Psychological assessment in South Africa: A needs analysis

The test use patterns and needs of psychological assessment practitioners

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Final Report

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Cheryl Foxcroft
Project Leader 13 July 2004

EXECUTIVE SUMMARY

Psychological assessment in South Africa faces many challenges at present. Among these challenges is the fact that assessment practitioners need access to high quality tests so as to ensure that the assessments that they perform yield valid and reliable results. In many countries such as the United States of America, the United Kingdom, the Netherlands, Spain, and so forth surveys have been conducted to determine the patterns of test use so as to *inter alia* establish which tests are the most frequently used and may thus require constant reviewing and updating. A comprehensive survey of the test-use patterns and needs of psychological assessment practitioners has never been undertaken in South Africa. This has made it difficult to establish an effective agenda regarding the development, adaptation and updating of tests and to develop appropriate continuing professional development courses and workshops for practitioners.

The present project thus aimed to contribute to the continued development of the field of psychological assessment in South Africa by conducting a wide-reaching survey into the test-use patterns and needs of psychological assessment practitioners. It was envisaged that the information gathered in the process would not only document test use patterns and needs but would also form the basis for generating suggestions regarding the agenda that needs to be established to guide test development and enhance assessment practices in South Africa.

Three distinct data-gathering methods were used to collect information regarding the test use patterns and needs of assessment practitioners. This entailed:

- Conducting a postal survey. Although the response rate was low (i.e., 13.3% or N=881), the characteristics of the sample in terms of professional registration categories and gender were nonetheless generally reflective of the spread of these characteristics in the population of registered psychology professionals in South Africa. The survey questionnaire included questions related to the extent to which practitioners used tests, the purpose for which they used tests, cross-cultural test use, use of specific tests and the extent to which practitioners felt that the tests should be updated or adapted, the needs of practitioners, and the extent to which there was a need for a central test agency and what it's functions would be.
- Conducting focus group interviews. In total, 141 participants took part in 17 focus-group interviews. The questions explored in the focus groups attempted to elicit information on

the purpose and value of psychological testing; the tests most frequently used along with a critical analysis of their quality, strengths and weaknesses; the needs of psychological assessment practitioners; as well as views on who should assume responsibility for addressing the needs of psychological assessment practitioners.

- Conducting individual interviews with key informants. Thirty-one individuals participated in 22 interviews. Unfortunately, more white than black practitioners were interviewed due mainly to the fact that there appears to be very few black psychologists in managerial positions. The questions posed revolved around the tests used as well as their strengths and limitations, needs related to new tests, the monitoring of the quality of psychological assessment services, and the need for and functions of a central test agency.

The information obtained from the three data-gathering methods used is presented separately for the postal survey, focus groups, and individual interviews in this report. However, one purpose for using different methods for generating information was to triangulate the findings to establish whether similar themes emerged across the methods. This was indeed found to be the case and six overarching key themes were identified which at least emerged from two, if not all, of the data-gathering methods. These six overarching themes were:

- **Perceptions related to the value of psychological tests and testing**. Generally, practitioners felt that psychological tests and testing were being perceived more positively at present and that testing added value provided that culturally appropriate, psychometrically sound, high quality tests were used. However, there appears to be some uncertainty regarding the definition of a psychological test and how to differentiate it from other assessment measures such as a competency-based test.

- **Tests are used for a variety of purposes with a wide array of clients**. Tests are used with clients across the age spectrum for such divergent purposes as identifying and diagnosing psychiatric conditions; describing intellectual or cognitive and personality functioning; for selection and development purposes; and to perform specialist forensic and psycholegal assessments. When the purposes for which psychology professionals in the various registration categories use tests were explored, it was found that most psychologists, especially if they were in private practice, seemed to use tests for similar purposes irrespective of their professional registration category.

- **Types of tests used and patterns of use**. Frequently used national and international tests were identified. Tests of intellectual ability, personality functioning, and interests represented the bulk of the frequently used tests identified. Test-use patterns were particularly influenced by whether or not a test was classified by the Professional Board for Psychology. A major concern noted was that the majority of the tests being used frequently were in need of adapting for our multicultural context or required updating in view of the rapidly changing world of work.

  Of the frequently used nationally developed tests identified, the majority were developed or adapted for use in South Africa by the HSRC. This is probably due to the fact that, as the HSRC was the sole developer of tests for a long period in the history of psychological testing in South Africa, many practitioners were trained in and purchased HSRC tests and have become experienced users of these tests. Nonetheless, practitioners pointed out that most of the HSRC tests were outdated and not culturally appropriate, their norms needed to be updated, and the instructions needed to be available in all the official South African languages. Furthermore, although there was a degree of similarity among the test-use patterns of practitioners in the various registration categories, the HSRC tests featured less prominently in the list of the top ten tests for clinical and educational psychologists than they did for other practitioners. In addition, when a consolidated list of frequently mentioned tests across the three data-gathering techniques was generated, less than half of the tests included in the list were developed by the HSRC and 56% were developed or are distributed by other agencies. This changing trend in the field is probably due to the emergence of other test development and distribution agencies in the past decade to fill the void created when the HSRC abdicated its role as the central test development and distribution agency in South Africa.

- **Needs related to psychological tests and test use**. Practitioners indicated that they needed tests that were appropriate for the multicultural South African context, that were available in all the official languages, and that were regularly updated. In addition, practitioners indicated that they required appropriate and varied norms and strategies needed to be found to address language issues in assessment. Practitioners also identified a number of gaps in their toolkits where they would like new tests to be developed. Practitioners felt that awareness needed to be raised regarding good practices in computerised test use and the ethical practice of assessment in general. One of the ways proposed in which the latter could be addressed was through the provision of quality training to trainees as well as to registered professionals. It was also

felt that test developers should take responsibility for the development of quality tests and the appropriate marketing and pricing of tests.

- **The control and regulation of tests and testing practices**. Many issues were raised regarding whether the Professional Board for Psychology was able to control and regulate test use. Consequently, it was suggested that it might be necessary to create a new, all encompassing body (e.g., a Centre of Excellence for Testing) to monitor test use, advise practitioners, research and review tests and make the information centrally available to practitioners, and to monitor and coordinate test development, adaptation, and updating.

- **Perceptions regarding who should develop tests**. There was a mixed response from practitioners regarding the need for a central test agency. While there was support for a central test agency, practitioners generally saw scope for various test development initiatives coordinated by, for example, a Centre of Excellence for Testing.

  As regards the role of the Human Sciences Research Council (HSRC), practitioners generally felt that the HSRC had lost too much ground and carried too much political baggage to re-enter the test development field as a major player. However, they did see a role for the HSRC as regards developing tests for people with special needs (e.g., blind, deaf, physically disabled) as well as tests of national importance such as scholastic tests and tests that can be used to guide admissions and selection decision-making in the higher education sector. In addition, given that many of the HSRC tests are still frequently used by practitioners, the HSRC might wish to identify a few of the most popular tests (e.g., SSAIS-R) to update and adapt from a cross-cultural perspective. Furthermore, it was suggested that HSRC might undertake test development in conjunction with universities, although financial and time constraints on the part of university staff might curtail the development of such partnerships. A potential role was also perceived for the HSRC in terms of conducting contract or commissioned research to inform test use and assessment practice policies as well as to guide the re-design of training programmes and the development of programmes to train test developers.

With the above findings in mind, a tentative agenda was generated to guide the continued development of psychological testing in South Africa and in an attempt to start addressing the needs of psychological test development practitioners. The key aspects of the agenda generated are:

- Develop a clear description of a psychological test and how it is differentiated from other types of tests.
- Disseminate user-friendly information on what a psychological test is and who may use such a test as an awareness raising exercise among those stakeholders external to the psychology professions who use psychological test information.
- Clearly delineate the purposes of test use and the scope of practice for professionals in the various registration categories and re-align training programmes accordingly.
- Urgently review the requirement that practitioners should only use tests registered with the Professional Board for Psychology and shift the emphasis to requiring that practitioners use high quality, culturally appropriate tests.
- Review the test classification process and find mechanisms to complete the process with greater speed.
- Introduce a comprehensive test review system using a standardised format and provide practitioners with easy access to the review information.
- Provide appropriate continuing professional development activities related to advances in the field, psychological test use and assessment practice.
- Existing national and international tests identified in the present project need to be urgently adapted, revised or updated.
- New culturally and linguistically appropriate tests need to be developed to fill gaps in the toolkits of assessment practitioners.
- Develop competency standards for all levels of assessment practitioners and revise training programmes where necessary so that they can produce practitioners with the desired competencies.
- Training programmes to build test development expertise are needed and black test developers in particular are needed.
- Develop a Code of Practice for test developers, publishers and distributors.
- The professional societies need to establish the role that they wish to play.
- A model needs to be developed with respect to who will be responsible for developing tests and who might coordinate test development.

To ensure that the valuable findings generated from the present project as well as the tentative agenda generated find practical expression, it is proposed that the Professional Board for Psychology initially takes ownership of the agenda by establishing a task force of all relevant stakeholders to firm up the agenda and monitor its implementation.

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INTRODUCTION AND BACKGROUND TO THE PROJECT

CHAPTER OVERVIEW

This chapter introduces the reader to the motivation for assessing the test use patterns and needs of psychological assessment practitioners in South Africa. The research questions that the project aimed to address as well as a broad outline of the methodology employed to answer the questions are provided. Finally, an outline of the chapters contained in this report is provided.

