

Educational psychologists' views on the value of the Senior South African Individual Scale Revised

Jenna Gordon

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**Educational psychologists' views on the value of the Senior South African
Individual Scale Revised**

by

Jenna Gordon

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DECLARATION OF ORIGINALITY

I, Jenna Gordon (student number 13043197), declare that the dissertation, which I hereby submit for the degree Magister Educationis in Educational Psychology at the University of Pretoria, is my own work and has not been previously submitted by me for any degree at this or any other tertiary institution.

Jenna Gordon

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31 August 2022

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ETHICS STATEMENT

The author, whose name appears on the title page of this dissertation, has obtained, for the research described in this work, the applicable research ethics approval. The author declares that she has observed the ethical standards required in terms of the University of Pretoria's Code of ethics for researchers and the Policy guidelines for responsible research.

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ABSTRACT

Educational psychologists' views on the value of the Senior South African Individual Scale Revised

by

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Supervisor: Professor Suzanne Bester

Degree: M. Ed. (Educational Psychology)

The purpose of this exploratory case study was to explore and describe two educational psychologists' views on the value of the Senior South African Individual Scale - Revised (SSAIS-R) for their clients. The conceptual framework supporting this study was guided by a psychometric approach to intelligence and included concepts of validity, reliability and fairness. These concepts provided insight into the meaningfulness, appropriateness and usefulness of the SSAIS-R. The participants were purposively selected, and the data were generated by means of semi-structured interviews and field notes. An interpretivist paradigm guided this qualitative study. The findings suggest that the participants have mixed views on the value of the SSAIS-R. While the participants believe that the SSAIS-R has value as a cognitive measure, as it provides the necessary clinical information, the participants expressed concerns about the outdatedness of the test. The participants referenced certain pictures and vocabulary items found in the Missing Parts and Vocabulary subtests which they believe are irrelevant for children in the 21st century. The participants are of the view that if the SSAIS-R was to follow international standards in terms of regularly updating tests, the SSAIS-R's relevance and value could be enhanced. Despite their concerns about the outdatedness of the SSAIS-R, the participants believe that the SSAIS-R is fairer and more accessible for many of their clients in terms of content and language compared to international tests. Furthermore, the participants discussed the affordability and the shorter administration time of the SSAIS-R as two notable benefits for practitioners.

Keywords:

- SSAIS-R
- Educational psychologists
- Intelligence testing
- South African context

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CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION AND RATIONALE

The use of intelligence tests in South Africa has been widely debated and researched, with a specific focus on the applicability and relevance of the intelligence tests used in South Africa (Laher & Cockcroft, 2013). Most of the tests that South African practitioners use are not designed or adapted for the multicultural context of South Africa, and not all tests have been standardised for the entire South African population (Gafoor et al., 2021).

One locally developed test frequently used in South Africa is the Senior South African Individual Scale - Revised (SSAIS-R). Although this is a locally developed test, it too has not been standardised for the entire South African population as Black South Africans are excluded from the norm groups (Gafoor et al., 2021; Madge, 1986; te Nijenhuis et al., 2011; van Eeden, 1991). However, the test continues to be frequently used in South Africa due to the limited availability of other locally normed tests (Laher & Cockcroft, 2013). There is an evident void in the development and adaptations of South African tests (Gafoor et al., 2021). Therefore, practitioners are forced to use international tests which are not standardised for the local population and local tests which are considered outdated (Gafoor et al., 2021).

One significant aspect of the SSAIS-R that needs to be considered is that the test has not been updated since 1992 (Cockcroft, 2013). This highlights that the SSAIS-R has not followed the trends of many international intelligence tests (Cockcroft, 2013). Many international tests are in their 4th and 5th editions, illustrating that these tests have been revised and updated to ensure that they remain relevant. For example, a frequently used international intelligence test, the Wechsler Intelligence Scale for Children (WISC), is currently in its 5th edition, illustrating that significant changes have been made to the first edition of the WISC which was developed in 1939 (Foxcroft et al., 2004).

Another challenge linked to the test not having undergone any adaptations is that the SSAIS-R is based on an outdated theoretical model of intelligence (Cockcroft, 2013; van Eeden, 1991). The SSAIS-R is based on Thurstone's Model of Intelligence (Cockcroft, 2013; van Eeden, 1991) which includes seven primary mental abilities that comprise intelligence such as verbal comprehension, verbal fluency, number facility, spatial visualisation, perceptual speed, inductive reasoning and memory (van Eeden & de Beer, 2019) whereas international tests that have been updated are based on more recent theoretical frameworks (Shuttleworth-Edwards et al., 2013). For example, the WISC-V is based on the Cattell-Horn-Carroll (CHC), a more recent and relevant theoretical intelligence model (Shuttleworth-Edwards et al., 2013). While the CHC also defines intelligence in terms of mental abilities, it further emphasises various cognitive abilities in terms of fluid ability, crystallised intelligence, short-term memory, long-term storage and retrieval, and processing speed (Laher & Cockcroft, 2013). Thus, illustrating the comprehensiveness of the CHC model compared to Thurstone's Model of Intelligence (Laher & Cockcroft, 2013). Therefore, this raises concern regarding the relevance and applicability of the SSAIS-R for South African children as the test has not undergone any theoretical adaptations since 1992 (Cockcroft, 2013).

Various qualitative studies have been conducted regarding the utility, validity, relevance and applicability of the use of the international as well as national intelligence tests in South Africa (Foxcroft & Aston, 2006; Foxcroft et al., 2004; Meiring et al., 2005; Mitchell et al., 2018; Shuttleworth-Edwards et al., 2004; van Eeden & Prinsloo, 1997). The focus of these studies were on the influence of culture and language on the efficacy of intelligence tests within a multicultural context as well as variables that influence test results. Within the South African context, various demographic variables are considered to affect a child's development and intellectual functioning (Laher & Cockcroft, 2013). The aforementioned studies researched these variables, namely the influence that quality of education and socio-economic status (SES) have on South Africa's intelligence testing.

A few studies have been conducted on the applicability of the SSAIS-R in South Africa (van Eeden, 1993, 1997; van Eeden & Visser, 1992). The first study was a quantitative study conducted in 1990 to determine the reliability and validity of the SSAIS-R (Cockcroft, 2013; van Eeden, 1991). Two additional quantitative studies were

conducted in 1993 and 1997, which focused on the influence of language and education on the SSAIS-R test results (Cockcroft, 2013). A subsequent quantitative study was conducted in 1992 to determine the validity of the SSAIS-R for different population groups (van Eeden & Visser, 1992).

As previously mentioned, there have been limited studies conducted on the relevance of the psychometric properties of the SSAIS-R as the research conducted on its reliability and validity was last done in the early 1990s (Cockcroft, 2013; van Eeden, 1991). Current research on the relevance of the SSAIS-R is needed due to the significant changes in the demographics and school curriculum in South Africa since the test was last revised.

After reviewing literature from Google Scholar, Educational Resources Information Center (ERIC) and Research Gate, the researcher could not find a qualitative research study that has been conducted on the experiences and viewpoints of educational psychologists who use the SSAIS-R. The rationale for conducting this research study was to gain current perspectives of educational psychologists on the use, value and relevance of the SSAIS-R for their clients. By exploring educational psychologists' perspectives on the use and value of this test, the advantages, possible challenges and benefits of using this test were identified. This research will provide a holistic view of the utility of the SSAIS-R and thus attempt to contribute to the research on intelligence testing in the South African context.

1.2 PURPOSE OF THE STUDY

The purpose of this exploratory case study was to explore and describe the experiences of two educational psychologists in Gauteng regarding the value of the SSAIS-R for their clients. For the purposes of this study, the SSAIS-R will be generally defined as a South African intelligence test which is used to assess general intellectual and cognitive abilities and to determine strengths and areas of development in children from the age of seven years to 16 years 11 months (van Eeden, 1991).

1.3 RESEARCH QUESTIONS

1.3.1 Primary Research Question

The primary research question of this study is: “What are the views of two educational psychologists from Gauteng regarding the value of the SSAIS-R for their clients?”

1.3.2 Secondary Research Questions

This study also posed the following sub-questions:

- How relevant do these educational psychologists believe that the SSAIS-R is for their clients?
- What are the benefits of using the SSAIS-R with their clients?
- What are the concerns that these educational psychologists have with regard to using the SSAIS-R with their clients?

1.4 WORKING ASSUMPTIONS

This study was based on the following assumptions:

- The SSAIS-R is still predominately used as an intelligence test for children in South Africa.
- Educational psychologists are the most suitable participants to provide relevant information about the SSAIS-R because they assess children’s cognitive abilities.
- Educational psychologists have sufficient knowledge and experience with the SSAIS-R to discuss the benefits and strengths of the SSAIS-R.
- Educational psychologists have sufficient knowledge to discuss possible challenges or weaknesses when using the SSAIS-R.
- A qualitative research methodology will provide the researcher with sufficient narrative data from educational psychologists to effectively answer the research questions.

1.5 CONCEPT CLARIFICATION

1.5.1 Intelligence

Intelligence is a concept that does not have one single definition. This study will focus on the concept of intelligence as measured by IQ tests, namely psychometric intelligence (Foxcroft & Roodt, 2019). Psychometric intelligence can be defined as the use of standardised intelligence tests to measure various levels of functioning based on psychologically defined constructs (Foxcroft & Roodt, 2019). Intelligence is defined by the theoretical definition of intelligence as determined by the specific tests employed (Foxcroft & Roodt, 2019). In this study, intelligence is defined by the theoretical definition as determined by the SSAIS-R, which views intelligence as a composite of mental abilities representing a general intelligence factor (van Eeden, 1991). These mental abilities are defined in terms of Thurstone's Model of Intelligence (van Eeden, 1991).

1.5.2 Intelligence Testing

Intelligence testing is a form of assessment used to determine one's level of intelligence and cognitive functioning (Laher & Cockcroft, 2013). Intelligence tests consist of several verbal and non-verbal subtests (Foxcroft & Roodt, 2019). This study will focus on the SSAIS-R. The SSAIS-R consists of nine core subtests which are broken up into five verbal and four non-verbal subtests (Cockcroft, 2013).

1.5.3 Culture

In international studies, culture refers to nationality or ethnicity (Laher & Cockcroft, 2013). In South African research, culture is defined by the racial categories of Black, Coloured, White and Indian as well as by language groups (Laher & Cockcroft, 2013). Therefore, culture is a complex phenomenon that can be described as a particular set of values, beliefs, learned behaviour, traditions and customs within a group of people (Lebrón, 2013). In this study, culture will be defined in the multicultural context of South Africa using language, race, ethnicity and SES.

1.6 INTRODUCING THE CONCEPTUAL FRAMEWORK SUPPORTING THE STUDY

The psychometric approach to intelligence guided the conceptual framework for this research study. A psychometric approach to intelligence is a model that defines intelligence as a combination of abilities measured by mental tests (Sternberg, 2020). It includes the following psychometric properties: validity, reliability and fairness. These constructs provide insight into the meaningfulness, appropriateness and usefulness of psychometric tests, specifically focusing on the SSAIS-R.

Validity in psychometrics is concerned with the nature of the construct measured and how well it is measured (Coaley, 2014). A psychometric test is valid if it measures the constructs it claims to measure (Coaley, 2014). Validity is an essential construct in psychometric tests for the results to be accurately applied and interpreted (Coaley, 2014). Validity was relevant for this study based on how valid the participants regarded the SSAIS-R was in measuring what they believed it should measure and, therefore, producing valid test results.

Reliability is closely linked with consistency. Reliability is the degree to which a test produces consistent results over different administration occasions (Foxcroft & Roodt, 2019; Frey, 2018). A test is considered reliable if the results are consistent across different testing occasions and with different test editions (Coulacoglou & Saklofske, 2017).

Due to the multicultural context of South Africa, fairness with a specific focus on cultural fairness is a necessary construct to determine the relevance of the SSAIS-R for use in the diverse, multicultural contexts of South Africa. Fairness is a crucial quality of a test which can be defined as test-takers receiving equal treatment in the absence of measurement bias (Banerjee, 2016). Culturally fair tests are tests that are equally fair to all cultural groups and are less culture specific.

The conceptual framework supporting this research study is discussed in-depth in Chapter 2.

1.7 OVERVIEW OF THE RESEARCH METHODOLOGY, APPROACH AND PROCESS

Table 1.1 provides an overview of the research paradigm and approach that guided this study. The table further illustrates the research process which consists of the research questions, the research design, the selection of the case and participants, the data capturing process, data documentation, data analysis and interpretations, the criteria used to ensure trustworthiness and lastly, the ethical considerations that were followed. The research methodology, approach and process are discussed in Chapter 3.

Table 1.1: Research methodology, approach and process

RESEARCH QUESTIONS							
Primary research question							
<ul style="list-style-type: none"> • What are the views of two educational psychologists from Gauteng regarding the value of the SSAIS-R for their clients? 							
Secondary research questions							
<ul style="list-style-type: none"> • How relevant do these educational psychologists believe that the SSAIS-R is for their clients? • What are the benefits of using the SSAIS-R with their clients? • What are the concerns that these educational psychologists have with regard to using the SSAIS-R with their clients? 							
OVERVIEW OF RESEARCH METHODOLOGY, APPROACH AND PROCESS							
Paradigm and research approach	Research design	Binding the case	Data generation	Data documentation	Data analysis and interpretation	Trustworthiness of the study	Ethical considerations
<ul style="list-style-type: none"> • Interpretivism • Qualitative research 	<ul style="list-style-type: none"> • Exploratory case study design 	<ul style="list-style-type: none"> • Purposive selection of the case • Purposive selection of participants 	<ul style="list-style-type: none"> • Semi-structured individual interviews • Field notes 	<ul style="list-style-type: none"> • Audio data documentation • Field notes • Interview transcription 	<ul style="list-style-type: none"> • Inductive thematic analysis following phases as stipulated by Braun and Clarke (2006) 	<ul style="list-style-type: none"> • Credibility • Transferability • Dependability • Confirmability • Authenticity 	<ul style="list-style-type: none"> • Ethical clearance to conduct research • Voluntary participation and informed consent • Privacy, confidentiality and anonymity • Respect, integrity and truthfulness

1.8 SUMMARY

This chapter introduced the study by explaining the rationale and purpose of the study. This chapter also included the research questions, conceptual framework that guided the study and clarification of key concepts of the study. Lastly, an overview of the research methodology, approach and process that was followed was provided.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter begins with an overview of intelligence testing. This overview sheds light on the history of intelligence testing and the advancements that have been made to ensure the relevance and applicability of intelligence tests particularly in South Africa. The chapter then focuses on the specific challenges in intelligence testing in South Africa. The challenges include practical challenges and the role that culture, language, quality of education and SES play in test performance. These challenges are essential to consider when contemplating the relevance and efficacy of intelligence tests.

The chapter continues by introducing the SSAIS-R and providing background information regarding the adaptations of this test. This then leads to a discussion regarding the use and some of the challenges that have been found with the SSAIS-R. Research conducted on the SSAIS-R is discussed next to illustrate how this instrument has been researched as well as to demonstrate the gaps in research. The chapter concludes with a discussion of the conceptual framework which underpins this study. The specific concepts that are discussed focus on validity, reliability and fairness.

2.2 INTELLIGENCE TESTING IN THE SOUTH AFRICAN CONTEXT

Intelligence testing has been around for many decades and many advancements have been made in terms of the theory and practice of intelligence tests. Internationally, intelligence testing gained momentum after World War II due to the increasing societal need to assess candidates for job suitability (Foxcroft et al., 2019). Similarly, the development of testing followed in South Africa after World War II, when there was a need to determine the occupational aptitude of Black South Africans who had received limited formal education, particularly for employment in mines (Foxcroft et al., 2019).

However, the use of intelligence tests in South Africa remains controversial for various reasons (Laher & Cockcroft, 2013). The two main reasons for this are that intelligence

tests were first developed in South Africa during racial segregation and many of the tests that are currently used in South Africa are international tests (Laher & Cockcroft, 2013). During Apartheid, psychological assessments were administered to justify Black labour and deny Black South Africans access to education and economic resources (Laher & Cockcroft, 2013). This was achieved by administering the same psychological assessment measures developed and standardised for White South Africans to Black South Africans who were illiterate and poorly educated (Laher & Cockcroft, 2013).

After democracy, South African psychologists experienced the need to develop and use new tests and adapt current international tests to ensure that tests were applicable to the general population in South Africa (Laher & Cockcroft, 2013). This shift in perspective of the necessity for culturally relevant tests was linked, in part, to the legislation of the Employment Equity Act (Laher & Cockcroft, 2013). This act required the use of psychological testing to be fair, unbiased and culturally appropriate for diverse populations (Laher & Cockcroft, 2013). Although there has been an attempt to create local psychological tests and adapt international tests, this has not been without challenges.

Currently, most intelligence tests used in South Africa are based on psychological measures that were initially developed in the United States and the United Kingdom. Therefore, it is the view of some authors that some of the content may not be culturally relevant to the South African context (Grieve & Foxcroft, 2019; Laher & Cockcroft, 2013). Another pertinent issue with international tests is that some of the tests are not standardised for the local populations (Niu, 2020). Standardisation for local populations is essential to create a representative sample of the population for which the test is being administered (Niu, 2020).

As previously mentioned, many of the tests that are used in South Africa are international tests (etic) with very few local tests (emic) (Laher & Cockcroft, 2013). Whether emic or etic tests should be used in South Africa remains a highly debated topic (Laher & Cockcroft, 2013). Many psychologists support and encourage the use of etic tests as these tests are necessary and justified because most companies that use tests are multinational (Laher & Cockcroft, 2013). Therefore, South Africa needs to be represented as equal to other countries (Laher & Cockcroft, 2013). However,

many scholars also advocate for the use of more emic tests to ensure that the tests used are culturally relevant and appropriate for the diverse population of South Africa (Laher & Cockcroft, 2013). It is not necessarily viable and feasible to adapt all etic tests due to financial and time constraints as this is a costly and lengthy process (Foxcroft & Aston, 2006; Laher & Cockcroft, 2013). Furthermore, there is also a lack of trained professionals with sufficient knowledge to make the necessary adaptations of etic tests (Laher & Cockcroft, 2013).

Due to the aforementioned constraints, it could be argued that it makes more sense to adapt and standardise well-researched etic tests rather than developing entirely new tests (Shuttleworth-Edwards et al., 2004). Additionally, various challenges with assessment exist in South Africa, such as culture, language, quality of education, SES and poverty. These challenges will be discussed next.

2.3 CHALLENGES FACED WITH INTELLIGENCE TESTING IN SOUTH AFRICA

Some important challenges that will be discussed include the influence that culture, language, quality of education, SES and poverty have on intelligence testing.

2.3.1 Culture

Culture is an important aspect to consider in intelligence testing because culture directly influences one's behaviour, understanding and perception of the environment (Laher & Cockcroft, 2013; Niu, 2020). As a result, each item included in an intelligence test may be interpreted differently by test-takers from different cultural backgrounds (Foxcroft, 2004; Niu, 2020). The influence of culture on tests is not unique to the South African context. It has been debated worldwide as globalisation continues to change the dynamics of testing (Daouk-Oyry & Zeiniun, 2017). Researchers and practitioners from many fields of psychology around the world are engaging in test development and adapting existing tests for a particular language, typically from a Western language and culture to a non-Western language and culture (Daouk-Oyry & Zeiniun, 2017; Niu, 2020). This movement toward adapting tests to ensure cultural relevance is guided by the International Test Commission's guidelines for translating and adapting tests (ITC, 2017).

Researchers have acknowledged that intelligence cannot be understood in isolation from a cultural context because individuals from different cultures perceive intelligence differently (Niu, 2020). Each culture's definition of intelligence depends on what is considered important for that culture (Niu, 2020). For example, Asian cultures value and view effort as an important component of intelligence (Niu, 2020). However, many of the tests developed in the United States and Europe do not measure effort because the culture of these countries do not view intelligence based on one's effort but rather as inherent and based on ability (Niu, 2020).

The South African population is vastly diverse with many different cultural and ethnic groups (Foxcroft & Aston, 2006). Due to the cultural diversity in South Africa, there is a need for intelligence tests that are valid, fair and culturally appropriate for the entire population (Foxcroft, 2004; Laher & Cockcroft, 2013). All individuals from different languages, cultures and SES backgrounds should be accommodated and considered when using intelligence tests (Grieve & Foxcroft, 2019).

Foxcroft et al. (2004) found that many psychology practitioners indicated the need for suitable tests for use in multicultural contexts as there is a lack of appropriate and culture-fair intelligence tests (Mitchell et al., 2018). However, as previously mentioned, the development of culturally relevant tests is considered a costly and lengthy process because South Africa has many different cultural groups, all at various stages of acculturation and with differing linguistic and educational exposure (Cockcroft et al., 2008). Developments toward more culturally appropriate tests have highlighted that developing tests that are free from any cultural bias is challenging (Foxcroft & Roodt, 2019).

The difficulty with developing tests which are free from any cultural bias has led to the development of tests that are "culture-reduced" or "culture-common" to mitigate cultural bias as much as possible, aiming to make tests more valid and reliable for a multicultural context (Foxcroft et al., 2019). For example, non-verbal intelligence tests such as the Test of Non-verbal Intelligence and the Raven's Progressive Matrices were developed, where the focus of these tests is on problem-solving tasks in which language use is minimised as language is believed to be an obstacle in cross-cultural tests (Foxcroft et al., 2019).

Furthermore, the influence of culture is more complex than language, race and ethnicity alone (Laher & Cockcroft, 2013), and the level of acculturation also needs to be considered. Acculturation is the process by which individuals adjust their cultural values, beliefs and ideas to cultures different from their own to the dominant culture in the place of residence (American Psychological Association, n.d.; Laher & Cockcroft, 2014). It is a general belief that African individuals have had to acculturate to Western cultures because they have had to move from rural to urban areas in search of work and schooling (Laher & Cockcroft, 2014).

Additionally, it is vital to consider the influence of culture on intelligence tests that are frequently used in South Africa. As previously mentioned, there is a lack of appropriate culture-fair intelligence tests available in South Africa (Mitchell et al., 2018). Future developments should make sure that intelligence tests are more accessible and relevant for most individuals in South Africa (Laher & Cockcroft, 2014). Closely linked to culture is the influence of language, as language and culture are intertwined (Daouk-Oyry & Zeiniun, 2017).

