaken to explore the perceptions of practising psychologists' regarding cross-cultural issues in the assessment of cognitive functioning on LCD L2 learners, focussing on theoretical, practical and ethical implications, in the Pietermaritzburg area of KwaZulu-Natal province.

The study aimed to: i) identify assessment measures that are commonly used by practising psychologists to assess cognitive functioning on CLD L2 learners, ii) to determine the appropriateness and fairness of these assessment measures to the multilingual and multicultural South African society as assessed by practitioners, and iii) to explore theoretical, ethical and practical issues in the assessment of cognitive functioning in a multicultural society from the perspective of practitioners and to iv) find out challenges that practising psychologists are faced with in their day-to-day practice and how they deal with these challenges.

Furthermore, through interviews with practitioners in Pietermaritzburg area, the study aimed to identify challenges that practitioners are faced with in the assessment of cognitive functioning on CLD L2 learners, how practitioners deal with these challenges in their day-to-day practice and to make recommendations on measures that should be taken to address cross-cultural issues in psychological assessment.

Chapter 1 covered the background to the problem, the statement of the problem, aims and rationale of the study, research questions, methodological approach, definition of terms, and the outline of the research study. Chapter 2 covered literature relevant to this research study. In this chapter the following was discussed: theoretical framework, multiculturalism, cross-cultural assessment, psychological assessment in South Africa, issues of validity and reliability, culture and intelligence, and proper training of psychologists. Chapter 3 discussed

the research methodology adopted by the researcher in this study. It covered the purpose of the research, research design, sampling method, data collection process, data analysis, validity, reliability and rigour as well as ethical considerations. In Chapter 4 the analysis of qualitative data is provided. Chapter 5 discusses the findings of the study. This chapter will focus on the significant conclusions, the formulation of relevant implications, the limitations of the study and recommendations.

6.2   Conclusions about the Research Questions

This study was conducted in the Pietermaritzburg area of KwaZulu-Natal province with the aim of exploring practitioners' perceptions on cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners. Research has identified challenges that practitioners are faced with in daily practice in cross-cultural psychological assessment.

The first research question was: *"What challenges are practicing psychologists faced with in the assessment of cognitive functioning of CLD L2 learners?"* It appears that most practising psychologists, both in private and public practice, are faced with immense challenges when assessing CLD L2 learners. The first challenge relates to the perception of intelligence in different cultural communities. Participants perceived intelligence as a cultural concept that can be fully and meaningfully understood within a cultural context, yet they use assessment measures based on a western cultural framework and assumptions that emphasises western views and beliefs, and are standardised for this western community. The African perception of intelligence is social-based rather than individual-based. Tests and assessment tools were perceived to be inappropriate for use in a South African context.

Tests and assessment tools that focus on academic skills acquired through formal schooling and ignore social aspects of intelligence and other cognitive skills like practical and creative skills create problems for practitioners who have to assess a culturally and linguistically diverse South African population. Practitioners are faced with an ethical dilemma of making very important decisions based on Euro-American assessment measures. The majority of the clientele that participants service is from disadvantaged low socio-economic backgrounds and

cannot afford private consultation. This category of clientele can access psychological services from public institutions only. Because of a large number of referrals, and clients' economic deprivation, participants have to do as much within the limited time at their disposal, hence preference is given to short, time efficient non-verbal assessment measures. The non-verbal tests assess a limited number of skills and competencies and are not free from bias.

The absence of valid norms for both international and national assessment measures is a major challenge in cross-cultural assessment. Very little research has been conducted to validate currently used assessment measures. As a result practitioners have to rely on international data. Assessment of children with visual impairments and physical disabilities is a major challenge. There are no assessment measures suitable for this category of clients and practitioners end up using available assessment measures. The interpretation of results where apples are 'compared with oranges' become a challenge. Ethical guidelines require that results be interpreted with 'caution' where norms for the target group are not available. Conventional assessment measures are never used in isolation because of the limitations identified by practitioners. Informal assessment measures are used to supplement test scores. Conducting informal assessment is also a challenge for practitioners because of the time limitation and the unavailability of caregivers to provide baseline information. Fair cross-cultural assessment can be achieved through the use of culturally appropriate assessment measures with valid norms for valid comparative studies.