INTRODUCTION AND RESEARCH QUESTIONS

The field of psychological test use, development and adaptation in South Africa faces many challenges at present. Foremost among the challenges is that culturally appropriate tests, which meet stringent psychometric standards, are needed for all age groups in our multicultural society if psychological assessment practitioners are to succeed in employing fair testing practices. Linked to this is the challenge of having various language versions of tests so that test-takers in the multi-lingual South African society can be assessed in the language in which they are most proficient. This poses logistical challenges to the test developer. Intensive, large-scale test development, adaptation and revision projects need to be urgently undertaken if South African psychological assessment practitioners are to rise to the challenge of performing ethically and culturally sound assessment. However, various factors are preventing significant progress being made regarding test development, adaptation and revision at present. Foremost among these factors is the fact that the Human Sciences Research Council (HSRC), which was the largest developer and supplier of psychological tests until the early 1990s, has been restructured and is still uncertain as to what role, if any, it should play in test development in the 21st century. Since the demise of the HSRC as a major test developer, smaller companies have sprung up to develop and supply tests, but there is no body or organization to coordinate test development activities. Although the Professional Board for Psychology has established a Psychometrics Committee to oversee psychological testing, it has failed to establish a national test development, adaptation and revision agenda that could drive and coordinate test development efforts undertaken by the various smaller companies and research teams at universities. Furthermore, little research data is available related to test use patterns and the needs of assessment practitioners which could aid in the establishment of a national agenda.

To be able to meaningfully respond to the many challenges facing psychological testing in South Africa, it is important to firstly gain an understanding of the tests currently being used by psychological practitioners. Thereafter it is important to establish the everyday practice needs related to the types of tests, normative information, and psychometric characteristics of tests which psychological practitioners see as being of critical importance. From this information, it should be possible to generate a test development and adaptation agenda for South Africa as well as to provide pointers regarding how to translate such an agenda into action.

Consequently, this project was undertaken to answer the following questions.

1. What psychological tests are South African psychological practitioners currently using?
2. To what extent do the tests currently being widely used require either adaptation for the multicultural South African context or updating, and what additional tests do practitioners require?
3. What should the agenda be for psychological test development and adaptation in South Africa?
4. What role should the HSRC play in the development and adaptation of psychological tests?

Before attempting to outline how the above questions were investigated, it is important to clarify the term “psychological test”.

What is a psychological test?

In South Africa, a test is classified as a psychological test when the purpose of the test results in the performance of a psychological act (Foxcroft, Roodt, & Abrahams, 2001). According to the Health Professions Act, 56 of 1974, Section 37 (2) (a), (b), (c), (d) and (e), a psychological act with respect to assessment is defined as being “the use of measures to assess mental, cognitive, or behavioural processes and functioning, intellectual or cognitive ability or functioning, aptitude, interest, emotions, personality, psychophysiological functioning, or psychopathology (abnormal functioning)” (Foxcroft, Roodt, & Abrahams, 2001, p. 108). Furthermore, according to the Health Professions Act, 56 of 1974, only registered psychologists are permitted to perform psychological acts. Tests, psychometric devises, instruments and questionnaires that measure psychological constructs must be used, interpreted and controlled by psychologists. Psychometrists, psychotechnicians and other professionals, such as speech therapists, can use certain psychological tests provided that they comply with certain requirements, such as:

i. The test administrator is appropriately trained, and has achieved minimal competencies necessary to use the test.
ii. The test administrator is supervised and monitored by a psychologist.
iii. The test administrator complies with the restrictions placed on that psychological test, which means that a psychometrist may score and interpret certain psychological tests but

they may not report on the results of these tests, e.g. a psychometrist is not allowed to use specialist neuropsychological measures.

iv. The use of the test has been certified for that category of tester by the Psychometrics Committee of the Professional Board of Psychology (e.g., psychometrists may not use projective tests).

Test classification in South Africa

The Professional Board for Psychology of the Health Professions Council of South Africa (HPCSA) is the sole national statutory body responsible for *inter alia* classifying, registering and reviewing the use of psychometric and psychological tests, questionnaires, apparatus and instruments used for the determination of intellectual ability, aptitude, personality make-up, personality functioning, psycho-physiological functioning and psychopathology.

The previous system of classifying tests as A, B and C level tests has been revised and is no longer used. Tests are now classified as either a psychological test or not. If it is established that a test does not tap psychological constructs or is not essentially psychological in nature, it does not fall under the jurisdiction of the Board. If it is established that a test taps a psychological construct after evaluation, it is classified in one of the following categories:

i) Tests reserved for psychologists. This implies that all aspects of the tests fall under the control of registered psychologists. Psychologists may, however, decide to utilise an appropriately trained person, such as a psychotechnician or psychometrist, to administer the tests under their supervision, but the appropriately trained psychologist shall do the interpretation and feedback of test results.

ii) Tests that may be used by other persons registered with the Board, that is, Registered Counsellors, Psychometrists, and Psychotechnicians. It must be noted that each of these categories of registration has scope of practice limitations. For example, registered counsellors may not use projective, neuropsychological and other highly specialised clinical and psychodiagnostic tests. Psychometrists (supervised practice) may use psychological tests under the supervision of an appropriately trained psychologist, but may not perform specialized assessments, administer projective tests, and bill clients for their services. A new category, psychometrist (independent practice) is in the process of being introduced. After three years of supervised practice and on passing a Board examination, psychometrists (supervised practice) can upgrade to psychometrists (independent practice) and can bill clients for services rendered. However, they still cannot perform specialized assessments or use projective tests or tests that tap psychopathology.

iii) Tests approved by the Board for use by other appropriately qualified professionals in the normal course of their work, for example, Occupational Therapists, Speech Therapists, and Educationalists.

It is the responsibility of the developer of the test to apply to the Board for classification, and it is the responsibility of the student in psychology, psychotechnician, psychometrist, intern psychologist, registered counsellor or psychologist to ensure that any test he/she intends to use has been classified by the Professional Board and that such a test is accompanied by a classification certificate issued by the Board. Practitioners should be aware of test limitations (such as validity and reliability), cultural sensitivity and legal implications with respect to testing in the South African context (e.g., the Constitution of the RSA, the Employment Equity Act, the Health Professions Act, and other relevant legislation and regulations).

RESEARCH DESIGN AND FRAMEWORK

Method

To address the four research questions, a needs assessment was performed. A needs assessment is performed to identify a problem or a need and to provide the target group with an opportunity to be involved in planning how to address their needs. In the case of the envisaged project, the needs of psychological practitioners and key stakeholders related to psychological tests were surveyed and the resultant information was used to inform the generation of an agenda to guide psychological test development and adaptation in South Africa.

In the process of performing the needs assessment, a number of research methods were used. The methods used can be summarised as follows:

1. Both quantitative and qualitative research methods were used. The reason for this is that it enhanced the richness of the data gathered and the information obtained could be triangulated. This increased the trustworthiness and validity of the findings.
2. A postal survey was performed as this provided an appropriate means of collecting information from as many psychological practitioners as possible. While the survey questionnaire was largely quantitative in nature, some open-ended questions were included.
3. Focus group interviews were conducted with groups of psychological practitioners to identify their test-related needs and to explore their test use patterns in greater depth.
4. The key informant approach was used in that key role players in psychological testing in South Africa were interviewed.

Participants

There were two main categories of participants in the project. The categories of participants were:

1. Psychological practitioners – psychologists, psychometrists, and psychotechnicians. They were purposively sampled through obtaining mailing lists of relevant professional societies and the Professional Board for Psychology. The survey questionnaire was mailed to all registered psychological practitioners. Furthermore, practitioners were also purposively sampled to participate in the focus groups.
2. Key informants – members of the Professional Board for Psychology, the Psychological Society of South Africa (PsySSA), role players in government and industry and so forth, who were deemed to have expert knowledge of psychological test use needs in South Africa were purposively sampled.

Detailed information on the characteristics of the participants is provided in later chapters in this report.

Data collection techniques

Three main types of data collection techniques were used, namely:

1. A postal survey questionnaire.
2. Personal interviews.
3. Focus group interviews held in various provinces.

Each data collection technique is discussed in detail in the relevant chapters of this report.

Data analysis

A variety of analysis techniques were used, for example:

1. For the survey questionnaire, quantitative data were represented in terms of frequencies and percentages and some of the data were rank ordered.

2. Qualitative data obtained from the interviews, focus groups, and open-ended questions of the survey questionnaire were content analysed to identify the main themes.

More detailed information on the data analysis techniques is provided in the relevant chapters in this report.

SIGNIFICANCE OF THE PROJECT

The present project is the largest of its kind ever to have been undertaken in South Africa. Surveys have previously been conducted into test use patterns in specific geographic areas and with respect to the application of tests for specific purposes or developed by specific test development agencies (e.g., England & Zietsman, 1995; Van der Merwe, 2002, conducted a survey related to psychological assessment in industry and human resource management in the Eastern Cape). However, the aim of the present project was to explore the test use patterns and needs of psychological assessment practitioners nationally so that the findings could inform a national test development and test use strategy. As such, this project is comparable to projects conducted in the United States, the United Kingdom and Europe, for example. Thus, the findings of the present project can also be used to see whether the test use patterns and needs of psychological assessment practitioners in South Africa are comparable to those of their counterparts in other countries.

LAYOUT OF THE REPORT

Chapter 2 covers the methodology related to the national survey conducted and the findings of the survey questionnaire are reported.

Chapter 3 covers the methodology related to the focus group interviews and the findings obtained from them.

Chapter 4 covers the methodology used to conduct individual interviews and the themes that emerged from the interviews are reported.

In Chapter 5 the results of the quantitative and qualitative aspects of the study are triangulated (for verification and trustworthiness purposes) and an integrative overview of the overarching key themes is presented and discussed. The key themes are also reflected against the findings of previous research studies conducted in South Africa and internationally.

In Chapter 6, a tentative test development agenda is generated, based on the findings of the study, and concluding remarks and suggestions are made.

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CHAPTER 2

TEST USE AND NEEDS: RESULTS OF SURVEY QUESTIONNAIRE

CHAPTER OVERVIEW

This chapter covers the national postal survey that was carried out on the test use patterns and needs of psychological assessment practitioners in South Africa. In the first section the research design and methodology of the survey is explained. The second section contains the results of the survey, which cover four aspects, namely:

- A description of the sample, who they are and where they are employed.
- The types of tests and the extent to which tests are being used by practitioners.
- What the needs of practitioners are.
- Whether there should be a central agency in South Africa and what this would entail.