2.3.2 Language

Language is considered an important mediator of test performance, particularly when learners have to take tests that are not in their home language (Foxcroft & Aston, 2006; Grieve & Foxcroft, 2019). Misunderstandings and miscommunications in tests can be increased when colloquial language is used in the test items, therefore affecting test scores (Foxcroft & Aston, 2006; Frey, 2018).

Herbst and Huysamen (2000) found that learners assessed in a language that differed from their home language performed significantly lower than learners assessed in their home language. Additionally, Meiring et al. (2005) found that the English concepts used in tests proved problematic for African test-takers due to a lack of language proficiency in the test language. Another significant finding from this study was that a subtest involving verbal comprehension was found to be biased against the test-takers whose mother tongue was an African language, as they performed lower despite having adequate daily exposure to English (Foxcroft & Aston, 2006).

Due to the influence that language has on test results, there is a need for intelligence tests to be translated into all 11 official languages – soon to be 12 – in South Africa

(Department of Justice and Constitutional Development, 2022). Test translation refers to the process of changing a test from one language to one or more other languages while still ensuring that the content and original meaning of the test items remain the same (Foxcroft & Roodt, 2019).

However, this cannot be done without overcoming challenges that may be experienced when translating tests (Foxcroft, 2011; Niu, 2020). Many practical challenges are faced when translating tests such as a lack of trained personnel to translate tests, the absence of equivalent words and phrases found in all languages and ensuring that the level of difficulty is consistent between the translated versions. One main challenge is the 11 official languages and the availability of test administrators and trained personnel who are fluent in all 11 languages to translate tests (van Eeden & Mantsha, 2007).

Another difficulty in translating tests is that there are not always equivalent words or phrases found in all languages (Laher & Cockcroft, 2013; Niu, 2020). The different vernaculars and a lack of standardisation in African languages pose a challenge in ensuring the validity and reliability of the adapted and translated tests (van Eeden & Mantsha, 2007). A subsequent difficulty in translating tests is that even though a test may be translated from one language to another while ensuring the cultural value remains the same, construct connotations and level of difficulty may be altered in the translation process (Krach et al., 2017; Niu, 2020). For example, if a reading subtest is translated, the translated text needs to contain the same number of phonemes for the words because if not, this can alter the level of difficulty of the test (Krach et al., 2017).

Various methods can be applied to ensure the validity and reliability of translated tests such as the traditional forward translation, the back translation and the bilingual judge's technique (Daouk-Oyry & Zeiniun, 2017). However, using a single method may not be suitable for achieving linguistic and cultural equivalence between test versions (Daouk-Oyry & Zeiniun, 2017; Niu, 2020). Therefore, it has been suggested that using a combination of techniques is necessary to ensure the accuracy of test translation and adaptation (Daouk-Oyry & Zeiniun, 2017).

2.3.3 Quality of Education

The effect of the quality of education on test performance is a global phenomenon (Akubuilu et al., 2020; Flynn, 2020; Rindermann et al., 2016; Ritchie & Tucker-Drob, 2018). Shuttleworth-Edwards et al. (2004) suggest that quality of education plays a crucial role in the test results of intelligence tests. Internationally, Rindermann et al. (2016) conducted a study to determine the main causes for differences in intelligence test scores. This study revealed that two educational factors, namely quality and quantity of education, were considered the most significant causes of the differences seen in cognitive ability (Rindermann et al., 2016).

Although South Africa has been racially desegregated since 1994, inequalities still exist between learners in independent, government, township and rural schools (Grieve & Foxcroft, 2019). During Apartheid, Black South Africans were schooled separately from White South Africans, with the Black South Africans' education system controlled by the Department of Education and Training (DET schooling) (Shuttleworth-Edwards et al., 2004). The DET schooling had its own curriculum and examination system with limited government resources, which only consisted of 5–25% of what was spent on education for English and Afrikaans speaking White South Africans (Shuttleworth-Edwards et al., 2004).

A negative effect on educational achievement is most noticeable for underprivileged and environmentally disadvantaged Black South Africans (Laher & Cockcroft, 2013). Even after democracy, private and former Model C schools continue to be well-resourced, and children who attend these schools achieve high levels of academic competency (Laher & Cockcroft, 2013). Inequalities are still experienced in rural and government schools. These inequalities are highlighted by the lack of resources, poorly trained teachers, overcrowding in classrooms and minimal opportunities for extra-mural activities (Fleisch, 2008; Laher & Cockcroft, 2013; Mpu & Adu, 2021; Shuttleworth-Edwards et al., 2004).

Adding to the lack of basic school supplies, township and government schools receive limited funding from the government (Laher & Cockcroft, 2013). There is a high level of absenteeism among both the learners and the teachers, ineffective teaching methods are used, many teachers are not qualified and there is a high ratio of teacher-learners in township schools (Laher & Cockcroft, 2013). The disparity in educational

conditions often indicates that the learners who attend township and rural schools do not have the same benefits as those who attend private/Model C schools (Shuttleworth-Edwards et al., 2004). This is evident in terms of acquired knowledge, including proficiency in English and reading and test-taking abilities (Niu, 2020; Shuttleworth-Edwards et al., 2004).

Closely linked to the quality of education is the concept of “test wiseness” (Niu, 2020; Shuttleworth-Edwards et al., 2004). “Test wiseness” refers to a test-taker’s familiarity with pencil use, copying tasks and the ability to concentrate in test-taking situations (Niu, 2020; Shuttleworth-Edwards et al., 2004). “Test wiseness” also refers to how often an individual is exposed to test situations, as with school exams and tests. The more one is exposed to test situations, the more familiar one becomes with the demands of the testing situation and what is expected (Shuttleworth-Edwards et al., 2004).

As previously mentioned, individuals from disadvantaged environments and children who attend rural and township schools may not have had the same exposure to test-taking situations as those who come from advantaged environments and attend private schools (Niu, 2020; Shuttleworth-Edwards et al., 2004). Therefore, they do not have the familiarity, knowledge and experience of the test-taking situation (Shuttleworth-Edwards et al., 2004). As many children may not be exposed to taking a test or may not be ‘test-wise’, this can significantly influence test performance and thus contribute to invalid results (Foxcroft, 2011; Niu, 2020).

2.3.4 Socio-economic Status

Closely linked to the quality of education is SES. The SES of a test taker can negatively influence cognitive achievement on a test (Mitchell et al., 2018). Factors such as the level of parental education, nutrition, access to health care, violence, poor quality of education or repeated absence from school all influence cognitive ability (Mitchell et al., 2018). A significant variable that is believed to influence test performance is the level and quality of education, not only of the testee but also the testee’s parents (Cockcroft et al., 2008; Piccolo et al., 2016). Parents who have a high level of education are likely to have professional occupations and, therefore, are more likely to have a higher SES (Cockcroft et al., 2008; Piccolo et al., 2016).

Consequently, this influences financial resources, exposure to books and technology and a higher quality of education for learners, affecting their cognitive development (Cockcroft et al., 2008). However, no research studies have been conducted to determine the effect that parental education has on test performance specifically on the SSAIS-R (Cockcroft, 2013). Measures implemented to reduce the effects of SES on cognitive assessments have led to the development of tests that focus on assessing the cognitive processes required to solve tasks rather than those tests that assess previously learned knowledge (Laher & Cockcroft, 2013).

Additional factors linked to SES are poverty and health. Poverty causes various challenges such as substance abuse, an increase in illnesses such as HIV/AIDS and a high rate of school truancy which eventually leads to a high rate of school dropouts (Donald et al., 2020). High rates of school truancy and dropouts can be linked to both economic and health reasons (Donald et al., 2020). Poverty, when combined with unequal access to education, inadequate quality of education and other services, can cause significant barriers to learning therefore influencing test performance (Donald et al., 2020).

For economic reasons, many parents living in poverty cannot afford the cost of schooling for their children (Donald et al., 2020). Many children also have to miss school and drop out because they need a job to earn money to help provide for their families (Donald et al., 2020).

HIV/AIDS also has a detrimental effect on schooling and, therefore, a learner's intelligence for various well-known medical reasons (Donald et al., 2020). Furthermore, many children are left without parents due to HIV/AIDS resulting in them becoming orphans or living in child-headed households (Donald et al., 2020). This increases school dropout rates as learners are required to work to provide for their families (Donald et al., 2020).

School truancy is also influenced by HIV/AIDS, as many learners miss school to care for their sick parents (Donald et al., 2020). This not only affects academic achievement and intellectual development but also significantly affects a learner's well-being because it is added stress that a learner has to deal with (Donald et al., 2020). When interpreting test performance and results, these factors, which can be directly or

indirectly caused by poverty, need to be considered. The development of the SSAIS-R will be discussed in the next section.

2.4 THE DEVELOPMENT OF THE SENIOR SOUTH AFRICAN INDIVIDUAL SCALE REVISED IN SOUTH AFRICA

According to Foxcroft et al. (2004), the SSAIS-R is frequently used in South Africa. This frequent use is due to the limited number of other locally normed tests (Laher & Cockcroft, 2013). It is necessary to understand the history and development of the SSAIS-R to understand the potential challenges and limitations of the test.

Dr M.L. Fick, a psychometrician, developed the Official Mental Hygiene Individual Scale of Intelligence (OMHISI) in 1926, which was published by the National Bureau of Educational and Social Research (Fleisch, 1995; Louw & Danziger, 2007). The OMHISI was revised in 1939 and published with a new name, the Individual Scale of General Intelligence for South Africa (ISGISA) (Louw & Danziger, 2007). In 1955, there was a request by the National Bureau of Educational and Social Research to restandardise the ISGISA due to concerns regarding the outdated norms (Madge, 1986). The ISGISA was revised in the same year with English and Afrikaans norm groups. This revised test was published with a new name, the New South African Individual Scale (NSAIS) (Fleisch, 1995; Madge, 1986).

However, in 1957, it was decided that the NSAIS should be updated to ensure that the Full-Scale IQ included both verbal and non-verbal subtests, to adapt it from an age scale to a point scale, and to ensure that the test did not take more than one hour to administer (Madge, 1986). This led to the reconstruction of the NSAIS in 1964, and it was renamed and published as the Senior South African Individual Scale (SSAIS) (Madge, 1986). The SSAIS was normed for English and Afrikaans speaking children between 5 years 0 months to 17 years, 11 months (Madge, 1986).

In 1987, the SSAIS was revised and renormed. However, this test was standardised for White, Coloured and Indian learners, while Black African learners remained excluded (Madge, 1986; te Nijenhuis et al., 2011; van Eeden, 1991). In the early 1990s, the Individual Scale for Indian South Africans was developed and adapted from the NSAIS to accommodate Black South Africans who were excluded from the SSAIS (Landman, 1988). The NSAIS was translated into IsiXhosa in 1988, and in the same

year, it was translated into IsiZulu (Landman, 1988). The test was later translated into Northern Sotho, Southern Sotho, and Setswana in 1990 (Landman, 1988). Landman (1988) states that it was anticipated that there would be necessary adaptations made to the vernacular versions. However, there is no evidence of the restandardisation of the vernacular versions. Furthermore, there are no vernacular versions of the SSAIS-R (van Eeden & Visser, 1992).

Despite the test being translated into a few African languages, this still did not make it appropriate for the entire population (Cockcroft, 2013). The relevance and applicability of the vernacular tests can be questioned because there has been no research conducted on the reliability and validity of any of the vernacular tests (van Eeden, 1991). Linked to this challenge is the limited availability of the background and standardisation manuals for the vernacular versions, which are necessary to provide pertinent background information (Mindmuzik, 2016).

In the early 1990s, many education departments requested that the HSRC restandardise the SSAIS due to the outdated norms and the belief that some test items were no longer effective (van Eeden, 1991). Therefore, this led to the development of the English and Afrikaans versions of the SSAIS-R, which are still in use today (van Eeden, 1991).

Due to the belief that some of the SSAIS test items were no longer effective, the SSAIS-R was developed using the existing SSAIS test items as well as including new test items (van Eeden, 1991). The existing items from the SSAIS were still used because the reliability and validity of these items were already confirmed (van Eeden, 1991). The test revision included some of the subtests being renamed to provide a better description of the item content; for example, the Verbal Reasoning test was renamed Similarities (van Eeden, 1991). However, in the Absurdities subtest, not only was the name changed to Missing Parts but the content was also adapted so that each item/picture only contained a missing part rather than portraying absurd situations (van Eeden, 1991).

Furthermore, several additional items were added to each subtest, which increased the number of suitable items for all ages. The discontinuation rules and time limits

were adjusted to ensure sufficient opportunity for the test-takers to answer the questions (van Eeden, 1991).

When the SSAIS was revised, the sample for the norm groups consisted of 500 children with 100 children per age group for ages 7, 9, 12, 14 and 16 years (Cockcroft, 2013; van Eeden, 1991). The children were selected based on their racial groups of White, Indian, and Coloured (Cockcroft, 2013; van Eeden, 1991). They either spoke English or Afrikaans, therefore excluding the other nine official South African languages (Cockcroft, 2013).

The SSAIS-R has been standardised for English and Afrikaans speaking learners between 7 years 0 months and 16 years 11 months (van Eeden, 1991). The SSAIS-R is based on the understanding of intelligence, adopted from Thurstone's model, and it is used to determine cognitive abilities and to determine one's general level of intelligence and assess the testee's relative strengths and weaknesses in certain aspects of intelligence (Cockcroft, 2013; van Eeden, 1991). The SSAIS-R consists of nine core subtests comprising five verbal and four non-verbal tests as well as two additional tests (Cockcroft, 2013). It takes approximately 90 minutes to administer the test (Cockcroft, 2013). Regarding the scoring of the subtests, the standard scores range between 0 and 20. Cockcroft (2013) suggests that the SSAIS-R may not be adequately sensitive for very low-functioning children.

The content of SSAIS-R is considered to be based on Western cultural knowledge (Cockcroft, 2013; Niu, 2020; van Eeden, 1991). Therefore, environmentally disadvantaged learners are at a disadvantage regarding expertise and familiarity with the cultural content of the test items in the SSAIS-R (van Eeden, 1991). Thus, when the SSAIS was revised, new norms were developed to accommodate some of the ethnic subgroups in South Africa during the 1990s, namely Coloured, Indian and White children (van Eeden, 1991). The norms were developed for English and Afrikaans first language White children who were considered non-environmentally disadvantaged. A separate norm table was developed for Coloured and Indian children who were considered to be environmentally disadvantaged (Cockcroft, 2013).

However, the revised norm groups still symbolise racial exclusion because the non-environmentally disadvantaged norm group only consisted of White children

(Cockcroft, 2013). In contrast, Indian and Coloured children were only included in the environmentally disadvantaged norm group (Cockcroft, 2013). Another significant limitation regarding the norm groups is that Black children were still not included in the norm groups when the test was last revised (Cockcroft, 2013).

2.5 CHALLENGES WITH THE SENIOR SOUTH AFRICAN INDIVIDUAL SCALE REVISED

Significant challenges include the differences in the English and Afrikaans versions of the SSAIS-R, the outdated norms, and the relevance of the test for the changing demographics of South African children (Cockcroft, 2013; te Nijenhuis et al., 2011; van Eeden, 1997; van Eeden & de Beer, 2019).

The SSAIS-R was initially developed in English and Afrikaans. However, there is no confirmation that the two versions of the test are comparable regarding content and level of difficulty (Cockcroft, 2013). Research conducted by van Eeden (1997) illustrated a significant difference in performance between English and Afrikaans speaking children regarding the verbal and non-verbal scales in the SSAIS-R (Cockcroft, 2013). Another challenge is that separate norms for each language are only provided for the Vocabulary subtests (Cockcroft, 2013).

Another significant challenge is that the SSAIS-R has not been revised since 1992. It is essential to consider that there is a need for the SSAIS-R to be restandardised and renormed due to the significant changes in the demographics of South African children and the curriculum in schools since the last revision (Cockcroft, 2013). In addition to the changes in the curriculum, the changes and development in children's IQ in the 20th century also need to be considered (Cockcroft, 2013). The developments in IQ have been researched and identified in developed countries (Cockcroft, 2013). However, these changes have also been seen in less developed countries like Kenya (Cockcroft, 2013). The changes seen in intelligence are known as the Flynn effect, which explains that intelligence is dynamic, and it refers to increases seen in IQ scores over time (Frey, 2018; te Nijenhuis et al., 2011). Several factors have been hypothesised to contribute to the Flynn effect, namely education, nutrition, urbanisation, health care, the increase in visual-spatial toys, and teacher-student ratios (Frey, 2018; te Nijenhuis et al., 2011).

Therefore, it can be assumed that these increases in IQ may also be seen in South African children (Cockcroft, 2013). The advances mentioned above have been seen in specific subtests of the WISC, such as those that assess processing speed and abstract classification (Cockcroft, 2013). The skills required for these subtests appear to have developed due to children's social and educational contexts and exposure (Cockcroft, 2013). Therefore, psychometric tests, such as the SSAIS-R, need to be renormed and updated to remain relevant for the changes seen in children's IQ (Cockcroft, 2013; Frey, 2018; te Nijenhuis et al., 2011).

2.6 RESEARCH CONDUCTED ON THE SENIOR SOUTH AFRICAN INDIVIDUAL SCALE REVISED

Research was conducted to determine the reliability and validity of the SSAIS-R (Cockcroft, 2013; van Eeden, 1991) as part of the construction and standardisation of the SSAIS-R (van Eeden, 1991). The sample included a proportional sample of 4676 pupils, which included pupils from each age group ranging from 7 to 16 years, and a non-environmentally disadvantaged sample which consisted of 2671 learners also consisting of learners from each age group ranging from 7 to 16 years (van Eeden, 1991).

Regarding reliability, reliability coefficients of the SSAIS-R were calculated using the Kuder-Richardson formula 8 for subtests 1 to 10 and the Kuder-Richardson formula 21 for subtest 11 (van Eeden, 1991). The reliability coefficients of the composite scales were calculated using Mosier's formula (van Eeden, 1991).

It was recommended that the reliability coefficients and the standard errors of measurement be considered when interpreting the scores obtained on the SSAIS-R and the composite scales (van Eeden, 1991). The reliability coefficient of a particular score indicates the extent to which a testee's true ability can be evaluated in terms of the score obtained on the specific subtest or composite scale (van Eeden, 1991).

Various aspects of validity were investigated to determine the validity of the SSAIS-R. Namely, content validity, construct validity, concurrent validity, and predictive validity (van Eeden, 1991). Content validity refers to how the content of the test represents the construct being measured (van Eeden, 1991). The SSAIS-R is based on the Wechsler model of intelligence, which is viewed to have a good content validity

(Cockcroft, 2013). The development of the SSAIS-R included the bias analyses of the standardisation sample results (Cockcroft, 2013).

To investigate the construct validity of the SSAIS-R, two interest methods were utilised (van Eeden, 1991). The first method was factor analysis which was used to investigate the interconnectedness of the tests (van Eeden, 1991). The results of this method indicated which tests had common variance, therefore measuring the same construct (van Eeden, 1991). The second method was the correlation of the scores that were obtained on the new test (SSAIS-R) with the scores on the old test (SSAIS) (van Eeden, 1991).

Concurrent validity was determined by requesting teachers to rate each testee's language skills and general intellectual ability on a five-point scale (van Eeden, 1991). This technique was utilised to determine whether the SSAIS-R can differentiate between learners of differing intellectual abilities (van Eeden, 1991). The correlations between this criterion and the composite and scaled scores indicated that the SSAIS-R could differentiate between learners differing in intellectual ability (van Eeden, 1991).

The validity of the SSAIS-R to predict school achievement and academic success was also investigated (van Eeden, 1991). This is vital as an early diagnosis or indication of potential school failure can allow parents and teachers to ensure that preventative intervention can be implemented (Laher & Cockcroft, 2013). However, the capacity of an intelligence test to indicate and predict academic achievement has been debated (Laher & Cockcroft, 2013). The age of the test-taker influences the ability of an intelligence test score to predict academic achievement (Laher & Cockcroft, 2013). Although the predictive validity was researched, the statistics of this investigation cannot be considered valid due to the significant changes in the South African school curriculum since 1992, which was when the predictive validity of the SSAIS-R was last investigated (Cockcroft, 2013).

Subsequently, two additional studies were conducted to determine the validity of the SSAIS-R. As previously mentioned, quality of education plays a pivotal role in a learner's development, specifically with language development and fluency. Therefore, there was a need to research the applicability of the SSAIS-R for learners who had an African mother tongue language because there was an increasing need

to use the SSAIS-R on learners whose mother tongue was not English (Cockcroft, 2013).

The first study, conducted in 1993, was conducted with 14 and 15-year-old learners from private schools who had an African language as their mother tongue (Cockcroft, 2013). In this study, a sample of 105 learners were included, with 35 children having English as their home language and 70 learners with an African language as their home language (Cockcroft, 2013). All 105 children were considered to have reasonable proficiency in English, as confirmed by their performance on a Scholastic Achievement Test in English (Cockcroft, 2013). When the two groups of learners were compared, the learners who had English as their home language performed significantly higher than those who had an African language as their home language (Cockcroft, 2013).

This study also revealed that the performance of the learners who had an African home language were equivalent to that of the non-environmentally disadvantaged norm group (Cockcroft, 2013). However, the small sample size may have influenced these findings (Cockcroft, 2013). This study led to the recommendation the environmentally disadvantaged norm group should be used if a child is not tested in their home language (Cockcroft, 2013). This study also revealed that the SSAIS-R was shown to be reasonably reliable for learners who did not speak English as their home language but had some proficiency in English (Cockcroft, 2013).

The second study, conducted in 1997, was conducted with learners with an African language as their mother tongue and who attended Model C schools (Cockcroft, 2013). This study comprised a similar sample size to the first study. It provided the same results and conclusions regarding the applicability of the SSAIS-R for learners who have an African language as their home language (Cockcroft, 2013).

