

CHAPTER 1 – INTRODUCTION TO RESEARCH

1.1 - INTRODUCTION

For many years diagnosis through the use of psychological assessment measures has been at the crux of the psychological field. Authors such as Sicile-Kira (2006) indicate that in order to provide an adequate and efficient level of service and assistance, obtaining an accurate diagnosis is of the utmost importance. Furthermore, through the use of psychological testing measures, a psychological professional is able to not only diagnose/identify a disorder, but also develop interventions most suited for the treatment and eventual management of said disorder (Sicile-Kira, 2006).

In South Africa, a study by Foxcroft, Paterson, Le Roux, and Herbst (2004) indicated that almost half of the participants in their survey used psychological assessment measures frequently. In addition, this study further indicated that psychological assessment measures in the form of cognitive tests are regularly administered to children and adolescents for the purposes of assessing cognitive functioning and identifying potential learning and/or other barriers that can impact their scholastic progress. Also, cognitive tests such as the Wechsler Intelligence Scale for Children (WISC) and the Senior South African Individual Scale (SSAIS) (Foxcroft et al., 2004; HPCSA Psychometrics Committee, 2010) are often used to make specific recommendations regarding school placement, as well as other interventions for the support of children and adolescents who experience barriers to learning and development.

Despite these apparent high levels of test usage in the South African context, Laher and Cockcroft (2014) indicate that it remains a highly controversial topic that is linked to South Africa's troubled political history and the use of psychological assessment measures in an

“indiscriminate, unfair, and biased” manner (p.303). Furthermore, in post-apartheid South Africa, the use of psychological assessment measures is plagued by concerns of administering tests that are not considered suitable in a linguistically, socially, economically, politically, and culturally diverse society (Foxcroft et al., 2004; Laher & Cockcroft, 2014).

Nonetheless, as indicated by Laher and Cockcroft (2014), psychological assessments can make a valuable contribution to the development of South Africa and the well-being of its citizens. Within the context of education and the use of psychological assessments such as cognitive tests with children and adolescents, these authors indicate that “psychological assessment can contribute meaningfully towards transforming education” (Laher & Cockcroft, 2014, p. 312). However, to do so, the focus should not only fall on the development of more appropriate cognitive assessment measures or the standardisation of existing ones, but also on the application of for instance dynamic assessment which is considered more suitable in assessing the cognitive functioning and potential of children from diverse backgrounds (Amod & Seabi, 2013). In addition, Amod (2013), Greenop, Rice, and De Sousa (2013), and Laher and Cockcroft (2014) further recommend a shift from using conventional intelligence tests that focus more on crystallised intelligence and prior learning, to using cognitive assessment measures that focus more on fluid intelligence and the manner in which children process information.

However, when investigating publications by Foxcroft et al. (2004) and Greenop et al. (2013), it would appear that few South African practitioners have made this shift. This became the focus of the present study which aimed to not only explore the perceived value of cognitive testing on children living within the South African context, but also on exploring the reasons why South African practitioners appear to give preference to more conventional assessment measures over those that are considered more suitable for use in the

South African contexts.

1.2 – RATIONALE

As noted, Laher and Cockcroft (2014) refer to the value of psychological assessment measures in the development of South Africa as a country. However, to do so it is vitally important that South African practitioners begin by utilising assessment measures considered contextually suitable. In better understanding the above, the role of cognitive testing will first be investigated.

In the process of testing, an individual's cognitive functioning is measured through the use of both standardised and ecological tools (Ortiz, Lella, & Canter, 2010), and as explained by Cockcroft (2013), is used to understand the “developed academic potential” (p. 48) of said individual. Through this explanation one is able to infer the purpose of such testing as being rooted at “gauging” the potential of any given individual insofar as cognitive abilities and processing are concerned. Where, during the apartheid era, psychological testing was used as a tool to legitimise unfair behaviours within the education system across the races, its value in the present day rests in early identification and subsequent immediate intervention of many scholastic difficulties (Laher & Cockcroft, 2013; 2014). As highlighted by Mash and Wolfe (2013), intellectual testing (on the basis of one's level of cognitive functioning) aids in the diagnosis of various disorders some of which include those on the Autism Spectrum, as well as Attention Deficit Hyperactivity Disorder (ADHD), through which immediate and effective intervention proves possible. Through the recognition of a need for effective assessment measures within South Africa – capable of competing on an international level – practices of adaption have come to the forefront with recent efforts observed in the revision of the Wechsler Adult Intelligence Scale, Fourth Edition (WAIS-

IV) and its standardisation for the South African context, as well as the development of the Learning Potential Computerised Adaptive Test (LPCAT) (Laher & Cockcroft, 2014). These efforts illustrate a need for improvement and betterment of testing measures within the country as opposed to their being completely disregarded (Setshedi, 2008).

As it stands, the literature available on measures used for cognitive testing in South Africa focuses more on internationally standardised variants where the use of culturally inappropriate assessments is often observed (Foxcroft et al., 2004). According to Foxcroft (2004) and her colleagues, this is most commonly the case with measures such as the Wechsler Intelligence Scale for Children (WISC), which remains in high rotation even amidst concerns regarding its suitability for multicultural contexts such as South Africa. In addition to this are concerns surrounding the lack of normative studies for such tests not providing practitioners with appropriated norms for interpretation (Foxcroft et al., 2004). The problem in this regard lies in the perceived benefits of such measures in contexts plagued by a variety of issues, of which lifestyle and language inequalities (most centered on financial constraints) prove primary (Foxcroft et al., 2004). One finds that, while South African assessments such as the JSAIS and SSAIS are still in frequent use based on suitability of context, their relevance for the 21st Century learner often comes into question. Difficulties in selection of assessments by practitioners now lie in the issue of relevance versus standardisation. Where the international variants prove more modernised in terms of themes and dates of development, norms utilised for interpretation are not suitable for the South African scholar; the South African variants satisfy the difficulty surrounding norms given the country of development, however fail to account for all members of the population as the Black populace was left out at the time of development; in addition to that is the issue

of relevance as these tests were developed in the early 1990s (Cockcroft, 2013; Foxcroft et al., 2004). Controversies arise for both variants as neither fully satisfies the needs of a multicultural context.

While literature related to research studies on context and its salience in assessments is available in its numbers, those that focus predominantly on why a practitioner utilises the diagnostic tools he/she uses is not. There seems to be a gap in understanding pertaining to the use of more conventional, internationalised assessment measures within a society as multicultural as South Africa and the reasoning behind it. As a result of the above-mentioned points speaking to test use, the focus of this research is two-fold. Firstly, this research will look to explore the perceived value of cognitive assessment measures on South African children as viewed by psychological practitioners, and secondly it will look to gain insight into psychological practitioner preference regarding measures of cognitive testing within the South Africa context. In so doing, practice (in terms of test selection/preference) may be better understood through reasoning, as provided by practitioners.

Given the disadvantageous history of a majority of the South African population where one cohort was favoured over several others, the socio-economic status (SES) of many – and subsequent access to adequate resources – proved lower overall (Amod, Skuy, Sonderup, & Fridjhon, 2000). As a result, developmental ability was too slighted due to generational circumstance (Amod et al., 2000). With that knowledge base, the utilisation of cognitive tests such as the WISC is still an active diagnostic tool (Foxcroft et al., 2004), a troubling thought most especially in the diagnosis of specific learning disorders (SLDs). As briefly touched on previously, cognitive tests work - in the most basic of definitions - to pinpoint a child's level of functioning at a given time; it is, for all intents and purposes, a snapshot of a

child's ability (Cockcroft, 2013). Given the varieties in backgrounds children have, not only in South Africa but across the globe, it would seem essential to take into consideration the very same variations that may exist as far as understanding of concepts as defined in a given context. Seeing as understanding, and therefore interpretation, emerges differently, perhaps efforts to better recognise how it is a child reaches this understanding will prove more telling. This is what appears to be the predominant shortfall of assessments. It seems as though the focus is on a child's ability to accommodate, opposed to understanding their initial process of assimilation. A child's prior knowledge (schema) is dependent on the tools utilised for its initial acquisition where, much like the epistemological-ontological dyad, misinterpretation at acquisition is likely to yield negative results (Mooney, 2009). Failure during the initial stage predicts outcomes of which are often incorrect and deemed not suited for a given context. This is the common issue in the diagnosis of SLDs, introducing labels associated to being "deficient" and/or "incapable" being imposed on the child without an understanding of how said child processes information being undertaken. With engagement with methods of assessments more focused on dynamic assessment where differential methods of understanding (such as information processing) are undertaken, speak more closely to, and favouring, notions of accommodation over assimilation (Sternberg, Kaufman, & Grigorenko, 2008). This is the shift necessary for South African assessment measures, following practitioner awareness of assessment preference aligned with context. Where existing research has looked at frequency of use of particular assessments, this research will look to understand the reasons associated to the frequencies prevalent in so doing, encouraging more consideration by practitioners regarding the tests they use on South African children; outcomes of which may encourage changes in test development in South Africa to better suit the 21st Century child and place the country on a more global testing

stage.

1.3 – AIM OF RESEARCH

Keeping the above mentioned in mind, the predominant aim of this research was:

To explore the perceived value of cognitive testing on all children living within the South African context (including those with barriers to learning and development), as well as gain insight into the reasons why practitioners appear to give preference to more conventional assessment measures over those considered more suitable for the South African population.

1.4 – RESEARCH QUESTIONS

Based on the noted aims, the primary research question that guided this study is:

- What are the perceptions of South Africa practitioners regarding the value of cognitive assessment measures within the South African context?

In exploring this further, the following questions were posed:

1. To what extent do participants perceive the use of intellectual assessment measures as beneficial for the identification and support of a child with barriers to learning and development given the varying contextual factors influencing child development in South Africa?
2. What factors influence the choice and use of intellectulay-based assessment measures within the South African context?
3. What are practitioners' perceptions regarding the value of information processing assessments when compared to more conventional intelligence tests?

1.5 - CLARIFICATION OF RESEARCH CONCEPTS

This section will be looking at the four concepts that will be discussed in the course of this report. Research specific definitions will be provided for each concept as a means of

providing the reader with a clearer understanding of their use within this study.

1.5.1 Cognition

Within the context of this research, the term ‘cognition’ will be utilised in reference to psychological assessment. Cognition refers to a process of knowledge acquisition where the complexities of thinking are considered across various developmental levels of the lifespan (Rupp & Leighton, 2017), thus through its testing, focus on approaches to problem solving one applies is more closely observed as opposed to the final outcome provided; from this, multiple abilities may be recognised (Bedell, 1994; Saklofske, Reynolds, & Schwean, 2013).

1.5.2 Intelligence

‘Intelligence’ is perhaps one of the more difficult notions of definition within psychology, as its use and understanding is dependent on the context under which it is used (Foxcroft, 2011). Its value is further cemented by how this ‘intelligence’ aids in survival within said context (Johnson, 2015). Given the variations in definition that exist, it is important to clarify its use for purpose within this research. ‘Intelligence’ - also known by the term IQ - is a quantitative measure used for the interpretation of one’s cognitive abilities, illustrating one’s potential scholastic outcomes (Cockcroft, 2013). As described by Sternberg et al. (2008), it is a measure of a predictive capacity highlighting possible outcomes for success on the basis of cognitive abilities at a given time. Thus, ‘intelligence’ is the quantitative outcome from which cognitive tests are utilised in the measuring of potential, highlighting one’s strengths and weaknesses (Sternberg et al., 2008).

1.5.3 – Conventional assessments

Conventional assessments within the context of this research refer to the more standardised variants of psychological assessments used for purposes of obtaining an objective measure of a sample of behaviour (Owen, 1998). Instruments used for assessment include those

centered on obtaining a quantitative outcome from which verbal abilities, perceptual reasoning and working memory, to name a few.

1.5.4 – Information processing assessments

Assessment focused on information processing looking at the manner in which one processes information in order to gain understanding for immediate or delayed use. Often referred to as dynamic measures of assessment, these measures assess both existing knowledge, but also potential knowledge following mediated learning (Lauchlan & Carrigan, 2013).

1.5.5 – Context

Context in this research is utilised in much the same way as Urie Bronfenbrenner's theoretical framework, centered on the individual and his/her immediate environment (Bronfenbrenner, 1979). Its use is event specific, speaking predominantly to notions relating to the environment in which one lives/grew up, often societal in nature.

1.6 – THEROERTICAL FRAMEWORK: THEORY OF PERCEPTION THEORY OF REASONED ACTION

This section will focus on beliefs and perceptual understanding. With the aim of the research being to gain insight into the perceptions of practitioners regarding the value of cognitive assessments, an understanding of the grounding of these needs to be undertaken. In so doing, notions surrounding beliefs, attitudes and behaviour will be initially explored prior to engagement with the theory at hand.

1.6.1 – Beliefs

Beliefs are defined as judgments of what one deems to be true or false; they're linked to objects, but have no scientific basis (Allen et al., 2009). According to Furnham (2005),

beliefs are associated to one's values often driven by feelings, intuition, or cultural norms. With such belief systems set in place, attitudes are in turn developed (Furnham, 2005).

1.6.2 – Attitudes

In continuation of the beliefs one holds, the attitudes developed are centralised on the feelings and thoughts experienced (positive or negative) towards a given object/situation/person (Bordens & Horowitz, 2012; Furnham, 2005). This mental state of processing is made up of four interconnected structures inclusive of: cognitions, affective responses, behavioural intentions, and the last of which is that of behaviour (Bordens & Horowitz, 2012). With the development of attitudes, manners of thinking are soon formed from which perceptions emerge. As explained by Bordens and Horowitz (2012), one's affect (emotions) can lead to the development of views (perception).

1.6.3 – Behaviour

Moving from ideation to action, behaviour is as a result of one's beliefs and developed attitudes (Bordens & Horowitz, 2012; Furnham, 2005). For the shift from ideation to action to occur, motivation for action needs to be identified; for human beings the most common of these motivations for action include: biological needs, affiliation, dominance, and aggression, to name a few (Argyle, 1994).

In essence, behaviour is brought about by a motivation centered on one's beliefs and attitudes. Should the beliefs and attitudes one holds be strong, their motivation to act on those basic feelings and thoughts in turn grows in strength. This occurrence can too be understood in a circular manner headed by beliefs and ending with the solidification or altering of beliefs on the basis of outcomes yielded (Figure 1.1).

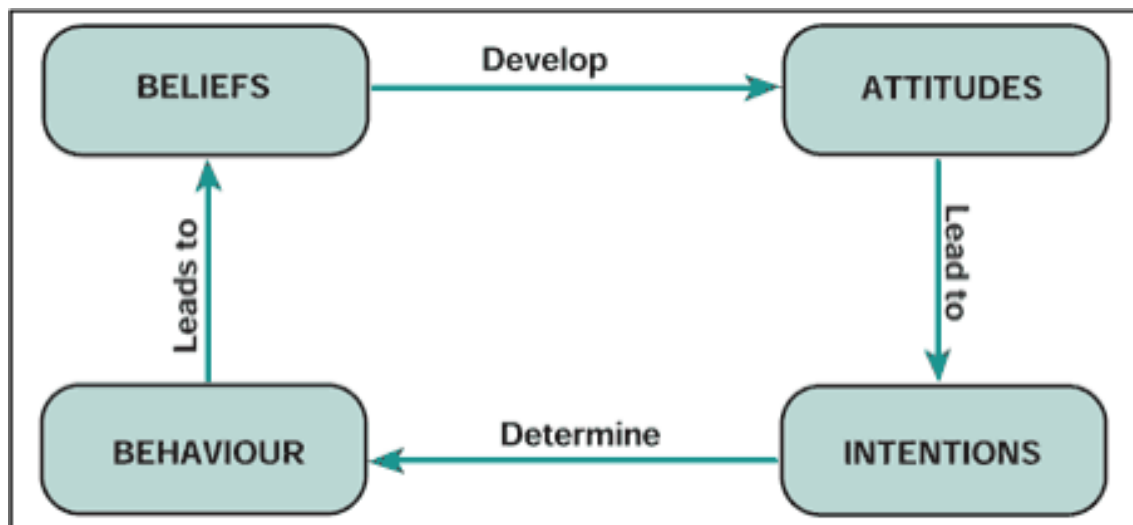


Figure 1.1 – TRA flow of reasoning.

With the above in mind, what is to follow is an explanation the Theory of Reasoned Action (TRA) as a model of understanding perception.

Theory of Reasoned Action (TRA)

TRA is one of three models of persuasion developed in 1967 by Martin Fishbein and Icek Ajzen, and was derived from previous research based on the theories of attitude (Fishbein & Ajzen, 2010). As the name suggests, this theory looks to understand action through the relationship that exists between attitude, views (perception) and behaviour. Where one's attitude is a motivator for behaviour (Argyle, 1994), the premise of this theory involves predicting one's action on the basis of said attitude (Fishbein & Ajzen, 2010).

TRA works to predict action through tracking the elements that have led to it. The factors most influential in this regard are two-fold, namely, attitudes and subjective norms, thus societal in nature and formulation.

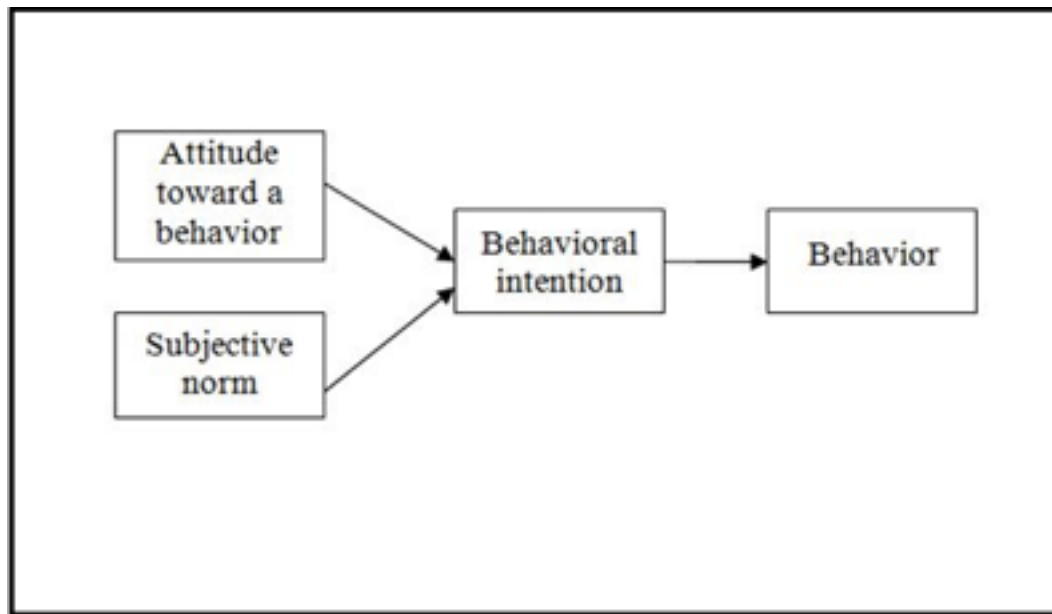


Figure 1.2 – Developed attitudes and beliefs (social norms) influence one's thoughts/feelings thus leading to an aligned behaviour

Relevance of this model for this research lies in the purpose of the research, that being to investigate the perceptions of psychological practitioners regarding cognitive assessments.

As explained above, beliefs, attitudes and views work in combination to predict behaviour, from which motive derives. In understanding just a single element of the above, behaviour can be better understood. This speaks to the aim of this research: in exploring practitioner beliefs and views of assessments, a better understanding of their behaviours in the selection of assessments can be obtained.

While informative in its explanatory nature, Hale, Householder, and Greene (2002) highlight the inability for the theory to explain behaviours of an impulsive, spontaneous or mindless nature. Its effectiveness thus rests on recurrent, standard behaviour patterns, elements of importance for this research in obtaining a definitive understanding of practitioners' perceptions for further application across contexts focused on assessment.