In Section 3, a summary of the key findings and concluding remarks are provided and the next chapter is introduced.

SECTION 1:
RESEARCH DESIGN AND METHODOLOGY OF THE SURVEY

Introduction

The project to assess the test use patterns and needs of psychological assessment practitioners applied three tools to gather information. Both quantitative and qualitative methods were used. These were a survey, focus groups and personal interviews. In this chapter only the aspects related to the survey are discussed and in later chapters the other methods of data gathering are reported on.

A survey is a system for collecting information to describe, compare, or explain knowledge, attitudes and behaviour (Fink, 1995). This study involved surveying psychological test practitioners in South Africa. The purpose of the survey questionnaire was to determine what psychological tests and measures are being used by psychological assessment practitioners. Furthermore, the survey aimed to identify the needs practitioners have with respect to psychological and educational tests. A survey was used as it provided an appropriate means of collecting information from as many psychological practitioners as possible. The survey questionnaire was largely quantitative in nature, although three open-ended questions were also included.

Description of the questionnaire

The survey questionnaire was 13 pages in length (see Appendix A) and the average time to complete it was 20 minutes. The questionnaire included various types of questions. These questions:

- required multiple responses,
- were open ended,
- required yes or no responses, and
- required likert-type responses.

The questionnaire was divided into three sections. Section A had five questions, which covered the gender of the practitioners, the language of communication between the practitioner and the clients, the home language of the clients, the category of professional registration, and where the practitioners worked. Most of the questions were multiple response questions; which meant that practitioners could select more than one option.

There were seven questions in Section B, which surveyed the extent to which practitioners are using psychological tests and for what purposes. Questions about whether there should be a central agency for developing and standardizing tests in South Africa were also posed. Practitioners were also asked what the duties and functions of a central agency should be if they thought there should be one. The responses were rated on a 3-point Likert scale.

Section C was divided into four sub-sections, namely:

- In Sub-section 1 all the tests that are currently registered by the HPCSA were listed and psychological practitioners had to rate how often they use these tests, whether they thought the test had local reliability and validity, whether the test needs revising and how useful the test was.
- In Sub-section 2, the practitioners had to write down the names of tests that they use that were not cited in Sub-section 1. The practitioners were then asked to rate these tests in the same way as they rated the tests in Sub-section 1.
- In Sub-section 3, the practitioners were asked to select the tests that they wanted to comment on or had any suggestions about.
- In Sub-section 4, the practitioners had to list aspects of human functioning which they would like to assess but for which they have not yet been able to find a suitable test.

Ethical considerations were addressed in a cover letter. Respondents were requested to indicate that they had been informed of the purpose of the study and consented to participate. Furthermore, the questionnaires were completed anonymously.

The survey questionnaire, a self-addressed envelope, and a cover letter explaining what the project entailed were sent by regular mail to the psychological practitioners. Mailed questionnaires are cheaper than personal interviews and telephonic interviews, but it usually has a lower response rate.

Aims of the survey

The aims of the survey were:

1. To establish what psychological tests South African psychological practitioners are currently using.
2. To evaluate the extent to which practitioners indicate that the psychological tests they currently use require adaptation for the multicultural South African context and what additional tests they require.

Description of the population

The population surveyed were registered and qualified psychological practitioners in South Africa. The surveyed practitioners were all registered with the Health Professions Council of South Africa (HPCSA) and mailing lists were obtained from the relevant professional bodies and societies. The full population of registered psychological practitioners (N = 6614) were initially targeted for this study.

Data analysis

Only descriptive analyses were done on the data obtained from the survey questionnaire. In Section 2, findings are presented in terms of frequencies and percentages, and the needs have been rank ordered. Frequencies have also been cross-tabulated to determine the patterns of test use across registration categories.

SECTION 2:
FINDINGS OF THE QUESTIONNAIRE

Response Rate

A total of 6614 questionnaires were sent to practitioners and a total of 881 questionnaires were returned by the due date for data capturing. This represents a 13.3 % return rate. Sixty-three questionnaires were returned unopened, because the practitioner was unknown at the address or the post office box had been closed. According to Fowler (1988), mailed questionnaires are biased in favour of the sampled population who are interested in the topic. This could thus have been one factor that influenced the response rate in the present study. According to Linskey (1975), having a cover letter with the questionnaire has the potential to increase the response rate by up to 12%. A cover letter was attached to the questionnaire in the present study, but this did not have the same

positive effect on increasing the number of respondents, as was the case in Linskey's study. Another factor that could also increase the return rate is re-mailing the questionnaire. An increase of 10 – 15 % is expected if re-mailing is done. Two weeks after the questionnaires were posted a reminder with an electronic version of the questionnaire was e-mailed to practitioners who are members of the Psychological Society of South Africa (PsySSA). The HPCSA did not have the email addresses of the practitioners so an electronic database was obtained from PsySSA. Not all psychological practitioners are members of PsySSA and thus only about a third of the practitioners were targeted with the reminder. Five practitioners responded that they had already completed and mailed the questionnaire. Twenty-three electronic questionnaires were returned, which represents a response rate of 2 %. These returned questionnaires formed part of the overall response rate of 13.3%.

According to Mangione (1998), if the response rate is less than 50% then the results might not be scientifically acceptable. According to Soriano (1995) it is important that the respondents are representative of the population in a needs assessment. According to Borg and Gall (1989), if more than 20% of the respondents did not return the questionnaires it is likely that the results or findings of the study could be affected. It would thus appear that the low response rate obtained in the present study could have negatively affected the generalisability of the findings, However, although the sample was probably not representative, it is pointed out in the next section that the sample was nonetheless reflective of the characteristics of the psychological practitioners in South Africa, which suggests that the findings could still be of value beyond the present study.

Description of the sample

A description of some of the more pertinent characteristics of the 881 practitioners who completed and returned the survey questionnaire is provided in this section.

Table 2.1

Gender distribution of the practitioners

Gender	Frequency	Percentage of responses
Male	229	33.9
Female	568	64.4
Not Indicated	14	1.6
Total	881	100

Of the practitioners who responded, 33.9% were males and 64.4% were females. The statistics of the surveyed practitioners are similar to the national statistics in that 64% of all the psychological practitioners registered with the HPCSA are female and 36 % are male.

Table 2.2

Language of communication between client and practitioner

Language of communication	Frequency	Percentage [b]
Sepedi	20	2.3
IsiSwati	6	0.7
Tsivenda	8	0.9
Setswana	20	2.3
Sesotho	10	1.1
IsiNdebele	9	1.0
Afrikaans	567	64.4
English	795	90.2
IsiXhosa	33	3.8
IsiZulu	41	4.7
Xitsonga	2	0.2
Other, German, Dutch etc.	20	2.3
Total	1531[a]	

[a] As many practitioners indicated that they communicate in more than one language with their clients, the total frequency exceeds the 881 respondents to the survey.

[b] These percentages were determined by dividing the frequency count for each communication language used by the total number (N=881) of respondents to the survey

From Table 2.2 it can be seen that most practitioners (i.e., 90.2%) use English, followed by Afrikaans (64.4%), as a medium of communication. Of the African languages, the most common language used between practitioner and client is isiZulu (4.7%) followed by isiXhosa (3.8%).

Table 2.3

Home languages of clients

Home language	Frequency	Percentage [b]
Sepedi	97	11.0
IsiSwati	35	4.0
Tsivenda	69	7.8
Setswana	159	18.1
Sesotho	29	3.3
IsiNedebele	74	8.4
Afrikaans	727	82.5
English	810	91.9
IsiXhosa	302	34.3
IsiZulu	294	33.4
Xitsonga	4	0.5
Other, German, Dutch,etc	34	3.9
Total	2634[a]	

[a] As the home languages of the clients seen by one practitioner varied, the total frequency exceeds the 881 respondents to the survey.

[b] These percentages were determined by dividing the frequency count for each home language by the total number (N=881) of respondents to the survey

As was the case with the language of communication between practitioner and client, English and Afrikaans were the dominant home languages of the clients in that 91.9 % of the practitioners indicated that they work with clients whose home language is English, and 82.5% indicated that they work with clients whose home language is Afrikaans. Of the African languages, 34.4% of the practitioners indicated that they work with clients whose home language is Xhosa, while 33.4% of the practitioners indicated that the home language of their clients is Zulu. When the information provided in Tables 2.2 and 2.3 are compared and contrasted, some interesting observations can be made. In this regard, Figure 1 illustrates the language of communication between the client and the practitioner as well as the home language of the clients graphically.

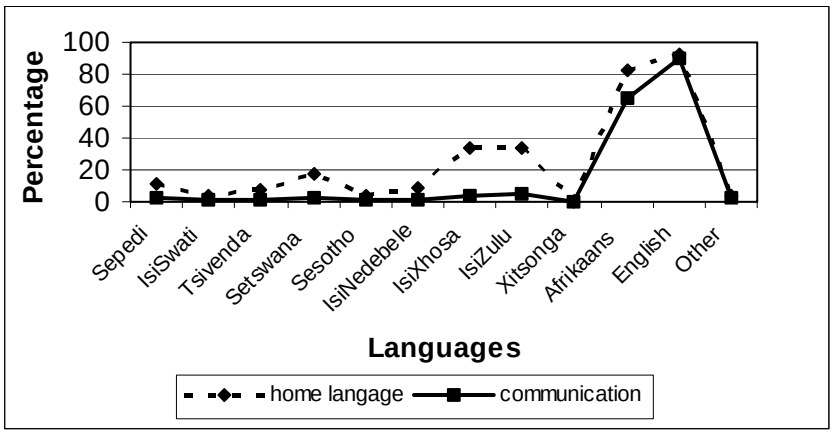

Figure 1.1 Language of communication and home language of client

While about a third of the practitioners indicated that the home language of clients that they see is Xhosa or Zulu, only 3.8% of the practitioners communicate with their clients in Xhosa and 4.7% in Zulu. Similar trends can be observed for the other African languages. What is clear from Figure 1.1 and Tables 2.2 and 2.3 is that the predominant medium of communication between practitioner and client is either English or Afrikaans, with English being the most dominant language. This has serious implications for fair assessment practices. According to the *International Guidelines for Test Use* (International Test Commission, 2001), in bilingual or multilingual contexts, practitioners need to establish whether a client is proficient in a language before they assess the client using a particular language. If practitioners are not first establishing that a client who speaks isiXhosa, for example, is proficient in English, before assessing him/her using English as the language of communication, the assessment results may not be a true reflection of the client's capabilities and functioning. The findings related to the needs of practitioners presented later in this chapter as well as the qualitative findings presented in chapters 3 and 4 will shed more light on the serious concern raised here when comparing the language of practitioner-client communication and the home language of the client.