Furthermore, Cockcroft and Blackburn (2008) conducted a study to determine the efficacy of the SSAIS-R in predicting reading ability compared to the Neale Analysis of Reading Ability- Revised. The study consisted of 32 Grade 2 boys and 32 Grade 2 girls from private schools in Gauteng (Cockcroft & Blackburn, 2008). Due to time constraints, only selected subtests from the SSAIS-R were used, namely the Vocabulary, Similarities, Story Memory, and Coding subtests (Cockcroft & Blackburn,

2008). This study found significant correlations between the Vocabulary and Similarities subtests and the Neale for both samples (Cockcroft & Blackburn, 2008). Additionally, a correlation was found between the Memory subtest and the Neale within the girls' sample (Cockcroft & Blackburn, 2008). However, no correlation was found between the Coding subtest and the Neale (Cockcroft & Blackburn, 2008). Lastly, the boys scored higher than the girls on the Vocabulary and Similarities subtests on the SSAIS-R and the Reading Comprehension component of the Neale. In contrast, the girls scored higher on the non-verbal Coding subtest on the SSAIS-R (Cockcroft & Blackburn, 2008).

As previously mentioned, various demographic variables influence a child's development and intellectual and psychological functioning (Laher & Cockcroft, 2013). Studies focusing on the effect of demographic variables on the SSAIS-R, namely gender and language, were conducted (van Eeden, 1997; van Eeden & Visser, 1992). Although these are two crucial variables, there is a notable gap in local research focusing on the influence of other variables such as SES, quality of education and level of parental education.

Despite the valid research that has been discussed, limited recent studies have been conducted on the psychometric properties of the SSAIS-R (Cockcroft, 2013). This is needed due to the significant changes in the demographics and school curriculum in South Africa since the test was last revised.

2.7 CONCEPTUAL FRAMEWORK

This study made use of the psychometric approach to intelligence as a model that defines intelligence as a combination of abilities measured by mental tests (Sternberg, 2020). Furthermore, intelligence is defined by the theoretical definition of intelligence as determined by the specific tests used (van Eeden & de Beer, 2019). The psychometric constructs that will be discussed, focus on validity, reliability and fairness. These constructs provide insight into the meaningfulness, appropriateness and usefulness of psychometric tests, specifically focusing on the SSAIS-R.

Validity in psychometrics is concerned with the nature of the construct measured and how well it measures the construct (Coaley, 2014; Frey, 2018). A psychometric test can be considered valid if it measures the constructs it claims to measure (Coaley,

2014). Validity is an essential construct in psychometric tests for the results to be accurately applied and interpreted (Coaley, 2014; Frey, 2018). Validity is relevant for this study in reference to whether the participants are of the view that the subtests of the SSAIS-R measure what they are meant to be measuring and, therefore, produce valid test results.

With the use of international tests and tests that have been adapted and translated, a few aspects can cause a test not to be valid, such as the cultural context and language of the test (Daouk-Oyry & Zeiniun, 2017). When a test is translated, the new version needs to be valid for the target cultural group of the test-taker (Daouk-Oyry & Zeiniun, 2017). Therefore, construct equivalence needs to be determined to establish whether the different language tests measure the same construct within each culture (Daouk-Oyry & Zeiniun, 2017).

Another factor that can influence the validity of a test is that when an international test is used, the cultural context needs to be considered (Daouk-Oyry & Zeiniun, 2017). It needs to be determined if the construct exists in the target culture, and if it does exist, it needs to be determined if the construct is defined and manifested in the same manner within both cultures (Daouk-Oyry & Zeiniun, 2017). This is linked to conceptual bias, which is the relevance of the content of each item to the target culture (Daouk-Oyry & Zeiniun, 2017). Therefore, the content of tests also needs to be adapted to be culturally appropriate and fair to ensure the validity of a test (Daouk-Oyry & Zeiniun, 2017).

Reliability is closely linked with consistency. Reliability is the extent to which a measuring instrument produces test results that are repeatable and consistent across independent settings (Frey, 2018; Roodt, 2019). Reliability in psychometrics is concerned with how measurement results are unaffected by random error (Coulacoglou & Saklofske, 2017). A test is considered reliable if the results are consistent across different testing occasions and with different test editions (Coulacoglou & Saklofske, 2017). Reliability will ensure that the test results of the SSAIS-R are considered consistent to determine the relevance and usefulness of the SSAIS-R in different contexts.

Due to the multicultural context of South Africa, fairness with a specific focus on cultural fairness is a necessary construct to determine the appropriateness of the SSAIS-R for use in the diverse multicultural contexts. Fairness is a crucial quality of a test which can be defined as the equal treatment of all test-takers and the absence of measurement bias (Banerjee, 2016). Culturally fair tests are tests that are equally fair to all cultural groups and are less culturally specific. A culturally fair test should accurately provide results that reflect the test-taker's ability regardless of their cultural background (Cocodia, 2014).

2.8 SUMMARY

This chapter provided an overview of the challenges experienced with intelligence testing in South Africa and highlighted the various factors that may influence test performance and achievement. After reviewing the literature, it is evident that there is limited recent research conducted on the use and relevance of the SSAIS-R within a South African context, particularly from the perspectives of educational psychologists (Cockcroft, 2013). By exploring educational psychologists' experiences using this test, the advantages, possible challenges and benefits of using this test can be identified.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

This chapter focuses on the underlying meta-theoretical and methodological paradigms that were used to guide this study. This chapter also provides a comprehensive description of the research design with a specific focus on the selection of the participants, the procedures that were used to generate data and how the data were documented. Furthermore, a clear description is given of how the data were analysed and interpreted. Lastly, the study's trustworthiness and a description of how ethical considerations were followed are discussed.

3.2 UNDERLYING PARADIGM AND RESEARCH APPROACH

This study's meta-theoretical and methodological paradigms are discussed in the following section.

3.2.1 Meta-theoretical Paradigm

The epistemological approach that was used in this study is interpretivism. Interpretivism is the belief that truth and knowledge are subjective and situated within a cultural context (Ryan, 2018). Interpretivism is considered to have a 'relativist' ontological paradigm; therefore, it is based on people's experiences and their understanding of the experiences (Ryan, 2018). Furthermore, a phenomenon is considered to have multiple realities, and meaning making is made and reconstructed through the interactions between the researcher and the participants (Kivunja & Kuyini, 2017).

The subjective epistemology of interpretivism assumes that reality is socially constructed (Kivunja & Kuyini, 2017). Therefore, the researcher makes meaning of the data that has been collected through their thinking and cognitive processes, which is informed by the interactions with the participants (Kivunja & Kuyini, 2017). Researchers using an interpretivism perspective seek to gain a deeper understanding of the phenomenon within its unique context (Ryan, 2018).

According to Maree (2016), the interpretivist paradigm is based on five assumptions. The first assumption is that individuals' experiences and beliefs are unique and context-specific, thus, interpretivism focuses on individuals' subjective experiences and how individuals construct the social world (Maree, 2016). The second assumption is that reality is socially constructed rather than objectively determined. Therefore, observing individuals within their social contexts allows for a greater understanding of their perceptions and beliefs (Maree, 2016). The third assumption is that individuals are the main source of meaning (Maree, 2016). Therefore, understanding the meaning that individuals ascribe to their contexts can be understood by observing their activities and the meanings that they place on these activities (Maree, 2016).

The fourth assumption is that human behaviour is affected by understanding and perceptions of the social world (Maree, 2016). This assumption proposes that there are multiple realities of phenomena which can also differ across time and place (Maree, 2016). The final assumption is that a researcher's understanding of phenomena influences the research process, including the type of research questions that are asked and how research is conducted (Maree, 2016).

A strength of interpretivism is the in-depth explorations and detailed descriptions that it creates (Maree, 2016). The interactions with participants allow for rich, in-depth and detailed data allowing for a meaningful understanding of the phenomenon (Pham, 2018). Furthermore, interpretivism enables the researcher to conduct interviews in a more natural setting, leading to more authentic responses from the participants (Pham, 2018). However, it is also vital to consider the limitations of interpretivism.

A limitation is that interpretivism aims to obtain an in-depth understanding and knowledge of the phenomenon from a specific context which does not allow for the results to be generalised (Pham, 2018). However, this study aimed to have an in-depth understanding of the experiences of the two psychologists in this study with using the SSAIS-R, and the researcher did not seek to generalise the results but rather to achieve transferability of the results. A second limitation is that the ontological view of interpretivism is considered subjective rather than objective, which suggests that the results are affected by the researcher's interpretation, personal beliefs and ways of thinking which can cause bias (Pham, 2018). This was mitigated in this study by continuous reflections in the field notes.

3.2.2 Methodological Paradigm

This study made use of a qualitative methodological paradigm. Qualitative research is scientific research that allows the researcher to explore, interpret and understand a phenomenon from the meaning that people ascribe to the phenomenon (Aspers & Corte, 2019). Qualitative research is considered to be interpretive and subjective in nature (Wagner et al., 2012). The focus is on linguistic data rather than numerical data, and it makes use of meaning-based data analysis as opposed to statistical data analysis (Maree, 2016). Furthermore, qualitative research requires extensive observation and explanations, and it assumes that it is impossible to specifically define what elements are valuable and what elements should be excluded (Queiros et al., 2017).

Creswell and Poth (2017) highlight various key characteristics of qualitative research. Firstly, qualitative research is conducted in a natural setting where researchers obtain relevant information by talking directly to people and observing their behaviour (Creswell & Poth, 2017). Secondly, the researcher is viewed as the key instrument as they collect the data themselves through observations and interviewing participants (Creswell & Poth, 2017). Additionally, qualitative research involves multiple data collection methods, such as conducting interviews, observations and documents (Creswell & Poth, 2017). Therefore, qualitative research does not rely on a single data source (Creswell & Poth, 2017). Once the data has been obtained, researchers review and make sense of the data by organising it into themes or categories (Creswell & Poth, 2017).

Thirdly, qualitative research involves complex reasoning through inductive and deductive logic, meaning that the patterns, themes and categories are organised from the “bottom-up” approach in an inductive process (Creswell & Poth, 2017). Furthermore, qualitative data is context-dependent, and it is essential to understand the contextual factors and the influence that these have on the participants’ experiences (Creswell & Poth, 2017). Lastly, qualitative research is emergent; therefore, the initial plan and outline for the research process cannot be tightly prearranged as all the phases of the process may alter once the data collection begins (Creswell & Poth, 2017).

Strengths of qualitative research include providing complex detailed descriptions of the participants' experiences (Wagner et al., 2012) and consisting of open, exploratory research questions (Maree, 2016). The relationship between the researcher and the participants tends to be less formal than in quantitative research (Maree, 2016). This nature of the research questions and the relationship between the researcher and participants allow participants to respond in their own words, share their stories and provide more complex answers than simple “yes” or “no” answers (Maree, 2016; Wagner et al., 2012).

Qualitative research is not without limitations. The findings cannot necessarily be extended to wider populations because the results are not tested to determine whether they are statistically significant or due to chance (Frey, 2018; Ochieng, 2009). The data collected can also be interpreted in various ways, changing the meaning of the results, and the data is not objectively verifiable (Choy, 2014). The researcher can negatively influence the data collected, and therefore, the researcher requires specific skills for the observation and interview process (Choy, 2014). However, the method of triangulation can be used to overcome the limitations mentioned above.

3.2.3 Justification for the Interpretive Paradigm

As previously mentioned, interpretivism is considered to have a ‘relativist’ ontological paradigm; therefore, it is based on people’s experiences and their understanding of the experiences. Likewise, in this study, the researcher believed that each participant had valuable and differing experiences regarding the value of the SSAIS-R in their contexts, therefore, influencing their opinions and viewpoints regarding the SSAIS-R. These personal viewpoints were beneficial in informing the purpose of this study in understanding the relevance of the SSAIS-R.

By implementing the interpretive belief of acknowledging multiple realities, the researcher obtained two psychologists’ experiences, which contributed to a more in-depth and valuable understanding of their use of the SSAIS-R. The use of the qualitative approach allowed the use of open-ended and flexible research questions which led to content-rich and detailed responses from the participants.

Furthermore, these paradigms emphasise the importance of personal bias. Therefore, throughout the study, the researcher ensured that she was aware of any personal biases and beliefs and how these might have influenced the analysis and interpretation of the results by making use of field notes. The researcher also stated her assumptions at the onset of this study and ensured that the data analysis was thorough and objective.

3.3 RESEARCH DESIGN

An exploratory case study design was used for this research study. Case studies are used to explore and describe phenomena in the everyday contexts in which they occur (Yin, 2018). Case study research may follow a qualitative research approach where the researcher explores a case through detailed, in-depth data collection methods consisting of multiple sources of information (Creswell & Poth, 2017; Frey, 2018; Maree, 2016). This ensures that the phenomenon is explored through various lenses, thus allowing for various aspects of the phenomenon to be explored and understood (Maree, 2016). Furthermore, this method is ideal for various epistemological orientations, specifically within an interpretivist paradigm (Yin, 2018).

Exploratory research aims to answer “what” and “how” questions (Yin, 2018). Case studies can lead researchers to attempt to answer questions that may be too broad, resulting in the researcher becoming unfocused (Maree, 2016). To avoid this, boundaries can be put in place that include time and place, time and activity and definition and context (Frey, 2018; Maree, 2016).

An advantage of the case study design is that it allows for close collaboration between the researcher and the participants, which facilitates the process of the participants sharing their experiences and viewpoints (Maree, 2016). Another advantage is that in-depth and detailed information can be obtained, leading to a deeper understanding of the explored phenomena (Yin, 2018). This was beneficial as limited current research has been conducted on the value of the SSAIS-R from the perspectives of the psychologists who use this instrument regularly.

A limitation of the case study design is that it does not allow for findings to be generalised (Yin, 2018). However, this study aimed to gain a deeper understanding of the views of the two participants, and it was never intended to generalise the findings

but rather to provide an in-depth understanding of educational psychologists' viewpoints on their use of the SSAIS-R. Case studies are also criticised for lacking scientific rigour (Creswell & Poth, 2017; Crowe et al., 2011). To mitigate this, member checking was used throughout the research process.

3.4 BINDING THE CASE

As previously mentioned, binding the case allows the research to establish parameters in a study, therefore avoiding the risk of gathering and analysing copious amounts of information and data (Baxter & Jack, 2008; Njie & Asimiran, 2014). Boundaries include time and place, time and activity and definition and context (Maree, 2016).

This study was bound in terms of activity and context. Regarding activity, the participants were required to willingly participate in a semi-structured interview where they were provided with an opportunity to share their experiences and viewpoints of the SSAIS-R. The context required the participants to work in the South African context with diverse clients to provide insight into the relevance of the SSAIS-R for their clients.

Therefore, this study used purposive sampling to select the participants. Purposive sampling is a nonprobability sampling technique (Etikan et al., 2016). In nonprobability sampling, randomisation of participants is not essential and subjective methods are employed to determine the elements that are included in the sample (Etikan et al., 2016). Purposive sampling is frequently used in exploratory research (Neuman, 2020). In purposive sampling, the participants are selected with a specific purpose in mind (Neuman, 2020). The participants are selected based on the qualities that they possess and those who are proficient and well-informed about the phenomenon (Etikan et al., 2016). This made this method suitable for this study as the researcher required participants who had experience with using the SSAIS-R and who were able to provide rich, detailed content about this phenomenon.

Two educational psychologists who met the criteria and who were willing to participate in this study were selected as the participants. One psychologist was working in private practice, while the other was working for the Gauteng Department of Education (GDE). The participants were selected with the goal of including participants who could provide diverse perspectives and experiences regarding the use of the SSAIS-R. Table 3.1 illustrates the demographic information of the participants.

Table 3.1: Demographic information of participants

	Race	Gender	Years of registration	Demographics of clients
Participant 1:	White	Male	15 Years	Works in a private practice in an affluent area. Most clients attend surrounding private schools.
Participant 2:	Indian	Female	2 Years	Works for the Department of Basic Education. Most clients attend surrounding government and township schools.

The two participants were selected based on the following criteria:

- Participants must be registered educational psychologists for a minimum of two years and working in South Africa.
- Participants needed to be currently using or had previously used the SSAIS-R.
- Participants needed to be able to communicate in English.

A limitation of purposive sampling is that the participants do not represent the entire population, and therefore, the results cannot be generalised beyond the sample (Acharya et al., 2013; Frey, 2018). However, the researcher's aim was not to generalise the results but rather to have transferability of the findings through rich and meaningful data obtained from the participants. A further limitation is that purposive sampling can be subject to researcher bias as the researcher selects the participants based on specific criteria (Sharma, 2017). However, this limitation was mitigated by continuously monitoring personal bias and observations, which were written down in the researcher's field notes.

3.5 DATA GENERATION

An exploratory case study design requires multiple sources of data collection (Yin, 2018); therefore, this study used semi-structured interviews and field notes to gather rich data. The following section explains how the interviews were conducted, the value of this data collection method and the value of field notes as a method of data collection.

3.5.1 Individual Semi-structured Interviews

Semi-structured interviews are purposeful interactions between a researcher and a participant to collect data about the participants' ideas, experiences, viewpoints and beliefs (Frey, 2018; Wagner et al., 2012). Semi-structured interviews require an interview guide containing predetermined questions to guide the interview (Frey, 2018; Wagner et al., 2012).

The researcher conducted individual semi-structured interviews with the two educational psychologists who met the criteria stipulated above. Before proceeding with the interviews, the researcher presented the purpose and all other necessary information on the study to the two participants. Ethical issues pertaining to confidentiality, anonymity and voluntary participation were discussed. They were offered the opportunity to ask questions before consenting to be part of this study.

The interviews took place on two afternoons at a time that was convenient for the participants. Before commencing with interviews, rapport was established with the participants by engaging in small talk, and a brief outline of the interview procedure was discussed.

The interviews lasted 40 minutes and consisted of eight open-ended questions, which allowed the participants to use their own words and provide detailed and narrative answers (Yin, 2015). The flexible nature of the semi-structured interviews allowed the researcher to ask the participants to elaborate on their responses when necessary. The aim was to collect in-depth data about the participants' perceptions, attitudes and experiences about the SSAIS-R to answer the research questions (Maree, 2016).

3.5.2 Field Notes

Field notes are used to document important contextual information and are viewed as an essential component of rigorous qualitative research (Phillippi & Lauderdale, 2017). Field notes enhance the data collection and provide a rich context for the data analysis phase of the research study (Phillippi & Lauderdale, 2017). Field notes also provide nontextual or auditory information about interviews, which is valuable for understanding participant meaning (Phillippi & Lauderdale, 2017). Furthermore, field notes offer various functions, such as prompting the researcher to observe the environment and interactions closely (Phillippi & Lauderdale, 2017). This allows the

researcher to be aware of non-verbal cues, which facilitates further probing of the participants, resulting in continuous and meaningful discussions that allow for rich and detailed data to be gathered (Phillippi & Lauderdale, 2017). Field notes are a valuable source of data and are considered to improve the depth of qualitative findings as body language and non-verbal cues can be included in the data transcripts to provide further meaning and interpretation of the data (Phillippi & Lauderdale, 2017).

The abovementioned functions facilitated the researcher's role during the interviews. It allowed for careful observations of the participant's body language and non-verbal cues, which facilitated the flow of the discussions as probing questions and prompts were asked based on these cues. The use of field notes ensured that all relevant and necessary information provided by the participants were included. Lastly, the field notes were compiled in shorthand during the interviews to ensure the accuracy of the field notes.

3.6 DATA DOCUMENTATION

The following section discusses how data were documented during this study.

3.6.1 Audio Recordings

The interviews were recorded with a voice recorder, and consent was obtained from the participants before the recordings began. The recordings provided verbatim accounts of the interview proceedings and were used in conjunction with the field notes. Recording the interviews was valuable as it allowed the researcher to be able to actively engage with the participants and facilitate the discussions.

The audio recordings were then transcribed word-for-word into written format. Once the recordings were transcribed, the researcher listened to the audio recordings again to ensure that the transcriptions were accurate and reliable. The audio recordings and the transcripts were saved in an encrypted password folder.

3.6.2 Field Notes

As previously mentioned, field notes were valuable as a data generation source, and the use of field notes was also beneficial as a source of data documentation within this study. The use of field notes encourages the researcher to reflect and identify any personal bias as well as increases the rigour and trustworthiness of a study (Phillippi

& Lauderdale, 2017). Field notes effectively facilitate preliminary coding and provide essential context that aids data analysis (Phillippi & Lauderdale, 2017).

Phillippi and Lauderdale (2017) suggest key aspects and information that should be included in field notes to ensure optimal use as a form of data documentation. These aspects include pre-interview planning notes, the date and setting of the interviews, demographic information and critical reflections after the interviews have been conducted (Phillippi & Lauderdale, 2017).

Before the interviews commenced, pre-planning notes were made which consisted of planning the interview structure as well as possible follow-up questions to be asked. This facilitated the discussions and allowed for prompts and probes to ask further questions. To ensure the effectiveness of the field notes, they were compiled during the interviews in shorthand and directly after to prevent any important information from being omitted. As mentioned above, demographics are important to include in the field notes. In this study, the demographic information included information about the participants and also their clients' demographics.

Lastly, critical reflections are essential to include in field notes. Critical reflections provide the researcher with an opportunity to evaluate their performance, feelings and potential biases that they may have (Phillippi & Lauderdale, 2017). These reflections were noted down directly after the interviews had finished.

3.7 DATA ANALYSIS AND INTERPRETATION

This study made use of inductive thematic analysis. Inductive analysis is a method of coding the data without using a pre-existing coding frame and is data-driven (Braun & Clarke, 2006). Thematic analysis is the process of identifying various patterns or themes within qualitative data (Maguire & Delahunt, 2017; Wagner et al., 2012). It organises and describes the data in detail (Braun & Clarke, 2006). Thematic analysis aims to identify themes that are obtained from the data to address and answer the research questions (Maguire & Delahunt, 2017). A theme illustrates something significant or interesting about the data concerning the research questions (Braun & Clarke, 2006; Maguire & Delahunt, 2017).

Thematic analysis consists of a six-phase analytic process: familiarisation with the data, generation of data codes, construction of themes, reviewing of potential themes, defining and naming themes, and producing the report (Willig & Stainton-Roger, 2017). The six phases are considered to be an iterative and recursive process, allowing the researcher to move back and forth between them (Willig & Stainton-Roger, 2017). The first phase consists of reading and rereading the entire textual data as well as listening to the audio recordings for the researcher to become familiar with the data and to be able to identify relevant ideas (Braun & Clarke, 2006). This is illustrated in figure 3.1.