1.7 – OUTLINE OF RESEARCH REPORT**1.7.1 – Structure of report**

HEADING	CONTENT/DESCRIPTION
Chapter 1	Introductory section of research report inclusive of: rationale, aims, research questions and overall outline of paper
Chapter 2	Literature review focused on existing literature available on intellectually based assessments, with expansion on thinking through the use of theoretical knowledge.
Chapter 3	Methodological section looking at steps undertaken to the completion of this study. Inclusive of: research paradigm, research design, sampling, instruments, procedures and time frame, data analysis and ethical considerations.
Chapter 4	This section attends to the results and discussions of the research following analysis of data obtained. Also inclusive of reflexivity during research.
Chapter 5	Overview of report, including: limitations, recommendation, strengths, contributions and concluding remarks of the study

CHAPTER 2 – LITERATURE REVIEW

Given the nature of knowledge and research, current modes of thinking are heavily influenced by previously established literature and findings (Dawidowicz, 2010). The basis of this research is no different as pre-existing material was used to guide and inform the direction of the study. In exploring the concepts underpinning this research, two points will be under discussion; firstly the notion of cognitive testing and the use of the measures therein, followed by an exploration of the factors influencing psychological practitioners regarding their preferences for the cognitive assessments they use in practice. In achieving the above, theories of development that focus on context will be applied.

It is not uncommon to find the difficulties experienced by the citizens of a developing country centred on and around issues linked to poverty, lack of socio-economic growth and inequality (Guiga & Rejab, 2012). Whether the premise of it is socio-economically inclined, or related to grievances of power, major imbalances emerge and with them the introduction of inequalities, as witnessed within the South African Republic during the apartheid era (Boddy-Evans, 2015). The most overwhelming outcome of the above-mentioned inequalities seldom impacts those in direct contact with the situation, but rather filters down and over to generations following the initial victims (Servaes & Oyedemi, 2016). This, as a result for some, echoes the initial inequalities experienced by the first generation (initial victims) and are still felt by the third, and even fourth generation as the resources to a) rectify, and b) eradicate the prevalence of such problems are unattainable (Servaes & Oyedemi, 2016). An awareness of the existence of such cross-generational hindrances speaks to the need for a more inclusive manner of understanding the individual, most especially school going children.

While within the South African context, issues related to disproportionate generational backgrounds often produce the most evident of inequalities amongst residents (commonly centered on finances and access to resources), they are by no means the only sources of disadvantage that children face concerning their scholastic development (Coon & Mitterer, 2012; Gilmartin, 2001). As illustrated in a study conducted by Lamy (2003), scholastic development is also greatly influenced by issues viewed as being indirectly associated to the child. The study conducted by Lamy (2003) describes the impact family risks (inclusive of unfavourable living conditions) have on the mathematics and reading achievement of school going children. According to the findings, households deemed high risk in terms of: maternal depression, parenting style and poor parental education levels just to name a few, compromise outcomes of mathematics and reading achievements. Of the studies correlated within Lamy's research, family income proved a repeated predictor for academic achievements (mathematics and reading), with greater impacts and effects being observed in higher grades should resources be limited (Lamy, 2003). An expected finding, given the previously mentioned impact of cross-generational inequalities on issues relating to access to resources is concerned (The World Bank, 2011). From a developmental perspective, poor nutrition fosters poor cognitive development; from which the most overt repercussions of this are observed within the classroom. Issues of 'intelligence' are thus considered paramount. With 'intelligence' being recognised as a predictive measure of one's academic potential (Jordan, Carlile, & Stack, 2008), the value it holds in the eyes of many is understandable, most especially given the discourse of "deficit" that often accompanies poor results. In better conceptualising 'intelligence' and its salience within the classroom, a brief definition of the term will be undertaken.

2.1 – INTELLIGENCE AS A MEASURE OF COGNITIVE ABILITY

The notion of ‘intelligence’ is one that is often hard to define as it often depends on context and scenario, thus by definition, intelligence could refer to one’s ability to successfully adapt to a particular domain through the utilisation of tools available (Campion, Brown, & Ferrera, 1982; Coon & Mitterer, 2012). As such, intelligence comes in varying forms inclusive of: emotional, social and academic functioning, to name a few (Campion et al., 1982) from which tools of measure may be conventional (psychometric) or aligned with dynamic processing in nature. The domain of academic intelligence (in terms of the functioning) is one most centered on one’s ability to succeed within school/testing scenarios, thus representing cognitive potential (Sternberg et al., 2008). While the act of ‘learning’ is innate (United Nations’s Children’s Fund, 2012), the extent to which this is successful and favourable for long term application is not which is why process of attainment is of great importance as highlighted by theorist Lev Vygotsky.

Vygotsky believed in a method of understanding the mind that was geared at a more scientific underpinning where the processes of ontology and epistemology proved mutually inclusive (Mooney, 2009). In his theory of development (in which cognitive development was too considered), Vygotsky highlighted how the methods/tools one uses to investigate the mind can determine the results yielded/content obtained, regarding the mind (Mooney, 2009). What this means is that the process undertaken to obtain information is important for retrieval at a later stage; should input be unsuccessful (or inappropriate for a given individual), accurate retrieval will too be unsuccessful (Coon & Mitterer, 2012; Shaffer & Kipp, 2014). Where teaching and learning occurs in various contexts – whether school or home - the tools used are similarly utilised in varying ways. According to Vygotsky’s sociocultural theory, this is best undertaken in collaboration with others through which the

presence of the other mediates learning by guiding fluid knowledge and expanding crystallised knowledge when/where necessary (Coon & Mitterer, 2012; Kozulin, Gindis, Ageyev, & Miller, 2003). This not only introduced the role of a third party in learning, but also cemented the importance of social interaction where learning is concerned. Additionally, given the fluctuating times of interaction during which learning may occur, Vygotsky's theory broke free of the notion of a presence of "biologically fixed stages of development" (Green, 2014, p. 19), and rather assumed the prevalence of a sequence as far as development is concerned; when necessary and where necessary.

Development of knowledge through the use of mediators (human or otherwise) as tools for psychological development through which "higher mental function[ing]" may be obtained is what separated Vygotsky's work from his mentors as the active engagement of the external other (i.e. parent or caregiver) was introduced as vital to the process of learning (Green, 2014, p. 20). Such learning develops knowledge from which cognition is fostered, and according to Vygotsky, is most dependent on the tools initially utilised.

Moving on, as mentioned previously, the inequalities of the past become most evident in generations to follow, with evidence of this being observed in intelligence testing scenarios. In engaging with this topic of 'intellectual' testing, an understanding of it is required.

2.2 – WHAT IS INTELLECTUAL TESTING

In much the same way as the notion of 'intelligence' proves hard to define, the same can too be said regarding the tools used for its measurement. Ranging from the more conventional, psychometric variants to the dynamic and information processing measures - while different in design - the localised purpose is to obtain a "psychological measurement of intelligence"

(Sternberg et al., 2008, p. 7) deemed most predicative of success in a given context. Through the use of a variety of components (within each test) looking to recognise common patterns of mental processing, assessors are able to identify the cognitive functionality – thus ability – of individuals on the basis of responses provided (Sternberg et al., 2008). Intellectually based assessments work to measure an individual's cognitive abilities across constructs focused on mental cognition or behavioural processes (Foxcroft et al., 2004). From this an understanding of one's cognitive abilities may be derived through interpretations of functional components, the most basic of which include: vocabulary, arithmetic, working memory, perception and processing speed (Sternberg et al., 2008). Underpinning these processes are two types of intelligence, namely fluid (*Gf*) and crystallised (*Gc*); forms of intelligence from which either expansion of prior knowledge (*Gf*), or acquisition of new knowledge from teaching (*Gc*) may be undertaken (Coon & Mitterer, 2012; Sternberg et al., 2008). Each is reflected in the results obtained in cognitive testing.

Where in the traditional manner of understanding intelligence, future outcomes and success probability was the focus, modern understanding has shifted to a more cognitive-ability quotient where multiple intellects are favoured over just one (Sternberg et al., 2008). As such, conventional measures such as the Wechsler Scales (where content is focused upon) are being looked at differently through which methods of processing are more closely looked at, thus placing less emphasis on the Full Scale scores in favour of the individual index outcomes (Sternberg et al., 2008). This is beneficial as these highlight isolated strengths and weaknesses of the individual being assessed. With this comes the emergence of dynamic techniques of measure which look at 'intelligence' (in terms of the numerical value) from an interactive perspective identifying an individual's skills and learning potential (Lauchlan & Carrigan, 2013). In much the same way as the Kaufman Assessment

Battery for Children (K-ABC) and Cognitive Assessment System (CAS), dynamic assessment measures assess the cognitive development, processing and potential of individuals (rather children in the case of the above) by focusing on the processes undertaken to solve problems and not the content therein (Keith, Kranzler, & Flanagan, 2001; Sternberg et al., 2008). As stated by Sternberg and his colleagues, no assessment covers all components of cognition, thus “there is no one, wholly appropriate test” (2008, p. 43); treatment of assessment and testing as a multifaceted, complex process indicates strides in cognitive measurements, hence the interest and need for a shift.

The development of more processing based assessment measures came with the recognition of the presence of unfair measuring systems in society. Where tests deemed as standardised were observed as producing disproportionate mean outcomes differing from one race to another (Reynolds & Suzuki, 2016), issues of consistency and validity emerged. Taking a look at South Africa’s use of intellectual testing pre- and during Apartheid, its use and favour was to legitimise firstly job categorisation, and secondly educational access and content on the basis of ‘differential cognitive abilities’ (Laher & Cockcroft, 2014). While assessments were often developed, they were standardised for the White population while still being used on the Black population to further support and emphasize the perceived differences (on the basis of numerical quotients obtained) that existed across population groups (Laher & Cockcroft, 2014). Following claims that the Human Science Research Council (HSRC) was not producing sufficient ‘cross-cultural’ research outcomes, development of context specific norms for the SSAIS-R soon emerged, suitable for ‘environmentally disadvantaged’ children. With this new development, all races were included with the continued exclusion of the Black demographic, resulting in testing - as viewed by this population – as negative and oppressive (Laher & Cockcroft, 2014). While

still cautious in acceptance, present day affect of many towards assessment in South Africa is shifting.

According to Laher and Cockcroft (2014), while divisions remain within the Republic, these are no longer wholly on the basis of race/ethnicity, but more so on the basis of SES. Where schooling systems and background (in terms of social class and access to resources) have become the points of difference, cognitive testing strategies are focusing on developing measures culturally and socially inclusive of all the lived experiences of the population (Laher & Cockcroft, 2014). Circling back to dynamic assessment measures, it is the opinion of Laher and Cockcroft (2014) that this form is “[fast becoming] one of the best ways to establish equity in testing” (2014, p. 10). While a strong statement, on the basis of the variations that exist within the South African society in terms of access and finances, measurements centered on knowledge adaptation (*Gf*) may prove more favourable. Setshedi (2008) speaks similarly to this by highlighting the benefits experienced in assessments that utilise a variety of sources in determining outcomes, one of which is identifying strengths to be fostered and weaknesses to be managed. For contexts of a multicultural society where thinking, understanding and interpretations differ across a spectrum, it appears that gaining insight into the ‘how’ one thinks is more suited when trying to measure potential success, specifically in cases of contextual ‘intelligence’.

In an attempt to better understand the outcomes of the present, a look into context may prove beneficial. In so doing, a brief exploration of the South African Republic will be undertaken where educational context and lifestyle - across races – will be observed.

2.3 – EDUCATION IN SOUTH AFRICA

As a country, South Africa has undergone a multitude of changes spanning from pre-colonial to post-apartheid times (Abaunza, 2013). While the changes spanning these time frames were political in nature, the repercussions were also felt in other areas of society, one of which being education. With a change in “leadership” and power, a reform in the focus of the education system was observable in order to fit the times (Abaunza, 2013).

2.3.1 – Education spanning pre-colonial to the Apartheid Era

The pre-colonial education system in South Africa was centered on community-based teachings that were aimed at preparing children to aid within the community upon schooling leaving age (Abaunza, 2013). Colonialism brought forth an education system that not only introduced Western religion, but also introduced teachings focused on slave labour and English – the language of trade and perceived intellect - across the continent (Abaunza, 2013; Schmied, 1996; Shillington, 2005). The last, most politically altering shift in education occurred during and after the Apartheid Era. During Apartheid the education system was of a segregated nature where the development of a system for each race was brought into legislation; Bantu (Black) Education introduced in 1955, Coloured Education in 1964, and Indian Education in 1966 (Parmegiani, 2009; Soudien, 2002). It is important to note that the curriculum in these systems was markedly different and lower (in quality of education and content) than those of their White contemporaries; each racial cohort was taught according to whatever job the government deemed fitting, ranging from farmers and labourers, to traders and domestic workers (Abaunza, 2013; Parmegiani, 2009). In better understanding this, one could utilise Urie Bronfenbrenner’s systems theory through its elaboration on each level of the theory (inclusive of the microsystem, mesosystem, exosystem, macroosystem and chronosystem) having a role to fulfill for success of the entire

system (Bronfenbrenner, 1979; Newman & Newman, 2009; Shaffer & Kipp, 2014) In much the same way, education of the people of the Republic was to satisfy the needs of the country's workforce in accordance to the racial classifications of the time (Abaunza, 2013). While isolated in conception within the system, Bronfenbrenner explains that each level functions somewhat interdependently, thus failure on one level may impact another (Newman & Newman, 2009) This too applied to education during Apartheid where failure of substantial labour in a given racial cohort (for example Black farm labourers and White farmer) led to decreased trade material for the country's economy. Where one failed to be adequately produced, another was compromised.

Given the disproportionalities of the time, the poor levels of teaching very quickly reflected in the learning, as observed in the inadequate acquisition of language, trade and overall abilities of the children of the time (Soudien, 2002). Years later one still finds the consequences of these inequalities within society, most observable in socio-economic status; differences tending to be more favourable of those coming from a more educated background – tending more towards the White populace in South Africa. The effects of poor education in present day are further observed in the limited ability and knowledge of many a child (and their parent) as far as cognitive assessments are concerned where, with insufficient awareness, successful engagement with such assessments produces unfavourable outcomes. Seeing as such assessments are often not practiced within the more disadvantaged societies, their introduction brings forth an unfamiliar element of learning very foreign to them, thus predicative of the possible, negative outcomes (Foxcroft, 2011). The inadequacies and disproportionalities of the past education systems worked to lead the way for future generations, as an uneducated, illiterate parent at times passes on similar practices to their child; resulting in the continuation of a failing cycle. With the demolishment of the

apartheid government, one of the first orders of business was to restructure the education system in order to right the wrongs of the educational past for the future scholars.

2.3.2 – Post Apartheid education

Shortly after apartheid and new reign of a democratic South Africa governed by the African National Congress (ANC) in 1994 came a new education system. The first was that known as CASS (Continuous Content Assessment) introduced in 1996, which measured both teacher and learner progress (Abaunza, 2013). In essence, this system aimed at progressing as many learners to the next grade level as possible by assessing a teacher's success by the marks obtained by learners; while this proved stressful, it pushed teachers to apply themselves more by motivating learners to do their best (Abaunza, 2013). Following this was OBE and C2005 (Outcomes Based Education and Curriculum 2005, respectively), which were implemented in 1997 with plans of their being phased out by 2005 (Abaunza, 2013). These systems were said to be strictly outcomes based; thus placing greater emphasis on teachers. It introduced a more interactive manner of teaching and learning where educators played the role of a mentor and collaborator (much like a mediator as described by Vygotsky), an element avoided during apartheid teaching (Abaunza, 2013). Success in this system was based on the learner's ability to illustrate content and learned skills (Abaunza, 2013). While a great idea and of great success in other countries, OBE failed to produce the outcomes hoped for within the South African context, as reported by academic Jonathan Jansen (Gilmartin, 2001).

Jansen (1998 as cited in Gilmartin, 2001) is reported as saying the OBE system of education was nothing more than “ambitious” (p. 117). Furthermore, while of great appreciation in theory, Jansen expressed that it was not suited for the “experience in South Africa [due to]

resources for...successful implementation not [being] available” (Gilmartin, 2001, p. 117). His sentiments are said to echo those of various members within the OBE system, with failure of this system being cited as being centred at poor assistance at government level in terms of implementation, as seen with an insufficiently trained teaching force (Gilmartin, 2001). With class volumes reaching numbers as high as 80 pupils to one teacher, the ability of a teacher to not only contain and manage a class but also produce work at a level accessible to all, is nearly impossible. Not to mention their ability to effectively identify, thus refer, children with academic difficulties appropriately (Abunza, 2013; Gilmartin, 2001). The eventual outcome of such unsupported teaching systems are a great deal of teachers, from the OBE system, still teaching in an unguided manner; this then further lets down the current generation, thus compromising their futures. This is the reality of the South African scholastic context today.

Following on from OBE was the National Senior Certificate (NSC); a curriculum based on the New Curriculum Statement (NCS) in 2008 (Department of Basic Education, 2016a). Changes in practice in this curriculum involved learners in Grades 10-12 taking a minimum of 7 subjects, of which 1 must be Life Orientation, 1 must be either Mathematics or Mathematics Literacy, and 2 subjects must be South African languages, 1 of which is the language of teaching (Department of Basic Education, 2016a). The last examination under this curriculum was written in 2013, following which the Curriculum and Assessment Policy Statement (CAPS) was introduced (Department of Basic Education 2016a). CAPS is the most recent curriculum currently implemented in government schools across South Africa. It is defined as an amended version of the NCS under which a single comprehensive document of curriculum and assessment for grades R-12 has been underwritten (Department of Basic Education, 2016a).

The above speaks considerably to the impacts that context has on the extent to which a child may develop optimally, and given the notion of systems as highlighted by Bronfenbrenner (1979), the above is a further example of the impacts of one level on another, in this case being those of the mesosystem and chronosystem (Newman & Newman, 2009). While Bronfenbrenner prides the systems theory nature of learning as being more active than passive, influencers of external factors (whether direct or indirect in nature) are nevertheless centered primarily on the child (McDevitt, Ormrod, Cupit, Chandler, & Aloa, 2013; Shaffer & Kipp, 2014). In understanding these factors from the point of view of ‘intelligence’, cognitive assessments, and the difficulties that may arise within the classroom, treatment/intervention is said to focus on the influencers, and not just the child. This does away with the common practice of blaming of the child, as is typical of the medical model, but rather gears towards a more social model of understanding (Neaum, 2010). This method of intervention (where focus on influencers is considered) introduces a proactive means of assistance following unfavourable result outcomes. What is meant by this is that, in recognising difficulties within a testee as obtained from the intelligence test, steps can be undertaken to manage the occurrence and prevent it from being exacerbated/reoccurring following remediation, should the environment too be a risk factor.

Where notions related to risk factors had initially been mentioned, and also the previously turbulent and now unsupported educational context, the South African context is continually exposed to both unfavourable circumstances, and in turn, so too the South African child. Limitations within context reduce availability to resources, which then reduce potential for sustained growth and development (The World Bank Group, 2011). Speaking in terms of

cognition, processing and functional ability may be stunted, thus negatively impacting cognitive testing results (World Health Organization, 2017).

2.4 – CONTEXTAUL INEQUALITIES AND LANGUAGE

We have a society here in South Africa which recognises in the main, two languages, English and Afrikaans, as official languages. These are the languages that you have to use at school, at university, or in the pursuit of any discipline when you are studying as a black man... English is a second language to you... You grapple with the language to matriculation, and before you conquer it, you must apply it now to learn disciplines at university. As a result, you never quite catch everything that is in a book... [making] you less articulate as a black man generally... English is completely foreign, and therefore people find it difficult to move beyond a certain point in their comprehension of the language.

(Gilmartin, 2001, pp.

204-205)

2.4.1 – Generational impacts of environmental context on development

These are the words quoted from Steve Biko, Black Conscious leader active during the Apartheid Era, on language and its power. While various issues of inequality were experienced during the times of the struggle, the most pertinent of those facing children then – and consequently children now – is that of language and the power it had to dictate one's position and/or authority in society. Before exploring this further, one should consider the consequences of language in context.