The other interesting observation that can be made from Figure 1.1 is that isiZulu and isiXhosa, and to a lesser extent Setswana and Sepedi, appear to be the more predominant home languages spoken by clients. Thus, when rising to the daunting challenge of developing tests for the 9 African

languages represented in South Africa, a sensible starting point could be to develop tests for Zulu and Xhosa speakers before tackling translations into Setswana and Sepedi followed by the other African languages.

Table 2.4 provides information on where the practitioners who participated in the survey were employed. It should be noted that 13.6% of the respondents indicated more than one place of employment (e.g., employed at a university but also in private practice).

Table 2.4

Place of employment of practitioners

Where employed	Frequencies	Percentage
Private practice	552	62.7
University	123	14.0
Industry	109	12.4
Private clinic	31	3.5
Government dept.	145	16.5
Other, consultancy	41	4.7
Total	1001[a]	

[a] As some practitioners were employed at more than one place, the total frequency exceeds the 881 respondents surveyed.

Almost two-thirds (62.7%) of the psychological practitioners surveyed were in private practice, 14% were employed at a university, 12.4 % worked in industry, while 16.5% worked for government departments (the latter will be elaborated on in Table 2.5). The “other” category (4.7%) includes practitioners who work for NGO's, consultancies, private schools, in the corporate sector, or who are retired or unemployed.

Table 2.5

Distribution of practitioners in government departments

Where employed	Frequencies	Percentage
Education	80	55.2
Health	14	9.7
SAPS	18	12.4
Defence	7	4.8
Labour	4	2.8
Correctional services	6	4.1
Other departments	16	11.0
Total	145	100

Of the practitioners that worked in government departments, 55.2 % were working in the Department of Education and 12.4% were employed by the South African Police Services.

In Table 2.6 information is provided on the percentage of practitioners in the various registration categories who participated in the survey. It is important to note that 91 (10.3%) of the practitioners in the survey sample were registered in more than one category.

Table 2.6

Categories of registration of psychological practitioners

Registration Category	Frequency	Percentage	Mean years of practising
Clinical	238	27.0	12.0
Counselling	185	21.0	11.6
Industrial	125	14.2	10.0
Educational	219	24.9	10.1
Research	33	3.8	8.7
Psychometrist	129	14.6	6.4
Psychotechnician	2	0.2	5.0
Registered counsellor (psychometry)	15	1.7	9.4
Student	5	0.6	2.5
Intern psychologist	11	1.2	1.5
Other	10	1.1	8.3
Total	972		7.7

[a] As some practitioners were registered in more than one category, the total frequency exceeds the total number (N=881) of respondents surveyed.

There was a spread of registration categories among the respondents. 27% of practitioners were registered as clinical psychologists, 24.9% as educational psychologists, 21% as counselling psychologists, 14.2% as industrial psychologists, 14.6% as psychometrists, and 3.8% as research psychologists. The “other” category includes practitioners who indicated that they practice in the fields of pastoral psychology and clinical hypnotherapy.

The average number of years of experience for the total sample was 7.7 years. The registered counsellor (psychometry) category was created in the recent past to allow psychometrists who have been practising under the supervision of a psychologist to practise independently. Fifteen of the respondents fell into this category. This category is to be renamed “psychometrist (independent practice)". Readers should note that the total sample of 881 was used for most of the analyses, but the small size of the samples of students, psychotechnicians, interns, and registered counsellors (psychometry) precluded an analysis of their test use patterns.

The question that arises from the information presented in Table 2.6 is to what extent the distribution of registration categories in the sample reflects the national distribution of the categories? The national statistics obtained from the HPCSA are similar to those of the sample. At the start of 2004, the total number of registered practitioners in the various categories as well as interns was 8625. The national distribution of practitioners in the various categories is provided in Table 2.7.

Table 2.7

The distribution of practitioners across the various fields

National statistics			Sample statistics	
Categories	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Clinical	1975	22.9	238	27.0
Counselling	1222	14.2	185	21.0
Industrial	944	10.9	125	14.2
Educational	1135	13.2	219	24.9
Research	229	2.7	33	3.8
Psychometrist	1995	23.1	129	14.6
Psychotechnician	123	1.4	2	0.2
Interns	1002	11.6	11	0.6
Other (student, registered counsellor, etc)			10	1.1
Total	8625	100	972	

The survey sample was thus not necessarily representative of the national statistics, given the low response rate, but it was nonetheless reflective of the various registration categories which suggests that the findings of the survey should provide a reasonable picture of the extent to which tests are being used and what the needs of the practitioners are.

Extent to which practitioners use tests

One of the aims in undertaking this research project was to determine the extent to which psychological practitioners are using tests. This section will provide the findings related to the extent to which practitioners are using psychological and educational tests.

Extent of test use

Table 2.8 reflects the extent to which tests are used in various settings.

Table 2.8

The extent of test use by psychological practitioners (the total sample)

Use of psychological and educational tests	Never % of cases	Sometimes % of cases	Frequently % of cases	Non-response % of cases
In applied practice	7.9	34.4	47.9	9.8
With children in applied practice	21	22.2	39.3	17.5
With adolescents in applied practice	15	36.2	32.8	16.0
With adults in applied practice	19.7	39.4	22.0	18.8
For research purposes	33.1	15.3	7.0	44.5

From Table 2.8 it appears that tests are being used to a reasonable extent in applied practice with almost half of the practitioners using tests frequently (40% of the time or more) and a further third using tests sometimes. Not many practitioners are using tests for research purposes, however.

When a more in-depth analysis was conducted it showed that 196 (82.5%) of clinical psychologists are using tests in applied practice, compared to research psychologists that use tests for only 54.5 % of their time, presumably to conduct applied research. The next five tables, Tables 2.9 to 2.13, give an indication of the settings in which and with whom the practitioners in the different registration categories are using testing and assessment.

Table 2.9 illustrates that while practitioners in all the registration categories analysed are using tests in applied practice, educational, industrial, and counselling psychologists are using tests more than the other practitioners, although not significantly so.

Table 2.9

Use of tests in applied practice per registration category

Category of registration	% of practitioners who never use tests in applied practice	% of practitioners who use tests in applied practice	% of non-responses
Clinical	12.6	82.5	4.9
Counselling	5.9	87.6	6.2
Industrial	6.4	85.6	8.0
Educational	1.8	86.3	11.9
Research	30.3	54.5	15.2
Psychometrist	10.9	71.3	17.8

It is reflected in Table 2.10 below that educational psychologists use tests with children more often than any of the other practitioners, as 94.1% of them indicated that they use tests with children.

Table 2.10

Practitioners using tests with children in applied practice

Category of registration	% of practitioners who never use tests with children	% of practitioners who use tests with children	% of non-responses
Clinical	21.4	60.5	8.1
Counselling	17.3	69.2	13.5
Industrial	38.4	20.8	40.8
Educational	2.3	94.1	3.6
Research	39.4	36.4	24.2
Psychometrist	35.7	43.4	20.9

From Table 2.11 it appears that educational and counselling psychologists use tests with adolescents more frequently than do practitioners from other registration categories. A reasonable percentage of psychometrists (49.6%) also administer tests to adolescents.

Table 2.11

Practitioners using tests with adolescents in applied practice

Category of registration	% of practitioners who never use tests with adolescents	% of practitioners who use tests with adolescents	% of non-responses
Clinical	16.8	68.1	15.1
Counselling	7.0	84.3	8.7
Industrial	24.0	44.0	32.0
Educational	3.2	89.0	8.8
Research	42.4	36.4	21.2
Psychometrist	29.5	49.6	21.2

Table 2.12

Practitioners using tests with adults in applied practice

Category of registration	% of practitioners who never use tests with adults	% of practitioners who use tests with adults	% of non-responses
Clinical	21.4	22.6	56.0
Counselling	10.9	57.1	32.0
Industrial	4.6	37.4	58.0
Educational	23.5	47.1	29.4
Research	5.0	6.7	88.3
Psychometrist	10.5	33.6	55.9

Table 2.12 reveals that counselling psychologists tend to apply tests to adults more frequently in applied practice than practitioners from the other registration categories do.

Table 2.13

Practitioners using tests for research purposes

Category of registration	% of practitioners who never use tests for research	% of practitioners who use tests for research	% of non-responses
Clinical	37.4	22.3	40.3
Counselling	30.3	17.8	51.9
Industrial	26.4	32.8	40.8
Educational	35.2	15.5	49.3
Research	30.3	36.4	33.3
Psychometrist	34.9	27.9	37.2

Research psychologists most frequently use tests for research purposes in applied practice. However, just over a third of the research psychologists indicated that they use tests to conduct applied research, while a further third indicated that they did not use tests for the purposes of applied research. The nature of the applied research probably dictates whether or not it would be appropriate to use tests. Another interesting finding in Table 2.13 is the fact that almost a third of the industrial psychologists indicated that they use tests for applied research purposes. It could be speculated that, given the stipulations in the Employment Equity Act Number 55 of 1998 (Section 8) related to the need to establish the local validity and reliability of a test, industrial psychologists have started responding to this challenge by conducting applied research on the psychometric properties of the tests they use as well as exploring whether or not they are used in a fair way.

From the information provided in Tables 2.9 to 2.13, it would appear that educational psychologists use tests far more frequently and with a broad range of clients when compared to clinical, counselling and industrial psychologists.