30 March: Interview 1 (35 minutes)				14 April: Online interview 2 (30 minutes)			
The researcher introduces herself, and the participant introduces himself, and the informed consent form is verbally explained, including the research process and issues of confidentiality.				The researcher introduces herself and the participant introduces herself and informed consent form is verbally explained, including the research process, and issues of confidentiality.			
After informed consent is verbally given, an outline of the aim of the research is explained, and the participant begins:				After informed consent is verbally given, an outline of the aim of the research is explained and the participant begins:			
	LINE		CODE		LINE		CODE
Participant 1:	1	You said you struggled to find people who		Researcher:	571	Sorry I didn't <u>actually find</u> out where you	
	2	use it and would have an interview with			572	work. I know you said the GDE?	
	3	you?		Participant 2:	573	Yes. <u>So</u> our district is based in Benoni.	
Researcher:	4	Yes.		Researcher:	574	OK.	
Participant 1:	5	Did you go more Joburg based?		Participant 2:	575	And we have, we have four different	
Researcher:	6	Yes.			576	circuits, so we cover areas like circuit one	
Participant 1:	7	Yeah, Pretoria you're going to find more			577	is xxx and xxx.	
	8	people who use it.		Researcher:	578	OK.	
Researcher:	9	Really?		Participant 2:	579	Circuit 2 is more xxx (area) and we are	
Participant 1:	10	You have Afrikaans speaking kids here so			580	looking at uhm xxx (area). But my schools	
	11	you're going to find that you do get some			581	are based mainly in circuit 2 which is our	
	12	Ed psych's that have the WISC and have			582	xxx area.	
	13	had it translated or some picked up a					
	14	translated version of the WISC.					

Figure 3.1: Stage one

Data codes are generated during the second stage by identifying interesting and repeated patterns within the data items (Braun & Clarke, 2006). This involves systematic coding of the data in a meaningful and methodical manner. An effective way to complete this stage is to use line-by-line coding in the data (Maguire & Delahunt, 2017). This is illustrated in figure 3.2.

Participant 1:	74	If English isn't their first language it makes	CO3.1: Language
	75	it fair but if you take the WISC and you test	
	76	and Afrikaans kid uhm, whose first	
	77	language Afrikaans, they going to take	
	78	strain.	
Researcher:	79	Yes, it will be unfair.	
Participant 1:	80	So that's why I use the SSAIS-R because	CO3.1: Language
	81	its still, it was standardized long ago, and	
	82	it would be nice if it could be standardized	CO1.2: Standardisation
	83	again and maybe adapted a bit. So, like	
	84	the WISC is adapted every now and then	CO1.2: Update it
	85	and they take some subtests out or add	
	86	some questions. So, I think like on the	CO1.1: Outdated content
	87	SSAIS-R there is a uhm, missing parts	
	88	one where there is a picture of an	
	89	envelope.	

Figure 3.2: Line-by-line coding

The third phase involves searching for broad themes within the data and integrating all the relevant data into the potential themes (Braun & Clarke, 2006). For the fourth phase, the researcher needs to ensure that the data that has been organised into themes is coherent and meaningful (Braun & Clarke, 2006). It is also essential to ensure that there are clear distinctions between the themes and to ensure that potential themes have not been excluded in the earlier coding phase (Braun & Clarke, 2006). These steps are illustrated in figure 3.3.

Themes	Sub-themes
Theme 1: The concerns and challenges with the SSAIS-R	Sub-theme 1.1: Outdated content (CO1.1; CO1.6)
	Sub-theme 1.2: Norms, standardisation and the need for updating the SSAIS-R (CO1.2; CO1.3)
	Sub-theme 1.3: Comparisons to the WISC-V (CO1.4; CO1.5)
Theme 2: Variables impacting testing in the South African context	Sub-theme 2.1: Contextual challenges (CO2.1; CO2.2; CO2.3; CO2.4)
	Sub-theme 2.2: Language (CO2.7; CO2.8; CO2.9; CO2.10)
	Sub-theme 2.3: Practical constraints (CO2.5; CO2.6)
Theme 3: Factors that result in the use of the SSAIS-R	Sub-theme 3.1: Language (CO3.1; CO3.2)
	Sub-theme 3.2: Difficulty of the WISC (CO3.4)
Theme 4: The benefit and value of the SSAIS-R	Sub-theme 4.1: The usefulness of the SSAIS-R (CO4.1; CO2.6)
	Sub-theme 4.2: The value of the SSAIS-R (CO4.2; CO4.3; CO1.4; CO4.4)

Figure 3.3: Themes and sub-themes

In the fifth stage, the themes and possible sub-themes are defined. There are continuous reflections on how the themes relate to the research questions in this phase, and definitions and names are given for the themes (Braun & Clarke, 2006). For the final phase, the themes are analysed for the last time, the analysis is related to the research questions and existing literature, and a report is written (Braun & Clarke, 2006). These steps are illustrated in figure 3.4.

Themes	Sub-themes
Theme 1: Relevance	Sub-theme 1.1: Value as in IQ test (C01.4; C02.6; C02.9; C04.1; C04.2; C04.3; C04.4)
	Sub-theme 1.2: Contextual relevance (C02.1; C02.2; C02.3; C02.4; C03.4; C03.1; C03.2; C02.7; C01.5; C02.10; C02.8)
Theme 2: Benefits	Sub-theme 2.1: Affordability (C02.6)
	Sub-theme 2.2: Time (C02.5)
Theme 3: Concerns and challenges	Sub-theme 3.1: Outdated content (C01.1; C01.6)
	Sub-theme 3.2: Norms (C01.2; C01.3)

Figure 3.4: Stage 5

Inductive thematic analysis was suitable for this study as the flexible nature of thematic analysis allows for it be used within most theoretical frameworks (Willig & Stainton-Roger, 2017). This flexibility further allows for thematic analysis to be suitable for various data collection strategies (Willig & Stainton-Roger, 2017).

Furthermore, it is a valuable method for identifying the different perspectives of the participants (Nowell et al., 2017). Thus, it was beneficial for this study as it allowed each participant's valuable viewpoints and experiences to be analysed.

3.8 TRUSTWORTHINESS OF THE STUDY

Trustworthiness is an essential part of qualitative research studies, which refers to the scientific rigour of the research design and the applicability of the research methods used within the study (Rose & Johnson, 2020). Trustworthiness can be gauged by the

use of five criteria: credibility, transferability, dependability, confirmability and authenticity (Gunawan, 2015; Korstjens & Moser, 2018; Wagner et al., 2012).

3.8.1 Credibility

Credibility refers to the extent to which research findings represent accurate and credible information provided by the participants (Korstjens & Moser, 2018). It also refers to the accuracy of interpreting the participant's viewpoints and opinions (Korstjens & Moser, 2018). Various strategies can be employed to ensure credibility, such as continual engagement, constant observation, triangulation and member checking (Korstjens & Moser, 2018).

Before commencing this study, the researcher familiarised herself with the research field by conducting extensive research into the existing literature regarding intelligence testing, explicitly focusing on intelligence testing within the South African context. The method of triangulation was also used to enhance the credibility of this study. Triangulation is the use of multiple data sources (Korstjens & Moser, 2018). Data were obtained through semi-structured interviews, observations and field notes. To ensure that the participants provided honest and accurate responses, they agreed to voluntary participation. They were allowed to withdraw from the study at any stage of the research process.

Lastly, member checking is the process of sending the analysis of the data obtained to the participants for them to check if the opinions and viewpoints that they provided were interpreted correctly (Korstjens & Moser, 2018). This ensures that the researcher's interpretation and analysis of the data are correct (Korstjens & Moser, 2018). The participants were given the opportunity to review and verify if their views were accurately interpreted.

3.8.2 Transferability

As previously mentioned, a limitation of case studies is that it does not allow for findings to be generalised (Yin, 2018), therefore making transferability important for qualitative studies. Transferability is the degree to which the research study findings can be applied to different contexts or settings with different participants (Korstjens & Moser, 2018). Transferability is also achieved when the researcher provides a thick

description of the participants' viewpoints and the research process (Korstjens & Moser, 2018).

To enhance the transferability of this study, rich and detailed explanations regarding the phenomenon have been provided. This ensures clarity of the research findings and allows this study to be reproduced in similar settings or contexts (Korstjens & Moser, 2018). Furthermore, to increase the transferability of this study, the researcher made use of purposive sampling, and clear inclusion criteria were stipulated (Etikan et al., 2016).

3.8.3 Dependability

Dependability refers to the stability of the research findings over time; thus, the extent to which the research study would generate similar results if the study were to be repeated (Korstjens & Moser, 2018). An audit trail is one strategy to ensure dependability (Carcary, 2020). An audit trail involves transparently describing the research steps taken at the beginning of the research study right through to the development and findings of the study (Korstjens & Moser, 2018).

The researcher provided an audit trail of this research study by documenting the entire research process. Field notes have also been included. The field notes included the researcher's observations, personal reflections and verbatim transcriptions of the participants' contributions. Furthermore, the researcher engaged in continuous reflective sessions with her supervisor to monitor her progress as well as the consistency and cohesiveness of the study.

3.8.4 Confirmability

Confirmability is the degree to which other researchers can confirm the findings of a research study; thus, the findings are based on participants' experiences and viewpoints rather than the researcher's viewpoints (Korstjens & Moser, 2018). Similar to transferability, confirmability can be ensured through the use of triangulation, member checking, an audit trail and triangulation (Korstjens & Moser, 2018). The researcher made use of triangulation to mitigate personal bias during the research study.

As previously mentioned, the researcher provided a detailed audit trail highlighting the research process which enhances the confirmability of this study. Lastly, the researcher ensured that she remained transparent throughout the study, which was achieved through the detailed field notes.

3.8.5 Authenticity

Authenticity refers to the extent to which the findings are fairly and accurately represented (Korstjens & Moser, 2018). The researcher provided thick and detailed descriptions of the participants' perspectives and experiences and verbatim responses to enhance the authenticity of this study (Rose & Johnson, 2020). As stated earlier, the researcher used audio recordings to ensure that the participants' exact words were captured. The participants were given an opportunity to read through the analysis to determine the accuracy of the analysis and transcription of the results.

3.9 ETHICAL CONSIDERATIONS

Ethical considerations must be considered during every stage of the research process (Frey, 2018; Wagner et al., 2012). To ensure that the researcher adhered to the necessary ethical considerations throughout this study, the guidelines set by the University of Pretoria and the Health Professions Council of South Africa (HPCSA) were followed. The core values of the HPCSA guidelines that were followed in this study included respect, the well-being of the participants, beneficence, truthfulness, confidentiality and autonomy of the participants (HPCSA, 2016). In the following section, the researcher explains how the abovementioned values were adhered to in this study.

3.9.1 Permission to Conduct Research, Informed Consent and Voluntary Participation

Before conducting the research, the researcher submitted her research proposal to the Ethics Committee of the Faculty of Education at the University of Pretoria and obtained ethical clearance to commence this research study.

Furthermore, participants' safety and rights must always be considered (Frey, 2018; Wagner et al., 2012). To ensure the safety and protect the rights of the participants, the researcher obtained informed consent from the participants. Informed consent is

an agreement made by individuals willing to participate in a research study after being informed of the benefits, risks and requirements of the research study (Frey, 2018). Before the participants gave informed consent, the researcher provided the participants with details of the purpose and process of the research study. Their role in the study and what was expected of them was explained. This was presented verbally and in written format in the consent letter form.

The participants were informed that their participation was voluntary and that they had the right to withdraw from the study at any stage of the research without any consequences to them. Lastly, the researcher obtained consent that audio recording was allowed to be used during the interviews. Once the participants volunteered to be part of this study, they were asked to complete and sign the consent letters before the data generation began.

3.9.2 Privacy, Confidentiality and Anonymity

Privacy and confidentiality in research ensure that private and personal data which can lead to the participants being identified will not be used in the research report (Willig & Stainton-Roger, 2017). Confidentiality is the privacy of the participant's personal information (Frey, 2018; Neuman, 2020).

Throughout this study, the researcher ensured the confidentiality of the participants by ensuring that their identities were not identifiable. This was achieved by using pseudonyms instead of their real names. All the data documentation, namely the audio recordings and field notes, were saved in an encrypted password folder which was only accessible to my supervisor and me.

3.9.3 Respect, Integrity and Truthfulness

Respect, integrity and truthfulness were adhered to throughout the study. The participants were provided with opportunities to ask questions or raise any concerns that they may have had throughout the study.

3.10 SUMMARY

This chapter discussed the meta-theoretical and qualitative research paradigms underlying this study. This chapter also reviewed the research design by illustrating how the study was conducted as well as the benefits of the different methods that were

employed. Lastly, it was explained how this study's trustworthiness was met and what ethical considerations were adhered to throughout this study.

CHAPTER 4: FINDINGS OF THE STUDY

4.1 INTRODUCTION

In this chapter, the findings of this study are reported. This chapter presents the data over three themes and six sub-themes. Theme 1 relates to the relevance of the SSAIS-R, Theme 2 relates to the benefits of the SSAIS-R and Theme 3 relates to the concerns and challenges that the two participants have with using the SSAIS-R.

Table 4.1 provides an overview of the three themes and the related sub-themes.

Table 4.1: Overview of themes and sub-themes

Themes	Sub-themes
Theme 1: Relevance	Sub-theme 1.1: Value as an IQ test
	Sub-theme 1.2: Contextual relevance
Theme 2: Benefits	Sub-theme 2.1: Affordability
	Sub-theme 2.2: Time
Theme 3: Concerns and challenges	Sub-theme 3.1: Outdated content
	Sub-theme 3.2: Norms

The following section discusses the themes that emerged from the data analysis. Section 4.3 discusses the findings of the study within the context of literature.

4.2 RESULTS OF THE STUDY

The definitions for each theme, sub-theme and inclusion criteria are presented. The findings are supported by the extracts from the two interviews.

4.2.1 Theme 1: The Relevance of the Senior South African Individual Scale

During the interviews, the participants were asked to share their views about how relevant they believed the SSAIS-R was for the clients they assessed. With regard to relevance, two sub-themes were identified. The two sub-themes include the relevance in terms of the value of the SSAIS-R as an IQ test and the contextual relevance of the SSAIS-R. In the section that follows, the data will be presented in sub-themes: value as an IQ test and contextual relevance.

4.2.1.1 Sub-theme 1.1: Value as an IQ test

Table 4.2 provides a working definition of the value as an IQ test and the inclusion criteria used for sub-theme 1.1.

Table 4.2: Working definition and inclusion criteria for sub-theme 1.1

WORKING DEFINITION: Value as an IQ test
The main purpose of intelligence testing is to identify an individual's strengths and weaknesses and inform diagnoses as well as interventions for children and adults (Frey, 2018). Intelligence tests provide scores for various cognitive processes such as language fluency, working memory, abstract thinking and problem-solving (Frey, 2018). These scores are combined to provide an overall Full-Scale IQ (Frey, 2018).
INCLUSION CRITERIA¹
Keywords and phrases that were used to identify data that aligned with this sub-theme were the following: assesses cognitive potential; usefulness; use in concessions; time to administer; favourable comparisons of the SSAIS-R with the WISC in terms of research and standardisation; and comparisons of the norms of the WISC and the SSAIS-R.

¹ The inclusion criteria will refer to the data that was included, and the exclusion criteria refer to the data that falls outside the inclusion criteria.

When discussing the value of the SSAIS-R as an IQ test, the participants had mixed viewpoints. One participant felt that the SSAIS-R had great value for measuring IQ and that it was still very useful. The other participant was ambiguous in her viewpoints regarding the value of the SSAIS-R. The participant who felt that the SSAIS-R still had value indicated the following:

So, it (SSAIS-R) still gives us a good idea of cognitive potential, I think (P1, L160–161).

There is a lot of value in the SSAIS-R because it allows you to be able to diagnose and understand the whole picture (P1, L454–457).²

So again, with Afrikaans speaking kids, it tests, it gives us a pretty good idea of, so if the kids are strong language based, they tend to do well. If they struggle with languages, they struggle. So, I still feel it's quite valid in terms of creating an idea of where their strengths lie, the more non-verbal, verbal (P1, L145–152).³

When comparing the WISC and the SSAIS-R, participant 1 also discussed the value of the SSAIS-R in terms of the norms. He believed the SSAIS-R norms were preferable to the WISC norms, which tended to disadvantage some children. He stated the following in this regard:

You will see with the WISC, the UK norms are strict, kids don't easily do well on it unless they are functioning on a very high level. So that's where one weighs up and kind of looks at the context (P1, L509–514).

² After every quote, the letter “P” followed by a number represents which participant articulated the response. After the comma, the letter “L” followed by a number range indicates the line reference as illustrated in the transcription of the two interviews (refer to Appendix D).

³ Data is reported mostly verbatim but light editing was done to facilitate the understanding of the data captured while ensuring that the authenticity of the data remained.

Participant 1 further indicated his preference for using the SSIAS-R for Afrikaans speaking children because of the norms for Afrikaans speaking children, which was fairer than when assessing them compared with the WISC and UK norms. The following illustrated his viewpoint:

So, I use it with my Afrikaans speaking kids always. You'll find that the WISC is standardised in English and with a UK norm base (P1, L46–49).

But if you take the WISC and you test an Afrikaans kid, whose first language is Afrikaans, they are going to take strain (P1, L75–78).

Participant 1 further believed that the SSAIS-R was relevant because it was the only IQ test for Afrikaans speaking children that was acknowledged by the Independent Examinations Board (IEB) when applying for IEB concessions:

With IEB concessions, they have got specific tests that you need to use (P1, L361–363). So that's the thing where you see its usefulness because that's the only one that is there for the Afrikaans kids. So, they accept it for Afrikaans kids and English kids, you can do the SSAIS-R for an English-speaking kid (P1, L366–371).

Participant 2, who expressed a more ambivalent view about the value of the SSAIS-R, felt that the WISC provided more insight into cognitive potential. She stated the following:

The WISC gives you more information and more insights into understanding the child, and you know in terms of where is their cognitive potential, what is the strengths and the weaknesses (P2, L739–743).

Although participant 2 believed that the SSAIS-R provided less information about cognitive potential when compared to the WISC, she commented on it in terms of the administration time. Participant 2, who was employed as a psychologist by the Department of Basic Education (DBE) in Gauteng, had to perform a large number of assessments in the shortest possible time. Due to the high number of assessments that needed to be completed, she preferred the SSAIS-R, which had a shorter

administration time when compared to the WISC. She stated the following in this regard:

Because it's 90 minutes per client (P2, L683–684). So, when looking at the number of referrals and looking at the other instruments that you got to use, we are still using SSAIS-R more frequently unfortunately because of the number of assessments you know that need to be done (P2, L763–769).

Participant 1 also compared the value of the SSAIS-R to the WISC, and he believed that the SSAIS-R could be more valuable if it was updated regularly and aligned with more current research like the WISC. He stated the following:

That's where standardisation is useful so like you kind of restandardise it and you change, adapt it a bit so that's where maybe the fault lies, you know it's not updated enough because if you look at the WISC, I think they update it, I'm not exactly sure and I will have to just double check but they do it every so often (P1, L94–102).

So, if they (SSAIS-R norms) were updated I think you know it would be good to continue with the alignment with what we are seeing with the WISC (P1, L207–210). For me, the way (the WISC-V) it's set up and the research behind it, I just find it's more updated (P1, L532–534).

Participant 1 also compared the diagnostic value of the SSAIS-R with that of the WISC. He was of the opinion that the various scales on the WISC that counted toward the child's Full Scale IQ score offered more insight into how areas of weakness influenced children's cognitive abilities. He stated the following:

But with the WISC, they add the processing speed, working memory and the visual processing speed part of your full-scale score (P1, L174–178) (also refer to P1, L537–552).⁴

⁴ For conciseness, the quotes that best illustrate the results are used and thereafter, reference is made to additional quotes that further support the results (refer to Appendix D).

So, you got your ability index, and the kid might have like above average but because they process slowly, visually, auditory or concentration issues and you add those scores, suddenly the IQ is average, so it makes sense that the kid is doing average at school (P1, L180–186).

Participant 1 further believed that the SSAIS-R had less application value for diagnostic purposes when compared to the WISC because the scores of the two additional tests, namely Memory for Digits and Coding, were not added to the composite scale scores. Therefore, it did not allow the clinician to evaluate how these two subtests influenced the child's cognitive functioning. He stated the following:

But with the SSAIS-R, those processing speed ones are separate, they are not combined with the full-scale score. So in the past, the kids would score very high on the IQ on the SSAIS-R, but they would still struggle at school (P1, L180–192).

Participant 1 was of the view that if the aforementioned problem could be addressed, it would add value to the diagnostic use of the SSAIS-R. He stated the following in this regard:

So, if they were updated, I think you know it would be good to continue with the alignment with what we are seeing with the WISC-V in terms of bringing in the processing speed index as a full-scale score because it kind of puts that into perspective as to why kids struggle (P1, L207–213).

While discussing the value of the SSAIS-R as an IQ test, the participants also referred to the contextual relevance of the SSAIS-R, which is discussed next in sub-theme 1.2.

4.2.1.2 Sub-theme 1.2: Contextual relevance

Table 4.3 provides a working definition of the contextual relevance and the inclusion criteria used for sub-theme 1.2.

Table 4.3: Working definition and inclusion criteria for sub-theme 1.2

WORKING DEFINITION: CONTEXTUAL RELEVANCE
A context can be described in terms of a social context which includes quality of education, language, culture and environmental factors (Foxcroft & Roodt, 2019). The contextual factors within a social context are considered to influence a child’s development and intellectual functioning (Laher & Cockcroft, 2013).
INCLUSION CRITERIA
Keywords and phrases that were used to identify data that aligned with this sub-theme were the following: quality of education; role of language; stimulation from home; the client’s community; exposure; IEB schooling, ex Mode-C schools; education system; the language used in the WISC; relevance of the SSAIS-R for Afrikaans speaking children; and translated versions of the SSAIS-R.

When discussing the use of the SSAIS-R, the participants emphasised the importance of understanding the context of their clients before administering the SSAIS-R. The participants referred to specific contextual factors, namely proficiency in language and exposure to language, quality of education and the input and stimulation received in the home environment as they believed these were important factors that needed to be taken into consideration. The participants stated the following:

So, it’s very important to first understand your child exactly and where is your child coming from (P2, L743–745). The contextual issues are important here. You know the child, the environment the child is coming from (P2, L835–838).

What type of community is the child in, their stimulation at home (P2, L746–748).

So, language for sure, and educational stimulation, input from home (P1, L462–463).