There are various contextual factors that can negatively impact on the cognitive development of a child, inclusive of: language, finances, resources and schooling. Among these are difficulties experienced in most developing countries, of which poverty is the most prominent (Handley, Higgins, & Sharma, 2009). As mentioned previously, poor nutrition

has been identified as a precursor for poor development on both the physical and cognitive functioning of a person (The World Bank Group, 2011). Malnutrition, most especially in the developing years, is said to result in the increased chance of the emergence of varied states of underdevelopment through which a hindered state of cognitive ability is recognised (Newman & Newman, 2015; The World Bank Group, 2011). A decreased level of functioning will subsequently impact on a child's academic abilities and depict a rather negative outlook as far as academic testing is concerned. For those privy to the knowledge, it is widely known that such academic tests used within South Africa lack norms for the South African population, and in addition, produce outcomes that vary across ethnic groupings (Reynolds & Suzuki, 2016). In such cases one recognises a trend where these outcomes negatively favour minorities, often exasperating behaviours of polarisation within societies, as was the case in a study conducted in the United States where non-normed tests administered on African Americans, Hispanic Americans and Indian Americans (to name a few) produced outcomes recording great intellectual differences (in terms of quantitative numerical quotients) when compared to their White counterparts (Reynolds & Suzuki, 2016).

In societies such as those mentioned above, where contextual factors such as poverty, abuse and trauma exist in high proportions, awareness of context is paramount due to the systematic nature of the world where one impacts, and is impacted by, their surroundings (Bronfenbrenner, 1979; Shaffer & Kipp, 2014). As is defined in one study by Lamy (2003), a risk factor is any condition “which inhibits the child's educational and social success in society” (p. 3). According to this research, the most commonly occurring risk factor a child is exposed to is their family (Lamy, 2003). By family, this study mentions family-based contexts a child experiences as their immediate realities, and are inclusive of issues relating

to: parental unemployment, adolescent parenthood, and poor education attainment (parentally) just to name a few (Lamy, 2003). These contextual factors speak to the notion, and effects, of cross-generational impacts previously mentioned. In situations where the family is unable to effectively negotiate issues of poverty, the effects are witnessed in the child's development (The World Bank Group, 2011). One often finds that where there is no money, the resources necessary to secure a developmentally supportive structure aimed at yielding favourable outcomes are compromised, subsequently impacting on the potential for a child's successful development throughout the lifespan (Lamy, 2003). In understanding this occurrence according to Bronfenbrenner's systems theory, familial impacts speak most to the mesosystem and exosystem. The interplay that Bronfenbrenner recognises when defining the mesosystem focuses, most predominantly, on the relationships between the varying levels (Bronfenbrenner, 1979). Familial resources and the impacts these have on the child in terms of: stimulation, educational access and food are what Lamy's (2003) research speaks to. Exosystemically, the unemployment and poor educational level of one's parents, while indirect in nature, have direct impacts on a child as issues relating to the prospects of financial security prove to be limited, most especially when in need of educational and/or developmental resources.

With the inclusion of exosystemic factors relating to parental unemployment, poor educational accessibility and limited availability of aid and support services for the poor (in terms of social grants sufficient to sustain personal and educational needs of a child/family), the resulting effects are not promising. As Bronfenbrenner's theory highlights, with the failure of one element in the system comes the probability of failure across various others; a consequence of an interconnected network such as this (Bronfenbrenner, 1979; Newman & Newman, 2009). In looking a little closer at the issue of services and support of the poor,

macrosystemic factors may be introduced on the basis of the stigma often associated to the poor. While not observed in overt conversation, societies often harbour feelings of dislike and limited sympathy for poor people, as the common belief regarding the situation of these people is described as being a consequence of their laziness or other such circumstances brought onto the self, thus not wholly deserving of any assistance. When perceptions inform attitudes thus behaviour, negative beliefs are likely to yield negative actions – if any action at all (Bordens & Horowitz, 2012; Furnham, 2005). This may work to lay the foundation for broader views within the system, further limiting hopes for access by the fellow man.

Issues observed by Lamy were too observed in a study conducted by Flanagan (2002) where neglect was the focus.

The Flanagan (2002) study paid particular focus to the impacts of maternal depression on the development of 5-year-old children. Collectively, the study spoke to the salience of having a maternal figure able to readily display feelings of nurture and care towards the child in order to foster positive affect in the child (Flanagan, 2002), a notion that many social psychologists touch on where modeling is concerned. Lack of care through neglect (for example nutritional and emotional deprivation) is highlighted as a developmental risk factor, as the deprivation limits the ability of the brain to promote from a lower to higher level of function as discussed in Maslow's Hierarchy of Needs (Coon & Mitterer, 2012), thus limiting growth. Such an environment does little for cognitive stimulation and development.

2.4.2 – Impacts of language in context

Going back to language, the above speaks to the immediate impacts of poor access to quality education on the self (first generation, for example parents), and subsequent generations (children, grandchildren, etc.). With the introduction of English as the language of trade

during colonial times, followed by the subpar educational system of the Apartheid Era (Abaunza, 2013), incomplete acquisition of a language held in high regard placed many at a disadvantage, as highlighted by Biko above (Gilmartin, 2001). With poor language one often finds accessibility to a variety of resources limited, most pertinent being: education which leads to job attainment, a job leading to financial security, and financial security leading to everything inclusive of nutrition, education and academic support, if necessary (Corno & Anderman, 2016).

Inequalities in this day and age are still more centered at language. It is, as discussed above, a tool of the highest power and one's inability to effectively use it brings forth the perception of one being at a lowered skill level than another. This then serves as the outcomes in academic testing too. A large majority of schools within the South African education system work in favour of English-speaking individuals where the Language Of Teaching and Learning (LOLT) is that of their Home Language (HL), while other individuals often have English as either their 2nd, 3rd or even 4th language (Gilmartin, 2001); a possibility of high probability in a country with 11 official languages. Given the current standings, the preferential utilisation of English yields more positive outcomes, thus favouring the majority of White individuals of the populace, in comparison to 2nd + English speakers often made up of Coloured, Black and Indian individuals of the populace. Where experiences of poor access sustained from one generation to the next exist, the chronosystemic level of Bronfenbrenner's systems theory would be most applicable (Bronfenbrenner, 1979; Shaffer & Kipp, 2014). When patterns of observed behaviour - pertaining to a singular event/occurrence - inform the lives of many beyond the year during which the event/occurrence took place, transitions of experience are identified; limited language acquisition for those who grew up during the event/occurrence carries over into the

generations to follow (grandparents, parents, then children).

A possible reply to the difficulties that exist surrounding language is that of language immersion, where the LOLT is utilised across all subjects: mathematics, science, geography, etc. (Potowski, 2007). A method akin to Vygotsky's theoretical understanding of mediators as tools of learning (Green, 2014). As found in two studies conducted by Floyd (2011) and Rolstad (1998), language immersion of 2nd and 3rd language English speakers produces positive academic outcomes. Through this, contextual issues of schooling and generational delay (most related to poor language acquisition due to limited resources) mentioned above may be attended to.

The study by Rolstad (1998) consisted of a sample of lower income, kindergarten aged Korean children with little to no English proficiency from Tujunga Elementary. This longitudinal study looked to monitor and measure English acquisition of 1st language Korean children exposed to English immersion from kindergarten to the 5th grade (Rolstad, 1998). Upon completion, the study found that acquisition of English by participants when fully immersed aids in the better attainment for even 3rd language English speakers (Rolstad, 1998). Additionally, Rolstad's study found that immersion measures of learning were also beneficial for children experiencing scholastic difficulties; those who were recorded as initially lagging eventually obtained an adequate academic leveling by the completion of the study (1998). Floyd (2011) observed similar findings in his study, where outcomes of success were measured using the Oklahoma Core Curriculum Test (OCCT). Much like the previous study, Floyd found that full language immersion had participants yielding higher levels of academic achievement (2011). The sample of his study was made up of 16 language immersion teachers from 2 urban Oklahoma Elementary schools, with perceptions

of said teachers on implementation being the focus (Floyd, 2011). With the completion of the study, changes observed – apart from language acquisition of English – included a greater confidence in academic abilities of learners, most especially in the comprehension of the immersed language (Floyd, 2011).

The outcomes of the above mentioned studies illustrate potential measures of addressing the issues of language within South African schools, most appropriately so due to the similarities in contextual frameworks, namely: socio-economic status, English as an additional language, and success with use on children with academic difficulties. Within the South African classroom, language immersion in practice may aid in issues related to multilingual learning and instruction, helping in bridging the gap between ones HL and their LOLT through mediated learning. While limiting in the extent to which full acquisition of one language may be undertaken over another, this practice is nevertheless beneficial for biliterate development (Potowski, 2007). Changes implemented at this level, addressing generationally cemented inequalities, may in time be observed in generations to come as described by the interdependent nature of the systems theory at a chronosystemic level.

The disadvantages of full language immersion as undertaken in the above studies rests primarily on issues of segregation existing between immersion and non-immersion pupils (Rimington, 2014). Given the history of South Africa, this issue may reignite tangible difficulties of the past as witnessed with the racial segregation allegations at Curro School (Ngqola, 2015). With practices of deliberate separation of children, irrespective of the reason, comes the reemergence of unresolved feelings of unease rooted at the discriminatory practices of the past within this Republic. Efforts in this regard are likely to be faced with considerable apprehension by many parents. Additional factors include: disproportionate

school funding (majority of funding being directed to immersion class programs), class size (non-immersion class volumes being higher than immersion classes, at times with limited teaching staff and pupil support), and managing the transition of immersion children once promoted out of the program as there may be a difficulty experienced by the child with a sudden shift from one LOLT to the next in the following year (Rimington, 2014). Difficulties of language confusion could emerge with insufficient assistance. The last disadvantage pertinent to the South African context is that of “cognitive and linguistic immaturity”, as described by Gaffney (1999, p.4). While beneficial and of great success for many students, the same cannot be expected in a context where issues of cognitive development are rife, most centered at poor nutrition of SES. As spoken to above, malnutrition leads to a stunting of growth, thus impacting cognitive development (The World Bank Group, 2011). With a country where poverty is a reality for many people, developmentally based academic delays (on the basis of poor nutritional health and well-being) are of a high probability thus a necessary consideration.

This is where the role of the psychological practitioner proves challenging, assessment selection and administration. In administering assessments in a country filled with various contextually unfavourable structures (most centered at finances), ascertaining the most fair and unbiased measure limits the extent of the battery, most especially in terms of bias as the number of South African normed measures are limited (Cockcroft, 2013). As a result, efforts to 1) identify possible barriers to learning, thus 2) implement effective strategies for intervention well into the future, are too hard to undertake. Over and above this is the issue of language in multicultural contexts. Where in South Africa there are 11 official languages (12 with the inclusion of sign language), poor communication compromises assessment outcomes for reasons associated to either miscommunication (interpretation of language of

instruction), or total lack of comprehension of languages available for assessment (usually either English, Afrikaans or Zulu); client/assessor communication hinders progress of assessment, thus resulting in benefits of assessment not being obtained (Laher & Cockcroft, 2013).

In recognising these difficulties of environmental context, steps can be more readily taken in firstly safeguarding children, and secondly managing them when it comes to academic based testing. Through an awareness of the circumstance that have led to observable difficulties/disabilities (whether cognitive or behavioural), measures to accommodate a child regarding the methods applied for assessment – in terms of assessor assessment preference and rationale – can be negotiated. This illustrates the informative capacity of context on a child's development and overall academic potential.

2.4.3 – Societal impacts of context on development

The above-mentioned studies speak predominantly to the environment and the impact that the elements within it have on a child. They have illustrated how the people in a context can highly influence how a child not only develops, but also views the world. Apart from the people who are directly involved within the environment a child is raised, are the indirect elements, inclusive of the society, which have too been identified as having an immense impact on a child's development.

A reality of the South African society as it stands is one that has had to deal with the physical and sexual abuse of a significant proportion of the population. A study conducted by Sheldon (1986) looked into the ways in which sexual abuse can impact a child's functioning. The study found that in situations where a child is exposed to an environment loaded with more risk than protective factors, their capacity for a typical cognitive

development is affected (Sheldon, 1986). Although dated, Sheldon's study highlighted an important impact that a trauma such as sexual abuse can have, cognitive stunting (1986). Sheldon (1986) refers to "psychological dwarfism" (p. 12), a stunting of growth at a neural level through which physical changes of the cortex may be witnessed. This expression is likened to the physical cortical changes experienced in patients with Post-Traumatic Stress Disorder (PTSD) where vivid flashbacks of the traumatic event consume the individual's life, limiting development of the self and mind beyond said event (Wlassoff, 2015). Similarly, Sheldon goes on to say that a sexually abused child could also experience such flashbacks; an experience that, if not acknowledged, could be interpreted as a lack of concentration during cognitive testing (1986), and during academic activities. Should a child fail in adopting adequate stress management techniques (as is sometimes the case should a support system not exist), the inability to cope in stressful situations may lead to the development of various mood disorders, for example anxiety and/or depression (Remschmidt, 2011).

In South Africa, during the period of 2006/07 – 2009/10, more than 56 000 children were reported as victims of violent crimes, while 29% of sexual offences against children involved children aged between 0-10 years of age (South African Human Rights Commission & UNICEF SA, 2011) (Addition 1). Of these reports, perpetrators are cited as being at times people close to the child. Such acts of violence can prove traumatic, as illustrated by Sheldon (1986). In a 2014 report on sexual abuse, it was cited that of the 53 million people that make up the South African population, 18.6 million are made up of children under the age of 18 (Artz, Burton, Leoschut, Ward, & Lloyd, 2016). Of this figure, a total of 784 967 (between ages of 15-17) are reported as having experienced some form of sexual abuse (Artz et al., 2016). These figures illustrate the reality of the South African child, a reality that –

according to Sheldon (1986) - has negative impacts on a child's ability to develop successfully and perform optimally where schooling is concerned.

Comparably, Guin (2015) found that exposure to natural disasters in early childhood greatly impacts brain development, and later, cognitive development in children. Much like with sexual abuse in terms of the relationship to the abuser and frequency of the abuse, the type of disaster and the child's proximity to the disaster will dictate the degree to which the child is affected (Guin, 2015). Emotionally, the stressors of such an event heighten and intensify the trauma and results in a child manifesting difficulties ranging from behavioural to neurobiological levels (Guin, 2015; Wlassoff, 2015). Much like the misunderstanding surrounding the lack of concentration in sexually abused children mentioned above, a child might be misdiagnosed with an intellectual difficulty when in fact the true problem lies at an emotional level.

These studies spoke to a majority, if not all, levels of the systems theory in some way or another. Exposure to elements of abuse and disaster requires one to manage and negotiate the self in relation to their environment, simultaneously. As the family works to heal from the effects of the abuse on a member (inclusive of the emotions associated to the abuse), the victim him/herself has to manage their interactions with a now untrustworthy environment (inclusive of the people within it). Additionally are the behaviours of friends, extended family members, colleagues and societal communities (church and work) that one needs to manage, both directly on the part of the victim, but also their family. These interactions inform how many perceive and engage with the victim; these behaviours alter in some capacity, whether conscious or unconscious, thus filtering to the individual. Engagements with the world by the victim are also negotiated differently as perceptions of the world prove different (Guin, 2015; Remschmidt, 2011). One level informs the next, and the next, and so on.

2.5 – MOVING FORWARD: RENEGOTIATING IMPACTS OF THE PAST

It is evident on the basis of the literature reviewed above that the impact that context has on a child's development very often informs the potential of said child throughout life. The context under which they develop greatly informs future successes across the lifespan (Coon & Mitterer, 2012). Given the role of such contexts on development, in terms of the elements to which a child is exposed, one would assume that greater care is taken in the decisions made regarding the testing tools and procedures utilised to assess children. Where, in South Africa, poverty and violence are often the overarching environments many children grow up in (The World Bank Group, 2011), the use of a test to measure how it is said child functions in comparison to a child from an environment cocooned in safety and security could prove unfair and sure to work against the child living in the more hostile context.

In response to these differences, the new South African government developed a variety of structures aimed at renegotiating the past to better suit all in the present – post 1994. Even with the integration of learners within the schooling system, Black children were still recorded as failing when compared to their White counterparts on account of the poor foundational base from which they came (Gilmartin, 2001). In terms of: teacher availability, training, school materials/resources and general infrastructure, these learners were stepping into a new system on a back foot, and as a means of rectifying this situation a number of implementation strategies were undertaken.

2.5.1 – ANC implementation plan for education

One of the first steps at rectifying the educational inequalities of the past was through the development of a Policy Framework for Education and Training under which an Implementation Plan for Education and Training was set up (Gilmartin, 2001; Welton, 2001). Established in 1994, this programme was set to run through till 1997 with the goal being to encourage the use of African languages within the education system (Gilmartin,

2001). Fundamentally, inclusion of these languages would work to reduce racial inequality where - along with English - the other 10 official languages would be utilised in schools (Welton, 2001), and as such, filter into all aspects of practice and trade within the Republic. However optimistic this programme was, its implementation has still not been fully realised as issues relating to LOLT within tertiary education have flared, as seen with recent protests at the University of Pretoria as well as University of the Free State and Stellenbosch University (Page, 2016; Pilane, 2016). Additional attempts by the government to renegotiate the difficulties of the past are those of curriculum planning and syllabi as discussed in a previous section. Since the dawn of the new democracy, the Department of Basic Education has undertaken in the implementation of various curriculum plans in order to support learners in light of the changes within the country, as observed with curriculums ranging from CASS to CAPS (Gilmartin, 2001). These curriculums, it seemed, would bring the South African system on par with its international counterparts. While attempts were made to introduce these curriculums into the schooling system, poor implementation, support and training of teachers resulted in the removal of some of the syllabi, and subsequent introduction of other curriculum plans (Gilmartin, 2001).

In much the same way as the disadvantages mentioned above regarding difficulties of transition, one may find that the shift of HL LOLT during the pre-tertiary stage of education has interrupted academic abilities within the tertiary education – this is probable in the case of rural and township schools where LOLT is very often an African language opposed that of English/Afrikaans (Department of Basic Education, 2010). In assessing an individual experiencing these difficulties on a standard, psychometric measure, results are likely to be unfavourable, informing negatively on the abilities of the individual on the basis of language and academic ability; intellect is thus equated to academic ability, where proportional

comparability is perhaps unfairly applied. Language in context is therefore yet another informative component that requires consideration in cognitive testing, as poor proficiency in the English language should not be immediately associated to poor academic capacity.

2.5.2 – White Papers: Pathway to Inclusive Education

There have been a number of White Papers spanning the years 1995-2004 (Department of Basic Education, 2016c). The purpose of a White Paper is to report/inform readers about complex issues in the most concise way possible; it is meant to aid the reader to better understand the issue at hand, and then propose the best way in which it may be addressed or rectified (Stelzner, 2007). From dealing with the issues associated to funding of schools (White Paper 2 – 1996), higher education (White Paper 3 – 1997), inclusive education (White paper 6 – 2001), and e-Education (White Paper 7 – 2004) these policies provided frameworks geared at repositioning all those within the educational system by better equipping them for success in conditions best suited for them (Department of Basic Education, 2016c). One of the greatest motions in this regard was that of the development of the 6th paper in which individuals with specific educational needs and barriers to learning and development within the system were not only rightfully recognised, but accommodated. Where the medical model heavily influenced traditional models on inclusive education, White Paper 6 takes a more paradigmatic framework from which social re-inclusion is at the premise (Department of Education, 2001; Parliamentary Monitoring Group, 2002). Aimed at public awareness, curriculum change and accommodating schooling frameworks (both infrastructure and learning systems) this White Paper introduced a dimension to the education system that not only brought purpose and value to cognitive assessments for identification of scholastic difficulties, but also provided institutions of intervention and aid for those identified as such (Parliamentary Monitoring Group, 2002). With the purpose of

assessors being primarily to provide assistance for continued progress of individuals with educational needs and barriers to learning and development, access to - and availability of - education systems to support in the intervention process is key. This could be understood as psychological practitioner support, as efforts to provide aid and guidance for clients and their families is no longer limited to the most affluent of members of society but - when placed into legislation - extends to the majority of the population.