Cross-cultural test use

Practitioners were also asked to comment on their use of tests in cross-cultural contexts. Table 2.14 highlights issues surrounding cross-cultural test use among practitioners.

Table 2.14

Cross-cultural test use by practitioners

Cross-cultural use of tests	Never % of cases	Sometimes % of cases	Frequently % of cases	Non-response % of cases
The tests used are appropriate for cross-cultural use	11.1	65.8	16.0	7.1
More culturally appropriate tests are needed	4.3	31.7	58.3	5.7
Would like further training in cross cultural test use, adaptation and interpretation	9.8	32.1	50.1	8.0

Given the multicultural nature of the South African society, practitioners are faced with the challenge of performing assessments on clients from varied cultural backgrounds. Table 2.14 raises many concerns about cross-cultural test use in South Africa. Only a relatively small percentage (16%) of practitioners felt that the tests that they were using were appropriate to use cross-culturally. In contrast to this, almost two-thirds (65.8%) of the respondents indicated that they feel that the tests that they use are only sometimes appropriate to use cross-culturally, while 11% of the respondents did not feel that any of the tests that they used were appropriate to use cross-culturally. It is thus not surprising that the majority (58%) of practitioners indicated that more culturally appropriate tests are needed in South Africa. The practitioners further highlighted that they would prefer more training in cross-cultural test use, test adaptation and the interpretation of cross-cultural test results.

Purposes for which tests are used

Practitioners were asked to indicate the purposes for which they used psychological and educational tests. Table 2.15 highlights some of the purposes for which practitioners use tests. Please note that in Table 2.15, the “Never” column reflects the percentage of practitioners who are not involved in a certain purpose of test use (e.g., for school readiness purposes).

Table 2.15

Purpose of test use (Total sample)

Purposes for which tests are being used	Never % of cases	Sometimes % of cases	Frequently % of cases	Non-response % of cases
Psycho educational	21.0	24.3	36.9	17.8
School readiness assessment	30.0	25.4	26.4	18.2
Assessment of learning problems	25.7	20.7	36.4	17.3
Intellectual assessment	9.3	29.7	51.5	9.5
Assessment of potential	13.0	29.5	44.3	13.2
Career assessment or development	13.6	33.0	42.3	11.0
Assessment of personality	11.4	37.9	40.2	10.5
Employment selection assessment	40.4	18.6	21.5	19.4
Selection of people for training in employment setting	43.0	17.1	14.9	25.0
Neuropsychological assessment	42.5	24.0	10.1	23.4
Child custody assessment	54.3	13.4	5.6	26.6
Forensic assessment	54.3	13.4	8.3	24.0

The information provided in Table 2.15 suggests that tests are being used for a variety of purposes. Practitioners are using tests mostly for assessing intelligence, personality, and potential as well as for career assessment purposes. Only about a third or less of the practitioners use tests for employment selection and training selection purposes. This is probably due to the specialized nature of such assessments and falls largely into the scope of practice of industrial psychologists. A similar trend is noted for the other types of specialized assessments reflected in Table 2.15. Only 10% of the practitioners frequently perform neuropsychological assessments and a further 24% perform assessments for this purpose less frequently. Child custody and forensic assessments are even more specialized in that 5% to 8% of practitioners frequently perform such assessments while a further 13% perform such assessments less frequently.

A further analysis was performed to explore whether there are different patterns related to the purpose of test use for practitioners from different registration categories. The outcome of this analysis can be found in Table 2.16.

Table 2.16

Purpose of test use broken down per registration category

Purpose	Clinical % of use	Counseling % of use	Industrial % of use	Educational % of use	Research % of use	Psychometrist % of use
Psycho-educational	54.6	64.9	27.2	94.5	30.3	45.7
School readiness assessment	45.8	53.5	10.4	80.9	27.3	40.3
Assessment of learning problems	50.4	60.0	16.8	92.7	33.3	45.0
Intellectual assessment	76.9	83.8	74.4	94.9	54.5	76.0
Assessment of potential	51.7	59.2	87.2	87.7	45.5	80.6
Career assessment or development	50.4	85.4	93.6	84.5	42.4	82.9
Assessment of personality	72.7	83.8	85.6	81.7	54.5	72.9
Employment selection assessment	26.1	38.9	86.4	24.2	39.4	58.1
Selection of people for training in employment setting	19.7	31.4	72.8	12.3	30.3	55.0
Neuropsychological assessment	50.4	33.0	8.8	47.5	30.3	17.1
Child custody assessment	21.4	22.0	4.8	33.8	18.2	6.2
Forensic assessment	29.4	28.1	18.4	20.5	27.3	10.9

From Table 2.16 it can be seen that clinical psychologists mostly use tests for assessing intellectual and personality functioning. They also tend to use tests to perform neuropsychological and forensic assessments to a greater extent than practitioners in other registration categories.

Counseling psychologists mostly use tests for the purposes of career, intellectual and personality assessment. To a slightly lesser extent they also use tests for assessing psycho-educational and learning problems, school readiness, and potential. Their strong career focus may explain why about a third of the counseling psychologists are involved in employment selection and training assessment. A quarter to a third of the counseling psychologists are involved in specialized child custody, forensic and neuropsychological assessment.

Industrial psychologists appear to concentrate on career assessment; intellectual, potential, and personality assessment; and assessment with the purpose of selecting people for employment or training. As would be expected within their scope of practice, about 18% of the industrial psychologists are involved in forensic assessment. However, the fact that some industrial psychologists are involved in child custody and neuropsychological assessments is interesting as this is not normally perceived to be within the scope of practice of an industrial psychologist.

Educational psychologists are involved in all the varied purposes for which tests are used. They focus particularly on using tests for psycho-educational purposes as well as for assessing intellectual functioning, learning problems, potential, personality functioning and career development. The fact that almost a quarter of these practitioners are involved in testing for employment selection purposes is somewhat surprising as this type of testing does not normally fall into an educational psychologist's scope of practice. Almost half of the educational psychologists are involved in performing neuropsychological assessments. This could be linked to the fact that the assessment of learning problems forms part of the domain of child neuropsychology. As regards specialized custody and forensic assessment, about a third to a fifth of the educational psychologists perform such assessments.

The pattern of test use for research psychologists is interesting. While their involvement in some of the areas (e.g., intellectual and personality assessment, selection testing) could be linked to the development and adaptation of tests, their involvement in the specialized areas of assessments requires some exploration. Among the interesting facts related to the development of neuropsychology and its application in South Africa is that some research psychologists were at the forefront of the initial development of this field here. They particularly researched and adapted neuropsychological tests for use in South Africa and in the process developed considerable expertise in the application of neuropsychological tests. This could thus explain why just under a third of the research psychologists are involved in neuropsychological and forensic assessment. However, there is no real explanation why some research psychologists are involved in child custody assessments.

Psychometrists are involved in all areas of testing with their main focus being on career, intellectual, and personality assessment as well as assessing potential. The fact that a reasonable percentage of the psychometrists are performing neuropsychological and forensic assessments is a worrying concern as the Professional Board for Psychology has made it quite clear that psychometrists are not allowed to perform specialist assessments. It is the responsibility of the supervising psychologist as well as the psychometrist to adhere to the rules as set out by the Professional Board.

Commonly used tests

The questionnaire provided a list of tests and practitioners needed to indicate the extent to which they use each test as well as how useful the test is, whether the test needs revising, and whether they have local reliability and validity information on the test. An analysis of the combined sample was done and the 20 mostly commonly used tests (used by 20% or more of the practitioners) are listed in Table 2.17. The table also includes comments concerning the usefulness of the test. See

Appendix B for the complete list of tests and the frequency with which they are used.

Table 2.17

Tests that are regularly used by practitioners (total sample)

Test name	Test Use (Frequency)	Percentage of practitioners using the test	Test is very useful. % of cases	Test needs revising. % of cases	Practitioner has info on reliability & validity of test. % of cases
16 Personality Factor Inventory[a]	545	61.9	53.0	55.1	65.1
Senior South African Individual Scale - Revised (SSAIS-R) [a]	497	56.5	68.8	65.7	77.3
Bender Visual Motor Gestalt Test	478	54.3	60.1	38.6	43.3
19 Field Interest Inventory (19 FII) [a]	456	51.8	33.5	80.4	55.7
Junior South African Individual Scales (JSAIS) [a]	420	47.7	64.3	69.1	71.4
TAT (cards)	404	45.9	48.0	49.0	38.2
Children's Apperception Test (CAT)	336	38.1	44.2	48.6	32.9
Goodenough Harris Draw-A-Person Test	326	37.0	48.9	53.5	41.0
Myers-Briggs Type Indicator	318	36.0	65.9	27.5	54.7
High School Personality Questionnaire (HSPQ) [a]	311	35.3	35.2	72.3	58.8
Senior Aptitude Tests (SAT) [a]	305	34.6	48.4	69.6	63.2
Jung Personality Questionnaire (JPQ) [a]	302	34.3	51.8	48.4	56.8
South African Wechsler Adult Intelligence Scale (SAWAIS)[a]	291	29.9	39.9	71.5	58.6
Rorschach cards	275	31.2	48.4	33.9	39.4
Children's Apperception Test (human figures – CAT H)	268	30.4	44.3	50.7	35.7
Self-Directed Search Questionnaire (SDS) [a]	241	27.4	44.4	56.1	48.2
IPAT Anxiety Scale[a]	224	25.2	29.6	49.5	42.7
Developmental Test of Visual-Motor Integration (Beery)	208	23.5	56.9	41.4	42.9
Aptitude Tests for School Beginners[a]	187	21.2	46.8	67.1	59.5
Children's Apperception Test – Supplement (CAT –S)	175	19.9	41.1	50.3	37.7

[a] Test develop or adapted for use in South Africa by the HSRC

Table 2.17 reveals that tests that tap personality and emotional functioning (objective and projective), intellectual functioning, interests, aptitude, and visual-motor functioning are the most widely used types of tests. The most popular tests listed in Table 2.17 span all age groups, from children to adults. The list of popular tests provides much food for thought. Of concern is that:

- None of the tests have been either developed or adapted within a multicultural context.
- Some of the tests (e.g., the Bender and the Beery VMI) have been imported from overseas and full-scale national normative studies have never been undertaken so as to provide practitioners with appropriate norms.
- Some of the tests developed in South Africa are old and were only developed for certain groups of South Africans (e.g., SSAIS-R, JSAIS, 19 Field Interest Inventory, SAT).