Participant 1 emphasised the importance of considering the school curriculum when deciding to use the SSAIS-R rather than the WISC. Participant 1 believed that the WISC may be too difficult for some children in the South African context. Participant 1 referred to the age that children in the UK started learning to read, which was at four years old, allowing for earlier language exposure and stimulation compared to children in South Africa. For this reason, he believed that the SSAIS-R was a fairer option, especially for children in the Foundation Phase. He stated the following:

Again, public schools sometimes as well so you know so IEB schools versus government schools sometimes if we feel there is a bit of a ..., especially younger kids are too because it's standardised in the UK, they start reading and exposed to reading and a lot of language stimulation from four years old (P1, L108–116).

So, then it's like maybe in the early grades we use the SSAIS-R because it's a bit fairer in terms of what they have been exposed to, you know. It depends on their curriculum (P1, L118–122).

Participant 2 had similar views and discussed the importance of using an IQ test that would be fairer by using what children had been exposed to. She was of the opinion that even the SSAIS-R was sometimes too difficult in instances where learners lacked exposure. She made the following statements:

We have to look at something that's going to be more reliable and fairer to the child as well (P2, L931–933). You know the exposure and all those things, even the SSAIS-R is a bit too difficult for them than you can imagine (P2, L1163–1165).

Participant 2, who worked at the DBE, agreed with participant 1 that the level of education of learners who were in government schools compared to those who were in private schools registered with the IEB should be considered when deciding whether to use the SSAIS-R or the WISC. She believed very few learners in government schools could cope with the level of difficulty of the WISC and that the majority of learners she assessed attained higher scores on the SSAIS-R. She stated the following:

WISC tends to be very difficult for us. We must find that particular child, maybe in an ex-Model C school but maybe a highflyer or someone in your normal GDE school that will work as well (P2, L648–652).

WISC is too difficult for them. They can't manage most of them. The majority of the client that we see, they can't manage that otherwise all of them would be cognitively delayed in terms of scores (P2, L924–929).

Both participants also discussed the importance of considering language. Participant 1 believed that language and language proficiency could influence test results, especially if a client had not had adequate exposure to the language of testing. He stated the following:

So, the input the child gets from home. If the child has just started with school and his first language isn't English and he hasn't been exposed much to the language of testing, that would be a factor (P1, L466–469).

Participant 2 discussed language exposure concerning the clients she saw, and she believed that the WISC was not suitable for many of her clients as the language used in the WISC was too difficult for them. She stated the following:

So, it's also in terms of language barrier. We have to consider the language in the case item in the instrument and we find that in the WISC our children really, it won't be reliable. It won't be accurate actually because they struggle with the English and they do not understand most of the terminology in there (P2, L627– 635).

Participant 2 qualified her previous statement by stating that her opinion applies to learners from townships and that it may not necessarily be true for learners from other contexts. She stated the following in this regard:

Not everybody, be careful, I'm talking about more your Thembisa, talking about certain areas (P2, L1134–1138).

Yes, those areas it becomes problematic there (P2, L1140–1141).

Participant 1, who assessed many Afrikaans speaking clients, expressed the value of the SSAIS-R for the clients that he saw, as the SSAIS-R was the only standardised IQ test available in Afrikaans. He stated the following:

It's mainly for the language necessity that we use the SSAIS-R (P1, L32–33).

If you go to Afrikaans speaking schools, you will find everyone there will most probably use the SSAIS-R (P1, L36–39). They won't even have the WISC because they are not working with English kids (P1, L41–43).

So, the Afrikaans speaking kids we tend to use it often, or always (P1, L107–108). I use the WISC for the English kids and the SSAIS-R for the Afrikaans kids because there is not really any alternative (P1, L124–127).

Participant 1 expressed that he was aware that the WISC had been translated into Afrikaans. However, he did not use the translated version as he was concerned with the validity of the translated version as it had not been standardised. His concern regarding the Afrikaans version of the WISC is stated below:

You're going to find that you do get some educational psychologists who have the WISC and have had it translated or some have picked up a translated version of the WISC (P1, L11–14).

Like some psychologist translated it, but it has not been standardised or tested. So personally, I don't use it because it hasn't been standardised. I mean, it's like me translating it and googling the Afrikaans word for that word. I haven't tested it (P1, L17–24).

Both participants also discussed the value of the translated versions of the SSAIS-R. Both participants were of the view that the SSAIS-R had been translated into a few African languages. They stated the following:

You get it [the SSAIS-R], it has been translated into African languages (P1, L134–135).

I've been speaking to my colleague, they've got Northern Sotho I think and Xhosa as well (P2, L902–906).

Although the participants viewed the translated versions of the SSAIS-R as a benefit, participant 2 expressed that the availability of the translated versions did not make it completely accessible to the entire population. She justified her views by discussing the lack of trained professionals to administer the translated versions and the expense of purchasing the test kits of the translated versions. She stated the following:

But, look in our district, we don't have people, we don't have psychologists that can administer that. We don't have the instrument [translated versions of the SSAIS-R] because remember, it's expensive. We've got IsiZulu but just one (P2, L906–912).

Theme 1 highlighted the relevance of the SSAIS-R in the South African context. Closely linked to relevance are the benefits of the SSAIS-R. These benefits are discussed in the next theme.

4.2.2 Theme 2: Benefits

This theme captures the participants' viewpoints on the benefits of the SSAIS-R. When discussing the benefits, the participants referred to the accessibility of the SSAIS-R in terms of the cost of the test. Another benefit the participants discussed is the administration time of the SSAIS-R. This section discusses the two sub-themes of theme 2: affordability and time.

4.2.2.1 Sub-theme 2.1: Affordability

Table 4.4 provides a working definition of affordability and the inclusion criteria that were used for sub-theme 2.1.

Table 4.4: Working definition and inclusion criteria for sub-theme 2.1

WORKING DEFINITION: AFFORDABILITY
Affordability refers to the financial value of the type and amount of resources that are utilised to administer, score and interpret an IQ assessment (Yates & Taub, 2003). Resources needed to administer IQ tests include observation forms, recording forms, test kits and scoring keys (Yates & Taub, 2003).

INCLUSION CRITERIA

Keywords and phrases that were used to identify data that aligned with this sub-theme were the following: cost of psychometric media; availability of psychometric media; and cost of the WISC.

When discussing the benefits of the SSAIS-R, participant 2 referred to the benefits of the SSAIS-R with regard to the affordability of the test. Participant 2 described how the cost of an IQ test significantly influenced which tests educational psychologists use, especially when working in the DBE. Participant 2 expressed that the expense of international IQ tests determined the number of tests they could purchase, limiting the accessibility of international IQ tests. She stated the following:

The WISC is expensive and the WIAT (P2, L1117–1118).

In our district, we've been just given one [the WISC], and it's possibly also due to how expensive it is (P2, L666–668) (also refer to P2, L662–664; P2, L918–920).

So the thing is, with the WISC, luckily it was given from the head office so it wasn't purchased by the district (P2, L111–1113). We won't have enough money to buy it (P2, L1115).

While discussing the expense of international IQ tests, participant 2 elaborated on her use of the SSAIS-R in terms of the availability of the test. Although she referred to the SSAIS-R as being more affordable, this did not make IQ tests completely accessible as she stated that four psychologists were working in the district, and they had to share the instruments amongst them. She stated the following:

A tool is expensive so the psychologists are using the SSAIS-R more and the other instruments that are more available (P2, L670–673).

The English and Afrikaans tests [SSAIS-R], we've only got about two or three and remember we are four psychologists (P2, L914–916).

A question noted in the field notes was the cost of the SSAIS-R. Participant 2 discussed that their district had recently purchased new copies of the SSAIS-R, and they could purchase more than one copy for approximately R30 000, whereas one copy of the WISC cost R49 880.

In addition to the affordability of the SSAIS-R, the participants also discussed the benefits of the SSAIS-R regarding time. This is discussed in the following section in sub-theme 2.2.

4.2.2.2 Sub-theme 2.2: Time

Table 4.5 provides a working definition of time and the inclusion criteria used for sub-theme 2.2.

Table 4.4: Working definition and inclusion criteria for sub-theme 2.2

WORKING DEFINITION: TIME
Time refers to the amount of time that is required for an educational psychologist to administer an IQ test including: conducting intake and feedback interviews, administering the IQ test, scoring, interpreting, and writing a report (Yates & Taub, 2003).
INCLUSION CRITERIA
Keywords and phrases that were used to identify data that aligns with this sub-theme were the following: time availability in private practice; the time it takes to administer the SSAIS-R in comparison to the WISC; the number of referrals; and the scoring of the SSAIS-R.

During the discussion of the benefits of the SSAIS-R, both participants indicated that the SSAIS-R was faster to administer and that this was a strong consideration given that they had limited time for assessments. Participant 1, who worked in private practice, discussed how his time constraints influenced the number of subtests on the WISC that he administered but that he was able to administer all of the subtests in the SSAIS-R. He stated the following:

So, with the SSAIS-R, you administer all of them but with the WISC, you have 10 that are for the full scale (P1, L331–333) (also refer to P1, L333–344).

In practice, we tend to only administer the necessary, so we administer the 10. On the WISC, we don't administer the 15, there is no time in private practice necessarily (P1, L325–329).

As discussed in theme 1, participant 2 discussed her preference for using the SSAIS-R as she received several referrals for assessments and she experienced the WISC to be more time-consuming. Participant 2 stated the following:

We have to consider this because if you look at this term, last term rather, we had close to 526 referrals (P2, L598–600).

So, it's quite a bit and we've like completed maybe only 250 between the four psychologists now that I am talking about. So, we are still overlapping and this next term, we need to still finish the other assessments. So yes, we use it [SSAIS-R] quite a lot but obviously in my case I've got lots of English and Afrikaans learners that I use it with (P2, L602–610).

But remember our time. If we're looking at 526, now with the WISC itself, you have to spend a fair amount of time to be fair to the child as well. Then, of course, it's not only your cognitive and intellectual instrument, you have to use others as well, like the Bender, your emotional and then to triangulate all your results. Yeah, so time constraints are our biggest issue that we struggle with (P2, L652–662) (also refer to P2, L763–769; P2, L1044–1047).

Although participant 1 was of the view that the SSAIS-R was faster to administer, he felt that scoring it was more time-consuming. He stated the following in this regard:

I think the marking of the SSAIS-R is trickier (P1, L303–304). For example, it is maybe a bit more time-consuming because for the form board subtest, it is time-based and from there you convert your time-based into raw scores and then into the scaled scores (P1, L308–312).

I think it's that part where you have to work on the scatter analysis, I think, on the SSAIS-R where you get your scaled scores, your index scores, but then you have to kind of work out compared to your overall ability, which subtest did you score higher in and which subtest did you score lower in and there

you have to work out the sums and minus it. Whereas with the WISC, you literally, the raw scores and scaled scores and ability processing speed index is already done (P1, L308–325).

In this theme, the participants discussed the various benefits that they experienced with using the SSAIS-R. The discussion of the benefits led to the participants also considering their challenges and concerns with the SSAIS-R. These challenges and concerns are discussed in theme 3.

4.2.3 Theme 3: Concerns and Challenges

When discussing the use of the SSAIS-R, the participants were asked about their concerns and challenges that they experienced when using the SSAIS-R. This section discusses two sub-themes for theme 3, relating to the outdated content and the outdated norms of the SSAIS-R.

4.2.3.1 Sub-theme 3.1: Outdated content

Table 4.6 provides a working definition of outdated content within the SSAIS-R subtests and the inclusion criteria used for sub-theme 3.1.

Table 4.5: Working definition and inclusion criteria for sub-theme 3.1

WORKING DEFINITION: OUTDATED CONTENT
Intelligence tests consist of verbal and non-verbal subtests which contain different content (van Eeden & de Beer, 2019). The content of subtests includes the type of questions asked, the pictures and language used and the activities that the test-taker needs to complete (van Eeden & de Beer, 2019). Content that is outdated is content that has not been updated or revised to remain relevant.
INCLUSION CRITERIA
Keywords and phrases that were used to identify data that aligned with this sub-theme were the following: outdated content; frame of reference; the need for updating the images; cognitive skills that the Missing Parts subtest measures; and the impact on a score when guessing an answer.

Both participants expressed concerns about the content in the Missing Parts and Vocabulary subtests in the SSAIS-R. They believed that certain aspects of the content in the SSAIS-R were outdated. The following excerpts illustrate this:

Some of the pictures there are outdated. So, like the car on the Missing Parts is like a 19, I don't know, like the 1930s or 1940s [model] (P1, L227–230).

So, I think like on the SSAIS-R there is a Missing Parts one where there is a picture of an envelope (P1, L86–89).

So, in the Missing Parts we talk about, you know on that envelope the address is missing, right? Children are using emails now (P2, L719–722).

The exposure to those things, you look at that stove thing, there is touch screen (P2, L724–725).

It's ok, but it would be good if some of the images could be more updated (P1, L231–233).

The participants further discussed the implications of using outdated pictures and content. They were of the view that using outdated content may disadvantage children who grew up in the 21st century and who were exposed to different things. They stated the following:

So, if we look at where we are now and the type of pictures and maybe what we're asking for, is it relevant? (P2, L725–729).

And now, a lot of kids don't know what an envelope is hey (P1, L91–92).

... and certain subtests like we spoke of the Missing Parts where it's not part of their frame of reference so it kind of almost can negatively influence them (P1, L490–494).

... so, we have got to find something that would make sense to all ages (P1, L280–282).

Participant 1 further discussed how he believed the use of the picture of an envelope influenced the cognitive skills that the Missing Parts subtest assessed, which were perceptual and conceptual abilities. He stated the following:

So, it's like with the horse one, the most difficult one – it's missing the hoof, but you have got three hooves to compare it to, so that's what Missing Parts is all about. Like one pig has a tail, one pig doesn't have a tail, so you probably want something like that where the clues are on the picture, whereas on the envelope, the clue is not really on the picture if you don't really know what an envelope is (P1, L282–292).

So, I think that's why we need to find something more in line with what it's testing, which is visual processing, visual acuity and all that stuff (P1, L295–299).

As discussed in theme 1, the participants discussed the importance of considering language as a contextual factor. Both participants expressed their concerns regarding certain words used in the Vocabulary subtest. The participants believed that a few words were not in the children's frame of reference, making the subtest more difficult for their clients. The participants stated the following:

I think the weaknesses would probably be like some of the subtests, like the vocab subtest because the vocab is outdated (P1, L223–226). Because some of the language used is, you know, I can see some kids struggle (P1, L141–143).

There are a few of those terms that we've picked up that these children just look at you confused but then they'll guess (P2, L698–701) (also refer to P2, L693–696).

When discussing her viewpoints on the difficulty of the words used in the Vocabulary subtest, participant 2 further indicated that she believed this had implications for the relevance of the SSAIS-R. She noted that because of the language barriers that many children whom she assessed had, her clients would guess answers, which she believed had implications for the reliability of the scores. She stated the following:

Then obviously the language barrier becomes very big you know ..., here you find a thing like in the vocab Conviviality, ¾ of our clients don't know and that they would guess and that doesn't make then your scoring reliable if I could say (P2, L690–696).

Inauguration is another one, sweltering is another one, and desolation. So, there are quite a few that you know, like even if you sit with a Grade six and seven learner, they look at you confused and think now, 'OK what are you talking about?' (P2, L703–708).

Although participant 2 shared her concerns about the Missing Parts and Vocabulary subtests, she did express that she did not consider all of the content in the SSAIS-R to be outdated. She mentioned some subtests that she believed were still relevant. She stated the following:

But non-verbal, I may say, is quite relevant. Non-verbal when we looking at the patterns for the block design (P2, L729–732).

Look at the pattern completion. Those things will still remain relevant if one could say (P2, L734–736).

As discussed in the following section, the participants shared their viewpoints regarding the norms of the SSAIS-R.

4.2.3.2 Sub-theme 3.2: Norms

Table 4.7 provides a working definition of norms and standardisation as well as the inclusion criteria that were used for sub-theme 3.2.

Table 4.7: Working definition and inclusion criteria for sub-theme 3.2

WORKING DEFINITION: NORMS
Norms are defined as a set of raw scores for a particular measure and the corresponding standard scores for a group of people allowing for a comparison of the test-takers scores with the designated population (Coaley, 2014).
INCLUSION CRITERIA
Keywords and phrases that were used to identify data that aligned with this sub-theme were the following: outdated norms and the need for the SSAIS-R to be restandardised.

Both participants were of the view that the SSAIS-R being outdated was a concern. The participants expressed the need for the SSAIS-R to be restandardised and updated. The following excerpts illustrate their viewpoints:

If you look at the SSAIS-R, that's got its own issues as well as being outdated (P2, L933–935).

OK, first of all, if you look at the norms right (P2, L680). They are outdated number 1, so we all know that, but we still use them (P2, L682–683).

It was standardised long ago, and it would be nice if it could be standardised again and maybe adapted a bit (P1, L81–83).

Although the participants discussed the challenges of the SSAIS-R, they still believed the SSAIS-R had value, as discussed in theme 1, and they made the SSAIS-R work despite the challenges:

We make the SSAIS-R work (P1, L534–535).

But we try, we are trying (P2, L1166). It is difficult, it is, but we try and help as many as we can (P2, L854–855).

In the next section, the findings of the study, based on the results from each theme and sub-theme, are discussed within the context of literature.

4.3 PRESENTING THE FINDINGS OF THE STUDY WITHIN THE CONTEXT OF LITERATURE

The value of an IQ test can be gauged by how the test enables psychologists to identify the strengths and areas of difficulties, determine general intellectual functioning and inform diagnoses and interventions for their clients (Frey, 2018). This study revealed mixed viewpoints regarding the value of the SSAIS-R as an IQ test. Although the participants in this study felt that the SSAIS-R still had value for providing clinical information regarding cognitive potential and making a diagnosis, they were also of the view that its value was affected by the outdatedness of the test. They expressed the need for the SSAIS-R to follow international standards in terms of regularly updating tests. An example that was mentioned was the WISC.

The SSAIS-R has not been updated or restandardised since 1992 (Cockcroft, 2013). Normally, intelligence tests undergo revisions to ensure that they keep up with the advances seen in intelligence, known as the Flynn effect, and to ensure that the content remains current, relevant and unbiased (Cockcroft, 2013). According to Frey (2018), international intelligence tests are updated and renormed approximately every 10 years. However, research has pointed out that locally developed tests do not follow this standard due to a lack of financial resources (Cockcroft, 2013). The literature and the findings of this study highlight the need for the SSAIS-R to be updated to ensure that it retains its value and relevance for children in South Africa.

The participants in this study underscored the importance of considering the context of their clients that they assessed as well as the importance of understanding how contextual factors influenced test results. Reference was made to specific contextual factors that needed to be considered, namely the stimulation in the home environment, type of community a child comes from, quality of education and exposure to language. The stimulation an individual receives from home and the community that an individual comes from are important variables that both participants mentioned they needed to consider before administering intelligence tests. They discussed how these factors determined which IQ test they used as they believed these factors influenced how well a child performed on an IQ test. This view is supported by research which illustrates that stimulation from home and child-rearing practices directly influence an individual's development and competence (Grieve & Foxcroft, 2019).

In addition to the community and stimulation that a client receives from home, the participants discussed how the quality of education that their clients received influenced their decision to use the SSAIS-R. When discussing education, the participants cited the importance of considering the curriculum that their clients were exposed to. The participants felt that the WISC was often too difficult for many of their clients, specifically those attending township and government schools where they felt that the curriculum children were exposed to was lacking. Research indicates that one's intelligence can be considered an indirect measure of what an individual has been taught and is strongly influenced by the educational context of the child as the quality of education determines the level of problem-solving strategies, cognitive skills and knowledge one is exposed to, all of which are assessed by intelligence tests (Frey, 2018; Grieve & Foxcroft, 2019).

The participants also discussed language exposure as an important factor that they needed to consider. The participants believed that language proficiency could influence test results. Research highlights that language is regarded as one of the most important moderators of test performance (Grieve & Foxcroft, 2019). The participants were of the view that the SSAIS-R was more suitable for many of the clients that they assessed as they believed that the language used in the WISC was too difficult. This was especially the case for their clients who came from townships as they were not exposed to the type of language that was used in the WISC, therefore influencing the test results. Research confirms the importance of interpreting test scores with caution, particularly with linguistically diverse individuals, as these individuals' scores can be affected by their exposure to information, particularly in Vocabulary subtests (Frey, 2018).

Furthermore, reference was made to the value of the translated versions of the SSAIS-R. The participants' perceptions were that the vernacular versions of the SSAIS-R increased the relevance of the SSAIS-R for the South African context. However, this was a misconception held by the participants. As discussed in Chapter 2, the vernacular versions are based on the NSAIS, not the SSAIS-R. There are currently no vernacular versions of the SSAIS-R, and the vernacular version of the NSAIS is thus even more outdated than the SSAIS-R (Landman, 1988; van Eeden & Visser, 1992).

When considering the factors above, the participants in this study were of the view that the SSAIS-R held great value and relevance for children as it was considered to be fairer and more accessible in terms of the curriculum, exposure to language and quality of education of children in their contexts compared to international tests such as the WISC. Research has illustrated that the factors mentioned above are important factors to consider when evaluating the relevance and value of an IQ test (Frey, 2018; Grieve & Foxcroft, 2019). Although IQ tests are developed with statistical and test construction methods to ensure the relevance of tests, tests contain content that reflects the culture and context of the country where the test has been developed (Foxcroft & Roodt, 2019; Frey, 2018). Therefore, when an individual's language exposure and quality of education are comparable to that of the country where the test was developed, the test can be considered appropriate and relevant to measure an individual's intelligence (Frey, 2018). However, when an individual's culture, language and educational background differ from that of the norm group, the relevance of the test and the validity of test results can be questioned (Frey, 2018).

In addition to the relevance and value of the SSAIS-R, the findings of this study illustrated the benefit of using the SSAIS-R in terms of affordability. The cost of the SSAIS-R, compared to international IQ tests such as the WISC, allowed for the SSAIS-R to be more accessible and affordable for the participants in this study. Research has illustrated the lack of financial resources available for psychological assessments in South Africa, especially international tests, due to the cost of these tests (Laher & Cockcroft, 2013). According to the latest price lists, the WISC costs R49,880, and the SSAIS-R costs R5,370 (Mindmuzik, 2016), thus demonstrating the benefit of the SSAIS-R in terms of affordability. Furthermore, the findings of this study also indicated the perceived benefit of the SSAIS-R in terms of a shorter administration time, compared to the WISC. The SSAIS-R takes approximately 90 minutes, whereas the WISC takes approximately 103 minutes (van Eeden, 1991; Wechsler, 2014). Although the administration time difference between these two tests is not significant, it is perceived to be a positive factor to consider when using the SSAIS-R.