Language is perceived to be a major challenge in psychological assessment. The issue of language is closely related to the level and quality of education and socio-economic status background of learners. The use of English with children whose first language is isiZulu was perceived as a barrier to effective communication during test administration and reporting. Assessment measures are in English, yet the majority of clients from the rural KwaZulu-Natal cannot communicate competently in English due to the quality of education they receive. It is the basic right of a client to receive assessment in the language that he or she understands well and can express himself or herself in with ease. Participants use non-verbal assessment measures and translators to overcome this challenge.

The use of translators and interpreters that have limited knowledge of psychological assessment and no proper training pose a problem and can be a source of language bias in assessment. Although non-verbal assessment measures are deemed culture-fair or culture free, they have been found to be culturally biased. Participants in this study had to engage in adaptation during test administration. This is viewed as unethical because practitioners are prohibited from any deviations from the instructions given in the test manual. Test adaptation also runs the risk of construct and content bias. Reestablishment of validity has to follow adaptation to ensure that adapted assessment measures are free from any form of bias. Training of psychologists, which is based on westernised values and beliefs that are largely individualistic and focuses on the use of conventional tests, is not enough to prepare practitioners for culturally sensitive assessment. Training that promotes cultural sensitivity and competency is recommended.

The second research question was: *"How do practicing psychologists deal with these challenges in their day-to-day practice?"* There are quite a number of ways in which practising psychologists deal with the challenges in the assessment of cognitive functioning on CLD L2 learners. Some have been covered under the first question above. They include the use of non-verbal tests, translators and interpreters as ways of ameliorating language barriers and ways of speeding up the assessment process in the face of the large volume of clients to be serviced, especially in public practice. Test adaptation sometimes occurs even during the assessment process in an attempt to make assessment measures suitable for the South African context, and informal testing methods are employed to compensate for cultural inappropriateness of conventional tests. Where there is cultural mismatch, the importance is placed on establishing rapport and combining standard measures with general assessment practices. Sometimes referrals to colleagues who are bilingual, are preferred to conducting assessment in an environment where the assessor and the client's primary languages differ.

To compensate for incompetency in multicultural environments practitioners should read extensively on how to conduct fair cross-cultural assessment and attend conferences and professional discussions to keep up to date with current issues in cross-cultural assessment. It

is also recommended that test developers conduct ongoing practitioner training workshops so as to ensure proper administration of tests and proper interpretation of results.

The third question was: *"What measures should be taken to address cross-cultural issues in psychological assessment?"* Participants suggested various measures that should be taken to address cross-cultural issues in psychological assessment. They indicated that the most urgent need is the availability of tests and assessment tools in all official languages normed for each language group. These could be new tests developed locally or tests adapted from existing international tests. Most participants preferred adaptation, standardisation of existing tests and the development of local tests relevant for the South African context in all eleven official languages. They suggested that South African experts in psychology who work in universities should embark on extensive research to validate existing norms and to standardize international tests as well as develop new tests that are relevant for the South African context. Participants wanted to see universities taking responsibility for development of test norms with some viewing the HSRC as the institution that should take the lead in test development and validation. Regarding the use of translators, participants wanted to see a skilled practitioners working together with trained translators.

The Constitution of South Africa prohibits any form of discrimination and commits the state to the achievement of equality. Education White Paper 6: Special Needs Education on Building an Inclusive Education and Training System (DoE, 2001) acknowledge and respects differences in learners due to disability or otherwise and acknowledges that every learner has a right to quality education (Mayaba, 2008). A report by the national Department of Education estimated the number of children who experience barriers to learning to be around 300 000 (Mayaba, 2008). Amongst this number is the category of learners with physical disabilities and visual impairment. Practitioners have raised a serious concern regarding the non-availability of assessment measures for these learners. Practitioners wanted to see appropriate assessment measures being developed for this group.