- The SAT has been replaced by the more up-to-date Differential Aptitude Tests (DAT), yet the SAT is still very popular.
- Research on the 16PF, the most popular test identified in the survey, has yielded conflicting results regarding whether or not it is a culturally biased measure. Van Eeden and Prinsloo (1997) found that the factor structures for African language and English- or Afrikaans-speaking groups were essentially similar. However, they cautioned that cultural and gender-specific trends should be taken into account when interpreting the 16PF results. Conversely, Abrahams and Mauer (1999) found that the factor structures of Black and White groups differed and they thus queried the cross-cultural use of the measure. However, Prinsloo and Ebershön (2002) criticised the methodology used by Abrahams and Mauer (1999) and reiterated the fact that the scores on the 16PF needed to be differentially interpreted across cultures. Until there is greater clarity whether the 16PF is culturally biased or not, it should thus be used with caution.

It is also clear from Table 2.17 that:

- Eleven of the top twenty tests (i.e., 55%) were originally developed or adapted for use in South Africa by the HSRC. The fact that practitioners are still predominantly using tests developed by the HSRC attests to the dominant role that the HSRC has played as a central test development agency in South Africa.
- Despite the fact that practitioners frequently use the tests listed above, only about half of them on average rate these tests as being very useful.
- Of the five most popular tests, about a third of the practitioners indicated that four of them required revision.
- Few practitioners have local validity and reliability information on the frequently used tests.

A further in-depth analysis was undertaken to explore the specific tests that the practitioners in the various registration categories are using. This was done so as to compare and contrast the patterns of test use for practitioners in the various categories. The resultant information is provided in the following six tables, Table 2.18 to Table 2.22.

Table 2.18

The top ten tests that are being used by clinical psychologists

Rank	Name of test	Frequency	% of clinical psychologists
1	TAT cards (Murray)	145	60.9
2	Bender Visual Motor Gestalt Test	144	60.5
3	Senior South African Individual Scale – Revised[a]	126	52.9
4	16 Personality Factor Inventory SA 92 (16PF) [a]	123	51.7
5	Junior South African Individual Scales (JSAIS) [a]	107	44.9
6	Children's Apperception Test (CAT)	90	37.8
7	Rorschach cards	88	36.9
8	19 Field Interest Inventory (19 FII) [a]	87	36.6
9	Minnesota Multiphasic Personality Inventory	81	34.0
10	Good Enough-Harris Drawing Test	81	34.0

[a] Test develop or adapted for use in South Africa by the HSRC

Table 2.19

The top ten tests that are being used by counselling psychologists

Rank	Name of test	Frequency	% of counselling psychologists
1	16 Personality Factor Inventory SA 92 (16 PF) [a]	130	70.2
2	19 Field Interest Inventory (19 FII) [a]	117	63.2
3	Senior South African Individual Scale – Revised[a]	116	62.7
4	Bender Visual Motor Gestalt Test	112	60.5
5	Junior South African Individual Scales (JSAIS) [a]	100	54.1
6	High School Personality Questionnaire (HSPQ) [a]	88	47.6
7	Jung Personality Questionnaire (JPQ) [a]	88	47.6
8	TAT cards (Murray)	86	46.5
9	South African Wechsler Adult Intelligence Scale[a]	80	43.2
10	Senior Aptitude Tests (SAT) [a]	76	41.1

[a] Test develop or adapted for use in South Africa by the HSRC

Table 2.20

The top ten tests that are being used by industrial psychologists

Rank	Name of test	Frequency	% of industrial psychologists
1	16 Personality Factor Inventory SA 92 (16PF) [a]	88	70.4
2	Myers-Briggs Type Indicator	82	65.6
3	19 Field Interest Inventory (19 FII) [a]	64	51.2
4	Occupational Personality Questionnaire (OPQ)	53	42.4
5	Senior Aptitude Tests (SAT) [a]	41	32.8
6	Self-Directed Search Questionnaire (SDS) [a]	40	32.0
7	Jung Personality Questionnaire (JPQ) [a]	37	29.6
8	Ravens Progressive Matrices (RPM)	31	24.8
9	Fifteen Factor Questionnaire Plus (15FQP+)	31	24.8
10	South African Wechsler Adult Intelligence Scale[a] High Level Battery (B/75)[a]	30	24.0

[a] Test develop or adapted for use in South Africa by the HSRC

Table 2.21

The top ten tests that are being used by educational psychologists

Rank	Name of test	Frequency	% of educational psychologists
1	Senior South African Individual Scale – Revised[a]	194	88.6
2	Junior South African Individual Scales (JSAIS) [a]	177	80.8
3	Bender Visual Motor Gestalt Test	177	80.8
4	Children's Apperception Test (CAT)	149	68.0
5	19 Field Interest Inventory (19 FII) [a]	138	63.0
6	16 Personality Factor Inventory SA 92 (16PF) [a]	136	62.1
7	Goodenough-Harris Drawing Test	133	60.7
8	TAT cards (Murray)	130	59.4
9	High School Personality Questionnaire (HSPQ) [a]	130	59.4
10	Children's Apperception Test – Human Figures	120	54.8

[a] Test develop or adapted for use in South Africa by the HSRC

Table 2.22

Top ten tests that are being used by research psychologists

Rank	Name of test	Frequency	% of research psychologists
1	16 Personality Factor Inventory SA 92 (16PF) [a]	19	57.6
2	Senior South African Individual Scale – Revised[a]	15	45.5
3	19 Field Interest Inventory (19 FII) [a]	14	42.4
4	South African Wechsler Adult Intelligence Scale[a]	13	39.4
5	TAT cards (Murray)	12	36.4
6	Ravens Progressive Matrices (RPM)	10	30.3
7	Wechsler Adult Intelligence Scale[a]	9	27.3
8	Self-Directed Search Questionnaire (SDS) [a]	9	27.3
9	Minnesota Multiphasic Personality Inventory (MMPI) [a]	9	27.3
10	Bender Visual Motor Gestalt Test	9	27.3

[a] Test develop or adapted for use in South Africa by the HSRC

Table 2.23

Top ten tests that are being used by Psychometrists

Rank	Name of test	Frequency	% of psychometrists
1	16 Personality Factor Inventory SA 92 (16 PF) [a]	85	65.9
2	19 Field Interest Inventory (19 FII) [a]	68	53.5
3	Myers-Briggs Type Indicator	59	45.7
4	Senior South African Individual Scale – Revised (SSAIS-R) [a]	54	41.9
5	Bender Visual Motor Gestalt Test	45	34.9
6	Senior Aptitude Tests (SAT) [a]	41	31.8
7	Junior South African Individual Scales (JSAIS) [a]	41	31.8
8	Self-Directed Search Questionnaire (SDS) [a]	40	31.0
9	Jung Personality Questionnaire (JPQ) [a]	39	30.2
10	South African Wechsler Adult Intelligence Scale[a]	38	29.5

[a] Test develop or adapted for use in South Africa by the HSRC

From the above tables it can be deduced that there is a reasonable degree of similarity among the test use patterns of clinical, counselling, and educational psychologists. The pattern of test use for the industrial psychologists, however, is somewhat different. Although tests such as the 16 Personality Factor Inventory, the South African Wechsler Intelligence Scales, and the 19 Field Interest Inventory are also commonly used by industrial psychologists, the Occupational Personality Questionnaire and the Fifteen Personality Questionnaire Plus, the Raven's Progressive Matrices, and the High Level Battery appear only on the top 10 list for the industrial psychologists. There is some overlap between the tests that research psychologists are using and those that are

being used by practitioners in other registration categories. Presumably, the fact that a diagnostic test such as the Minnesota Multiphasic Personality Inventory features on the research psychologists' top 10 list is linked to the fact that they use the MMPI for research as opposed to diagnostic purposes.

The other observation that can be made regarding the test use patterns of practitioners in the various registration categories relates to the test agency that developed the top ten tests used per registration category. Generally speaking, practitioners tend to predominantly use tests that were developed or adapted for use in South Africa by the HSRC. Eighty percent of the top ten tests used frequently by counselling psychologists and psychometrists, and 70% of the top ten tests used by research psychologists were developed by the HSRC. Of the tests that industrial psychologists frequently use, 64% were developed by the HSRC. However, in comparison to practitioners in other registration categories, educational and clinical psychologists tend to use fewer tests developed by the HSRC. Half (50%) of the top ten tests used by educational psychologists were developed by the HSRC whereas only 40% of the top ten tests used by clinical psychologists were developed by the HSRC. While the HSRC tests remain popular, they clearly do not feature as strongly for practitioners in some registration categories. This could be associated with the fact that the HSRC tests do not cover all the constructs that practitioners need to measure, as will be highlighted in a later section of this chapter where the needs of practitioners is discussed. Furthermore, even although many practitioners use tests developed by the HSRC, they expressed concerns about many of these tests. Information in this regard will be provided later in this chapter as well as in Chapters 3 and 4.

Additional tests used

Practitioners were also asked to name the tests that they use but which do not appear on the list of tests classified by the HPCSA. As this was an open-ended question, not all practitioners responded and only 311 practitioners responded in total to this question. The information in Table 2.24 highlights only some of the tests that were mentioned more frequently by the practitioners. Readers should note that all these tests are international tests and have not necessarily been normed or adapted for the South African context. The additional tests along with the tests that have been registered with the HPCSA have been consolidated into one list to provide the reader with an overview of the tests used by South African practitioners. The consolidated list of tests can be found in Appendix C.