Although notable benefits and advantages of the SSAIS-R were highlighted, the challenges and concerns of the SSAIS-R were also noted. This study revealed concerns about the outdated content of pictures used in the Missing Parts and the

Vocabulary subtests. It was the participants' view that the relevance of these subtests could be questioned as they were not considered relevant to children in the 21st century. The participants were of the opinion that certain words used in the Vocabulary subtest were outdated and were difficult for the children that they assessed as they were not relevant for the context of many South African children.

As discussed in Chapter 2, the SSAIS-R is based on Western cultural knowledge (Cockcroft, 2013; Niu, 2020; van Eeden, 1991). Therefore, it can be deduced that certain words used in the Vocabulary subtest may be unfamiliar to many children in the South African context (Cockcroft, 2013). As previously mentioned, IQ tests are updated to ensure the content remains relevant, especially the language used in the tests (Frey, 2018; Laher & Cockcroft, 2013). This is evident in the WISC-V as the test items that were considered to be outdated were removed to include contemporary items (Wechsler, 2014). Therefore, this highlights the need for the language used in the Vocabulary subtest of the SSAIS-R to be revised and updated to ensure the relevance and accessibility of the test.

A subsequent concern found in this study was the need for the norms to be updated and restandardised. The participants expressed concerns and challenges with the outdated norms. However, due to the lack of availability of locally normed tests, the SSAIS-R is still used as there are no suitable alternatives. Research has indicated that practitioners are forced to use outdated tests because of a noticeable gap in the development of South African tests (Gafoor et al., 2021).

The findings of this study indicated the participants' viewpoints on the relevance, value and benefits of SSAIS-R for their clients. Furthermore, the challenges and concerns were also noted. The following section discusses the conceptual framework in relation to the study's findings.

4.4 REVISITING THE CONCEPTUAL FRAMEWORK SUPPORTING THIS STUDY

The conceptual framework for this research study was guided by a psychometric approach to intelligence which included the concepts of validity, reliability and fairness. These concepts supported the consideration of the relevance and value of the SSAIS-R for the participants' clients.

The participants referred to concerns regarding the validity of the Missing Parts subtest in the SSAIS-R due to the content being outdated and not relevant for children in the 21st century. For example, the Missing Parts subtest included a picture of an old model of a car and an envelope, two things that may not be in the frame of reference for children in the 21st century. The Missing Parts subtest aims to measure an individual's level of knowledge, contact with reality and comprehension of familiar situations (van Eeden, 1991). Therefore, this raises concern regarding the validity of this subtest as the two pictures, as mentioned above, are not considered familiar situations for a child in the 21st century.

Additionally, the concept of fairness was also raised by the participants. The participants expressed the need for the practitioner to consider various factors such as quality of education, language exposure and home stimulation before deciding which tests to use. This ensured that the client's needs were considered and that the test was fair.

4.5 SUMMARY

In this chapter, the study's findings were presented along with a detailed discussion of the themes and sub-themes that emerged from the data. The findings of the themes and sub-themes were critically discussed in the context of literature. Chapter 5 further discusses the findings presented in this chapter relating to the research questions illustrated in Chapter 1.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

5.1 INTRODUCTION

The purpose of this exploratory case study was to explore and describe the views of two educational psychologists regarding the value of the SSAIS-R for their clients. The literature revealed that many of the tests that South African practitioners use are international tests, which are not adapted for the multicultural context of South Africa and have not been standardised for the entire South African population (Gafoor et al., 2021). The reason for the use of international tests is due to the limited availability of locally normed tests which follow the standards of international tests (Gafoor et al., 2021; Laher & Cockcroft, 2013). Such standards include tests being continuously updated and revised (Gafoor et al., 2021; Laher & Cockcroft, 2013).

One locally developed test frequently used in South Africa is the SSAIS-R. Although this is a locally developed test, it is not without challenges. The SSAIS-R is not standardised for the entire South African population as Black South Africans were excluded from the norm groups (Gafoor et al., 2021; Madge, 1986; te Nijenhuis et al., 2011; van Eeden, 1991), and it has not been updated or revised since 1992 (Cockcroft, 2013). Despite these challenges, the SSAIS-R remains a commonly used test.

There is limited current research regarding educational psychologists' views on the value of the SSAIS-R. Therefore, this study aimed to explore the views of two educational psychologists regarding the relevance and value of the SSAIS-R for their clients. In this chapter, the primary research question, as posed in Chapter 1, is answered. Thereafter, this study's contributions, challenges and limitations will be discussed. This chapter concludes with recommendations for future research.

5.2 REFLECTING ON THE RESEARCH QUESTIONS

In answering the primary research question, “What are the views of two educational psychologists from Gauteng regarding the value of the SSAIS-R for their clients?”, the secondary research questions that guided this study will be addressed first.

5.2.1 Secondary Research Questions

5.2.1.1 Secondary research question one

How relevant do these educational psychologists believe that the SSAIS-R is for their clients?

The participants in this study had differing views on the value of the SSAIS-R as an IQ test. The participants agreed that although the SSAIS-R has value as a clinical instrument regarding cognitive potential and that it provides information for making a diagnosis, they also believed that the value is affected by the outdatedness of the test. The SSAIS-R has not been updated since 1992, and the participants agreed that the SSAIS-R needs to follow the international standards of tests concerning regularly updating tests. The WISC was mentioned as an example of a test that has undergone many adaptations to ensure it remains relevant.

The participants also indicated that the SSAIS-R holds great value and relevance for many of their clients as they consider it to be fairer and more accessible in terms of exposure to language and quality of education of children they assess compared to international tests such as the WISC. The participants noted that the WISC is often too difficult for many of their clients in terms of the content and the language used in the WISC.

The participants believed that there are two notable benefits of using the SSAIS-R that add to the relevance of the test. The benefits will be addressed in the following secondary research question.

5.2.1.2 Secondary research question two

What are the benefits of using the SSAIS-R with their clients?

The participants of this study agreed that using the SSAIS-R has two main benefits, affordability and the time it takes to administer the test. The participants felt that the cost of the SSAIS-R, compared to international IQ tests such as the WISC, allows for the SSAIS-R to be more accessible and affordable. The administration time of the SSAIS-R was also noted as a benefit. The participants indicated that the shorter administration time of the SSAIS-R compared to the WISC meant that they were able to assess more clients which allowed more time for other tests to be included in a test battery to obtain a more holistic impression of a client.

5.2.1.3 Secondary research question three

What are the concerns that these educational psychologists have with regard to using the SSAIS-R with their clients?

The challenges that the participants experienced with the SSAIS-R are related to the outdatedness of the test. The participants believed that the content within the SSAIS-R, particularly in the Missing Parts and Vocabulary subtests, is outdated. They believed that certain pictures and words found in these subtests are not relevant for children in the 21st century. The participants noted that the relevance of the Missing Parts subtest is influenced by the use of outdated pictures as they believed that children are no longer exposed to the items that are used. They also thought that certain words used in the Vocabulary subtest are outdated, making this subtest difficult for many children as the words are not relevant to the contexts of the children they assessed. A subsequent concern noted by the participants was the need for the norms to be updated and restandardised since the test was last updated in 1992.

5.2.2 Primary Research Question

This section addresses the primary research question as stated in Chapter 1: “What are the views of two educational psychologists from Gauteng regarding the value of the SSAIS-R for their clients?”

The participants held mixed views regarding the value of the SSAIS-R for their clients. While it was noted that the SSAIS-R has value as a cognitive measure as it provides important clinical information, concerns were expressed regarding the outdatedness of the test. The participants believed that if the SSAIS-R was to follow international standards in terms of regularly updating tests, its relevance and value could be enhanced.

However, despite their concerns about the outdatedness of the SSAIS-R, the participants were of the opinion that the SSAIS-R holds value for many of their clients. They believed that the SSAIS-R is fairer and more accessible for many of their clients in terms of content and language.

5.3 POTENTIAL CONTRIBUTIONS OF THE STUDY

This study provided insight into the viewpoints of two educational psychologists working in the South African context. Although limited in scope and sample size, this qualitative study could guide future research into the areas where the SSAIS-R can be revised and updated as the participants' viewpoints provided insight into the challenges with the outdated nature of the test in terms of content and norms.

5.4 CHALLENGES AND LIMITATIONS OF THE STUDY

When the research started, the researcher did not envision having difficulty finding participants. Due to time constraints, the researcher realised that she could not facilitate a focus group with eight participants together. Therefore, the data collection method had to be adjusted to semi-structured interviews. Due to the limited scope of this dissertation, two participants were sufficient, and the researcher believed that she was able to gather sufficient information regarding their views of the value of the SSAIS-R. A subsequent challenge was finding recent research that had been conducted on the SSAIS-R as there was limited literature available.

A limitation of this study is that the findings cannot be generalised. However, this was not the purpose of this study. Additionally, the sample size is another limitation, as this study only included the views of two educational psychologists. However, the findings provided differing viewpoints and experiences which enabled the researcher to answer the research question effectively.

5.5 RECOMMENDATIONS FOR RESEARCH

The following recommendations can be made for future research:

- A survey study to include a larger sample size of educational psychologists working in the South African context. Such a study could elicit a wider variety of viewpoints and thus provide better insights regarding the value of the SSAIS-R.
- A qualitative study to include psychometrists' viewpoints on the SSAIS-R. Such a study could potentially give insights into the value of the SSAIS-R from other professionals who use it. This would allow for an evaluation of the SSAIS-R from all practitioners in the South African context.

5.6 CONCLUDING REMARKS

This exploratory case study aimed to explore educational psychologists' views regarding the value of the SSAIS-R. Although this study was limited with regard to the sample size and scope, it is a recent study, and the findings could potentially be used to guide further research on the SSAIS-R. This study revealed many aspects which determine the relevance of the SSAIS-R. These include the value of the SSAIS-R as an IQ test and the contextual relevance. Challenges highlighted by the participants were noted regarding the outdatedness of the SSAIS-R. Therefore, the findings of this study could be considered as a starting point for research into what needs to be updated and revised on the SSAIS-R to enhance its value and relevance for South African children.

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APPENDICES

APPENDIX A: SEMI-STRUCTURED INTERVIEW SCHEDULE



Educational psychologists' views on the value of the Senior South African Individual Scale Revised

1. How frequently do you utilise the Senior South African Individual Scale for South African children (SSAIS-R) in your practice?
2. Why do you utilise the SSAIS-R instead of the other intelligence tests that are available in South Africa?
3. How applicable do you believe that the SSAIS-R is for South African children?
4. What do you believe are the strengths and opportunities of the SSAIS-R?
5. What are some of the challenges that you experience while utilising the SSAIS-R?
6. What factors do you believe can influence the test results of the SSAIS-R?
7. What changes do you believe could be implemented on the SSAIS-R to make it more suitable and relevant for South African children?

APPENDIX B: INFORMATION LETTER AND SAMPLE OF INFORMED CONSENT FORM FOR PARTICIPANTS



Information-consent letter to participate in a study titled: “Educational psychologists’ views on the value of the Senior South African Individual Scale Revised”

Dear Participant,

I, Jenna Gordon, am an educational psychology master’s degree student at the University of Pretoria working under the guidance of Prof. Suzanne Bester. I wish to invite you to participate in a research study where I am the principal investigator. The research will focus on educational psychologists’ views on the value of the Senior South African Individual Scale Revised (SSAIS-R).

This letter offers information about the study to help you make an informed decision regarding your participation. Before agreeing to take part in this study, you should fully understand what is involved. If you have any questions, which are not answered by the information in this document, do not hesitate to ask the investigator. You should not agree to participate unless you are entirely comfortable with what will be expected of you.

What is the study about?

This research study aims to explore and describe the experiences of educational psychologists in Gauteng regarding the use of the SSAIS-R for their clients. The SSAIS-R is generally defined as a South African intelligence test utilised to assess

general intellectual and cognitive abilities and to determine strengths and areas of development in children from the age of 7 years 0 months to 16 years 11 months.

I. Your responsibilities as a participant:

What does participation involve?

If you consent to participate in this research study, you will be asked to participate in a semi-structured interview.

The interview should last approximately 60 minutes. In the event that the interview is conducted in person, the necessary COVID-19 protocols will be adhered to. All participants' hands will be sanitised and we will be seated 1.5m apart to ensure social distancing. Masks will be worn throughout the interview. An interview schedule which is attached hereto for your consideration will guide the interview. However, you may be asked to elaborate on your answers. The interview will be captured using an audio-recording device which will be transcribed for data analysis purposes.

Additionally, you will also be asked to be involved in member checking. This means that you will be asked to check the accuracy of the interpreted data. This will be done by sending you a copy of the data analysis and documentation chapter to validate the accuracy of how the information was interpreted.

Who may participate in the study?

In order to participate in this research study, you should be a voluntary participant who has given informed consent, be able to speak English, be registered as an educational psychologist, and have experience with using the SSAIS-R.

II. Your rights as a participant:

Is participation in the study voluntary?

Your participation in this study is voluntary. You may decide not to consent to the study, to leave the study at any time, or to withdraw from the study. Additionally, you may stop at any time during the interview without giving a reason. Not consenting to or withdrawing from the study will not have any negative implications for you.

Will I receive anything for participating in the study?

You will not receive any payment in exchange for your participation in the study.

What are the possible benefits of the study?

Although there are no personal benefits to you for participating in this study, you have been selected for this research because you are regarded as knowledgeable on the research topic. By agreeing to be a participant in the research study, you will be contributing knowledge that may be beneficial to other researchers in the same field of study.

The benefits to the academic community will be that understanding the educational psychologists' experiences on the value of the SSAIS-R will contribute to an important area of research. Furthermore, the knowledge obtained from this study could provide information that may aid future research regarding the use of the SSAIS-R in South Africa.

What are the risks associated with the study?

In evaluating the potential risks for this research study, the risks that apply to all research studies have been taken into consideration. The categories considered include psychological, economic, physical and legal risks. In consideration of the risk categories mentioned above, the conclusion was that this research study presents “no more than minimal risk” to the participants in the following categories: the physical risks to the participant in terms of possible pain, injury or disease; the economic risk to the participants when considering research activities that may result in financial loss; the legal risk such as the risk that the participants may violate the law or the requirement of the participant to become involved in any criminal or illegal activity; the loss of confidentiality in terms of the participants' personal details; the psychological risks to the participants in terms of connecting the data findings to their self-worth or self-efficacy.

Will my identity be known?

Your participation in this study and the data collected will be treated as confidential. Pseudonyms will be used in the research report.

Will my information be kept confidential?

All records from this study will be regarded as confidential. The information you share will be kept confidential by linking your data to a pseudonym so that individual names are not associated with the data. Access to information collected during the interview will be limited as follows:

- Your information will be securely stored (for example, in a locked research office on a password-protected computer at the study site).
- Any data stored on a mobile device (for example, laptop, tablet, etc.) will be encrypted.
- Research data will be retained for a minimum of 15 years, at which time it will be shredded/destroyed.
- Only my supervisor and I will have access to the research data.

III. Questions, comments, or concerns:

Has the study received ethics approval?

This study has been reviewed and received ethics clearance through the Faculty of Education Research Ethics Committee (EDU094/21) at the University of Pretoria. If you have questions for the committee, contact the Chair of the Ethics Committee, Professor Funke Omidire, at funke.omidire@up.ac.za or 012 420 5506.

Who should I contact if I have questions regarding my participation in the study?

If you have any questions regarding this study or would like additional information to assist you in deciding on participation, please contact Jenna Gordon at 071 488 4203 or jengordon94@gmail.com or Professor Suzanne Bester on 012 420 3891 or suzanne.bester@up.ac.za.

Consent Form

You are not waiving your legal rights or releasing the investigator(s) or involved institution(s) from their legal and professional responsibilities by providing your consent.

Title of the study:

“Educational psychologists’ views on the value of the Senior South African Individual Scale Revised”.

I have read the information presented in the information letter about the study mentioned above conducted by the principal investigator, Jenna Gordon. I have had the opportunity to ask questions related to the study and have received satisfactory answers to my questions and any additional details. I was informed that participation in the study is voluntary and that I can withdraw this consent by informing the principal investigator.

This study has been reviewed and received ethics clearance through the Faculty of Education Research Ethics Committee (EDU094/21) at the University of Pretoria. If I have questions for the committee, I will contact the Chair of the Ethics Committee, Professor Funke Omidire, at 012 420 5506 or email her at funke.omidire@up.ac.za.

I agree that the data generated in the interview may be used confidentially and anonymously for further research purposes, as the datasets are the intellectual property of the University of Pretoria. Further research may include secondary data analysis and use of the data for teaching purposes. The confidentiality and privacy applicable to this study will be binding on future research studies. I understand that the interview will be audio-recorded and I consent to be audio-recorded. I agree of my own free will to participate in the study.

Participant name:

Signature: Date:

Researcher: Jenna Gordon

Signature: Date:

Researcher’s supervisor: Prof. Suzanne Bester

Signature: Date:

APPENDIX C: FIELD NOTES

#	Field Notes	Date	Event
*	Field Notes	30 March	Interview 1 (In-person)
	<ul style="list-style-type: none"> - Psychologists in PTA use SSAIS-R (Afrikaans learners) <ul style="list-style-type: none"> ↳ discussion of translated version of SSAIS-R but not tested/standardised - Use of SSAIS-R for language necessity <ul style="list-style-type: none"> ↳ always with Afrikaans children (unfair to use WISC) ● - WISC has UK norms ∴ "more difficult" ^{also strict} <ul style="list-style-type: none"> - Often compares SSAIS-R + WISC = same/similar results - Restandardise/update the SSAIS-R <ul style="list-style-type: none"> ↳ follow WISC as it is updated every few years ↳ envelope picture in Missing Parts = outdated/concern ● - Quality of education <ul style="list-style-type: none"> ↳ Government vs IEB Schools ↓ Impact on which test to use - WISC has U.K norms + start reading earlier ∴ our kids might take strain <ul style="list-style-type: none"> ↳ SSAIS-R will be more fair for younger children (curriculum) - 3rd language children? <ul style="list-style-type: none"> ↳ mention translated versions (misconception. Info in chapter 2) 		

* Discussion of applicability

- Need to update (some subtests)
 - ↳ language = kids struggle

- Comparisons to WISC:

↳ verbal + non verbal

↳ WISC adds in processing speed + working memory

∴ ability index

↳ SSAIS-R doesn't have ∴ some kids will

● Struggle at school



update SSAIS-R to include above

* Weaknesses:

- vocab subtest - outdated

- Missing Parts - outdated (car model, envelope ∴ don't know)

↓
not in frame of
reference

● Need to find something relevant to all ages (also what it is assessing - visual acuity)

* Administration

- finds marking more difficult/time-consuming

- only administer 10 subtests (WISC)

- administer all for SSAIS-R

- use SSAIS-R for IEB concessions (usefulness)

- value in SSAIS-R = diagnose / see whole picture

* factors influencing test results:

- Language exposure - stimulus from home
- concentration - Rapport
- language used in vocab subtest can influence negatively

Makes SSAIS-R work



* field Notes 14 April Interview 2 (online)

- works in GDE (There are 4 circuits)
 - ↳ circuit 2 (Benoni)
 - ↳ Schools in surrounding areas

- use SSAIS-R 75% more (English + Afrikaans)

- Time is a big challenge!
 - ↳ 526 referrals (only got through 250)
 - ↳ SSAIS-R 90 minutes

language barriers

- WISC is too difficult ∴ not reliable
 - ↳ terminology/language

- WISC too difficult (re clients she sees)
 - ↳ Government school
 - ↳ WISC takes longer to administer (Time constraint)
 - ↳ only have 1 copy of WISC (cost)

- Tools/tests are expensive

* challenges / concerns:

- Norms (outdated)
- language barrier [conviviality, inauguration, Sweltering, desolation]
- outdated pictures [envelope, stove] ∴ exposure
- But finds pattern completion relevant
- Believes WISC gives more insight/cognitive potential

Guess + questions reliability of scores

* Important to understand context of client

- where are they coming from
- Type of community
- stimulation at home
- exposure
- SNA forms very N.B

- Covid = kids/parents struggling
↳ kids moved schools (finances)

Systemic educational system

- 3rd language?

- isiZulu psychologist

- isiZulu, xhosa, Northern Sotho versions [misconception again]
↳ don't have psychologists to administer
↳ only have one copy = Cost

- Have to choose test that is more reliable for child

- ↳ screen children (1 minute reading + Maths) before deciding which test to use

- very different to Private Practice

* Challenges / concerns

- updating norms

- making content relevant - electronic generation

- language

- Time constraints again [GDE psychologist]

- ↳ have to assess + counselling + training

3 copies of SSAIS-R?

↳ Cost?