Moreover, practitioners should be aware of the constraints of the tests that they are working with and make note of these in their final assessment. Participants in this study suggested that

practising psychologists should get as much exposure to children's normal development as possible, read extensively on cross-cultural assessment and consult skilled practitioners when confronted with unfamiliar situations.

For psychological assessment to be effective and to promote access, price regulation is a necessity. Some practitioners and public institutions utilise a limited set of assessment measures with all clients because these are the only measures available at their disposal. The availability of a wide variety of assessment measures will make triangulation and assessment of different cognitive abilities other than academic abilities, a possibility.

Participants urged universities to publish or distribute findings of research conducted at masters level pertaining to test norms and test validation. This is valuable work that lays a foundation for further research and that will lead to the development of new culturally appropriate tests and assessment tools. Practitioners will have more current data for cross-cultural comparison and judgements.

Training of psychologists in the field of cross-cultural assessment has to be strengthened. Continuous professional development and training is necessary for practitioners to keep abreast of the issues relating to cross-cultural assessment as well as ethical issues. Training that addresses local problems in terms of psychological assessment will be appreciated. Universities and companies that develop tests should commit themselves to providing training opportunities and organise grants for practitioners who wish to take part in research and test development. It is highly appreciated that the University of KwaZulu-Natal is working towards ensuring that students learn an indigenous language in their undergraduate study. This is a step in the right direction and will assist in producing bilingual psychologists.

Participants felt that test development, adaptation and norming is a complex process in South Africa but seems to be the only way to fair and valid assessment, and therefore has to be tackled head on. All participants suggested that tests that can be administered in the primary language of the client should be developed together with relevant norms.

6.3   Implications for Theory, Practice and Ethics

Traditional psychometric tests are based on conventional conceptions of intelligence. This conventional definition of intelligence is not ideal because it narrows cognitive abilities down to academic abilities (Sternberg, 2005). Participants perceive intelligence in a much broader way than in the general intelligence theory postulated by psychologists in general. Intelligence is viewed differently by different cultures hence the lack of a general definition of intelligence. What is required therefore, are theories of intelligence relative to the context of the South African population, theories that take African cultural values and beliefs into consideration, and appropriate assessment tools aligned to these theories. The assessment of cognitive functioning on CLD L2 learners using measures designed in the western world deprives learners of fair assessment of their true abilities and is contrary to the prescripts of the legislation and policies of the country. Further research needs to be undertaken to establish assessment tools that will assess children's analytical, creative and practical abilities and also take cultural aspects into consideration. This will have an impact on policy, especially on the education system which tends to unintentionally discriminate against children with creative and practical strengths and focus on academic aspects of intelligence.

Training should incorporate courses that will prepare psychologists for practice in a multicultural and multilingual South African society. It is unethical for practitioners to provide psychological services to CLD learners knowing very well that they are incompetent in that field. The HPCSA states that "a practitioner shall limit his or her practice to areas within the boundaries of his or her competency based on his or her formal education, training, supervised experience and/or appropriate professional experience" (2010, p. 84). Psychologists should be competent not only in administering tests to diverse groups but also to collaborate test use with informal testing methods like taking history, background information and observation.

The HPCSA requires that practitioners deliver a service that accommodates cultural diversity, that is fair and discrimination free and culturally appropriate. Practitioners are further expected to use assessment methods appropriately. The Employment Equity Act 55 of 1998,

Section 8 of Government Gazette (RSA, 1998) requires that assessment measures be valid and reliable, fair and unbiased. This has practical as well as ethical implications. Research has to be undertaken on a large scale to determine the validity and reliability of currently used assessment measures. Practitioners should consider educational and socio-economic status variables in the assessment of cognitive functioning because differences in context can have an impact on performance (Sternberg, 2003). The language issue should be tackled head on right from the training of psychologists to the development, administration and interpretation of assessment measures. The challenge is huge but change is possible one step at a time, if all professional bodies and psychological experts are willing to get on board.

6.4   Limitations of the Study

The participants in this study are from the Pietermaritzburg area of KwaZulu-Natal province. Initially the sample was to be derived from the Durban, Pinetown and Pietermaritzburg areas of KwaZulu-Natal, but the researcher was able to get practising psychologists from the Pietermaritzburg area only. The sample had to comprise of practitioners in private practice but the researcher found it difficult to get these practitioners due to their busy schedules. They did not have time to partake in the study. The sample was extended to practitioners in public service.