2.6 – A LOOK AT COGNITIVE ASSESSMENTS: SOUTH AFRICAN PERSPECTIVE

Cognitive assessments are tests that have gone through the ringer in terms of their purpose and function (Sternberg et al., 2008). Where historically its use was centered on the identification of a definitive number onto a person is attached and judged accordingly (in terms of future success), of late its definition looks at one's cognitive ability through the recognition of strengths and weaknesses, where fostering of the strengths is the focus (Sternberg et al., 2008). Through the appropriate use of cognitive assessment measures, an array of cognitively based disorders and/or disabilities may be identified, following which interventions of best fit may be introduced. Before looking at assessments in high rotation within South Africa, a brief understanding of learning disabilities will be undertaken.

2.6.1 – Learning disabilities in the South African context

In endeavouring to better understand the notion of learning and the difficulties that surround it for people, most especially children living within South Africa, this section will be speaking to the notion of learning disability. As highlighted by Nel and Grosser (2016), the terms learning disability and learning difficulty are often used interchangeably while requiring varying means of intervention upon diagnosis.

It is firstly important to note that the causes of a learning difficulty/disability are different. The emergence of such problems may be due to intrinsic (originating within the individual) or extrinsic (externally rooted, usually within the environment) factors (Nel & Grosser, 2016). An understanding of learning difficulties/disabilities in this manner works in removing the child as the primary reason for the difficulty at hand, and recognises the role of the environment (Nel & Grosser, 2016). Learning difficulties are said to be “experienced in certain subjects” (p.80) and with support, the difficulties observed are most likely to decrease (Nel & Grosser, 2016). These are described as being extrinsic in nature as initial emergence is often due to factors related to socio-economic standings (poverty, thus poor nutrition as mentioned previously) and pedagogical factors aligned with elements such as LOLT and access to curriculum; with restoration of these factors, alleviation is possible (Nel & Grosser, 2016; Prinsloo, Vorster, & Sibaya, 1996). Learning disabilities are in turn understood as being intrinsically rooted, thus remain prevalent even with support (Nel & Grosser, 2016). The difficulties experienced with disabilities are often as a result of genetics or medically inclined with central nervous system dysfunctions being central at diagnosis (Mather & Woodcock, 2001; Nel & Grosser, 2016). Within South Africa the term *barriers to learning and development* is worked to adopt both variations of the above-mentioned reasons for emergence, thus speaking to all behavioural expressions therein.

2.6.2 – Cognitive assessments used in South Africa

Within South Africa the percentage usage of cognitive assessments by educational, counselling and clinical psychologists is cited as being 94.9%, 83.8% and 76,9% respectively, and are inclusive of the: Bender Visual Motor Gestalt Test, Griffiths Scale of Mental Development, JSAIS, SSAIS-R, South African Wechsler Adult Intelligence Scale,

and WISC-III (Foxcroft et al., 2004). Of these tests, while lying at an overall 50% ratio (where 3 out of 6 tests used are normed for the South African context), frequency of favourable use often tends towards international variants (Foxcroft et al., 2004). Comparably, the frequency of use of the South African variants is observed in a more fluctuating manner, illustrating a more unpredictable tendency of use than that of the internationals (Foxcroft et al., 2004). While more up to date versions of these assessment measures are available (such as the WISC IV and WISC-V), statistics on their use are not yet available.

Looking beyond just the measure of cognitive function into the entire assessment battery a psychological practitioner would typically use - which would be inclusive of emotional and scholastic functioning - Foxcroft and her colleagues (2004) illustrate how, of the 25 tests listed as being in circulation for diagnostic purposes, only 11 (44%) were developed or adapted to the South African context (Table 2.3). Given those proportions, it would be fair to assume that the frequency of use of the international variants outweighs that of the South African variants. Not to say the international variants are not of great use, but the use of those which focus more on verbal comprehension (for example the WISC) do nothing more than limit the possibilities of the children being measured, where an understanding of how a child comprehends is overlooked in favour of where they lie on a globalised range (Sternberg et al., 2008). Whereas, the use of international measures that focus more on cognitive function, like the Kaufman Assessment Battery for Children (KABC), look to understand how a child engages with cognitive processing (Sternberg et al., 2008). This method is not as ignorant of the differences that exist between individuals, and in so doing, looks to support the recognised strengths obtained from the test while managing the weaknesses (Cognadev, 2015). Where in a context such as South Africa where teaching and

learning outcomes are centered on one's abstractive abilities (making inferences), a system focused on recognising the processing of understanding undertaken by a child is likely to work better in introducing measures of accommodation over assimilation (Chikovore, Makusha, Muzvidziwa, & Richter, 2012).

Table 2.3

Registered Tests that are used by Practitioners (Consolidated list)				
Test name	Postal survey	Focus Groups	Individual Interviews	SA or International
16 Personality Factor Inventory ^a	*	*	*	International
19 Field Interest Inventory (19 FII) ^a	*	*		SA
APIL	*	*	*	SA
Bender Visual Motor Gestalt Test	*	*	*	International
California Psychological inventory	*	*	*	International
Children's Apperception Test (CAT)	*	*	*	International
Developmental Test of Visual-Motor Integration (Beery)	*		*	International
Differential Aptitude Tests (DAT) ^a	*	*	*	SA
Goodenough Harris Draw-A-Person Test	*	*	*	International
High School Personality Questionnaire (HSPQ) ^a	*	*		SA
Jung Personality Questionnaire (JPQ) ^a	*	*	*	SA
Junior South African Individual Scales (JSAIS) ^a	*	*	*	SA
Learning Potential Computerised Adaptive Test (LPCAT)	*	*	*	SA
Minnesota Multiphasic Personality Inventory (MMPI)	*	*		International
Myers-Briggs Type Indicator	*	*	*	International
Occupational Personality Questionnaire	*	*	*	Adapted for SA
Potential Index Batteries (PIB)	*	*	*	SA
Rorschach cards	*	*	*	International
SA Vocational Interest Inventory ^a	*	*	*	SA
Self-Directed Search Questionnaire (SDS) ^a	*	*	*	SA
Senior Aptitude Tests (SAT) ^a	*	*	*	SA
Senior South African Individual Scale - Revised (SSAIS-R) ^a	*	*	*	SA
South African Wechsler Adult Intelligence Scale (SAWAIS) ^a	*	*	*	SA
TAT (cards)	*	*	*	International
Wechsler Intelligence Scale for Children (WISC-III)	*	*	*	International

^a Test developed or adapted for use in South Africa by the HSRC

(Foxcroft et al., 2004, p. 135)

2.6.3 – Appropriation of these assessments on South African children

A psycho-educational assessment serves the purpose of determining if a child's scholastic abilities are appropriate for their age at the time of testing, and is done through identifying a consistency between observed academic ability and cognitive functioning (Setshedi, 2008). When used appropriately (in terms of context and language), results may be used to gauge one's academic abilities and their potential of overall success in the future (Foxcroft, 2011).

A great deal of value can be extracted from a cognitive assessment when utilised in combination with a firm understanding of the past and present contextual factors of a testee (Setshedi, 2008).

As illustrated above, the use of internationally developed cognitive assessment measures were in higher rotation within South Africa than those developed internally (Foxcroft et al., 2004). While this occurrence is concurred by Mpofu (2002), his opinion of their uses is positive on the basis of a duality in utilisation through the adaption of Western tests for our contexts, as well as the development of African tests. His sentiments echo those of Foxcroft (2011) citing an initial need for an understanding of the term “intelligence” as utilised within a particular context for appropriation of the test to be considered. In essence, a country develops a test most suited for its context and people (Foxcroft, 2011). As it stands, while having improved over the years, this is the struggle of assessments in South Africa.

While the need for assessments is not argued against, most especially given the progressions they provide in curriculum adaption through the development of inclusive systems (Department of Basic Education, 2016c; Setshedi, 2008), their use outside full historical background often produces unfair and biased outcomes. As discussed by Setshedi (2008), the presence of psychological assessment works on elements of pros and cons. The pros include: assessments acting as alternatives for solving scholastic problems; they can provide valuable information for further intervention; they can alleviate social problems; and finally they reduce notions of ‘illness’ in children (Setshedi, 2008). Additionally, and within the schooling system, these pros aid in the further development of curricula aimed at accommodate children who are inadequately supported within the current system (Setshedi, 2008). Following on from such developments is the removal of children from those systems,

for purposes of placement within specialised environments, tending towards inclusive education; these are the efforts behind the creation of policies such as Education White Paper 6 (Department of Education, 2001; Setshedi, 2008). Outside of providing academic quotients of ability, however, there are the cons of which include: assessments not being uniformly valid; they create labels, thus marginalising certain children; many are not culture free and fair; they are not language free and fair; and they have a tendency of focusing on a child's 'deficits' opposed to their educational needs and abilities (Setshedi, 2008). These cons are most pronounced when interpretations are made on the basis of culture and language (Foxcroft, 1997).

In a multicultural context such as South Africa, intellectually based assessments are deemed necessary (Foxcroft, 1997). In recognising the array of backgrounds, thus developmental understandings in terms of notions of cultural fitness, this melting pot has the potential to provide a wide spanning illustration of cognitive potential and success (Foxcroft, 1997). But this can only be achieved with total awareness of the differences that exist. In the vast collections of literature developed by Foxcroft and her colleagues, the overarching point echoed throughout is that of the importance of context, fairness and limited bias. Where in her 1997 publication *Psychological Testing in South Africa: Perspectives Regarding Ethical and Fair Practices*, observed scholastic lagging of Black students in comparison to their White counterparts is highlighted with reasons for this being centered on poor educational opportunities of the past (Foxcroft, 1997). A point reiterated by Gilmartin (2001), as mentioned earlier. In her later writings this point remains, as cited in her 2011 publication *Ethical Issues Related to Psychological Testing in Africa: What I Have Learned (So Far)* where amongst other factors, perspectives of test-takers in terms of culture, family, linguistic, educational, socio-economic and heritage are seen as being of importance

(Foxcroft, 2011). Where complete adaption is not possible, holistic means of cognitive assessments needs to be undertaken where all aspects of the test-taker are taken into consideration. Laher and Cockcroft (2013) echo Foxcroft's sentiments regarding assessing in South Africa as being of importance, but only with assessments developed with sensitivity to multicultural and multilingual societies. The benefits of this will begin at aligning South Africa – and its people - with the needs of assessment and testing as a common practice as observed internationally, and secondly work at decreasing the gap existent in testing between South Africa and the world (Laher & Cockcroft, 2013).

2.6.4 – Impressions of practitioners to date: South African normed assessments

This section will be looking at assessments used, and developed in South Africa for the South African population (Bedell, Van Eeden, & Van Staden, 1999; Cockcroft, 2013). The Senior South African Individual Scale –Revised (SSAIS-R) is a revision of The Senior South African Individual Scales (SSAIS), which was developed in 1964 in English and Afrikaans versions (Cockcroft, 2013). While having serviced as a useful tool over the past few decades, a review conducted by Cockcroft on the SSAIS-R highlighted a number of problems with the assessment that are likely to echo the sentiments of many practitioners.

The first and most reiterated issue is that relating to the initial norming demographic under which the assessment was developed. According to Cockcroft (2013), during the norming of the assessment Black South Africans were excluded on the basis of Blacks not having “parliamentary representation” (p. 52) under the old regime. Not much was expected of this demographic, and so their inclusion was deemed unnecessary. The result of this decision was a representative sample made up of Coloured, Indian and White members of the population (Cockcroft, 2013). Testing was then conducted in one of two languages, either

English or Afrikaans; but whether these versions produce equivalent results is unknown as there is no evidence in this regard (Cockcroft, 2013). It would appear however that a slight difference exists as scores associated to language (verbal and non-verbal components of the assessment) often produced outcomes in favour of the English-speaking demographic when compared to those of their Afrikaans-speaking counterparts (Cockcroft, 2013). Similarly, comparisons on the basis of socio-economic status (SES) between contextually advantaged (English and Afrikaans White children) and disadvantaged (English and Afrikaans-speaking Coloured and Indian children) members of the population swayed toward the former, with produced results illustrating increase in numbers with increase in age (Cockcroft, 2013). The need for more environmentally (in particular culture and language) unbiased testing is the issue stressed in this regard by 13% of practitioners queried in on study (Foxcroft et al., 2004). This speaks to the points mentioned previously surrounding the overall impacts of the environmental context on a child's development and potential, most especially when experienced within the immediate environment.

Feelings regarding the outdated nature of South African developed assessments also extended to include the junior version of the individual scale – Junior South African Individual Scale (JSAIS). Due to the outdated and culturally loaded content, practitioners were described as avoiding using the JSAIS (Foxcroft et al., 2004).

Another issue that was spoken to, aligned with the previous, is of the context from which the SSAIS was developed. The development of the SSAIS was based on Western cultural knowledge; while beneficial for global comparative purposes, the content of testing alienate a large number of children as some topics and concepts prove foreign (Cockcroft, 2013).

Positive impressions were also recorded, the first of which being language norms. With the passing of time and desegregation of the Republic, proportional norms were developed for

environmentally disadvantaged children whose home language is neither English nor Afrikaans (Cockcroft, 2013). This development worked in tending towards greater contextual awareness and fairness in assessment. In continuation of this is the awareness that “IQ” potential is not based on one’s race/ethnicity as believed during the old regime, but rather on the basis of schooling, of which three types exist in South Africa: private schooling (privately funded), Model C government schooling (previously White schools), and township and rural based schools (Bedell, Van Eeden, & Van Staden, 1999; Cockcroft, 2013). Another positive is that the scores of the SSAIS-R correlated with other South African assessments, indicating that it measured the same constructs for cognitive ability for both advantaged and disadvantaged cohorts; assessments utilised in this comparison were the included the New South African Group Test (NSAGT) and Group Test for Indian South Africans (GTISA) (Cockcroft, 2013). While not perfect, the SSAIS-R was considered a valuable instrument in assessing children as it revealed information regarding scholastic strengths and weaknesses could be used qualitatively (Foxcroft et al., 2004).

In summing up the perceptions of practitioners on the SSAIS-R, the greatest problem for the 21st Century assessor and testee is that of relevance. There has been a significant change in the demographic and educational system of children from the time the SSAIS-R was developed to present day; the needs of children in terms of support has also altered, while the assessment tool has remained the same. Where subtest standard scores range between 0-20, the likelihood of this test not being sensitive to low functioning children is high (Cockcroft, 2013). Tests catering for people with disabilities across the spectrum were also perceived as lacking and problematic, as a large portion of the population is thus excluded from assessments (Foxcroft et al., 2004). According to the views of practitioners, this speaks to the pressing need for the development and revision of assessments more suited for the

modern school going South African child and functioning adult (Foxcroft et al, 2004).

2.7 – CONCLUSION

This chapter has illustrated the notion of ‘no man is an island’, showcasing the constant overlap that exists between people and structures throughout their lifespan, whether direct or indirect in nature. While often occurring in isolation, and at different periods, the manner in which one level plays out (past educational system) very often impacts the manner in which another, wholly separate level is negotiated (literacy, thus sustainable job opportunities). Occurrences of the past have strong links to the future. Context thus moulds the potential success, as far as cognitive assessments is concerned, as highlighted in the contextual factors above; limited resource or accessibility limits the extent to which one’s cognitive abilities may be fostered/promoted due to insufficient foundational support measures. Shifts to rectify the inequalities of the past have been described as the most direct manner through which such change can be undertaken, however these efforts are proving slow in terms of implementation. While slight improvements are recognised, the most prominent of those being the overall integration of the population of the demographic; more work needs to be done to further cement this, as prejudices nevertheless still remain. In addition to this is the need to continue works on cognitive assessments used within the Republic by adapting more international measures for our population, given the high rotation of these on our people. Even though developing our own assessments would be most ideal – or simply the revising of those that exist – the financial and time constraints should first be considered.

CHAPTER 3 – METHODOLOGY

Before elaborating on the methods applied in conducting this research, an overview of the purpose of the study and research questions will be undertaken.

Given the multicultural context that makes up South Africa, the extent to which individuals across the country access resources varies (South African History Online, 2015). One can find that 20+ years post-apartheid there are still a large number of children who, due to the systems that impacted their parents (for example education, which is most pertinent to this research), experience difficulties that inform their social and academic potentials (Akhurst, 2007). One finds that the very same systems are still impacting said children in one way or another. These difficulties are however measured in comparison to their peers, whose backgrounds greatly differ to their own, whether positively or negatively, thus regulating results in much the same way (Akhurst, 2007). As such, this research investigated the value of cognitive assessments from the perspective of the registered psychological practitioners, insofar as the identification and diagnosis of academic difficulties in children. Furthermore, it looked to gain insight into the preference of practitioners regarding test use for the South African child.

The focal question guiding this research was:

- **What are the perceptions of South African practitioners regarding the value of cognitive assessment measures within the South African context?**

In addition to the above, three more questions were formulated to further explore the initial question posed. The questions are as follows:

1. To what extent do participants perceive the use of cognitive assessment measures as beneficial for the identification and support of a child with a scholastic difficulty/disability given the varying contextual factors children living in South Africa are faced with?
2. What factors influence the choice and use of cognitive assessment measures within the South African context?
3. What are practitioners' perceptions regarding the value of information processing assessments when compared to more conventional intelligence tests?

3.1 – RESEARCH PARADIGM: INTERPRETIVIST

The method of investigation for this research was qualitative, through which the researcher initially intended to conduct one-to-one interviews with nine practicing psychologists. As explained by Denzin and Lincoln (2005, as cited in Moolla & Lazarus, 2014), a qualitative approach in research works to provide an "interpretive, naturalistic approach to the world" (p. 3). This approach provides an in-depth perspective of the subjects/participants of focus within a given research project (Moolla & Lazarus, 2014). An approach of this nature is well suited for interview based research as it looks to explore questions surrounding the "why", "how" and "what" regarding a particular phenomenon or observation (Moolla & Lazarus, 2014). Through the explorative and descriptive nature that constitutes qualitative analysis, a richer understanding of the experiences of participants is hoped for (Klopper, 2008).

A paradigm developed in response to positivism, interpretivism avoids rigid manners of thinking by recognising the importance of both human understanding and empirical formulation (Edirisingha, 2012). It is centered on the notion that knowledge is developed

and better understood through continued exploration of the topic of investigation (Robert Wood Johnson Foundation, 2008b). Thus, understanding/perception is continually modified on the basis of new findings where both object and subject outcomes are considered and utilised in the development of thinking; mutual inclusivity and interactivity are prevalent throughout the research process (Duncan, Bowman, Naidoo, Pillay, & Roos, 2007; Edirisingha, 2012). With the purpose of this research being centered on the perceptions of participants, an interpretivist approach is best suited.

3.2 – RESEARCH DESIGN: EXPLORATIVE AND DESCRIPTIVE

The research design was of an explorative and descriptive nature. Keeping the overarching aim of this research in mind, the use of an explorative and descriptive design worked in favour of gaining insight into participants' perceptions through investigation. In combination, the former and latter work to further explain an observed phenomenon by providing a “basic familiarity” within a topic (Babbie & Mouton, 2014, p. 79).

3.2.1 - Exploratory

Exploratory research works to answer the question “what is occurring” (Babbie & Mouton, 2014). The premise of such design is to either explore a new domain of research, or attempt to expand upon existing research from a different perspective (Durrheim, 2006). While Babbie and Mouton (2014) mention a number a reasons for why exploratory research is undertaken, the reasons for its use in this research are twofold, namely: 1) to satisfy a curiosity for greater understanding within a particular phenomenon, and 2) to identify priority points for future research.

3.2.2 – Descriptive

Descriptive research answers the question “how is it occurring” (Babbie & Mouton, 2014). This approach looks to describe phenomena typically through narrative means, as explained by Durrheim (2006). This approach follows on well from that of the aforementioned where, with the identification of phenomena (exploratory), an explanation of its occurrence is then undertaken (Babbie & Mouton, 2014; Durrheim, 2006).