Table 2.24

Additional tests that practitioners have identified that they frequently use in their work

Test name	Frequency of test use	Percentage of practitioners using the test	Test is very useful % of cases	Test needs revising. % of cases	Practitioner has info on reliability & validity of the test. % of cases
Griffiths Scales of Mental development	40	4.5	4.0	2	2.8
Kinetic Family Drawing	38	4.3	3.2	1.2	1.1
Neale Analysis of Reading	27	3.1	1.9	2.0	0.7
Rotter incomplete Sentences	28	3.2	2.2	1.2	0.5
Rey Complex Figure Test	28	3.2	2.7	0.8	0.5
Rey Auditory Verbal Learning test	21	2.4	1.9	0.8	0.2
Beck's Depression Inventory	21	2.4	1.8	1.0	0.8
Millon Clinical Multiaxial Inventory	37	4.2	3.3	1.8	1.1
Bene Anthony (family relations)	37	4.2	3.2	1.9	1.0
Trail making test	15	1.7	1.1	0.5	0.7
Schonell Spelling Test	15	1.7	1.2	0.7	0.3

It is important to note that the percentages in table 2.24 are low because they were determined by dividing the response frequency by the number of practitioners in the total sample (N=881). This was done to provide a way of comparing and contrasting the use of the additional tests with the test use percentages reflected in Table 2.17. It is further interesting to note that the practitioners indicated that the additional tests listed above do not really need revising, yet they indicated that they do not have local norms, and reliability or validity information is very often not available for these tests.

Needs of psychological practitioners

Practitioners were asked to comment or make suggestions concerning their needs related to the tests that they are currently using. Only 225 practitioners gave additional information and suggestions, which represents 25.5 % of the practitioners surveyed. Of this proportion of practitioners, 51 % stated that tests are generally outdated and need revising. Ten percent stated that tests are outdated in terms of world of work. The 19 Field Interest Inventory is an example of such a test, yet it was one of the most frequently used tests. Careers in information technology (IT) and computer technology are not tapped and outdated equipment such as telex machines are still included in the items, yet most young people do not know what this is. In some instances only some parts of tests are outdated and need to be revised, such as the language (words and phrases) used. Examples of such tests include the Senior Aptitude test (SAT), Senior South

African Individual Scale – Revised, and the Junior Aptitude Test. Thirteen percent of the practitioners have stressed a need for culturally unbiased tests. There was some positive feedback about the Goodenough Harris Drawing Test and the Junior South African Individual Scale being very useful tests. Table 2.25 summarises some of the comments made by the practitioners.

Table 2.25

Comments and suggestions related to psychological test needs

Nature of the comments	Frequency	% of cases
Outdated – need revising	124	55.1
SA norms have to be provided, (cross-culturally relevant)	66	29.3
Useful	67	29.8
Some parts of tests need revising	48	21.3
Language in test need revising	45	20.0
Need culturally unbiased tests for cross cultural purposes	30	13.3
Need more information on tests (validity, norms & reliability)	26	11.6
Training required	25	11.1
Outdated for world of work	24	10.7
Tests are too expensive	17	7.6
International norms are not relevant for South African context	15	6.7
Tests are standardized for middle class Western men	15	6.7

Other than commenting that they need unbiased tests that can be used in cross-cultural contexts, practitioners also pointed out that they needed relevant, South African norms for tests. In addition, practitioners identified a need for further training and commented on the fact that tests have become too expensive.

When prompted to identify some aspect of human functioning that they would like to measure for which they cannot find a suitable test, 181 (21%) of the practitioners responded to this challenge. Practitioners expressed a need for tests that tap scholastic performance and emotional intelligence, as well as tests that can be used with conditions such as Attention Deficit Hyperactivity Disorder (ADHD), child anxiety and child depression. A more complete list of the suggestions can be found in Table 2.26.

Table 2.26

Aspects of human functioning that practitioners would like to assess

Additional constructs requiring coverage	Frequency	Percentage of total sample
Scholastic test	26	13.9
Emotional IQ	16	8.6
ADHD in children	12	6.4
Child anxiety, depression	12	6.4
Child custody – parenting style	9	4.8
Depression	8	4.3
IQ cross cultural	8	4.3
Integrity	8	4.3
Neuropsychological	8	4.3
School readiness	7	3.7
Post traumatic stress disorder	7	3.7
Psychopathology	6	3.2
Learning potential (cross cultural)	6	3.2
Anxiety in adults	6	3.2
Aptitude/ potential	6	3.2

Test development and whether there is a need for a central test agency in South Africa

Practitioners were given three options with respect to how psychological test development and the standardization of tests in South Africa could be undertaken. Table 2.27 shows the responses of the practitioners to these options.

Table 2.27

How should psychological test development and standardisation be undertaken in South Africa?

Options	Least preferred % of cases	Preferred % of cases	Most preferred % of cases	Non-response
Central government subsidised body developing test	32.1	31.9	19.5	16.5
Central government subsidised body determining priorities and subcontracting the development of tests to academics and other qualified persons	19.4	23.4	**42.2**	15.0
Development and standardization should be left to private practice	35.0	25.7	23.6	15.6

The least preferred option for 32% of practitioners was a purely government subsidised agency that would undertake the development and standardisation of psychological tests in South Africa. Likewise, 35% of the practitioners least preferred the option of leaving the development of tests solely to private enterprise. Forty-two percent of practitioners strongly preferred, and 23% preferred

the option of a central government subsidised body, which determines priorities and subcontracts the development of tests to academics and other qualified professionals. The implication of this is that the central agency will not necessarily develop and standardise tests in South Africa, but they will oversee and coordinate the development and standardisation of tests and the regular updating of tests, and they could provide a central information service to provide practitioners with information concerning tests. Only 19% of the practitioners perceived the option of having a central government subsidised body, which oversees test development and subcontracts development work to qualified professionals as being their least preferred option. This option thus emerged as the one that practitioners supported most.

The issue of a central test agency was explored further by asking the practitioners the question "Should there be a central agency developing and standardising psychological tests in South Africa?" Eighty nine percent of the surveyed practitioners answered that there should be a central agency. The duties and functions of this agency would include developing psychological tests. An outline of the perceived functions of the central test agency is provided in Table 2.28.

Table 2.28

Functions of a central test agency

Function	Frequency	Rank
Regularly update their tests	787	1
Publish research findings of tests	783	2
Run CPD course to update the psychometric knowledge of practitioners	779	3
Run CPD training courses on tests that the central agency has developed	749	4
Develop psychological tests	747	5
Develop more tests that cater for the linguistic diversity in S.A	708	6
Adapt overseas psychological tests	694	7
Develop more computer-based tests	596	8
Adapt South African psychological tests	542	9
Commission the development and standardization of tests rather than develop tests themselves	474	10

When asked who should fund the central agency, most practitioners (63 %) favoured a combination of state funding, private enterprise and self-funding. Fifty four percent of practitioners thought that the government should subsidise the central test agency, whereas sixty three percent of practitioners thought that the central agency should be funded by a combination of government subsidy, self-generated funds, and funding from the private sector. Very few practitioners supported the idea that the central agency should be a solely private enterprise or a self-funded agency. Some practitioners also suggested that a portion of the funds from members' contributions to the HPCSA and levies from test publishers and agencies could be used to fund the central agency.

SECTION 3:
SUMMARY AND CONCLUDING REMARKS

The test use patterns and needs of the practitioners were explored and identified in a national survey. Despite efforts to survey all practitioners, a relatively small sample of the total population of psychological practitioners responded by completing and returning the questionnaire (N=881, response rate = 13%). The gender distribution of the sample (males = 33.9%, females = 64.4%) as well as the number of respondents in each of the professional registration categories was reflective of the national distribution of these characteristics among psychologists. Thus, while the survey sample was not necessarily representative it was sufficiently reflective of the pertinent characteristics of South African psychologists. This permitted some tentative generalizations to be made from the results. Furthermore, these findings will be triangulated with the findings of the two qualitative studies presented in Chapters 3 and 4 and will be discussed in Chapter 5. If the survey findings are corroborated by the findings of the qualitative studies, the trustworthiness of the survey results will be further enhanced.

Some of the **key findings** are as follows:

- The home languages of the clients varied although English and Afrikaans were the dominant home languages of the clients, with Zulu and Xhosa being the dominant African languages spoken by clients. However, the most common languages used by practitioners to communicate with their clients were English and Afrikaans with a small percentage of African languages being used. The implications of testing a client in a language in which he/she is not proficient poses a serious threat to fair testing practices.

- Tests are being used fairly extensively in applied practice by practitioners in all the different registration categories. It appears that tests are frequently used to assess intellectual and personality functioning, career development, and potential. The use of tests for research purposes and research into the properties of tests seems to lag behind the applied use of tests. The Employment Equity Act, however, seems to have prompted industrial psychologists to conduct more research related to the tests that they use.

- Educational psychologists appear to use tests more frequently and for a greater variety of purposes than practitioners from the other registration categories.

- The scope of practice of practitioners in the various registration categories does not seem to be clearly defined when it comes to the purposes for which tests are used. For example, is testing for employment selection normally part of the scope of practice of an educational psychologist?

Likewise, are industrial psychologists trained to perform child custody assessments? Research psychologists also seem to use tests for varied applied and even diagnostic purposes, which does not fall into their normal scope of practice. Psychometrists also appear to be involved in specialized testing (neuropsychological and forensic), which is something that the Professional Board has clearly not permitted them to do. This key finding brings the issue of an urgent need for a clearer delineation of the scope of practice of the various registration categories into the spotlight. It also has implications for the training of practitioners. Training programmes need to provide trainee practitioners with learning opportunities related to the tests and the purposes for which they will use these tests in practice. Given the fact that practitioners in all the registration categories seem to be using tests for similar purposes, the question could be posed as to whether they have been sufficiently trained in such a broad range of tests and test use purposes.