The sample from which data was collected is small and purposive sampling was used. This sample is not necessarily representative of the South African practising psychologists. Therefore results of the study cannot be generalised to the population of interest.

The sample was to be gender, racially and categorically balanced, but ended up with an unbalanced representation comprising more clinical psychologists, more female participants and all but one participant were white. This is not surprising because it confirms the trend in psychology practice in South Africa. Statistics show that there are more practising clinical psychologists, more female psychologists and more white psychologists in South Africa.

6.5   Recommendations

This study explored cross-cultural issues in the assessment of cognitive functioning on CLD L2 learners as perceived by practitioners. The following recommendations are made as a way forward to appropriate psychological testing in a South African context:

There is a need for a review and evaluation of the academic training of psychologists in preparation for cross-cultural testing and psychometrics. Institutions that have introduced community service in their curriculum need to be encouraged and supported since this promotes students' exposure to diverse communities and assists in changing perceptions of student psychologists regarding their clientele in the place of work. Training should also be continuous so that practitioners should keep abreast with current practice standards and ethical requirements.

Adaptation and review of assessment tools currently used and the development of new local assessment tools that are appropriate for the South African context would be ideal. Research has to be undertaken to determine that assessment measures that are used are free from bias and discrimination. Training institutions should take the lead in this process. Since KwaZulu-Natal is predominantly isiZulu speaking, it would be recommended that assessment tools for use in the province be developed or adapted in this African language first. A team approach may be used to ensure deal with the challenge of vocabulary uniformity. Presently there is a dire shortage of tests in isiZulu. The study has revealed that due to the imbalances of the past, the majority of learners, although receiving instruction in English, are not proficient in the language. It is recommended that more research should be undertaken to investigate the influence of cultural variables like language, socio-economic status and education, on the assessment of cognitive functioning of CLD L2 learners.

The public, particularly teachers, parents and children, has to be educated on the value and benefits of psychological assessment so that referral can be made early to benefit the learners. The study found that children from disadvantaged families with educational problems are sometimes referred late for assessment, go for assessment on their own not accompanied by a

caregiver and had to consent to assessment themselves. The government should take the lead in advocacy. The Department of Education's Policy on Inclusive Education is an attempt to address this issue. Moreover, the Department of Education (both Basic and Higher) and the Department of Health should strengthen psychological service provided to the public to minimise 'incorrect referrals' and ensure quality service.

The importance of research on cross-cultural issues in psychological assessment cannot be overemphasised. This study is just but part of an extensive study that can be undertaken to get the views of practitioners in all provinces of the Republic of South Africa and from all categories and population groups. However it would be interesting to have more black participants in a similar study and to have the study undertaken in other areas of KwaZulu-Natal and in other provinces as well.

6.6   Conclusion

Prominent among the challenges experienced by practitioners in assessment of cognitive functioning for CLD L2 learners, was the type of tests that practitioners used and the lack of valid norms. Language was also identified as an issue. Participants generally felt that assessment measures that they used are inappropriate for use in the multicultural and multilingual South African context. Some assessment processes are therefore unfair, biased and invalid. This calls for cultural sensitivity in psychological assessment. In South Africa, there is a need for assessment tools that are culturally and linguistically appropriate and standardised for the South African population.

Test adaptation and the development of local tests are top on the list of participants' needs. The process of test adaptation and test development may seem complex and expensive but the assessment of learners with existing tools can be more damaging and more costly to reverse in the long run. This has implications for theory, practice and ethics, which need to be attended to urgently.

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APPENDIX ONE

Ethical Clearance Letter

UNIVERSITY OF ™
KWAZULU-NATAL
INYUVESI
YAKWAZULU-NATALI

27 June 2013

Mrs Annastasia Zandile Zuma 212557483
School of Applied Human Sciences
Pietermaritzburg Campus

Dear Mrs Zuma

Protocol reference number: HSS/0480/013M
Project title: Practitioners' Experiences of Cross-Cultural Issues in the Assessment of Cognitive Functioning in Culturally and Linguistically Diverse Learners for Whom English is a Second Language(CLD L2): Theoretical, Ethical and Practical Implications

EXPEDITED APPROVAL

I wish to inform you that your application has been granted Full Approval through an expedited review process.