3.3 - SAMPLING

Given the fact that this research worked to investigate the perspectives of psychological practitioners concerning cognitive testing and the impact that context may have, a non-probability, purposive and snowball sampling strategy was utilised. As defined by Babbie and Mouton (2014), the crux of non-probability, purposive sampling is one positioned on the judgment of the researcher based on his/her knowledge of the population (Babbie, 2008). Seeing as the researcher was aware of the purpose of her investigation, sourcing of participants was undertaken in a purposive manner, through which participants were expected to meet specified criteria for initial consideration; thus participation in this research. The use of snowballing was linked to the stratification of the purposive sampling as, through contact with individuals within the field of focus for this research, it was believed that more individuals meeting the criteria would be easily identified and then approached to participate on this research.

3.3.1 – Criteria for participation

The criteria for participation in this research were 5-fold; the first of which required the participant to be a registered practitioner practicing in one of three fields, namely: educational psychology, counselling psychology or clinical psychology. Experience in one

of the aforementioned fields was also of importance, thus having a participant being over the age of 24 years was the second requirement. The inclusion of this criterion was on the basis of practical experience outside the lecture hall where real-world exposure to the assessment space may be utilised in providing responses to questions. The third and fourth criteria address context and locale; each participant was expected to be based and practicing within the South African context, and localised (for reasons pertaining to accessibility) within the greater Johannesburg area. The final criterion required the administration and use of cognitive assessments as a diagnostic tool for the identification of barriers of learning and development in children.

With the completion of interviews, the initial sample was revised on the basis of availability of participants and variation of perspective. In undertaking an investigating of the topic, an expansion of the sample was decided upon as a means of obtaining as broad a perspective as possible. To accomplish this, the inclusion of two psychometrists was settled upon. With this settlement, the revised sample was that of eight psychological practitioners inclusive of: 2x educational psychologists, 2x counselling psychologists, 2x clinical psychologists and 2x psychometrists.

In accessing participants, poor response was obtained regarding participation of counselling psychologists, and as such, the sample upon completion of the research was as follows:

- 2x Psychometrists – inclusive of 2 females (1x White; 1x Indian) practicing at an assessment centre located in Johannesburg.
- 2x Educational Psychologists – inclusive of 2 White females currently in private practice, located in the Northern part of Johannesburg.
- 2x Clinical Psychologists – inclusive of 2 White females currently practicing in hospital

institutions located in Johannesburg, one public and the other private.

Table 3.1

List of participant pseudonyms, demographical information, field of specialisation and practice location

All participants fully satisfied the aforementioned criteria.

<u>Participant pseudonym</u>	<u>Race and Gender</u>	<u>Field</u>	<u>Location</u>
Participant 1	White; Female	Psychometrist	Assessment Centre
Participant 2	Indian; Female	Psychometrist	Assessment Centre
Participant 3	White; Female	Educational psychologist	Private practice
Participant 4	White; Female	Educational psychologist	Private practice
Participant 5	White; Female	Clinical psychologist	Public hospital
Participant 6	White; Female	Clinical psychologist	Private hospital

3.4 – INSTRUMENTS

In having satisfied the exploratory nature of this research, the lone instrument for data collection was that of a semi-structured, one-to-one interview schedule with each of the above-mentioned practitioners. Miles and Gilbert (2005) define semi-structured interviews as, conversations between individuals where the direction is somewhat predetermined in as far as what the interviewer is probing for, but allows for deviation in the progression of the interview in response to the answers provided by interviewees.

3.4.1 –Advantages and disadvantages of semi-structured interview

The advantages of using semi-structured interviews lie predominantly in the variety of possible responses one is likely to obtain based on the varying perspectives of participants

(Fylan, 2005). In addition to this is the open-ended nature of these kinds of interviews; the flexible structure does not limit the participant regarding how it is he/she may go about responding to questions (Fylan, 2005). Walsh and Wiggins (2003) also highlight the ability of the researcher to gain clarity on responses provided as an advantage, as well as the opportunity such interviews provide insofar as discovering, and elaborating upon unanticipated findings.

The disadvantages include the increased possibility of biased responses on the part of the participant due to the presence - and perceived observation - of the researcher (Walsh & Wiggins, 2003). Another disadvantage is that associated to deviation. Due to the flexibility of this style of interview, interviewees may either go too in-depth into the topic, or completely deviate from the initial topic making large portions of content unusable, thus adding to the already time consuming process of transcribing (Walsh & Wiggins, 2003). This process, while beneficial, may prove tedious, as precise application is required for comprehensive outcomes.

Considering the structure of the proposed interviews, the researcher had to be careful to refrain from being directive in her line of questioning insofar as preference is concerned. Subjectivity in this regard was necessary. The core questions posed within each interview remained constant from one interview to the next, with deviations being prompted solely by the response provided by the participant that the researcher felt the need to explore further for purposes of either clarification, or on the basis of differential perspective being presented by the given participant. As has been mentioned before, the utilisation of the semi-structured interview worked to provide more flexibility in response insofar as the extent to which probing was possible. Seeing as this research was initially undertaken for purposes of

investigating perspectives of participants, the ability to probe was paramount and so formed the basis for the questions. In achieving this line of questioning, a template obtained from Robert Wood Johnson Foundation (2008) (Appendix A).

In addition, an audio recorder was utilised as a tool for capturing the full-length interview in audio format. The recorder captured all contents of the interview from the beginning to the end and was used for transcriptive purposes post interview. No one apart from the researcher and her supervisor had access to the audio recordings of the participants.

3.5 – PROCEDURE AND TIME FRAME

Initial contact was made with possible participants through email; a list was compiled of professional contacts of both the researcher and her supervisor. The initial email provided a brief outline of the purpose of the research; a follow-up email was sent upon receipt of indication of interest by the prospective participant. The information sheet was at this time attached, which clearly stated the aims of the research (Appendix B). Those who formally accepted the invitation to participate in this study were then again contacted using the contact information they had subsequently provided. Once a date and time had been set and confirmed, the interview was undertaken at a locale of the participant's choosing. Prior to the commencement of each interview, each participant was provided with a consent form in hard copy format (covering voluntary participation and permission for recording of the interview) (Appendix C); and the researcher reiterated the aim and purpose of the research to the participant as outlined in the information sheet emailed during initial communications. At this time the expectations of the researcher were briefly discussed. Signed consent was obtained prior to commencement of the interview. All primary communication was undertaken on an individual basis with each participant.

It was intended that each interview would last for a minimum of 45 minutes and a maximum of 60 minutes, and was dependent on the length of responses, and overall engagement by each participant per interview. As such, some interviews were concluded slightly under the allocated time. With the completion of each interview, audio recordings were kept in the possession of the researcher for the period of transcription and analysis of the data.

Post analysis participant information was kept confidential and anonymity maintained (through the use of pseudonyms) with the exception of the researcher's supervisor. The information will be kept on the premise of the university for a total of 5 years for publication purposes on a password-protected computer.

3.6 – DATA ANALYSIS

After collecting the data from the interviews, the method of analysis proposed was that of content analysis. This method, as stated by Hsieh and Shannon (2005), is a method that is “widely used for qualitative research” (p. 1277). This method of analysis is described as being of great flexibility, given the varying manners though which analysis may be undertaken – for descriptive or interpretive purposes to name just two – depending on the research aim (Braun & Clarke, 2006; Hsieh & Shannon, 2005; Nigatu, 2009). Given the proposed aim of this research that looked to gain insight into the perspectives of participants concerning the value of cognitive assessments within South Africa, a more descriptive form of content analysis was utilised, that being thematic content analysis. This shift to a more stratified means of analysis aligns with the point mentioned in the proposal on the basis of, and depending on, the data collected.

3.6.1 – Thematic Content Analysis

Thematic content analysis works much the same as content analysis, where the contents of a particular data set are focused upon (Hsieh & Shannon, 2005). This can be understood as occurring at a very surface level, whereas the former involves searching for common patterns (themes) that occur within an entire data set and not just within a single data item

(Braun & Clarke, 2006). This form of analysis is said to work in speaking to both implicit and explicit ideas found within a dataset, thus deemed best for text-based data as the complexities of meaning within such data sets may be captured (Guest, MacQueen, & Namey, 2012). As such, an Inductive Thematic Analysis (ITA) method will be utilised as outlined by Braun and Clarke (2006). With the purpose of the research in mind, the use of ITA appears most suitable as the motive for the topic was not on the basis of pre-existing theoretical outcomes, but rather for exploration and greater insight from the data set (Braun & Clarke, 2006).

3.7 – ETHICAL CONSIDERATIONS

Ethics, or the notion of ethical practice, attend to questions of good or right conduct. As specified by Hammersley and Traianou (2012), amongst other things, it asks the question “Is it ethical?” (p. 16). Often closely tied to morals, research ethics deals with moral behaviour within research contexts (Wiles, 2013). Given the sample utilised for this research, issues related to parental consent was not a concern. As each participant was over the age of 18, participation was wholly on the voluntary basis of each participant, thus limiting the extent of ethical consideration to the individual in isolation.

The initial point of ethical consideration was that aligning with university clearance for the undertaking of this research. As this research was undertaken under the University of the Witwatersrand, full ethical clearance from the university had to be obtained. In doing so, a clear outline of the aims and purpose of the research was done through presentation and submission of a complete proposal. Following submission, acceptance of proposal by the ethics committee was obtained with clearance to proceed with the study being granted. The dissemination of invitations for participation were then allowed, following which further

communication and confirmation of voluntary involvement forwarded to all interested parties.

With participants identified and dates confirmed, informed and signed consent was obtained from all participants prior to commencement of any interview. In signing the form, the participant was indicating consent to the audio recording of the interview as well as to the possibility of the recording being exposed to the researcher's supervisor, should the need arise. The possibility of this was discussed prior to signing. The need and purpose of the audio recording was re-emphasised and further explained to the participant (as stipulated in the information sheet sent along with the invitation to participate) so as to ensure clarity on the part of the participant. It was also made clear to participants that participation in the research was voluntary and that there were no advantages or disadvantages in choosing to partake. In addition, participants were free to withdraw from the study at any point without fear of persecution.

The final point of ethical consideration for this research was that of confidentiality and anonymity. As this research looked to investigate the reasons behind why practicing psychological personnel utilised the diagnostic tools they do when assessing as well as the value of these, it was likely that responses provided would reflect personal preference. As this may not always align with the views of their peers, it was necessary to maintain strict levels of confidentiality and anonymity throughout analysis of the results. Confidentiality was guaranteed through the use of pseudonyms for each participant, to ensure that their true identities remained unknown to people outside the research in the publication and distribution of results. Furthermore, the omitting of their places of employment was exercised as a continued measure of the above. In terms of anonymity the same procedure

would be undertaken; however the extent of this was limited with regards to the researcher, as the one-on-one interview setting did not allow for this.

CHAPTER 4 – RESULTS AND DISCUSSION

This research was conducted using a sample of 6 professionals who use cognitive assessments in practice for measuring the academic potential of children. Participants included: 2x psychometrics (1 Indian, 1 White), 2x Educational psychologists (both White) and 2x Clinical psychologists (both White). All participants included in this research are female.

As mentioned in Chapter 3, the focal question of this research was:

What are the perceptions of South African practitioners regarding the value of cognitive assessment measures within the South African context?

4.1 – ANALYSIS OF RESULTS

The method of analysis applied for the data collected was that of thematic content analysis. Where content analysis simply looks at a single data item within a set, thematic content analysis looks at the entire data set and identifies patterns/themes that occur (Braun & Clarke, 2006). Glasper and Rees (2017) identified 7 steps that may be followed in the process of thematic analysis. Of these, in this research 6 were applied in the analysis of the data, as the 6th step in Glasper and Rees' process (Indexing) occurred seamlessly within the 5th step during the compilation of the themes. The steps followed are as follows:

4.1.1. Step 1 – Familiarisation

This is the initial step of the process. It involves reading through transcripts and listening to the audio, to become as familiar as possible with the data (Glasper & Rees, 2017). In addition, is the noting of pieces of information that may also inform the analysis.

4.1.2. Step 2 – Generating codes

This step introduces the actual combing through the data by thoroughly reading each line of the transcripts. The purpose of this portion of the process is to identify key words/patterns of information most relevant to the research topic and aims of the study.

In line with the above, Figure 4.1 illustrates the process undertaken by the researcher in identifying key points in one interview from the data set. On the right side of the margin the words/phrases/points noted as being of relevance to the research topic; on the left of the margin of the phrases/points that appeared to be the most predominant not only in this individual interview, but also occurred throughout the other interviews.

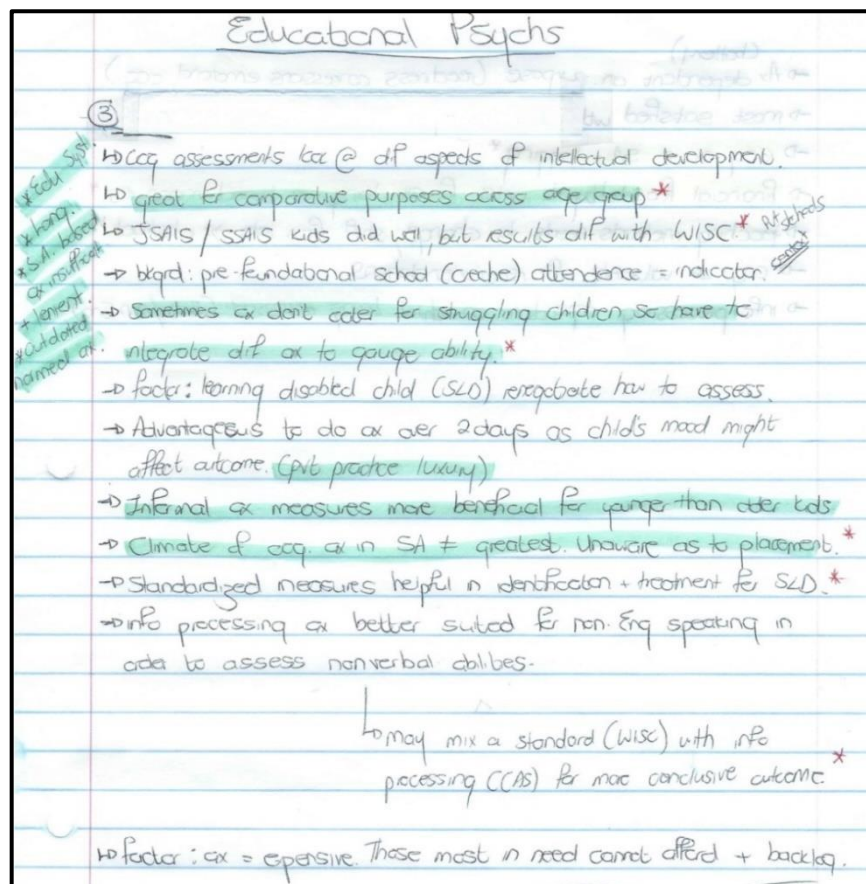


Figure 4.1 - Identification of key points obtained from interviews

4.1.3. Step 3 – Developing categories and themes

In the developing of categories and themes, Glasper and Rees (2017) speak to a process of refining the list of codes identified in step 2 by merging common codes, where possible. Similar codes are sorted into groups, then groups into themes.

In having completed the process of highlighting and listing of phrases/points as illustrated in Figure 4.1 for each transcript, a total of nine codes/phrases across all interviews were identified. These codes/phrases included, in no particular order:

- 1 – Education system,
- 2 – Issue surrounding 11 official languages,
- 3 – Multicultural backgrounds (heritage, practice, beliefs, interpretations),
- 4 – Socio-economic inequalities,
- 5 – Schooling system and appropriate placement,
- 6 – Limited training of assessors,
- 7 – South African based assessments insufficient for need of context (lenient and outdated),
- 8 – Resource availability (for example: medication, foundational stimulation, school support),
- 9 – Relevance of South African developed assessments (JSAIS/SSAIS) for modern scholars.

4.1.4. Step 4 – Identifying a thematic framework

In the continuation of the above, this step focuses on reviewing selected transcripts to ensure they are “meaningful and clear” with regard to the emergent themes (Glasper & Rees, 2017, p. 101). In so doing, a clear distinction from one theme to the next should be observable.

With the completion of the identification and refining process, the nine phrases/points mentioned above were sorted into five themes; these were further differentiated by their primary and secondary recognition by participants. Figure 4.2 illustrates refining of the nine points into five themes.

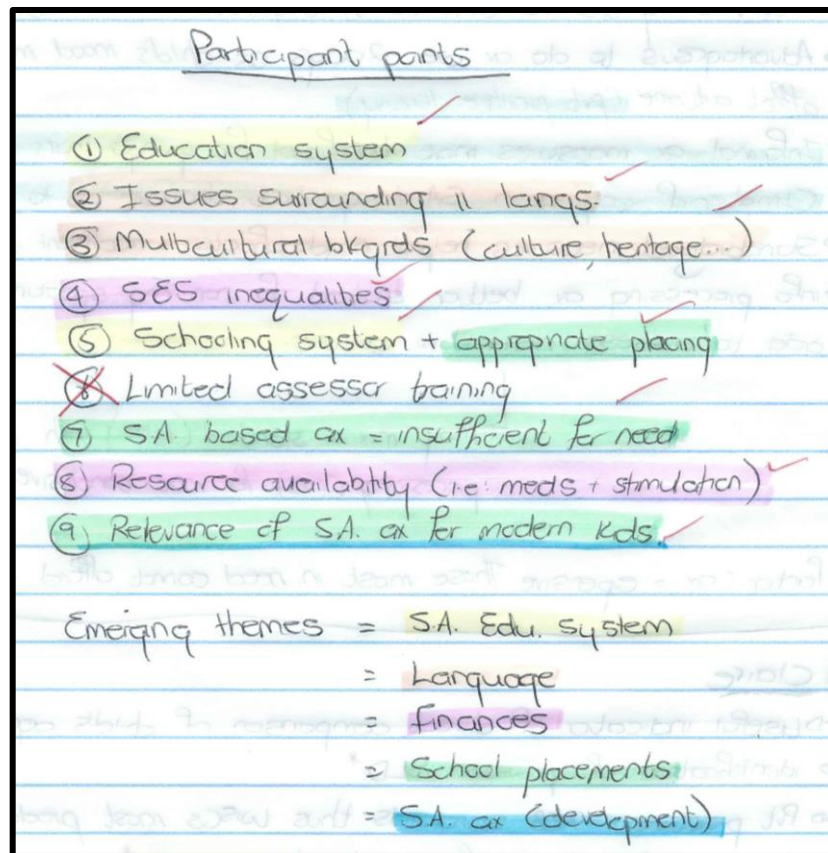


Figure 4.2. Refining of points into five themes (Step 4 - Identifying a thematic framework)

4.1.4.1 – Primary themes

The primary themes identified referred to those most commonly mentioned by the majority of participants. These points were either continually echoed throughout the individual participant's interview, or spoke most pertinently to the focus of this research.

- ❖ South African education system,
- ❖ Language in context,
- ❖ Finances: accessibility for all.

4.1.4.2 – Secondary themes

The secondary themes identified referred to those spoken to by some of the participants. In addition, while not initially considered by the researcher, these points proved valid to the direction and aim of the research.

- ❖ School placement,
- ❖ Development of new South African assessments.

4.1.5. Step 5 – Naming and defining themes

In having identified the themes most appropriate to the topic of research, each theme is clearly named and defined in accordance with the study. According to Glasper and Rees (2017), this step helps ensure that there is no overlap between themes delivered.

1 – South African education system

Focus is placed on the education system as it stands, and the role it plays in the degree to which South African children are deemed testwise. According to Foxcroft (2011), testwise refers to one's exposure to testing scenarios, thus protocol and language involved. Given the history of the education system discussed previously, it is no surprise that the effects of the past have filtered down and through the generations to date; many children still have access to a subpar educational system; the result of a number of reasons, some of which are included within the identified themes. Points in this regard were continually reiterated and highlighted by all participants, with poor foundational development (in terms of early childhood development) being one of the prominent reasons for developmental delay.

2 – Language in context

Closely linked to issues related to education, and in many instances a byproduct of a poor education system, the multilingual context of South Africa was a persistent factor. With issues ranging from effective testing, to accessibility of home language testing formats, poor acquisition of English was recurrent. Acquisition in this regard was perceived as a problem for both participants (when assessing individuals whose home language is not English) and clients (where certain subtests were either substituted or abandoned due to limited comprehension in the language of testing).