- ±R30 000 - will confirm

- WISC was purchased by district - wouldn't afford

↳ WISC + WIAT expensive

* Type of client also challenge

- language (Tlembisa areas even struggle with SSAIS-R)

- exposure

● Believes WISC + WIAT is the way to go

↳ would prefer to use WISC if she could

would be fighting at district as only one copy

●

APPENDIX D: TRANSCRIPT OF SEMI-STRUCTURED INTERVIEWS

30 March: Interview 1 (35 minutes)			
The researcher introduces herself, and the participant introduces himself, and the informed consent form is verbally explained, including the research process and issues of confidentiality.			
After informed consent is verbally given, an outline of the aim of the research is explained, and the participant begins:			
	LINE		CODE
Participant 1:	1 2 3	You said you struggled to find people who use it and would have an interview with you?	
Researcher:	4	Yes.	
Participant 1:	5	Did you go more Joburg based?	
Researcher:	6	Yes.	
Participant 1:	7 8	Yeah, Pretoria you're going to find more people who use it.	
Researcher:	9	Really?	
Participant 1:	10 11 12 13 14	You have Afrikaans speaking kids here so you're going to find that you do get some Ed psych's that have the WISC and have had it translated or some picked up a translated version of the WISC.	CO3.2 Language of the IWSC
Researcher:	15 16	I didn't think about the WISC not being available in Afrikaans.	
Participant 1:	17 18 19 20 21 22 23	There is like a, I've got it here, like some psychologist translated it but it's not done standardized or tested. So personally, I don't use it because it hasn't been standardised. I mean it's like me translating it and like googling the Afrikaans word for that word. I haven't	CO3.2 Language of the WISC

	24	tested it. So, there are guys that do do it.	
Researcher:	25 26 27	That's interesting, I didn't think about the psychologists testing Afrikaans speaking children.	
Participant 1:	28 29 30	Yeah, so I think we use it more here than in Joburg because most schools are English.	
Researcher:	31	Yes.	
Participant 1:	32 33 34	It's mainly for the language necessity that we use the SSAIS-R. Have you started recording?	CO3.1: Language necessity
Researcher:	35	Yes.	
Participant 1:	36 37 38 39	So, if you go to more the Afrikaans speaking school, sort of like uhm, Pretoria North you will find everyone there will most probably use the SSAIS-R.	CO3.1: Language necessity
Researcher:	40	Ok.	
Participant 1:	41 42 43	And they won't even have the WISC because they are not working with English kids.	CO3.1: Language necessity
Researcher:	44 45	That makes so much sense. So how often do you use the SSAIS-R?	
Participant 1:	46 47 48 49 50 51 52 53 54 55	So, I use it with my Afrikaans speaking kids always. Uhm, you'll find that the WISC is standardized in English and with a UK norm base. Interesting thing is, if you look at the WISC, it's from age 6 to 17 and then you get the adult version which is the WIAS and then it's from 17 and up and actually you could do it from 16 up but usually it's from 17 up and there's also English but you have uhm	CO3.1: Language necessity

	56 57 58 59 60 61	when you got first language English speaker norms and then you get second language English speaking norms so then you can use that test which is in English with Afrikaans speaking kids but you use the second language norms so it balances it out.	
Researcher:	62	Ok.	
Participant 1:	63 64 65 66 67	So, you kind of like, and I've compared it before, so it kinda works out quite well. But ah, so see that's another way to use an English test with Afrikaans speaking kids but it has to have been normed right.	
Researcher:	68	Hhm.	
Participant:	69 70 71 72	Because it has to have been normed right you know because it has to be normed amongst second language and African language speaking kids as well.	
Researcher:	73	Yes.	
Participant 1:	74 75 76 77 78	If English isn't their first language it makes it fair but if you take the WISC and you test and Afrikaans kid uhm, whose first language Afrikaans, they going to take strain.	CO3.1: Language necessity
Researcher:	79	Yes, it will be unfair.	
Participant 1:	80 81 82 83 84 85 86 87	So that's why I use the SSAIS-R because its still, it was standardized long ago, and it would be nice if it could be standardized again and maybe adapted a bit. So, like the WISC is adapted every now and then and they take some subtests out or add some questions. So, I think like on the SSAIS-R there is a uhm,	CO3.1: Language necessity CO1.2: Standardisation CO1.3: Update it CO1.1: Outdated content

	88 89	missing parts one where there is a picture of an envelope.	
Researcher:	90	Yes.	
Participant 1:	91 92	And now, a lot of kids don't know what an envelope is hey. (Laughs).	CO1.1: Outdated content
Researcher:	93	Yes, so they don't know what is missing.	
Participant 1:	94 95 96 97 98 99 100 101 102 103 104	Yeah, so like then to find an alternative for that, so that's where standardization is useful so like you kind of restandardise it and you change, adapt it a bit so that's where maybe the fault lies, you know it's not updated enough because if you look at the WISC, I think they update it, I'm not exactly sure and I will have to just double check but they do do it every so often. Because since I've started, I have had the WISC-IV and now I've got the WISC-V.	CO1.3: Update it
Researcher:	105 106	You have to buy it again each time (laughter).	
Participant 1:	107 108 109 110 111 112 113 114 115 116	So, the Afrikaans speaking kids we tend to use it often, or always. And then, again public schools sometimes as well so you know so IEB schools versus government schools sometimes if we feel there is a bit of a uhm, especially younger kids are too, because it's standardized in the UK, they start reading and exposed to reading and a lot of language stimulation from Grade, from four years old.	CO3.1: Language necessity CO2.1: Quality of education
Researcher:	117	From four years old, yes.	
Participant 1:	118 119	So, then it's like maybe the early grades we use the SSAIS-R because it's a bit	CO2.1: Quality of education

	120 121 122 123 124 125 126 127	more fair in terms of what they have been exposed too you know. It depends on what their curriculum is. But again, it depends, generally speaking in terms of the kids I see, I use the WISC for the English kids and the SSAIS-R for the Afrikaans kids. Because of, there is not really any alternative.	CO3.1: Language necessity
Researcher:	128 129 130 131	Do you think it's, how applicable do you think it is for South African children? Especially for children with English as their third language?	
Participant 1:	132	Yeah.	
Researcher:	133	Do they struggle?	
Participant 1:	134 135	You get it, it has been translated into African languages.	CO2.7: Language of available tests
Researcher:	136 137 138	Yes, but when I did research, it's that those vernacular versions are actually based on the 1964 version.	
Participant 1:	139	Oh ok. 64?	
Participant 1:	140 141 142 143	So, look I do think the standardisation and updating content and vocab. Because some of the language used is, you know. I can see some kids struggle.	CO1.3: Updating it
Researcher:	144	Hmm.	
Participant 1:	145 146 147 148 149 150 151 152	So again, with Afrikaans speaking kids it tests, it gives us a pretty good idea of, so if the kids are strong language based, they tend to do well. If they struggle with languages, they struggle. So I still feel it's quite valid in terms of creating an idea of where their strengths lie, the more nonverbal, verbal uhm. So, I do find it.	CO4.2: Value of SSAIS-R

	153 154 155 156 157 158 159 160 161 162 163	Because remember the IQ measure is to tell us in terms of an idea of learning potential so then we can kind of see from that profile and if to determine if this kid should be doing well but he's not or she's not and then we do the educational part to find barriers to learning that the kid is experiencing. So, it still gives us a good idea of cognitive potential, I think. So again, it would be great if it could be updated just some parts of subtests uhm	CO4.2: Value CO1.3: Update it
Participant 1:	164 165	Yeah. Look it was based on the Weschler when you look at it.	
Researcher:	166	Yes, it's got some similar subtests.	
Participant 1:	167 168 169 170 171 172 173 174 175 176 177 178	Yes, it's very similar but the only thing is with the WISC, what it does, it's got your verbal and nonverbal but now with the WISC-V it's your verbal ability, fluid intelligence and your visual-spatial. So, in the past, it was just visual spatial and language and that together gives your ability index. And then uhm, but with the WISC they add the processing speed, working memory and the visual processing speed-part of your full-scale score.	CO1.4: Comparison to WISC CO1.4: Comparison to WISC CO1.4: Comparison to WISC
Researcher:	179	Yes.	
Participant 1:	180 181 182 183 184	So, you got your ability index, and the kid might have like above average but because they process slowly, visually, auditory or concentration issues and you add those scores, suddenly the IQ is	CO1.4: Comparison to WISC

	185 186 187 188 189 190 191 192 193 194 195	average so it makes sense that the kid is doing average at school. But with the SSAIS-R, those processing speed ones are separate, they are not combined with full scale score so in the past the kids would score very high on the IQ on the SSAIS-R, but they would still struggle at school. And a lot of psychologists didn't always administer the coding subtest and the memory for digits subset because you don't need it to make your full-scale IQ.	
Researcher:	196	Oh okay.	
Participant 1:	197 198 199 200 201 202 203 204 205	You just need those nine so then it will be confusing because this kid is you know, is so bright but he's not doing well and that's where, so that's why what I do is I always do those, and I explain how it impacts on the overall score. So, I use almost that kind of like, the structure of the WISC in terms of how it kind of acts as a barrier to achieving to your full potential.	
Researcher:	206	Yes.	
Participant 1:	207 208 209 210 211 212 213 214 215	So, if they were updated I think you know it would be good to continue with the alignment with what we are seeing with the WISC-V in terms of bringing in the processing speed index as a full scale score because it kind of puts that into perspective as to why kids struggle. But you can still do it, but you do it kind of quite qualitatively and not quantitatively.	CO1.3: Update it

Researcher:	216	Yes, ok.	
Participant 1:	217	Does it make sense?	
Researcher:	218 219 220 221	Yes. So, the strengths and opportunities for the SSAIS-R, you have already mentioned that its mainly for the Afrikaans children.	
Participant 1:	222 223 224 225 226 227 228 229 230 231 232 233	Yes, yes, because it's standardized in their first language and uhm, I think the weaknesses would probably be like some of the subtests, like the vocab subtest because the vocab is outdated, the missing parts subtest, some of the pictures there are outdated. So, like the car on the missing parts is like a 19, I don't know like 1930s or 1940s, so the kids frame of reference. Its ok but it would be good to kind of, some of the images could be more updated.	CO3.2: Language CO1.1: Outdated content
Researcher:	234 235 236 237	So do you find if they are missing, so for the envelope one for example, do they find that will impact the score or do you explain a bit before about the envelope?	
Participant 1:	238 239 240 241 242 243 244 245 246 247 248	So, you will do it now, they are so strict in terms of leading a kid so you are not supposed to say any clues and even a lot of stuff with the vocab if they don't know they mustn't guess. A lot of kids want to know if they are right, especially the anxious kids. It's always difficult because some kids are so anxious if they don't have that feedback if they are right or wrong, they can't let go of that one and they go to the next one and they are	

	249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270	constantly thinking did I mess up, what if I messed up. So strictly speaking, you mustn't but sometimes depending on the situation but ideally you shouldn't give the answers because kids will remember. I've had kids that I've assessed, well one was actually first year, and she said no when she was previously assessed they told her the answer and she actually remembers it from that time, that was when she was in Grade 4. So, ones got to be careful. So, she remembered all the way from grade 4 to first year. So that's why one can't really give any clues or answers. With the envelope one, it's a difficult one because you can't, I think you kind of make note of it but it's again the older kids can kind of figure it out because it's a logical thing because its got a name but it doesn't say where it's going but the younger kids its totally out of their frame of reference so it would probably be that one and...	
Researcher:	271 272	So, there are only a few pictures that are outdated so it won't impact to much?	
Participant 1:	273 274 275 276	It won't too much, like I know some psychologists do an alternative where they give an email address without the @ sign.	
Researcher:	277	Oh ok.	
Participant 1:	278 279	But then again, its relevant for maybe 11 up because your 7-10s are not	

	280 281 282 283 284 285 286 287 288 289 290 291 292	necessarily going to know an email address. So, we have got to find something that would make sense to all ages. So, it's like with the horse one, the most difficult one- its missing the hoof but you have got three hooves to compare it too so that's what missing parts is all about. Like one pig has a tail one pig doesn't have a tail so you probably want something like that where the clues are on the picture whereas on the envelope the clue is not really on the picture if you don't really know what an envelope is.	CO1.1: Outdated content
Researcher:	293	Yes.	
Participant 1:	294 295 296 297 298 299	But if you've got a horse with 3 hooves so you know the other one is missing. So, I think that's why we need to find something more in line with what its testing which is visual processing, visual acuity and all that stuff.	CO1.1: Outdated content
Researcher:	300 301	And with the administration of the test, do you find it just as easy as the WISC?	
Participant 1:	302 303 304	I'm trying to think, I would almost think they are very similar, I think the marking of the SSAIS-R is more tricky...	CO1.5: Marking of the WISC
Researcher:	305	Ok.	
Participant 1:	306	Than the administering.	
Researcher:	307	What makes the marking more difficult?	
Participant 1:	308 309 310 311 312	So, for example it is maybe a bit more time consuming because for the form board subtest, it is time based and from there you convert your time based into raw scores and then into the scaled	CO1.5: Marking of the WISC

	313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329	<p>scores. And also, what do you call it, I think they call it, I think it's that part where you have to work on the scattered scanning I think on the SSAIS-R where you get your scaled scores, your index scores but then you have to kind of work out compared to your overall ability, which subtest did you score higher in and which subtest did you score lower in and there you have to work out the sums and minus it. Whereas with the WISC you literally, the raw scores and scaled scores and ability processing speed index is already done. In practice, we tend to only administer the necessary, so we administer the 10. On the WISC we don't administer the 15, there is no time in private practice necessarily.</p>	CO2.5: Time constraints
Researcher:	330	Oh is it. And with the SSAIS-R?	
Participant 1:	331 332 333 334 335 336 337 338 339 340 341 342 343 344	<p>So, with the SSAIS-R you administer all of them but with the WISC you have 10 that are for the full scale. There are some people who do all 15 but it doesn't really affect your full scale score but it does give you more information but it's going to take you from an hour and a half to 2 hours to administer it and then you still have to do your educational component and your emotional component and already with the IEB and the concessions assessments, there is a lot of things you need to administer so one has to kind of weigh it up. Or you can do it over two</p>	CO2.5: Time constraints

	345 346	sessions but it's also difficult because then the kids have to miss two days of school.	
Researcher:	347	Yes, so do you tend to do one day.	
Participant 1:	348 349	Yeah, most kids you say let's just get it done.	
Researcher:	350	So how long does it normally take?	
Participant 1:	351 352 353 354 355 356 357 358 359 360 361 362 363	If you are looking at a primary school kid, from grade 1 to 3, probably 3 hours, maybe 3 and a half if they haven't been previously assessed by OT's and Speech therapists and then grade 4 to 7 I would probably say 3 and a half hours again and then probably grade 8-9 probably 4 hours. If it is for concessions then they often take 4 and half hours. So, it's like morning from 8-12. And they can reach those hours and you take breaks in-between. With IEB concessions they have got specific tests that you need to use.	
Researcher:	364 365	I was going to ask if you can use the SSAIS-R for an IEB concession?	
Participant 1:	366 367 368 369 370 371	Yes, so that's the thing where you see its usefulness because that's the only one that is there for the Afrikaans kids. So, they accept it for Afrikaans kids and English kids, you can do the SSAIS-R for an English speaking kid.	CO4.1: Usefulness of SSAIS-R (IEB)
Researcher:	372 373	Do you need to justify why you used the SSAIS-R?	
Participant 1:	374 375	No because it's on their list of tests so the IQ test, it's the SSAIS-R, the WISC	

	376 377 378 379 380 381 382 383 384 385 386 387 388 389	and the WAIS. So, if I've done the SSAIS-R in primary school, in grade 7, and remember if you do an IQ test you can use it for 2 years, then I can just use those scores. If someone else has assessed the kid, and they did the SSAIS-R, I can just use those scores and then do my educational one and add the scores and IEB will accept it. So, it's quite complex, you can only apply once for a concession in an IEB school and the concession you get is until matric. The government schools you have to apply every two years for concessions, so you have to readminister the tests.	
Participant 1:	390 391 392 393	Going back to earlier, the Joburg based people never need to really use the SSAIS-R that often because they don't have Afrikaans speaking children.	
Researcher:	394 395 396 397	When I did speak to a psychologist from Joburg informally, she said that they prefer to not use the SSAIS-R because it's old and outdated. What do you think?	
Participant 1:	398 399 400 401 402 403 404 405 406	Look, I compare it often when I work. I look at previous, if I've done the SSAIS-R and the WISC with the same kid and I still see the same kind of discrepancy between the verbal and the non-verbal. If the kid struggles verbally and does well non-verbally on the WISC you get the same. For me, it's to get a profile, in terms of where's the kid's strengths.	CO4.3: Value of SSAIS-R

	407 408 409 410 411 412	Another argument with the Joburg based when I did a course once, they said the fine motor skills on the form board measures fine motor skills whereas the matrix, I think it's the matrix reasoning on the WISC which is where you have got to find patterns.	
Researcher:	413	Yes.	
Participant 1:	414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430	What's nice about most of the WISC is there is no visual motor, just the blocks. But even the blocks you have to use your hands so even on the WISC, it has a visual motor task and strictly speaking, if you assess a kid with CP and they don't have fine motor functioning, it's going to influence the way they do the block test and they are going to take a bit longer. So even that has a motor component so you can't really argue that the SSAIS-R is bad because of that fine motor of the form board because it can impact on the block test as well. So that was the argument they used there once. Again, one takes this into consideration. If a kid has a tremor or if there is physical stuff.	
Researcher:	431 432 433	Would you still administer that subset if you know the kid has a tremor or something?	
Participant 1:	434 435 436 437 438	You do, but then you have to quantitatively explain it and say its time based but explain that the child struggled to manipulate the form board. So again, for the IQ its not to get a standardized score	

	439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457	and say this is your IQ score. It's to kind of, to get almost get an idea of the child's strengths and weaknesses and cognitive functioning and what comes naturally. It allows one to kind of, when you diagnose a learning difficulty, a kid cannot have dyslexia, because strictly speaking your IQ has to be average or above average and the learning skills need to be behind to be diagnosed with that so you can't actually diagnose a learning difficulty without a cognitive profile. If a child is testing below average or borderline cognitively and they struggle to read, it's not a reading issue, it's a cognitive issue. So for me, there is a lot of value in the SSAIS-R because it allows you to be able to diagnose and understand the whole picture.	CO4.3: Value of SSAIS-R
Researcher:	458	Yes definitely.	
Researcher:	459 460 461	Do you have any factors that you believe can influence the test results of the SSAIS-R?	
Participant 1:	462 463 464 465 466 467 468 469 470 471	So, language for sure, and educational stimulation, input from home so if the kid is very young, because you can do it from 7 years, so the input the child gets from home. If the child has just started with school and his first language isn't English and he hasn't been exposed much to the language of testing, that would be a factor. Things like concertation is also a factor. So, with	CO2.1: Quality of Education CO2.2: Input from home CO2.8: Language

	472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494	<p>younger kids whose concentration is an issue they might be easily distracted so will not follow the instructions. Impulsivity can also influence test results. Also typical stuff with all testing like rapport, if the child is anxious because if a kid is comfortable, they test better so one focuses a lot on creating an environment where they are not anxious and they are comfortable and figures out what they are interested in and does that before they start with the formal testing because the IQ tests are quite enjoyable for the kids because it's activity based you know. It's blocks and it's pictures and it's verbal. It's not reading or writing or anything educational. Yeah. So, but I think of those typical things that influence testing.</p> <p>I think the big thing is maybe the outdated vocab a little bit and certain subtests like we spoke of the missing parts where it's not part of their frame of reference so it kind of almost can negatively influence.</p>	CO1.1: Outdated content
Researcher:	495	Ok.	
Researcher:	496 497 498 499	And when you explain to parent what tests you are going to use, do you have to go into exact details and explain that the SSAIS-R was last updated in 1992.	
Participant 1:	500 501 502	Yes, so one explains that and explains the process and especially goes into that detail.	
Researcher:	503	And the parents haven't had any	

	504	concerns that it is outdated?	
Participant 1:	505 506 507 508 509 510 511 512 513 514 515	I think because it was standardised a long time ago. It's difficult, they don't normally ask no. It's like the norm groups, they just want to make sure who their kid is being compared to. You will see with the WISC, the UK norms are strict, kids don't easily do well on it unless they are functioning on a very high level. So that's where one weighs up and kind of looks at the context and sees. For example, the JSAIS, you can use up until the age of 8.	
Researcher:	516 517 518	Yes, so when do you decide, if you have a grade one who is 7, how do you decide if you use the SSAIS-R or the JSAIS?	
Participant 1:	519 520	I find the JSAIS is up until 7 and then I use the SSAIS-R from 7.	
Researcher:	521	Okay.	
Participant 1:	522 523	I think the kids do better on the SSAIS-R from 7, then they would do on the JSAIS.	
Researcher:	524	Okay.	
Participant 1:	525 526	Again, that's another one that is quite hard because it's also outdated.	
Researcher:	527 528	Yes, it is. When you get an English child, will you always just use the WISC?	
Participant 1:	529 530 531 532 533 534 535	So, generally I would in my practice, especially the kids that I work with and the schools they go to because they generally stay in IEB until matric. For me, the way it's set up and the research behind it, I just find it's more updated. We make the SSAIS-R work but again it's the	CO1.4: Comparison to the WISC CO4.4: Make the SSAIS-R work

	536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552	language and then we explain how we bring in the processing speed because that's the big thing that the WISC has that the SSAIS-R doesn't. Is that full scale IQ score whereas the SSAIS-R actually has an ability score that is their full-scale score because they don't bring in the processing speed, that's separate. And that's nice for the parents to see that this is the ability but the full-scale score is when you bring in things like auditory memory and attention span and visual processing speed because he struggles, and it pulls his overall score down so he is not achieving to his full potential so it gives it more sort of user friendly but you can obviously still explain using the SSAIS-R.	CO1.4: Comparison to the WISC
Researcher:	553 554	Do you mostly see just clients from mostly both of the (xxx) schools?	
Participant 1:	555 556 557 558	Yeah so, its these schools and also Afrikaans schools like... (participant names 6 Afrikaans schools). It's kind of like in the surrounds.	
Researcher:	559	Ok.	
Participant 1:	560 561 562 563 564 565 566	So for assessment based, people don't mind travelling a bit for assessments but therapy based, its usually a bit closer. We also work quite closely with a school in Polokwane for example that send assessments through because there are not always specialised people in the	

	567	smaller towns.	
Researcher:	568 569 570	Oh ok. I think I have asked all of the questions that I was planning on asking. Thank you so much for your time.	
14 April: Online interview 2 (30 minutes)			
The researcher introduces herself and the participant introduces herself and informed consent form is verbally explained, including the research process, and issues of confidentiality.			
After informed consent is verbally given, an outline of the aim of the research is explained and the participant begins:			
	LINE		CODE
Researcher:	571 572	Sorry I didn't actually find out where you work. I know you said the GDE?	
Participant 2:	573	Yes. So our district is based in Benoni.	
Researcher:	574	OK.	
Participant 2:	575 576 577	And we have, we have four different circuits, so we cover areas like circuit one is xxx and xxx.	
Researcher:	578	OK.	
Participant 2:	579 580 581 582	Circuit 2 is more xxx (area) and we are looking at uhm xxx (area). But my schools are based mainly in circuit 2 which is our xxx area.	
Researcher:	583	Ok.	
Participant 2:	584 585 586	xxx (area) and also xxx (area), all those areas outlining in those areas. And then the circuit 4 is xxx (area).	
Researcher:	587	Ok.	
Participant 2:	588	So, I am circuit 2.	
Researcher:	589 590	Ok thank you. I just want to find out how often you utilise the SSAIS-R?	