Any alteration/s to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study, Research Approach and Methods must be reviewed and approved through the amendment/modification prior to its implementation. In case you have further queries, please quote the above reference number. Please note: Research data should be securely stored in the school/department for a period of 5 years.

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

Yours faithfully

....
Dr Shenuka Singh (Deputy Chair)
Humanities & Social Science Research Ethics Committee

/pm

cc Supervisor: Ms Phindile Mayaba
cc Academic Leader: Prof DP McCracken
cc School Admin.: Mr S Duma

INSPIRING GREATNESS

APPENDIX TWO

Information Sheet

My name is Annastasia Zandile Zuma, I am a Masters Research student at the University of KwaZulu-Natal. I am conducting a qualitative research on cross-cultural issues in the assessment of cognitive functioning in culturally and linguistically diverse learners whose first language is not English. The focus of the study is on theoretical, ethical and practical implications.

The purpose of the study is:

1.   To identify assessment measures that are commonly used by psychologists and intern psychologists to assess cognitive functioning of CLD L2 learners;

2.   To determine the appropriateness and fairness of these assessment measures to the multicultural and multilingual South African society ; and

3.   To explore theoretical, ethical and practical issues in cognitive functioning assessment in a multicultural society;

The findings of this project could inform a national test development and test use strategy and can also be used to share best practices and pave the way for the compilation of guidelines for the administration of psychological assessment in a multicultural and multilingual society.

Your participation in the study will involve an interview with an estimated length of one to one and a half hours. This interview will be audio recorded so as to allow proper analysis. The audio discs and transcripts as well as informed consent will be stored by my supervisor at the archives centre of the School of Applied Human Sciences, at UKZN PMB for five years after which they will be incinerated. Only the interviewer and the supervisor will have access to these audio discs.

There is no risk posed by this study to the participants but as a practicing psychologist, working in a culturally and linguistically diverse society you will benefit from the findings.

Your name and identifying information will not be used in any part of the study and the report. Confidentiality will be maintained throughout the study. A pseudonym will be used for reference purposes.

You are participating in this study willingly and you may choose to withdraw from the study at any time. You may also request that any data collected from you not be used in the study.

If you have any questions or concerns please contact Zandile Zuma (0731421194; zuma.zandalee@gmail.com) or Ms Phindile Mayaba, my supervisor (033 260 5364;mayabap@ukzn.ac.za).

Consent Form

I agree to participate in the research study and I am aware of what is required of me. I have read the information provided and support the study fully.

I understand that I am participating voluntarily and can withdraw from the study at any time without any negative consequences. I also understand that I will remain anonymous throughout the study and all the information obtained from me will be kept confidential.

Participant's Signature   Date signed

Researcher:

Supervisor:

APPENDIX THREE

Interview Schedule

Fifteen questions will be used as a guideline. These questions were adapted from Foxcroft et al. (2004):

1. How often and for what purpose do you use psychological tests?
2. Which tests do you use most frequently? (Identify three to five types of tests and /or add other tests that you use)
3. How diverse is your clientele?
4. How appropriate are the tests to your clientele?
5. If you think critically about the tests that you use most frequently, what are their main strengths?
6. What are the limitations of the tests?
7. How do you deal with challenges in administering psychological tests?
8. Looking at the multicultural nature of the society, what is your feeling about the appropriateness and fairness of these tests?
9. Do you find that your use of psychological tests adds value to the professional services that you render as a psychology practitioner?
10. What are your most important needs related to psychological test usage?
11. How can the needs that you have identified be addressed?
12. How do you see the quality of psychological tests in South Africa?
13. Who should take responsibility for addressing the psychological testing needs of practitioners?
14. Do you see a need for the development of new tests in South Africa? If so how should this be done?
15. Who, do you think, should take responsibility for the development of new tests?