3 – Finances: accessibility for all

The socio-economic status under which a child falls has often worked as a major predictor of assessment outcomes. While very often a learning difficulty is the identified problem, a disability is too possible as proper healthcare pre- and post-gestation could be often compromised. Issues of access to adequate education are also associated to this theme, as limited funds in turn limit one's quality of education, should access be at all obtainable.

4 – School placement

Much like with the first theme, removal of a child from an education system not equipped to support any barriers to learning and development they may be experiencing is paramount to alleviation of a problem, thus future success. Following an assessment, enrollment into a specialised schooling system is often the first line of intervention.

5 – Development of new South African assessments

An element most salient to fair and unbiased assessment, the development of South African normed assessments was occasionally highlighted. Cultural sensitivity and relevance to the 21st Century South African scholar is the issue most focused on under this theme.

4.1.6. Step 6 – Preparing the analysis report

This final step of the process involves the interpretation of the themes identified into a report (Glasper & Rees, 2017). Through the use of key quotations from the data, findings are described according to the focus of the study.

4.2 – CREDIBILITY AND DEPENDIBILITY

Validity is said to be one of the most important, if not the most important, element of any research as it introduces the link between the purpose of the study, and the intended outcomes of said study (Guest, MacQueen, & Namey, 2012). While the term ‘validity’ is said to be more suited for quantitative research, the qualitative alternatives are often termed as: “trustworthiness, worthy, relevant, plausible, confirmable, credible and representative” (Guest, MacQueen & Namey, 2012, p. 83). In much the same way, reliability in qualitative research has been alternatively termed dependability, referring to the consistency of outcomes produced from one setting of qualitative research to the next, of the same measure (Guest et al., 2012; Lincoln & Guba, 1985).

4.3 – REFLEXIVITY

Reflexivity deals with awareness on the part of the researcher of the “impossibility of remaining ‘outside of’ one’s subject matter” (Willig, 2013). It speaks to having the researcher recognise the role they play in the construction and delivery of meanings throughout the research, and the need for these to be controlled and managed so as to not impact the outcome (Willig, 2013). The recognition of one’s own position within the research process (i.e. researcher reflexivity) a level of transparency is introduced into research process, which helps the researcher account for his/her possible influence on the study (Crowley, 2010).

In engaging in research of the nature of this study, in which the preferences of individuals is

investigated and probed, the researcher is to hold the awareness that differences between their personal practice method or reasoning and that of each participant may arise. This action has proved beneficial for this style of research, most predominantly during the analysis process, to prevent the intrusion of bias on the research process. A lack of acknowledgment of these differences may impact the results revealed during interpretation of participant perceptions. In this research, from the first interview and through the analysis process, the researcher consciously regulated, separated and adequately managed her personal views - in terms of the topic –to maintain objectivity as far as was humanly possible.

In addition, constant note taking—as suggested by Crowley (2010)—benefitted the research process. Note taking allowed for the storing of information for review at a later stage with fresh eyes. Separation from the topic for brief periods of time allowed the researcher to see the same points/statements with more clarity; and constantly attending to different topics enabled the researcher to attend to the analysis process with greater objectivity. Furthermore, a reflective journal was utilised. In the engaging with this topic, through which topics of segregation, inequality and disadvantage within South Africa was at times dealt with, the keeping of a journal aided in keeping the researcher focused on the topic at hand without being overcome by subjective thoughts and opinions. In much the same way as the note taking was of benefit, the journal helped to create distance between the emotionally arousing content the researcher was attending to and her work as an objective researcher. While passions surrounding the topic often came to the forefront, the placement and reflection of these points within the journal introduced a reflective process throughout the paper as, prior to comments/statements being written within the report, they were first reviewed in the

journal to assess their relevance to the topic and overall objectivity. Without the reflective journal, the objective integrity of this research may have been compromised.

4.4 – DISCUSSION

In effectively highlighting the points made by the participants in this study, the themes identified in the previous section will be individually discussed. Given the nature in which these themes developed, first the primary themes will be discussed, followed by the secondary themes.

Primary:

As defined previously, the primary themes refer to the points most commonly mentioned by the majority of participants. They proved to be the most pressing of issues as perceived by participants.

4.4.1 – Language in context

This theme was the most prominent of all the themes as--irrespective of the question under consideration--the participants continually reverted back to the impact of language difficulties on assessment outcomes. Language difficulties in this regard are not limited to a lack of understanding of English by children being tested, but also include the lack of versatility insofar as language variations for testing in the testee's home language.

Interviews on this topic revealed that, while not normed, a number of participants appeared to favour the WISC over the available South African alternatives due to the language therein (verbal components) being deemed more linguistically relevant. While this is not the opinion of all participants, it proved a recurring opinion of many when questioned about assessment preference. Living and practicing in a country as culturally and linguistically rich as South

Africa, one is bound to come across issues to which not many other countries need to attend. With eleven official languages (which South African Sign Language being the twelfth unofficial language), attending to the needs of many in their home language (HL) can prove difficult. This point was most strongly spoken to by one particular participant, most especially regarding her perception of the root cause:

“...South Africa has 11 official languages, we only assess in English and Afrikaans, which is a problem...[it would appear] we need to fix the school system” – Participant 1

(p. 6)

The difficulties in this regard carried over into conversations regarding the demands of society at present and what is deemed “of higher intellect”; thus potential for success. The most prominently perceived factor predicating success in this regard is the attainment of English as it is a common tool of trade, business and power (Abaunza, 2013). Looking at the history of South Africa spanning the duration and post-apartheid era, the acquisition of a particular language and power were often closely linked; first with Afrikaans, then English (Parmegiani, 2009). Where during apartheid English was reduced within the Bantu Education System in favour of mother tongue use, this was a tactic by the former government to “manage” and “control” particular segments of the population by limiting their exposure to the language of trade, thus limiting their sense of control within business (Parmegiani, 2009). Post-apartheid policies reintroduced English into mainstream use where, while in the foundation phases (Grades 1 – 4) African languages were LOLT, a switch to either English or Afrikaans was observed with most “black” schools choosing English (Parmegiani, 2009). This shift occurred without contention, as the association between the English language and progression in business, politics and success remained firm

(Parmegiani, 2009; Simpson & Mayr, 2010).

This is a belief that has filtered down to the teaching system with many schools using English as the LOLT (Taylor & Coetzee, 2013). In assessing children, English is thus most likely to be utilised even when it is clear that a child is likely to struggle, but due to the purpose and rules of the assessment (child being exposed to English in teaching context) English is thus used (Taylor & Coetzee, 2013). These are the observations of one participant who said, in having come into contact with many a child in such a situation, it continually proved to be nothing less than “heartbreaking” (Participant 2 – p. 8) as her knowledge of the likely outcome on the basis of previous cases produced much the same. Similarly, another participant highlighted how language places non-English speakers at a disadvantage in every assessment, stating:

“...every test we do on an African child is in some way not appropriate and unreliable...[as seen] in all reports that we have disclaimers” – Participant 5 (p. 9)

While saddening in awareness, language remains a major factor for many. It does however reintroduce the discourse surrounding fair assessment, through which many children’s true potentials are qualitatively interpreted - due to the limitations of language that exist - within assessment reports. The trouble with these disclaimers lies in the extent to which the noting of “precautionary interpretation” is used. The struggle facing the South African psychological field is that of finding and using assessment measures that cater to the varying cultural and linguistic backgrounds that make up its population without leaning on the notion of a disclaimer when utilising measures normed for White, Westernised demographics on a more diversified cohort (Foxcroft, 1997). This is more especially noted with assessments used on children, as negative results speak directly to the cognitive ability of said child on

the basis of a scale inappropriately normed to them (Foxcroft, 1997; Shuttleworth-Edwards, van der Merwe, van Tonder, & Radloff, 2013). In addition, is the challenge on assessors to refrain from concluding low outcomes of children wholly on the use of non-normed assessments, as this may lead to the ignoring of true difficulties/disabilities of one's cognitive processing abilities. Repercussions of this thus recognised in inadequate and ineffective intervention implementation on the basis of the misinterpretation of results (Shuttleworth-Edwards et al., 2013).

A conversation that then needs to be had is one regarding the versatility – or lack thereof – of assessors regarding language and general capabilities. One participant spoke to this quite poignantly stating a plain truth:

“[assessment outcome] is as good as the person that reads the information”- Participant 2 (p.15)

The above mostly speaks to the training and assessing strength of the assessor. Much in the same way as within the classroom, should the teacher be of a lackluster quality, his/her ability to teach above that level is unlikely, thus damning for the pupils. One finds that in classroom scenarios inclusive of children with barriers to learning and development the above is often observed, as teacher support for identification is limited. Assessing, according to the participant quoted above, works in much the same way. The consequence of this falls onto the learner, as he/she often falls short of meeting the expectations of assimilation within the schooling environment, and thus experiences difficulties from which labels are attached (Sternberg et al., 2008). Mather (2009) speaks to ‘Intelligent Testing’ (a term coined by James Kaufman) as a possible solution of this, due to the approach of assessing that is undertaken; where conventional assessments highlight the placement of a

child in a given categorical range (ranging from very superior to extremely low), intelligent testing measures focus on the strengths and weakness of a child then utilise that information in recommending interventions to foster the strengths, while managing the weakness. This is where the role of dynamic and information processing techniques of measure prove most beneficial.

Additional issues spoken to in language are those associated to generational illiteracy. As discussed in Chapter 2, one often finds that the educational difficulties experienced by one generation filter down to 3rd and even 4th generations, should efforts not be made to rectify the faults. In as much as this is a reality that is not only prevalent and thus needs to be observed, it may too compromise the perceived potential of many a child on the basis of the poor education level of their parents and grandparents. Such a situation was the experience of one participant during which the following took place:

“Sometimes we underestimate the ability of the child...we [once] had an African mom that came in with an African daughter [and] there was no English speaking ability. I sat with my psychologist at that time and I said ‘you know what, can I just try the JSAIS?’. I sat in the room with her [client] and I said to her - but I was very physical - I was like ‘you going to take these pieces and you going to put these pieces there...She sat there and she went ‘oh so you want me to take this orange piece and you want me to put in the orange...’ I almost fell off my chair because mom had said no English ability at all, but actually what the child had learnt was when there is an African person in the room you speak African [language] and then when there is a White person in the room you speak English”

- Participant 1 (p. 7)

The above illustrates the adaptive nature observed by Piaget of children as they construct their own realities on the basis of what they deem of importance/most relevance given the context (Coon & Mitterer, 2012). The client’s contextual background had taught her that differing contexts (inclusive of people within said context) require differing manners of

conduct. Much like the above-mentioned participant, an individual interacting with the client from a singular perceptive (language in this case) may assume limited proficiency of other languages too. Assumptions of this sort inform assessment batteries where the limitations that language has on possible outcomes are imposed. While not the intention of the mother, the experience of her limited linguistic abilities acted as a factor on her perception of her daughter's linguistic ability. The differences in context and ability were also highlighted by another participant, with her sentiments being:

“...in a country such as ours where there's a lot of different backgrounds you can't assume that every child will interpret a given situation or question in the same way”

– Participant 6 (p. 8)

These observations speak, once again, to the notion of 'intelligence' and how 'intellect' is understood and practiced differently depending on one's societal context. It is very often more of a behavioural expression (Coon & Mitterer, 2012). Where in the Asian culture a humble nature devoid of eye contact is deemed respectful and aligned with success, the same behaviour is seen as weak and unfavourable in more Western societies (Coon & Mitterer, 2012). Similar practices are observed in Zulu and English households in South Africa. Neither is “better” than the other, just simply different.

In conversation with many of the participants during the interviews a paradox regarding assessment preference, and the reason behind that preference, soon emerged. The paradox looked at the WISC and SSAIS/JSAIS: in practice, is it better to use the SSAIS/JSAIS which is normed for the South African context, but exceptionally old, or to rather utilize the WISC which is not normed, however newer with new versions being developed at a constant rate? In having addressed this, over and above the issues of context discussed previously, the

majority of the participants (apart from one) favoured the use of the WISC over the South African variants on the basis of the language used within the test. In having made that choice, one participant went on to elaborate upon her preference for the use of the WISC by stating:

“...the reason why I’m more drawn to the WISC, even though it’s not normed for South African, is because...it covers a bit more. [In] the JSAIS...there’s a word sort of ‘abyss’ instead of ‘cliff’ and I’m like ‘I don’t even know what that word is” – Participant 4 (p. 3)

She went on to describe this assessment (JSAIS) as “archaic” and seemingly “from the 80s” (Participant 4, p. 3 –Appendix G). While the WISC is not clear of using similarly outdated terms/phrases, many of the participants seemed more willing to forgive that – given its monetary and functional use in many contexts in this day and age – than the outdated language used within the SSAIS and JSAIS. In essence, it is the opinion of the participants that it is easier to renegotiate the language used in the non-normed version of an assessment as its, at the very least, linguistically up to date.

While the above, upon elaboration, makes logical sense in that the WISC provides a view of where a child lies in comparison to their international counterparts, the issue of individuals whose first or second language is not English, as well as the non-English speakers in testing, remains insufficiently answered. The process as explained by one participant in her practice is one of three options: 1) child is tested using the SSAIS/JSAIS if exposure to English in a school setting prevalent (irrespective of fluency), 2) if English is limited or described as being “none”, either the Griffiths Mental Developmental Scale or Raven’s Progressive Matrices is undertaken, and 3) should the child not fit into either of the two above mentioned options, they are referred for a neurological assessment (Appendix H). Very often, children

from disadvantaged backgrounds fall in the 2nd option, and thus undergo one of the two nonverbal assessments as viable communication between the assessor and assessee cannot be established. As such, the question is now how do children falling within this option obtain a full assessment (inclusive of both the verbal and nonverbal components)?

Perhaps the solution lies in rectifying the lack of language versatility of assessors, to ensure that, while not fully fluent in the variety of languages of this Republic, a conversational level of understanding of the most commonly spoken African languages be obtained (Table 4.1). Given the governments aforementioned Policy Framework for Education and Training centered on educational and language reform (Gilmartin, 2001; Welton, 2001), thinking and implementation strategies have been considered, and would aid in bringing about equilibrium between English and the other South African languages as discussed by Welton (2001). Although ideal in theory, the difficulty comes with the feasibility of this in practice as it will prove a little harder to negotiate and would then raise additional questions, the first of which being: What is to be done with seasoned practitioners who are not fluent in any of these languages? Secondly, what would these changes do to the current psychology/psychometric programmes set in place? An additional solution is that relating to dynamic assessment measures through which the more conventional means of assessing (centered on crystallised, verbal components of learning) are replaced with techniques focused on information processing and potential for learning (Laher & Cockcroft, 2014). This introduces a shift in teaching and learning, where the duality that exists in learning is recognised, a duality inclusive of the teacher/assessor, and learner/assessee; a necessary inclusion as this relationship may also be understood as an impactful factor for learning.

The dealing with the intricacies on the “how” these issues of language can be attended to clearly needs time and resources to be undertaken, even in the initial stages. Nevertheless, a statement made by one participant stayed true to the needs of the child, speaking more for their benefit and comfort:

“...I firmly believe that the tests should be changing not the children should be assessed in a different language” – Participant 4 (p. 7)

Table 4.1

SOUTH AFRICAN LANGUAGES 2011		
Language	Number of speakers	% of total
Afrikaans	6 855 082	13.5
English	4 892 623	9.6
isiNdebele	1 090 223	2.1
isiXhosa	8 154 258	16
isiZulu	11 587 374	22.7
SePedi	4 618 576	9.1
Sesotho	3 849 563	7.6
Setswana	4 067 248	8
Sign Language	234 655	0.5
SiSwati	1 297 046	2.5
Tshivenda	1 209 388	2.4
Xitsonga	2 277 148	4.5
Other	828 258	1.6
TOTAL	50 961 443	100%

Note. The data in Table 4.1 was obtained from Brand South Africa, 2015.

Summary

With the continued use of international assessment variants (for example the WISC), the biggest question surrounding this theme was that of preference and the reasons behind that

preference. Over and over again international assessments have been favoured over South African assessments due to the linguistic relevance of the international variants. It was the opinion of participants that it would be easier to renegotiate the language used in assessments such as the WISC compared to the “archaic” language found within the SSAIS/JSAIS. The difficulties in language mentioned also spoke to poor fluency – or lack thereof – in English by testees. Inability to effectively communicate with assessors made testing rather difficult; this extended to assessors too in terms of their inability to accommodate testees in their home languages. As a result, non-verbal assessment measures are very often undertaken for non-English speakers where the forgoing of the verbal components is observed.

4.4.2 – South African Education System: *Education in South Africa is a Big Problem*

The education system as it stands was a most recurrent theme across all the interviews. A number of difficulties in this regard were spoken to and highlighted by the participants, ranging from impacts of assessment outcomes due to poor language, to policies of condoned passing practices throughout phases. Each of these, while often isolated in their expression in context, produced a collective problem observable in academic achievement and assessment results.

“...Education in South Africa is a big problem”

This is a statement made by Participant 2, highlighting the general consensus of the cohort of participants. Whether due to curriculum, classroom setup, teacher training and support, or general feasibility of teaching given individual contexts, it was found that the education system as it stands is the most hindering element children face. In having posed a question surrounding the most common factors that participants face when selecting the assessment

measure they used for each case, background (most centered at schooling – where they are educated and/or where it is they plan on going if school readiness is the purpose of assessment) was most often mentioned. While family setup and parental support/education levels were at times spoken to, the biggest recurring factor was that of education. One response to this was:

“Education is a problem...everywhere. It’s a very negative outlook” – Participant 2 (p.17)

The impression of this participant clearly highlights a lack of faith in the educational setup at the present time. The questions then are: What are the problems, and How do they present themselves? In having explored this across the interviews, the curriculum was initially mentioned:

“Curriculum has issues...we had 35 minute periods” –Participant 2 (p. 18)

Although the content of the curriculum was not the premise of the issue for this participant, the volume of content to be covered in the time frame available proved the greatest grievance. The participant explained how, leading up to her applying for her degree, she had completed a Post Graduate Certificate in Education (PGCE) in the hopes of going into education. While placed at a school in training, she experienced the difficulties many a teacher faces where she had a large bulk of content to cover in a ‘35 minute period’. That, along with the sheer class size (1:45 ratio of teacher to pupils) made teaching feasibly near impossible. In her elaboration, this participant alluded to her feelings of the curriculum not fitting into the time frame available and allotted number of pupils; that the educational system setup is not fully functional. Abaunza (2013) and Gilmartin (2001) both speak to the difficulties such proportions bring to the classroom, the greatest of which emerged in the ability of a) the educator to teach learners, and b) degree to which learners successfully

retained the material. With poor support and training of educators in the implementation of curriculums post apartheid, the high volumes of learners per class further added to the difficulties faced by teachers.

Additionally, problems presenting most significantly aligned with 1) language and 2) testability. On the statement made previously regarding the state of education, “...everywhere” appeared to speak more to the context of disadvantaged children. Foxcroft (2011) speaks to the notion of “testwise” and how standardised testing is not the norm for all. Being ignorant to the privilege associated to understanding how it is a test “works” and what is expected of the testee is a limiting factor, as it can impact assessment outcomes when testing anxiety and stressors are considered. Should the language of assessment also be ill-fitting, anxieties further increase.