Participant 2:	591 592 593 594 595 596	You see, more especially if the client is at a Grade 4 level and has been exposed to English and at least has a good knowledge of English or Afrikaans. Uhm, we tend to use it but obviously with other instruments as well.	
Researcher:	597	Yes.	
Participant 2:	598 599 600	Uhm, but we have to consider because if you look at this term, last term rather, we had like close on to 526 referrals.	CO2.5: Time constraints
Researcher:	601	Wow.	
Participant 2:	602 603 604 605 606 607 608 609 610	So, it's quite a bit and we've like completed maybe only 250 between the four psychologists now that I am talking about. So, we still overlapping and this next term we need to still finish the other assessments. So yes, so we use it quite a lot but obviously in my case I've got lots of English in Afrikaans learners that I use it with.	CO2.5: Time constraints
Researcher:	611	OK.	
Participant 2:	612 613	But it is not necessarily their home language.	
Researcher:	614	Yes.	
Participant 2:	615 616 617	So, in other words you understand what I'm saying, yeah, they second language sometimes.	
Researcher:	618 619 620	OK, so would you say would you use it the same amount as the WISC or do you say you use the SSAIS-R probably more?	
Participant 2:	621 622	No most definitely 75% more of the SSAIS-R than actually the WISC.	

Researcher:	623	OK.	
Participant 2:	624 625 626 627 628 629 630 631 632 633 634 635	You see our time constraints is so short so we have to look at the child specifically that would gain more from the WISC than the SSAIS-R. Alright. So, it's also in terms of language barrier we have to consider the language in the, in the case item in the instrument and we find that in the WISC our children really, it won't be reliable. It won't be accurate actually because they struggle with the English and they not understanding most of the terminology being in there.	CO2.5: Time constraints CO2.8: Language
Researcher:	636	OK.	
Participant 2:	637 638 639 640	So SSAIS-R yes but not even in xxx (area) it becomes a challenge, but I at least can use quite a bit of it with my group of learners in xxx area.	
Researcher:	641 642 643 644 645 646	OK, so for the time constraint and so you saying, well the next question we've kind of already answered on how applicable you think it is and we saying it's actually quite applicable just based on language alone.	
Participant 2:	647 648 649 650 651 652 653 654 655	Yes. Yes, so it's more the SSAIS-R I would say, WISC tends to be very difficult for us. We must find that particular child, maybe in a X Model C school but maybe a highflyer or someone in in your normal GDE school that that will work as well but remember our time. If we're looking at 526, now with the WISC itself, you've gotta spend a fair amount of time to be	CO3.4: Difficulty of WISC CO2.1: Quality of education CO2.5: Time constraints

	656 657 658 659 660 661 662 663 664	fair to the child as well so and then of course it's not only your cognitive intellectual instrument you gotta use others as well like the Bender, your emotional and then to triangulate all your results. Yeah, so time constraints is our biggest issue that we struggle with. Then you must remember we only got one instrument of WISC for all of us there.	CO2.6: Cost
Researcher:	665	Oh okay.	
Participant 2:	666 667 668	In our district because we've been just given one and possibly it's also due to how expensive it is.	CO2.6: Cost
Researcher:	669	Yes.	
Participant 2:	670 671 672 673 674 675 676	A tool is expensive yeah so, the psychologists are using more the SSAIS-R and the other instruments that are more available and obviously looking at the client specifically, then they're using the WISC so I would say more like I mentioned the SSAIS-R.	CO2.6: Cost
Researcher:	677 678 679	OK interesting, and then what do you think some of the challenges might be with the SSAIS-R?	
Participant 2:	680	OK first of all if you look at the norms right.	CO1.2: Norms
Researcher:	681	Yes.	
Participant 2:	682 683 684 685 686 687	They outdated number 1, so we all know that but we still use them because it's 90 minutes per say per client, but you must remember like we speaking with the type of learner that we receive you spending more time with that type of learner. You	CO1.2: Norms

	688 689 690 691 692 693 694 695 696	not spending 90 minutes as it's normed or said too, you know the time you using. Then obviously the language barrier becomes very big you know uhm, here you find a thing like in the vocab Conviviality, ¾ of our clients don't know and that they would guess and that doesn't make then your scoring reliable if I could say.	CO2.8: Language
Researcher:	697	Yes.	
Participant 2:	698 699 700 701	So, if I could just tell you, there's a few of those terms that we've picked up that these children just look at you confused but then they'll guess.	CO2.8: Language
Researcher:	702	Yes.	
Participant 2:	703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720	Inauguration is another one, sweltering is another one, uhm desolation. So, there is quite a few that you know, like even if you sit with a grade six and seven learner, they kinda look at you confused and think now OK what are you talking about. So then they wouldn't say they don't know, although the instructions says do not guess and then that then puts a question mark on that you know. That reliability of that score or the vocab or when you want to see the verbal comprehension does a child, or how familiar are they with the English language. So that is kinda a thing that one will question. Then of course also you look at uhm, there is quite a few things that's not relevant actually. So, in	CO2.8: Language CO2.9: Language influences results CO1.1: Outdated content

	721 722	the missing parts we talk about, you know on that envelope the address is missing right. Children are using emails now.	
Researcher:	723	Yes.	
Participant 2:	724 725 726 727 728 729 730 731 732	The exposure to those things, you look at that stove thing, there is touch screen. So, if we look at where we are now and the type of pictures and maybe what we're asking for, is it relevant? We have to ask these certain things. But nonverbal I may say, is quite relevant. Nonverbal when we looking at you know the pattern for the block design.	CO1.1: Outdated content CO1.6: Content
Researcher:	733	Yes.	
Participant 2:	734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750	Look at the pattern completion those things will still remain relevant if one could say. The worry is more especially you know, in the language, I think in the verbal comprehension. But saying that as it may, the WISC gives you more information and more insights into understanding the child and you know in terms of where is their cognitive potential, what is the strengths and the weaknesses. So, it's very important to first understand your child exactly, where is your child coming from, uhm, more important, what type of community is the child in, their stimulation at home, their exposure so for us, you know the SNA 1 and 2 that we get from the schools.	CO1.6: Content CO2.8: Language CO1.4: Comparison to the WISC CO2.1: Stimulation from home CO2.3: Community of client CO2.2: Stimulation from home
Researcher:	751	Yes.	

Participant 2:	752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772	The Support Needs Assessment forms those are very critical, so we read a lot into that and then our intake interview with a parent is also very important. So, in most cases you don't even get the parent coming sometimes on their own. You get the school bringing the child so then it becomes problematic because we want that first-hand information from the parent and then you get that information from the parents because that's critical in terms of writing your report. <i>So, when looking at the number of referrals and looking at the other instruments that you got to use, we are still using SSAIS-R more frequently unfortunately because of the number of assessments you know that need to be done.</i> And remember, it's also for placement in as much as we would not like to say that an assessment is for that it should be more for support.	CO2.5: Time constraints
Researcher:	773	Yeah.	
Participant 2:	774 775 776 777 778 779 780 781 782 783 784	Ideally, these children are struggling, they becoming frustrated. You got lots of children out of school especially now with COVID. Lots of children out of school so they don't necessarily have to be in a special school, it's just support. They need support so you'd find those are the challenges we grappling with on the ground. Lots of them, where children probably went into homeschooling. Yeah we're not saying that all homeschooling is	

	785 786 787 788 789 790 791 792	not you know, beneficial or useful to the children, but you know there's different, there's different sites and also our private schooling. Our parents can't afford now, so those are the challenges we grappling with because in as much as we assess, we must make sure we are assessing for the right reasons to support the child.	
Researcher:	793	Yes.	
Participant 2:	794 795 796 797	And then the teachers are in an outcry, this child knows nothing, the child can't complete, so we've got close links now with our health department.	
Researcher:	798	OK, that's good.	
Participant 2:	799 800 801 802 803	So that we work with them and also with our Resource Centers, the Speech and OT's so that we triangulate results from all of our professionals. It helps us. Is it giving you a good idea?	
Researcher:	804 805 806 807 808 809 810	Yes, definitely thank you. I know sometimes you might not even meet the parents or the school, do you have to explain to them that you are using the SSAIS-R and that the norms are outdated but you still using it. Do you have to have that conversation?	
Participant 2:	811 812 813 814 815 816 817	Look, at the end of the day we don't have to but especially if the child is struggling and we say OK we have to use, for the benefit of the child this is an alternative assessment or instrument we gonna consider because it's not fair to the child. You already pick up that this child, I	CO2.8: Language

	818 819 820 821 822 823 824 825 826	mean cannot and cannot manage cannot understand you, but in most cases when I have a learner that's having difficulty then I try rather to give it to my other psychologists that is IsiZulu which is most common in our area so then she does utilise the IsiZulu SSAIS-R with the child. Ok. So, I will not continue because I don't think it's fair to the child.	
Researcher:	827	OK.	
Participant 2:	828	Can you hear me?	
Researcher:	829 830 831 832 833 834	Yes, thank you and I think you have kind of touched on this but what do you think influences the test results of the SSAIS-R. So, I know you already mentioned obviously the language, background information from parents and the time.	
Participant 2:	835 836 837 838	Yes, the time and uhm, the contextual issues is important here. You know the child, the environment the child is coming from. Does that make any sense?	CO2.3: Community of the client
Researcher:	839	Yes.	
Participant 2:	840 841 842 843 844 845 846 847 848 849 850	And also, you must remember we looking at the learners that cannot afford a private psychologist. They don't, the majority do not go because of the expense and these children get progressed and it's also due to our systemic educational system where children are just being progressed from one grade to the next, in terms of only being able to fail once per phase. Meaning, if a child is failed in Grade one,	CO2.4 Education

	851	Grade two and Grade three they get	
	852	progressed so it's a systemic problem actually that we're sitting with.	
Researcher:	853	It's difficult.	
Participant 2:	854	It is difficult, it is, but we try and help as	CO4.4: Make It work
	855	many as we can. What's very common	
	856	when you're looking at that SNA is that	
	857	you will find that a child is failing once per	
	858	phase and what parents do because they	
	859	are in denial and do not want to you	
	860	know the proper schooling of place with	
	861	support for their child, they would start	
	862	school hopping so that's common. So	
	863	you will immediately see the child's been	
	864	like to five six different schools.	
Researcher:	865	Wow.	
Participant 2:	866	So you know what, they just say no they	
	867	relocated and now because of Covid you	
	868	would find that you know what, you've got	
	869	to be more understanding of the	
	870	situation. Lots of relocations we have	
	871	had. Quite a bit, so in as much as using	
	872	the SSAIS-R, we also need to	
	873	understand that are we getting the	
	874	reliable but you'll pick it up when you look	
	875	at your client when they talk to you, so	
	876	you build that rapport, you spend that	
	877	time with them and already you pick up if	
	878	the English is good enough then of	
	879	course we use lots of sources like classwork books.	
Researcher:	880	Ok.	
Participant 2:	881	The workbooks. We use the latest report	

	882 883 884 885 886 887 888 889 890 891 892 893 894	so the languages, trying to understand OK did this child, but sometimes they're not all very reliable as well and then you find your scores don't automatically correlate with what the report is saying. So, it's a lot to deal with because now you need to explain to the parent ,OK this is where we are, this is what, so that feedback is very important to explain exactly what our aim was, what did we intend to get from the child to understand to know what certain, you know things were done to help the child and support the child.	
Researcher:	895 896 897 898 899 900 901	Yes, so I know with language there's a few vernacular versions of the SSAIS-R and you mentioned that you have a colleague that does the IsiZulu. If that is not their home language and they still struggle, would you still just have to go with the SSAIS-R?	
Participant 2:	902 903 904	You see that, I've been speaking to my colleague, they've got Northern Sotho I think.	CO2.7: Language of available tests
Researcher:	905	Yes.	
Participant 2:	906 907 908 909 910 911 912	And Xhosa as well. But, look in our district we don't have people, we don't have psychologists that can administer that. We don't have, and look we don't have, what's the name, the instrument 'cause remember it's expensive so we don't. We've got IsiZulu but just one.	CO2.7: Language of available tests
Researcher:	913	Ok.	

Participant 2:	914 915 916	The English, Afrikaans we've got only about two or three and remember we four psychologists.	
Researcher:	917	OK.	
Participant 2:	918 919 920 921 922 923 924 925 926 927 928 929	The WISC, we've got only one instrument, the WIAT only one and the rest is Bender, our ESSI, so we utilise that and we hoping that with the early identification we can pick up learners quicker. So that we can see, OK here's the problem let's help, but compared to WISC, WISC is too difficult for them. They can't manage most of them. The majority of the client that we see, they can't manage that otherwise all of them would be cognitively delayed in terms of scores.	CO3.4: Difficulty of the WISC
Researcher:	930	Hmm.	
Participant 2:	931 932 933 934 935 936 937 938	So we gotta look at something that's going to be more reliable and fair to the child as well in as much as if you look at the SSAIS-R, that's got its own issues as well, being outdated. Remember, if you look at the SSAIS-R, the English and Afrikaans learners that I see it's not, most cases their mother tongue.	CO3.4: Difficulty of WISC CO1.2: Norms CO2.9: Language
Researcher:	939	Oh ok.	
Participant 2:	940 941 942	They only started but luckily, we don't do for Grade 1,2 and 3 in the SSAIS-R. You with me?	
Researcher:	943	Yes.	
Participant 2:	944 945	By the time they in Grade 4, they have sufficient English to understand. So we'll	CO2.9: Language

	946 947 948 949 950	also use our scholastic baseline, GDE tool as a screening to see, OK I normally before I even start the SSAIS-R then I'll build a rapport, then I'll do the screening, you know scholastic, I'll start there.	
Researcher:	951	Yes.	
Participant 2:	952 953 954 955 956 957 958 959 960 961	To just see the one minute reading, to see exactly where's my child at, I'll look at basic math as well then I'll do a bit of spelling so I do the basic scholastic scales first then I've got an idea OK this child you know what can cope, they know the basic sight words, they have an understanding before I go into the SSAIS-R. Just to give a fair understanding and to be fair to the child as well.	
Researcher:	962	Yes.	
Participant 2:	963	Does that make any sense?	
Researcher:	964 965 966 967	Yes definitely, it's so interesting hearing the different side where you work as opposed to private practice 'cause obviously your clients are so different.	
Participant 2:	968 969 970 971 972 973 974 975 976 977	It's very different remember, these children, these parents are now insisting, they are frustrated with their child that it's too long their child has been through the system and they sometimes know their child is not coping but the school is saying that child is doing fine. We have had a lot of cases like that, where parents come in, even from the private sector, where they say you know what I	

	978 979 980 981 982 983	know for fact although my child is being home schooling there's 70% in his report, this child is not coping. This child cannot read and write when I do homework and they picked it up, you know when COVID when parents had to assist.	
Researcher:	984	Yes.	
Participant 2:	985 986 987	A lot of parents picked up their actual potential of their children. And yet, you also get the denial of the parents as well.	
Researcher:	988	Yes definitely.	
Participant 2:	989 990 991	Where they say no no no my child is not because you must remember it also stigma.	
Researcher:	992	Yes.	
Participant 2:	993 994 995 996 997 998 999 1000 1001	A special school. But you know, we don't only use this instrument we use it with a lot of others, as well as sources of information. We phone the school, we check on various things because you want, we don't want to ideally label a child because remember in a GDE system we have got a weighting for each child.	
Researcher:	1002	OK.	
Participant 2:	1003 1004 1005 1006 1007 1008 1009 1010	So that makes a big difference. So it's not the same like a private school, so it's after we've completed a report we still have to fill in what is called a SNA 3, Support Needs Assessment form which is number 3. So now we give them the support if the child is gonna have to go to a special school, what support will you	

	1011 1012 1013 1014 1015 1016 1017 1018	give when you give, will you give, uhm does the child need an Occupational Therapists, Speech Therapists does the child need or even in a mainstream school, what exactly can be, can you assist in giving the child in terms of supporting the child better in order to cope with the curriculum better.	
Researcher:	1019	Yes.	
Researcher:	1020 1021 1022 1023 1024 1025	So, I think I've also touched on this, what changes do you believe could be implemented to make it more suitable and relevant. So I think that would link back to the norms, maybe updating the norms as you mentioned earlier?	
Participant 2:	1026 1027 1028	Updating the norms, making them more relevant also in terms of the generation they become very electronic as well.	CO1.2: Norms
Researcher:	1029	Yes.	
Participant 2:	1030 1031 1032 1033 1034 1035	If one could say, you understand, and I mean Ed Psych's that are going to a point where they are actually doing assessments you know, virtually which must have been difficult I can imagine. It's always good to have the face to face.	
Researcher:	1036	Yes definitely.	
Participant 2:	1037 1038 1039 1040 1041 1042 1043	Most definitely. It must have been a challenge, but I think we just need to watch on our norms, watch on our language, the type of learner sitting in front of us and too, you know, use all sources of information before we actually diagnose or actually, you know, make	CO1.1: Norms CO3.1: Language

	1044 1045 1046 1047	any recommendation. So, I think it's critical in that and as much as I think it's more a time thing, the amount of time we have available to us as GDE psychologists.	CO2.5: Time constraints
Researcher:	1048	Hmm.	
Participant 2:	1049 1050 1051 1052 1053 1054 1055 1056	We don't have because on top of all that, there is crisis cases that we have to attend to. So if there's a different, like this last term, we had two drowning cases, a child that passed on at school, educators that have passed on, a teacher that was shot at a school. So, in all those crises cases, we have to be there.	
Researcher:	1057 1058 1059	So at your district you don't only do assessments you also have to deal with crises situations.	
Participant 2:	1060 1061 1062 1063	Yes, we do counselling. Today I had to go to a child's home and do counselling there because the child was assaulted at school, so there is counselling.	
Researcher:	1064	Ok.	
Participant 2:	1065 1066 1067 1068 1069 1070 1071 1072	There is counselling yeah, there is training that we have to do. There is lots and lots of training in terms of you know early identification. Then there's the SIAS process in all schools so that they all on board, training for the SBST as well and then you're sitting on the district-based support team as well.	
Researcher:	1073	Wow, lots to do.	
Participant 2:	1074 1075	You give guidance in terms of underperforming schools. So we do lots	

	1076 1077 1078 1079 1080 1081 1082 1083 1084	of motivation to the Grade 12 learners. We do study skills and study methods there as well in terms of those. There is also career assessments that are done at our resource centers so when we have the opportunity at least we go there. Of late we, because of COVID, we have been working in our resource centers. It was kind of easier, it was easier to manage.	
Researcher:	1085	Ok.	
Participant 2:	1086 1087	But on top of the assessments that you get from schools you also get lots of walk-ins.	
Researcher:	1088	Oh okay.	
Participant 2:	1089 1090 1091 1092 1093	Yeah, so quite a lot of walk-ins as well. Like at the beginning of the year, you must have heard that the districts where there were like what, 1000 people standing outside offices.	
Researcher:	1094	Hmm.	
Participant 2:	1095 1096 1097	Yeah, so people want to be placed, people have relocated so all those types of things you've got to consider as well.	
Researcher:	1098 1099 1100 1101 1102	I know you said you only have 3 copies of the SSAIS-R and I am assuming it's because of the price. Do you know roughly how much it costs to buy the SSAIS-R currently?	
Participant 2:	1103 1104 1105 1106	I should have it; it could be about R30 000 I'm not sure. But what I will do is I will WhatsApp it to you because we have purchased, I think last term. So I	

	1107 1108	should have a statement and a closer guide to how much it is at the moment.	
Researcher:	1109 1110	Thank you so much. So, it is still quite expensive.	
Participant 2:	1111 1112 1113	So the thing is, with the WISC, luckily it was given from the head office so it wasn't purchased by the district.	CO2.6: Cost
Researcher:	1114	Ok.	
Participant 2:	1115	We won't have enough money to buy it.	CO2.6: Cost
Researcher:	1116	No, I know the WISC is very expensive.	
Participant 2:	1117 1118 1119 1120 1121 1122 1123	Exactly, the WISC is expensive (laughter) and the WIAT. So we busy with the training for all GDE officials because remember we've got, quite seasoned, old people there as well so they busy with the training of the WISC and the WIAT but still it's a time thing.	CO2.6: Cost
Researcher:	1124	Yes.	
Participant 2:	1125 1126 1127 1128 1129 1130 1131 1132	And I think the type of client we are seeing that is becoming challenging and that's more the issue than anything else. Because remember yes, it gives you better insights into the, you know what we looking for and how we can assist, but at the same time, the time and the language is an issue.	CO3.4: Difficulty of WISC CO2.9: Language
Researcher:	1133	Yes.	
Participant 2:	1134 1135 1136 1137 1138	The language in that is not conducive to our South African learner if I could say. Not everybody, be careful, I'm talking about more your Thembisa, talking about certain areas.	CO2.10: Language exposure
Researcher:	1139	Yes.	

Participant 2:	1140 1141	Yes, those areas it becomes problematic there.	CO2.10: Language exposure
Researcher:	1142 1143	Thank you I just want to see. I think I've actually asked everything.	
Participant 2:	1144	Did you?	
Researcher:	1145	Also like a roundabout way as well.	
Participant 2:	1146 1147	Yeah, I think they kind of link to each other somehow.	
Researcher:	1148	Yes.	
Participant 2:	1149 1150 1151	Although, I still believe the WISC would be the way to go, the WISC and the WIAT together.	CO1.4: Comparison to the WISC
Researcher:	1152	Yes ok.	
Participant 2:	1153 1154	But having only one at the district, we would be fighting with each other.	
Researcher:	1155	I can imagine (laughter).	
Participant 2:	1156 1157 1158 1159 1160 1161	Yeah exactly, so in private practice yes, it's ideal yes we can use it. I grab it and use it when I can but the majority of the time, like I said, its due to the contextual, the type of communities the children come from, the stimulation they get it at home.	CO2.3: Community
Researcher:	1162	Yeah.	
Participant 2:	1163 1164 1165 1166 1167 1168 1169 1170 1171	You know the exposure and all those things, even the SSAIS-R is a bit too difficult for them, then you can imagine. But we try, we are trying and you know what at the end of the day we get lots of uhm you know psych reports coming from private psychologists with that. So we've got to have the know-how. You know I much prefer to use the WISC if I	CO2.1: Quality of education CO4.4: Make it work CO1.4: Comparison to the WISC

	1172 1173	could depending on the client sitting in front of me.	
Researcher:	1174 1175	Yes, I can imagine. Thank you so much for your time.	
Participant 2:	1176	Pleasure.	