In continuation with issues relating to the education system is the practice of condoned passing, with condonation being defined as “the relaxation of promotion requirements” as outlined in the *National Policy Pertaining to the Programme and Promotion Requirements of the National Curriculum Statement Grade R – 12* (Department of Basic Education, 2012). The long term repercussions of this practice were spoken to by one participant in terms of the consequences, as experienced by first the child, and second the assessor:

“...child will come out with severely below average IQs...I can’t understand how did they get to Grade 9. [You] often find that they were pushed through...that’s a problem...hav[ing] a 16 year old in grade 9” – Participant 6 (p. 6)

While clearly frustrated by this, she goes on to display sympathy for the children in such processes as they find themselves ‘floating’ and without an immediate schooling system due

to their being deemed too old for acceptance into a trade school system, and so the trouble arises in where to place them. The difficulty in this regard rests in the academic delay the child experiences, thus the outcomes of this in the future, upon leaving the schooling system. This then brings focus to the possibility of a presence of scholastic difficulties aligned with numeracy, literacy and the like, persisting well into the child's foreseeable future. With that, the sentiments made by the participant are sound, as the ability of children with the passing of years and promotion in grades will place them in greater disadvantage when compared to their peers. In the dealing with such cases one has to then ask whether forfeiting this policy is a viable solution? In better understanding this process, the rationale provided for its consideration rests on notions of equality, as explained the Department of Basic Education. Following the introduction of the CAPS curriculum in 2014 (Addition 2), criteria for promotion was as follows: passing two language subjects (one of which needs to be at a minimum of 50%), as well as passing mathematics at a minimum of 40% (Province of the Eastern Cape Education, 2014; South African Government, 2016). This differed from the previous criteria where failure of mathematics had no bearing on one's promotion ability (South African Government, 2016). Given the variations of mathematics ability between learners, it was thought that failure of mathematics as a stand alone subject, irrespective of outcomes in other subjects (most especially if successful), was unfair to those who are "more inclined towards the arts...". Lowering the pass mark is said to work by considering these individuals who are forced to take mathematics (in accordance with the outline of the South African curriculum), but find it difficult to perform at a high level. Introduction of this lowered minimum is for compensatory purposes, hence only effective for senior phase learners (Grades 7-9) (South African Government, 2016).

Furthermore, on the basis of the trends observed where grade reputation is concerned, with

increased school dropout and truancy, lowering the pass mark is thought to lower pressures on learners by bringing a more attainable goal into reach (South African Government, 2016; Hugo, 2016).

In the logical consideration of such a prospect, reducing or completely doing away with the notion of condonation is likely to introduce a considerable issue of backlog within various schools, thus limited/no intakes of new learners in the following years. With recognition of the issues surrounding this policy by Minister of Basic Education, Angie Motshekga, solutions for change were spoken to, however are yet to come to pass (Mlambo, 2014). What was however identified as a possible action of recourse is that of persisting faults aligned with teacher support and training through the reintroduction of random inspector visits throughout the year; inspectors would check the progress of teaching within classrooms and monitor teachers, making all stakeholders accountable to the goings on within schools (Mlambo, 2014). The progress of this is one to look out for.

With the setup of the system discussed from the view point of participants, issues of the curriculum were also highlighted, with one participant's response to a question regarding its suitability for testing and future practice being:

“Abstract reasoning is a skill [that needs to be attained] yet our education system isn't teaching that” – Participant 4 (p. 8)

In her experience and observations, the curriculum as it stands teaches a child how to repeat notes/points made by the teacher without actually learning it. Using an example of a fish she states:

“...they’re not learning the fish, what the function is...so that needs to change...it’s policies” – Participant 4 (p. 8)

In much the same way as above, for this participant policies were main issues surrounding the difficulties children are experiencing. In essence, her sentiment is that of: being taught ineffectively will produce ineffective results (Gilmartin, 2001). Effective teaching and learning according to another participant is that of mediated learning, as described in Vygotsky’s Sociocultural Theory, with her stating:

“...children learn better through interactions...mom reads a book...opposed to they look[ing] at pictures on a tablet” – Participant 5 (p. 9)

In her opinion, this benefits a child’s vocabulary development above all else as it provides the most ideal foundation for the formation and expansion of words within the child’s immediate context. Following on from Piaget’s constructivism notion of the development of knowledge, Vygotsky’s adaptation concurs with this participant’s views as interaction provides the perfect premise for guided growth and development, from which cognitive development may also be added (Green, 2014). In government based classrooms housing no less than 45 children on average, the extent of this interaction is not easily achieved by teachers, much less parents at home whose focus is divided between other children, household responsibilities and the stresses of work. This is the reality of the majority of South Africa’s population; a reality centered at division, sacrifice and inconsistency...elements that all inform development and potential of a child both in isolation and in combination. In contrast is the reality of the privileged few for whom individualised teaching is possible, often observed within private schooling institutions.

The differentiation that exists between the public and private schooling systems brings forth measures of possibility where discourse surrounding the notion of “the haves” and “the have-nots” emerges. Where individualised, person-centered teaching and learning systems prove viable for children within the private schooling system, as described by Participant 5 (p. 13); whereas, for those within the public system the above experience is deemed more of a *“luxury, not [found] in government schools and not with the masses of South Africa”*. The public education system often finds it near impossible to change an entire class setup, inclusive of the pace of teaching, to accommodate 1 out of 46 children and as such often one can observe fluctuations in result outcomes when struggling learners slip through the cracks unnoticed - whether due to scholastic difficulties or even dropping out completely (South African Government, 2016). Statistics of the 2014 NSC results indicate that of the over 500 000 learners who wrote examinations that year, 75.8% passed, while only 28.3 % achieved marks high enough to pursue a degree (Department of Basic Education, 2016b). 2015 illustrated a decrease to 74%, and 2016 showed a slight improvement with results cited as 76.2% (Eyewitness News, 2016 Matric Class Obtains 76.2% Pass Rate, 2017); this outcome showcases the inconsistency of results from 2014 to 2016. Comparably, Independent Examinations Board (IEB) produced a total pass rate of 98.38%, with 85.45% of those learners qualifying for university entrance in 2014; while 2015 and 2016 results remained with the 98% range with 98.30% and 98.67% achieved respectively (City Press, 2014; Eyewitness News, 2017). As stated by Participant 5 (a clinician practicing in a public hospital in Johannesburg), the system works with what it has and, given these settings, presents assessments such as the SSAIS of best fit for such underprivileged contexts. Contextual availability dictates societal outcomes.

With the above in mind, this information then asks the question: Are the faults and issues witnessed within the system as a result of an inadequate education system, or with the identification processes set in place for the appropriate placement of children in schools? From the views of the participants, the problem lies in the setup and curriculum within the education system. According to the literature, the problem lies within the education system as observed with failed curriculum plans resulting from inadequate implementation strategies; and teacher support/training being viewed as limited (Gilmartin, 2001). The Minister, on the other hand, speaks only to a single component of the system in isolation; that being the poor policing of teachers. Its hard to believe that this is all she sees, all she deems as problematic given the academic outcomes of learners thus far.

Summary

With the foundational role the education system plays in the cognitive development and academic knowledge of children, it is of no surprise that this proved a recurring point by many of the participants. In speaking to this system grievances aligning with 1) the curriculum, and 2) differential schooling systems were mentioned. The curriculum was perceived as being ill fitting for the current needs of society with the important skills of abstract, interactive learning being left out of necessary learning outcomes. Additionally, issues surrounding the notion of condonation and how, in the future, this does little for the development of the child as learning outcomes were not fully obtained for predictive future success. In terms of the schooling systems, the differentiation that exists between private and public schools was highlighted when comparing teaching and learning frameworks as well as results. Where private school scholars are more likely to obtain more individualised teaching and learning environments, public school scholars are not; and as such impacting results of the internationally utilised assessment measures in rotation within South Africa.

The perception of participants regarding the South African education system is a hopeless one due to the ill fitting curriculum, and degree to which it will aid to further develop the minds of learners, most especially those within the public system. In the selecting of assessments, school placement appears to play a largely informative role. Where the “have’s” experience greater resources, thus a wider range of academic knowledge, the “have-nots” do not; and so a differentiation between the crystallised abilities of one group over the other soon emerges, influencing assessment use.

Participant’s negative perceptions of the public schooling system thus inform their beliefs of the ability of learners, and in turn the outcomes they may obtain in various cognitive assessment measures.

4.4.3 – Finances: Accessibility for all

The financial standing of many of the children who are referred for a cognitive assessment was described by many of the participants as a major marginalising factor, more so than education; although closely linked as finances dictate the type of education one receives. In addition, that very education predicts the quality of English – the most predominant language of trade, as discussed previously – one is exposed to (Parmegiani, 2009). In essence, subpar availability in terms of finances very often depicts subpar accessibility to other services in the future (Lamy, 2003). However limiting this factor was in theory, only one participant spoke to it as a constant defining factor in their current practice within the public sector. It was interesting for the researcher to see how the reality of financial constraint actively existed in just one setting of the many that she visited; this clearly highlighted how such occurrences proved to be a struggle for some, while being a non-factor for others.

While being a major factor in one of the settings, financial stability of the family from which a child comes was continuously described as a factor most impactful in assessing, according to participants. Finances dictate the kind of follow through intervention for a child, and forces assessors to be a lot more cognisant when making recommendations. In so doing, aspects relating to: familial background, residential setup (in terms of locale, thus accessibility to resources), and socio-economic means need to be assessed. From the experience of one participant, recommendations are greatly dictated by the child's family's financial standings, resting on:

“... how many resources does the family have...”

She went on to say:

“...[I] can't recommend an expensive special needs school...if its not possible [for the family to obtain or manage]” – Participant 5 (p. 4)

While of great concern, and must necessarily be kept in mind for all cases and clients, in this research responses most centered on financial awareness were provided most commonly by the practitioner within public practice. Having had some experience within private practice, she explained how in assessing children from the public services demographic one is able to observe significant differences in assessment outcomes where:

“...lower income children generally tend to do worse. The school that they've been to is a huge factor” – Participant 5 (p. 10)

This statement brings to light, once again, the impact of education on the success of a child in testing scenarios. This was echoed by another participant, this time in private practice, stating:

“...if you’re looking at disadvantaged children...there’s a big difference in comparison to children who have had a lot of information and a lot of stimuli; they know how to do puzzles.” - Participant 4 (p. 4)

In the experience of this participant exposure to an activity as simple as a puzzle, and understanding how it works, lends itself to the success of a child. Stimuli such as puzzles function as developmental aids through which cognitive maturity (concept reception and expansion) is initially built upon (Coon & Mitterer, 2012). A limitation in stimulation was viewed by the participants as being rooted at socio-economic status, but also parental awareness of the importance of such stimuli (Vorster, Sacks, Amod, Seabi, & Kern, 2016). It would appear that with poor/limited access to these stimuli, limited knowledge regarding its long-term benefits are either underestimated or disregarded as a whole. While lack of knowledge of this sort cannot be deemed the absolute fault of parents, the unwillingness to wholeheartedly embrace recommendations aimed at remediating the effects of the resulting shortfalls is.

Early childhood development (ECD) practices are said to be tools of great importance in safeguarding children grouping up in low income communities by attending to three areas of concern, namely: poverty, inequality, and unemployment (Vorster et al., 2016). Where difficulties often associated to poverty may be observed in low SES areas (for example cognitive delays and stunting), access to quality early childhood education may compensate for this (The World Bank Group, 2011; Vorster et al., 2016). As of 2008, more than 11 million South African children were recorded as living in poverty; of this, Black children constituted the greatest proportion (96% of total share of children in poverty) followed by Coloured (4%), White (0.4%) then Indian/Asian (0.3%) children (South African Human

Rights Commission & UNICEF SA, 2011) (Addition 3). Adding to this is the high percentage of economically non-active households in society; households that are cited as not having an income. The General Survey of 2009 states 69% of the population as lying in the 20% poorest portion (South African Human Rights Commission & UNICEF SA, 2011) (Addition 4). Given the above-mentioned statistics, and the experiences of participants – in terms of racial groupings too – the congruence is thus not surprising. The financial constraints within the family negatively impact the cognitive developmental potential of a child; management of this can only be negotiated with stimulatory intervention in early childhood to prevent continued deficits well into adulthood (Vorster et al., 2016).

It was the repeated experience of one participant with problems regarding parental support and buy in, which is also deemed a major impeding factor. Even with recognition, discussion and extensive negotiation of financial constraints with the family prior to the making of recommendations, this participant spoke to sustained parental support being very problematic. In cases where the need for the assessment was in the first place thought of as being “unnecessary”, follow through on recommendations is likely to reflect the same mindset. Perhaps the term ‘testwise’ (Foxcroft, 2011) could be expanded to include not just one’s understanding of a standardised testing situation but also the recognition of its role in determining the cognitive and scholastic potential of a child at a given time in their development (Cockcroft, 2013; Laher & Cockcroft, 2013; Setshedi, 2008). In the case of the above-mentioned scenario with the parents, one could then understand their low/limited level of testwiseness as being the cause of their lack of focus on implementing the recommended follow up interventions. With that said, however, the perspective of said parents cannot be ignored. Lack of testwiseness needs to be considered with regards to the era in which many of these parents grew up and were educated. Where the apartheid era was

known for using assessments as a tool to oppress a large portion of the population, generational knowledge of that practice is likely to have tainted the views and understanding of many in this regard (Louw & van Hoorn, 1997). One would think that, with the change in government and introduction of a fully integrated generation, issues of the past would be a little less impactful. With the significant differences observed between the verbal subtests outcomes of the “haves” and the “have-nots” within society, a change needs to be undertaken. The “how” is the perhaps the most relevant question at present—most especially given the consistency of inequality within the country, as witnessed throughout history.

Either way, one’s financial standing informs the extent to which interventions can be undertaken – if at all. It is clear that recommendations and follow up interventions go hand in hand with a child’s contextual background.

Summary

Socio-economic status informs assessment recommendations but intervention strategies, as recommended follow throughs, are not always implemented; often on the basis of parental limited finances, or for one of two reasons: 1) the parents are unaware of the long term benefits of the recommendations (or repercussions of not undertaking in them), or 2) (based on prior knowledge) parents consider recommendations as simple suggestions and thus purely optional. Parental collaboration in this regard is therefore a major hindrance. In essence, in the experience of participants, a low income often works as a predictor of assessment and educational outcome as necessary resources (for example developmental stimuli) are not readily obtainable. As such, a major factor of consideration pre- and post-assessment lies with the financial stability of the family; pre-testing in terms of the assessment battery (as more assessments cost more money), and post-testing in terms of recommendations for intervention and remediation.

Secondary:

The secondary themes refer to those addressed by some of participants. The inclusion of these was on the basis of the points being valid for the direction of this research.

4.4.4 – School placement

The impression of the researcher on this theme appeared somewhat sequential, with the first point by participants being that of issues of language, which then lead to appropriate placement.

As spoken to in Section 4.4.1, language in context topped as a major factor as far as assessments are concerned. Where a language base for basic communication cannot be obtained, nonverbal assessment alternatives are undertaken. As a result, many children find themselves being assessed on one component of the entire battery with the verbal component being forfeited. While a necessary forfeit given the limited communication, the question of where do these children obtain a full test battery was posed. Language was once again introduced as a factor regarding the placement of children, where one participant felt the limited versatility in language of the assessors played a key role in poor placement of children. In the opinion of Participant 1, with the expansion of the language curriculum in training institutions assessors would be more equipped to accurately test a child (in a language most comfortable for the child), thus being placed appropriately based on test outcomes (Appendix D). In her view, language versatility is useful and necessary in practice as school readiness assessments are common reasons for referral. Where a child is being assessed on the basis of their maturity for entrance into the schooling environment, their ability to speak English (if not the LOLT for the school of interest) should surely be secondary; the primary focus should be whether or not he/she will be able to cope within the

schooling environment amongst their peers. This echoes the statement made by another participant in which she spoke to changes needing to be undertaken within assessments, and not forced upon children (Participant 4 - Appendix G).

While language acquisition is key for an individual's development, especially within the foundational stage of their lifespan (Coon & Mitterer, 2012; Just, 2016), it would appear from the experience of the participants, such a pre-test requirement when poorly developed proves difficult to negotiate; especially when English is the 2nd+ language of the child. While there is a differentiation between *readiness for school* and *readiness to learn* (the latter is described as innate and the former based on preparation for structure), both are centered on the child with the support they are provided in context being most influential (United Nations Children's Fund, 2012). Limitations in terms of language development are predictive of testing outcomes, further compromised by conventional techniques of measure where verbal fluency is observed (Sternberg et al., 2008). This then reintroduces the notion of dynamic assessment and its possible appropriation in such cases. When limited understanding of the ability of a child is obtained (for example misdiagnosis due to poor communication, thus condensed assessment battery), poor/inappropriate school placement may be observed; from which behavioural issues may emerge (Cross, 2004). This point spoke to the shortfalls often observed within schooling systems where the role of practitioners is unsuccessfully executed:

“...leave a low functioning child in a school that is not appropriate for them long enough and the behavioural stuff will come. So it's about catching it before then, but often we don't; so they come with their psychiatric difficulties and then we assess them.” –

Participant 5 (p.2)

These are the common outcomes of a service system that may be failing children due to diagnoses made on the basis of a limited, non-exhaustive assessment battery selected due to poor communication on the part of the assessor. Following on from the view of Participant 1, with awareness of the purpose of the assessment, efforts should be ideally made to accommodate the child, especially if English proficiency is not a factor of importance. Should this not be done, the validity of assessments, thus eventual placement of children, could be brought into question as the quality of an assessment can only be judged by the quality of the assessor (Participant 2 –Appendix E).

Based on the perceptions of the participants, one gets the feeling that in addressing issues of language (and perhaps extending into culture) accurate and immediate placements are possible. The impression is that issues left unattended (where the child remains silent due to poor communication both during and after assessment) results in problems being overlooked and unidentified. Or one finds that incorrect placement is applied as poor fluency in one language (the language of assessment) is equated to a scholastic difficulty or disability. While perhaps linked in some instances, these are not mutually exclusive - most especially in the need of brief remediation.

In essence, it would appear that the opinion of participants (within an ideal setting) is that the issue of school placement rests on a child being afforded the opportunity of assessment in a language that will display their full potential. To what extent this is possible remains the overarching financial issue.

Summary

Assessments utilised for school placement deemed insufficient as only the non-verbal component of the assessment is used for decision making in non-English speaking clients.

While the need for this is understood, it may be considered limiting in it being unfairly leading on the basis on the singular aspect of measuring (non-verbal alone). When placement is inappropriate (through misdiagnosis), participants concur that issues of a behavioural nature are soon to emerge, with frustration being the cause. Resolution to this is full inclusion of culture and language where assessments are concerned. Additionally, consideration of more information processing (dynamic assessments) tools of measure where an understanding of the child's processing is obtained in favour of isolated aspects of ability; these may improve validity of measures too.

4.4.5 – Development of new South African assessments

On the basis of the multiple points made by the participants within the themes revealed above speaking to the poor level of measure and irrelevance of SSAIS and JSAIS, it is of no surprise that the development of new assessments made the list of themes. While conversations surrounding the practical feasibility were considered and discussed between interviews, their derived benefit appeared to consistently overrule this thought process.

“If we want to develop a new standard then we need to develop a new standard to measure it”

– Participant 2 (p. 14)

The statement above is perhaps the point from which attempts at new developments need to begin: curriculum and the ability to expand upon this after school. A lack of motivation to develop new versions within South Africa is most centred at the varying issues of education, as expressed by one participant. In her opinion:

“...until we can get our school system right, we are going to have difficulties with our cognitive assessments” – Participant 1 (p. 12)

The impression of the researcher of the participant upon providing this statement was that of a flailing belief in the likelihood of change at the root. The participant appeared to think that, much like in the past with the introduction of OBE, attempts at change may be implemented to feign progress, with these only being temporary in solution as the root cause (teacher training, support and curriculum setup) being ignored (Gilmartin, 2001). In realising the suggestion made by Participant 2 quoted above, rote learning techniques need to be replaced with abstract learning forms, as the ability to infer will aid beyond school, well into tertiary education, then carried over into the work force. In essence, the participants were of the belief that for steps to be taken for an as accurate as possible measure to be developed for the South African context, curriculum based issues need first to be attended to. Without this, steps to move forward will prove limited, as the ability to effectively record the potential of a child will continue to be qualitatively underwritten.

Given the multiple grievances expressed by participants throughout these themes, this then begs the question: Should the most recent educational programmes (National Senior Certificate, and Curriculum and Assessment Policy Statement) be revised or scrapped, being deemed useless in much the same way as OBE? Most especially with the most recent developments in which the Department of Basic Education introduced condoned passes to Grades 7-9 learners who obtained at least 20% in mathematics, what good is this system for South Africa's future leaders? This does nothing more than further diminish our national ability to compete globally (Etheridge & de Villiers, 2016).

The leniency spoken to above was also the experience of one particular participant, not just in terms of curriculum, but in her using of the JSAIS. When asked about her preference of the WISC over the normed JSAIS she responded by saying:

“I could see the child was struggling at school...[I] assess him on the JSAIS and it would say he is school ready [equipped]” – Participant 3 (p. 2)

She then went on to say:

“The reason I don’t use the SSAIS and JSAIS is not because it’s South African, but because it doesn’t give you enough” – Participant 3 (p. 8)

Another participant concurred with this point and her endorsement of international assessments by saying:

“The fact that it is modern outweighs the fact that the SSAIS is normed in South Africa... if it was current, I’d go with it 100%. But it’s because it’s so outdated that it still doesn’t feel relevant anyway.” – Participant 4 (p.9)

It doesn’t give enough information to make a conclusive diagnosis. In their individual opinions and experiences, these South African measures fail to give a well-rounded and extensive picture of a child’s potential, most especially that of the 21st Century child. Whether their opinions are on the basis of the period of its development (mid 1900s), or simply on the basis of the quality of these assessments was unclear. In asking this question of preference, or lack thereof, an understanding of perspective was being undertaken, as another participant was of the mind that the SSAIS is of good quality and best suited for South Africans and this context (Participant 5 –Appendix H) A view likened to that of Laher

and Cockcroft (2014), most especially when utilised as a qualitative measure of cognitive potential. This observation then reintroduced the differences that exist between the public and private schooling systems as, under comparison, private school scholars find SSAIS too easy while results of the WISC prove average; public school scholars don't fair quite as well. In her experience, Participant 3 expressed how the WISC, while producing differing results, is more suited for private school children (Appendix F).

With this response in mind, one then wonders what is to be then done with public school scholars? Are they to be left with the alternative deemed lenient, thus not of a globally competitive standard? Renegotiation of the differences in such systems leaves children suffering on the basis of contextual backgrounds; while indirect in occurrence, nevertheless they impact the child, as described by Bronfenbrenner (1979). The outcomes of context in this instance speaks volumes.

On the point of global comparison reemerges notions of language of assessment and the possibility of this in revisions and new South African normed developments. As spoken to in 4.4.1, the need to better attend to the language discrepancies that exist in assessments was clear. While developments leading towards assessments in all the official languages of South Africa would be ideal, as every child would get the opportunity to be assessed in their HL, such a development would prove pointless on the basis of global competition. The fact of the matter of the society we live in is that of an international form, in that in order to grow and develop beyond one's current environment, a certain level of flexibility needs to be acquired as far as language is concerned. As such, one's ability to define and defend the self in a language outside that most commonly practiced in the world of trade and industry (topped by Chinese, Spanish and English) appears counterproductive (Lane, 2016). With South

Africa being the only country utilising languages such as isiZulu, Sesotho, and isiXhosa, indigenously, strength of fluency means little to nothing outside the border. As was the view of one of the participants on the difficulties surrounding assessment language expansion, the greatest trouble lies within the overall functionality on the international stage (Participant 1, p. 13 –Appendix D). As expressed by a number of the participants, South African assessments are a significant number of steps behind that of other countries, the impression is that pumping money into efforts that will do little to bring the country and its people on par with its contemporaries is pointless and defeats the root problem, that being the lack of a measurable and comparable standard.

On a positive note, however, the revising of the WAIS III (Wechsler Adult Individual Scale) – through the adoption of South African norms – has been considered a win by the majority of the participants, along with this the WAIS-IV (Laher & Cockcroft, 2014). This norming, while indicating an awareness of the problems that exist with non-normed variants in high rotation as illustrated in Table 2.3 (Chapter 2) attends to adult assessment, but leaves children without such an alternative. Given the reality that all great things take time to be realised, this initial step nevertheless favours the progress of South Africa assessments. With that said, the premise of the issue continually reverted back to inequality and the need for more awareness of these in society to ensure fair testing. In the experience of one participant, more needs to be done as:

“...cultural issues...[aren’t] being addressed at all.” – Participant 6 (p.7)

Summary

In making attempts to develop South African assessments, a curriculum must be introduced from which a good quality assessment measure can be developed. At present, South African

assessments such as the SSAIS are deemed too lenient, especially for private school scholars, thus making their public school counterparts appear to be lagging during comparative processes. In essence, the South Africa measures of assessment currently in use are described as being poorly suited for a child on the basis of the expectations of society in the 21st Century.

With the above in mind, the perceptions of the participants regarding the value of conventional assessment measures utilised in South Africa (normed or otherwise) aligns with these being thought insufficient. Where the normed variants are viewed as irrelevant (in terms of both language and period of development), the international variants isolate some members of the population; additionally, interpretation of results is accomplished qualitatively, thus not indicating a true potential of the basis of lack of norms.

Conclusion

The above are thus a culmination of just five of the most recurrent topics extracted from the participants. While there were a number of additional topics that participants spoke to intermittently - as illustrated in Figure 4.2 – not all were of importance as perceived by participants, or of immediate relevance to the topic of this research. As such, it is important to note that the above are by no means an exhaustive list of factors associated to the value of psychological assessment measures in South Africa, but are rather isolated impressions of this data sample.

CHAPTER 5 – CONCLUSION

This final section will be speaking to the overall findings of the report. A recap on the research method utilized in this research will be spoken to, and then following the analysis undertaken, the findings of the participant interviews will be discussed. Limitations of the study as well as recommendations for future researchers will also be spoken to within this section, as no research is ever perfect and without faults. These last two components of the chapter aim to deal with such shortfalls of the research.

5.1 – DISCUSSION

As is the course of all research, a number of steps are undertaken in the process and completion of any research. The processes of this research were much the same. The purpose of this research was to investigate the perceptions of psychological practitioners on the value of cognitive assessment measures utilised within the South African context. The aim rested on trying to gain insight into the ways in which these assessments aid in the identification of scholastic difficulties/disabilities prevalent in children, and to what extent factors such as context contribute to these outcomes. Additionally, in having practitioners as the sample, it was the further aim of the research to understand the factors that impact the assessments practitioners utilise in testing, if any. What is to follow is a brief description of the methods undertaken in conducting this research, followed by a summation of the findings obtained.

5.1.1 – Research Method: Semi-Structured Interviews

As mentioned in Chapter 3, this research consisted of a sample of 6 psychological practitioners, practicing within the greater Johannesburg area. Once confirmation of

voluntary participation was obtained, semi-structured interviews (lasting 45-60 minutes) were conducted on the date and locale of the participant's choosing. Each interview was conducted with an audio recording being made for which consent was obtained prior to commencement. Consent forms for participation were also obtained under the same conditions. Audio recordings were necessary for transcript purposes that took place following each interview; no one other than the researcher and her supervisor had access to the recordings; thus anonymity of participants was cautiously maintained.

5.1.2 – Overview of findings

In having analysed the interviews, the most evident outcome observed was that of the continued impact of both education (regarding the schooling system/resources a child is exposed to) and language throughout each theme. There was consistent interplay from one theme to another, thus illustrating the extent to which aspects of social activity very rarely take place independently, as described by Bronfenbrenner's systemic understanding of development (1979). Additionally, the context under which one lives was illustrated, with the roles these contexts have on the assessments used and favoured by practitioners also discussed. While deemed a limiting factor by some participants – in that little to no change can be imparted on a system that already exists and so one needs to work with what they have – a few others viewed this as a point of departure, in that alternatives may be implemented on the basis of the current circumstances. With language as a prime example, where some participants felt helpless and defeated when faced with non-English speakers in testing, others felt a shift in teaching (of practitioners in training institutions) needed to be made where assessors exercised language versatility through their acquisition of an African language(s) in aims of meeting the language needs of testees half way. Efforts in this regard would also aid in obtaining a more valid representation of the potential of non-English

speakers where qualitative methods of assessment would not be necessary. On the basis of the above, with adequate attention to, and rectification of, language, a variety of difficulties experienced with regards to assessment use and value may be more easily negotiated.

Difficulties of inequality rooted at South Africa's segregated past were most observable in the conversations surrounding finances and schooling. A point of constant repetition by many participants was that of schooling, and the impact it has on outcomes one obtains in cognitive testing. Negative outcomes were often the experience of many participants of the more disadvantaged children. Given the foundation schooling provides a child (starting with crèche all the way to high school), an insufficient system in terms of quality and support places said child at a disadvantage; integral elements of language acquisition leading up to thinking and reasoning are fostered during these periods, and should poor teaching methods be implemented, poor learning will be observed too (Coon & Mitterer, 2012). This was the experience of participants, an experience centered at limited financial ability as perceived by many participants. In line with this limitation came a limited range of schools children may be enrolled in as, without adequate financial backing many parents either placed the child in whatever school was the most convenient (regarding locale too), or they forfeited assistance recommended by assessors if it proved too much a financial stretch for the household. In the long term, issues most aligned with behavioural issues were likely to emerge as children placed inappropriately (in terms of their scholastic needs) become more and more frustrated – this was the common experience of one participant in particular. The above illustrates the impact of the environmental context on the outcomes of cognitive testing of children in this regard. It would appear that in efforts to obtain the most reflective outcome in cognitive testing for children, a full awareness of the child's background is necessary as a means of negotiation, thus effectively managing, the factors that may be prevalent.

5.1.3 – Findings in relation to theories

The findings of this research continually align with the theories applied during analysis. Where Vygotsky's theory focuses on the impact societal figures (for example parents/guardians) have on the developing child by working in conjunction with the environment the child is reared in, Bronfenbrenner's theory continued this notion by explaining the interdependent nature of these elements (family and environment). In essence, the environment a child lives in informs an array of developmental aspects during early life, ranging from: mental/cognitive health, as well as physical and health wellbeing, of which financial capabilities impact primary and future educational opportunities.

Interplay of one factor (family) with another (environment) was evident in the findings as defined in the works by both of the above-mentioned theorists. The interdependent nature of actions of parents – whether due to unemployment, educational level or literacy – often filtered to the next generation, where patterns of behaviour/thinking matched that of the generation before. This was observed most commonly regarding parental buy in as of cognitive assessments; the negative experiences of assessment by the 1st generation was recognised within the 2nd, and was likely to filter to the 3rd generation and beyond (for example: grandparents to parents, then grandchildren).

Perception, beliefs and actions were also discussed though which its sequential underplay may be understood. As described previously, beliefs shape attitudes that inform one's intentions and ultimately determine behaviour; this is the basis of one's perceptions. In looking at the outcomes of this research, the above appeared to be true in the majority of the findings. According to Fishbein and Ajzen (2010), beliefs are motivators for behaviour thus often predictors of action; such was the experience of the researcher from participants most

especially within Theme 2 - South African education system. Perceptions of participants regarding the education system as it stands proved negative, this then impacted their beliefs regarding the outcomes of children on the basis of the schools from which they came. Very often the belief was: poorer outcomes from a government school, better outcomes from a private school; this in turn impacted the assessments utilised, varying once again between public and private schooling systems.

Similarly, Theme 3 produced guided expectations as limited income resulted in a lowered possibility (according to participants) of parents following through with recommendations/interventions. While fair in practice and beneficial for parents in terms of their means, these beliefs often dictated the extent to which fully exhaustive means of assistance may be suggested. For example, where income is limited one is less likely to recommend occupational therapy/a language specialist for a child, as the assumption is that the parents will find it difficult to obtain the funds for this intervention. Once again, while fair and understandable in practice, it also works to limit the effort of the parent, as their ability to obtain funds (perhaps from other family members) is considered on their behalf as not possible.

From this it appears that one's beliefs/continued experiences inform future practice. Motivation to act in a particular way rests on prior knowledge where experience forms the basis (Fishbein & Ajzen, 2010).

5.2 – LIMITATIONS AND RECOMMENDATIONS

The limitations of a study are said to be the elements/factors within research that one is unable to control (Bui, 2009). While observed as areas of weakness within a particular

study, they assist the researcher – and possible future researchers on the same topic – to think about the manner in which the study was initially conducted, and how they would improve on it by asking “If I had to do the study again, what would I do differently”, thus forming the recommendations (Bui, 2009, p. 198). By being aware of the limitations of a study, perspective post analysis and discussion is obtained on the basis of the outcomes observed due to the methods and/or techniques undertaken.

This research was not without limitations. What is to follow is the most prominent of limitations of the study, coupled where applicable with supporting recommendations. It is the hope of the researcher to have future researchers in this field expand upon the current findings by rectifying the faults within this research. In so doing, a greater, more diversified understanding of psychological practitioners perceptions of assessments may be obtained.

5.2.1 – Sample size

As discussed above, the sample size for this research was six psychological practitioners. Of this sample, two were psychometrists, two educational psychologists, and two clinical psychologists. It was the initial hope of the researcher to have a total of eight participants, with the inclusion of two counselling psychologists.

Given the nature of voluntary research, participants are free to enter and exit the study at anytime they choose without risk of persecution. This proved to be the resulting case with the counselling psychologists. In addition, given the criterion for participation regarding location of participants (as outlined in Chapter 3), poor response of counselling psychologists utilising psychological assessments for diagnosis was observed. This resulted in the time frame allocated for data collection and analysis being limited for the researcher, thus leaving the sample to a total of six in order to reach the deadline for report submission.

For reasons related to diversity of outcomes, future researchers are urged to either work to secure counselling psychologists so as to include them into the sample to gain insight into the experience of this discipline, or add an additional participant in each of the above sampled disciplines (psychometrists, educational and clinical psychologists), given the difficulties the researcher experienced obtaining counselling psychologists within locale of her research.

5.2.2 – Demographic of sample: Gender and race

Much like with sample size, obtaining a sample made up of other genders and races will prove greatly beneficial for the research in terms of diversity of outcomes. Experiences of one demographic to the next often differ, thus impacting outcomes. While it was not the intention of the researcher to explore the perceptions of a predominantly White, female demographic, that is the demographic that made itself available to the study. This perhaps ties into the above limitation of time as, the opportunity to sift through and thoroughly seek out a wide array of participants may have been afforded most especially in the factor of gender, as the field of psychological practice is dominated by the female gender.

5.2.3 – Location of sample

The criteria for this research spoke to eligible participants being located within the greater Johannesburg area, as this was the most accessible reach of the researcher. While many psychological practitioners practice within this area, it provided a one-sided perspective of experience, that being of the urban, and predominantly private sector. Future researchers should consider expanding their research locale into more rural areas. As context was a factor of interest in this research, the experiences of the rural and urban locales are likely to have produced a very diversified perspective, perfect for a comparative analysis of

practitioners across the country. Given the time and ability of the researcher in this study, this was not in her capability, but it is possible given additional time and resources.

5.2.4 – Research methods

This research was conducted under qualitative methods of analysis through the sole utilisation of individual interviews. While this worked to provide information, variations in data collection may have been of benefit as collating of results may have been possible. In the case of a focus group/forum, one may find that the opinions of some may have worked to influence those of another thus altering the answers provided. This may have also created different manners of thinking where conceptualisation of thought may have been informed differently on the basis of external intel. A mixed methods approach may also have provided a different outcome through the use of questionnaires. Such an approach would have provided a wider sample size from which findings could have been used in combination with the interviews conducted. The current method limited the extent to which sample saturation may have been explored. This should be considered, for purposes of variation and sample expansion, by future researchers.

Upon completion of this study, what the researcher found to be the biggest lesson is the complexities surrounding the field of psychological testing within South Africa. Where most countries mostly struggle with the financial feasibility of new developments, South African developers and citizens struggle with the history associated to these assessments. Segregation, discrimination and dehumanisation have long since followed cognitive assessments and as a result created discourses and beliefs of suppression, most especially for Black, Coloured and Indian members of the population (Abaunza, 2013; Akhurst, 2007) on the basis of the use and manipulation of the numerical value obtained. These struggles are

elements that South African developers continually need to consider in the conversations of developing new measures, elements that prove costly both financially, but also in terms of time as inclusion of all people (culture, language, SES, etc.) proves paramount. There are a variety of “grey areas” of which navigating has resulted in more than a 20 year gap being left since the last South African cognitive assessment measure was developed (Cockcroft, 2013). While present day practice appears to be moving towards a greater awareness of varied elements, the shift to align testing with these elements is not quite there, and it would appear (from points made by participants) that it is due to policy development in which psychological practitioners are not directly involved. The primary of which is language of teaching, and language of assessment; secondary to this is the schooling system, from which issues of language were also mentioned. From the researcher’s view point, institutional groundwork needs to be first implemented (from which the reassessing and renegotiating of the teaching and training systems needs to take place), following which the grievances of psychological practitioners can be integrated, grievances surrounding: assessment content and topics, the learning of the 21st Century child compared to that of the 19th Century child, and the influence that modern technology has on learning, just to name a few. Once the foundation for better learning is laid within South Africa, steps to further facilitate and expand upon the foundation may be undertaken, and as such may result in the preference of international assessment variants of many participants being shifted towards South African variants on the basis of 1) generational relevance and 2) educational equality and potential for true success.

5.3 – STRENGTHS AND CONTRIBUTIONS OF RESEARCH

The primary contribution of this research rests on the exploration of the perceptions of participants on cognitive assessments, but also the investigation of preference in this regard. While there is a vast array of literature on the types of assessment used by psychological practitioners, investigations as to the reasons why some assessments are used over others is not quite as vast. This is the gap that this research has looked to fill. In gaining insight into the factors that influence the use of particular assessments by practitioners, efforts can be made to renegotiate the most negatively impacting aspects—whether educational, social or familial in nature. This thus also doubles as a strength of this research through the approach of understanding cognitive assessments from the point of practitioner perception and preference. Additionally, exploration of experiences from differing psychological practitioners has worked to diversify viewpoints and understandings from the experience of the differing specialisations. It is easy to become comfortable and complacent in practice when information becomes circular (from those exposed to the same content/experiences); the addition of varying opinions of participants based on real world occurrences foster expansion of the mind, and creates a greater awareness of all domains of the same field. This research has worked to include the perceptions and understanding of all available practitioners in identifying the factors that need to be considered where cognitive assessments are concerned.

CONCLUSION

In conclusion, while the uses of cognitive tests within South Africa tend towards the more conventional, international variants, their value as a diagnostic tool for the identification of scholastic difficulties in children was continually spoken to. Participants expressed that, while the South African version of tests are at times utilised they are more often overlooked

on the basis of: the language used in the assessments (described as linguistically irrelevant for the modern child), difficulty level of the assessment (they prove too lenient in some instances), and the overall competitive level of these assessments when compared to the international variants. On the basis of this, participants expressed continued favour of the international variants, as it was believed that in the long run they will work to even out the academic playing fields of the South African child across the globe, as much as is possible. Context and the impacts of this are also considered in the testing of children, but often the extent to which this can be managed is limited. With protocols of assessments clear within the guidelines, the ability for an assessor to negotiate these in the best interest of the child is not always possible. The most common example in this regard mentioned by participants is that of language in that, should a child's LOLT be English then the language of assessment should also be in English. In situations where English is not accessible, some participants had mentioned interpreters as an option, while the vast majority spoke to opting for a wholly non-verbal battery through the use of assessments such as the Raven's Progressive Matrices. In essence, while not much can be done to manage the context where testing is involved, given the impact poor schooling, thus language acquisition, has on academic development, context appears to have significant impact on the cognitive testing of children. A poor and insufficient environment, ill-fitted for the cognitive development of a child, results in poor scholastic development, through which poor testing results are observed.

In the process of renegotiating measures of assessment through the utilising of the measures such as the Raven's, willingness to explore deviate from conventional assessments by participants has been observed. Where language proves a limiting factor, participants spoke to alternatives that would also provide an indication of cognitive potential. While information processing and dynamic assessment measures were not discussed by

participants in great length within their practices (even with probes by the researcher), appreciation of the benefits of these were recognised with one participant highlighting such as practices as luxury, especially within the South African context. Appreciation of this ideal was nevertheless noted.

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