- The 20 most frequently used tests were identified for the sample as a whole and the 10 most frequently used tests per registration category were also identified. All the lists included tests that tap intelligence, personality and interests. Further probing into which tests are most commonly used by the practitioners in different registration categories, showed that all practitioners are using the 16- Personality Factor questionnaire, which needs to be differentially interpreted for various cultural groups as the research has not clearly established whether or not it is culturally biased, and the 19 Field Interest Inventory, which is very outdated. There was a reasonable degree of similarity among the test use patterns of clinical, counselling, and educational psychologists. The pattern of test use for the industrial psychologists, however, is somewhat different. The test use pattern for research psychologists bore some resemblance to that of other registration categories.

- Most of the frequently used tests were originally developed or adapted for use in South Africa by the HSRC.

- Most of the tests used by practitioners were identified as in need of revision to a lesser or greater extent. Some of the reasons why the tests needed to be revised were linked to the language used, the outdated nature of the test and item content and norms, the cultural appropriateness of the test content and norms, and the fact that the tests were no longer appropriately aligned with career trends in the world of work.

- Besides the tests that appear on the list of tests classified by the Professional Board, practitioners are using tests that have not been classified by HPCSA. Most of these tests have been developed in other countries and it is hoped that practitioners have local psychometric and normative information available on the tests and that the tests have been adapted for the

South African context. If not, then this poses a serious threat to fair testing practices.

- Practitioners identified certain gaps in the provision of tests. For example, practitioners need tests that tap scholastic performance and emotional intelligence, and that can be used to identify ADHD, child anxiety and depression.

- Practitioners expressed a need for more cross-culturally appropriate tests as few of the tests that they are currently using are appropriate to use in diverse cultural settings. Practitioners also expressed a need for more training with regards to the adaptation, application, and interpretation of tests for cross-cultural purposes. Training programmes and CPD providers need to take note of the latter need expressed by the practitioners.

- In general, practitioners expressed a need for further training with regard to the psychometric properties of tests and fair test use. This could be addressed in CPD workshops, but this finding also raises questions about the current status of the psychometric training that is included in professional programmes. It may be necessary to conduct an audit of the psychometric components of professional programmes and to set minimum training standards.

- As regards the future of test development in South Africa, practitioners generally prefer that a centralised agency should be established, subsidised by the government. Such an agency would determine test development priorities, coordinate and oversee test development and revision (updating), but would subcontract the development of tests to other qualified persons. The central agency could provide an information service to practitioners and could run CPD workshops. If a central agency were to be established, most practitioners felt that it should be partly subsidised by the government and funded by the private sector, and generate it's own funding as well.

Some of these key findings surface again, in greater depth, when the qualitative results are presented in Chapters 3 and 4. Not only will the test use patterns and the needs of practitioners be confirmed, but the issue of a central test agency and the role of the HSRC in test development will come more sharply into the spotlight. Furthermore, the need for a watchdog body to control and monitor the use of tests as well as the role of the Professional Board are also highlighted in subsequent chapters.

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CHAPTER 3

Test Use and Needs: Themes Emerging from Focus Group Discussions

CHAPTER OVERVIEW

This chapter reports on the information that was obtained from the psychological assessment practitioners who participated in focus group interviews. In the first section, the use of focus groups in research is considered and thereafter the specific methodology employed in this part of the larger project is unpacked. In the second section, the themes and sub-themes that emerged when the data were analyzed are presented. In section 3, concluding remarks are made and the next chapter is introduced.

SECTION 1:
FOCUS GROUPS: USE IN RESEARCH AND METHODOLOGY EMPLOYED

Background to Focus Groups as a Qualitative Research Method

According to Krueger (1994), focus groups are designed mainly to obtain people's opinions and not to determine the exact strength of their opinions and perceptions. For example, focus groups may have the wrong perception of the relationship between IQ and aptitude. Focus groups also do not generate quantitative information and therefore the results of the focus group survey on its own can neither be generalized nor projected to a larger population.

The aim in using focus groups in the present project was to obtain rich data from practitioners that could be integrated with the results of the mail survey and individual interviews with stakeholders, which in turn would enrich as well as enhance the trustworthiness and validity of the findings of the overall project. The questions posed by facilitators served to guide the discussions and were not followed in a rigid and inflexible manner. The focus groups appeared to be well received as there was enough flexibility in the discussions to allow each participating psychology practitioner to express his/her opinion and perception on relevant issues.

The participants/practitioners[1] in the focus groups produced qualitative data focused on the aims of the research project. Dhunpath (2003) highlights the difference between producing data rather than "gathering" or "collecting" data. He emphasizes that "data" is not "out there" waiting to be "gathered" or "collected", or for that matter "discovered", but rather produced and constructed through the activities of researchers and practitioners.

For this report, the information from the focus groups was analyzed to gain some insight into the personal opinions and perceptions of psychological assessment practitioners. The practitioners indicated which psychological tests they currently (i.e., at the time of this research project and focus groups) used, and which tests required adaptation or updating for the new, multicultural South African context. Information on which additional tests were required for practice and for training-related purposes was also obtained. The method of organizing and conducting the focus groups is discussed next.

METHODOLOGY

Description of the study

The focus group networking commenced at the 9th Annual Conference of the Psychological Society of South Africa (PsySSA) held from 24 to 26 September 2003 at Caesar's Palace Conference Centre, Johannesburg. Contacts made by the researcher were followed up by visits to Cape Town, Durban, Bloemfontein and Johannesburg so as to sample practitioners from various geographic areas across the country.

Seventeen focus group discussions were facilitated by 17 facilitators. A total of 141 psychologists participated in the 17 different groups. Consistent with the approach suggested by Krueger (1994), the researcher and facilitator saw to it that each group was small enough for everyone to have the opportunity to share insights, and yet large enough to provide diversity of perceptions. In an attempt to ensure balance, small groups of psychologists who gathered monthly for accredited continuous professional development (CPD) discussions were also included. The procedure and sequence of steps followed in conducting the focus group study are described below.

[1] The terms psychological practitioner, participant, and psychologist either in singular or plural form, all refer to respondents in this study.

Preparing for focus group discussions

1. Questions for discussion

The first step in the process was to decide on a set of questions for discussion. The questions were partly prompted by the questions posed in the survey questionnaire, in order to enrich the quantitative information obtained from the survey. Eight questions were duly formulated to use as a guideline, namely:

1. To what extent and for what purposes do you use psychological tests?
2. Do you find that your use of psychological tests adds value to the professional services that you render as a psychology practitioner?
3. Which tests do you use most frequently? (Identify three to five types of tests, and/or add other tests that you use).
4. If you think critically about the tests that you use most frequently, what are their main strengths and limitations?
5. What are your most important needs related to psychological test usage?
6. How do you see the quality of psychological tests in South Africa?
7. How can the needs that you have identified be addressed?
8. Who should take responsibility for addressing the psychological testing needs of practitioners?

2. Selecting facilitators

Facilitators were selected on the basis of their familiarity with participants in the group or the particular work environment (e.g., university psychology department). All the facilitators were registered psychologists, either in private practice or lecturing at universities. This was to ensure objectivity and greater validity of the results. Facilitators invited psychology practitioners to participate in the group discussion on a specified date. The invitation was to meet for a discussion of an hour. The contact person also acted as the facilitator, organized the venue, invited the participants, and facilitated the discussions. The researcher's activities included taking notes and observing the group, and all the notes were captured electronically afterwards.

Participants

Registered psychologists participated in a purposively selected sample. To be included in a focus group discussion, practitioners had to share equivalent criteria. They had to be registered with the Health Professions Council of South Africa (HPCSA) as well as work in private practice or be appointed as lecturers at universities or be doing internships in

psychology. Focus groups were set up in Pretoria, Johannesburg, Bloemfontein, Durban and Cape Town. In total, 141 participants participated in the 17 focus groups. Table 3.1 provides information on the groups as well as the participants.

Table 3.1

Background information on the different groups

Groups		Number of participants	Description of group	Description of participants
1	**A**	10	CPD Group	Psychologists from clinical, counselling, educational and research categories.
2	**B**	5	University 1 Industrial Psychology	Department of Industrial Psychology: Participants were interns or registered industrial psychologists who were lecturers.
3	**C**	9	CPD Group	Participants included psychologists from clinical, counselling, educational and research categories.
4	**D**	4	Private practitioners	Registered clinical and educational psychologists in private practice.
5	**E**	13	University 2	Participants included registered psychologists from a psychology guidance centre and the departments of psychology, educational psychology, and industrial psychology.
6	**F**	12	University 3 (a)	Participants included registered psychologists from a psychology guidance centre and the departments of psychology, educational psychology, and industrial psychology involved in training psychology students.
7	**G**	10	University 3 (b)	Participants included registered psychologists from a psychology guidance centre as well as from the departments of psychology, educational psychology, and industrial psychology.
8	**H**	5	Practitioners from different categories	Participants included an industrial and an educational psychologist, and a psychologist from a psychiatric clinic.
9	**I**	14	University 4	Participants included psychologists from a psychology guidance centre as well as the departments of educational and industrial psychology.
10	**J**	5	Technikon 1	Participants included counselling, educational and research psychologists.
11	**K**	5	Technikon 2	Participants included counselling, educational and research psychologists.
12	**L**	12	CPD Group	Participants included psychologists from clinical, counselling, educational and research categories.
13	**M**	6	University 2 Dept for continuous Ed and training	Participants included educational psychologists who were also lecturers.
14	**N**	5	University 5 Student Services	Participants included clinical, educational and counselling psychologists and interns.
15	**O**	12	Psychiatric Hospital	Clinical psychologists and intern psychologists.
16	**P**	8	University 5	Educational psychologists/lecturers.
17	**Q**	6	CPD group	Different categories of psychologists all mainly performing neuropsychological assessment.

In Table 3.1 the different universities are indicated by a number, and where more than one group from a university participated, the number is followed by the letter (a) or (b). The

groups included psychologists from university training institutes, Continuous Professional Development groups, and groups of private practitioners. Psychologists of different ages and all cultural groups participated in the different focus groups. Most of the focus groups consisted of six to nine participants. In five instances the groups included more than ten participants.

Procedure

Upon arrival for the group discussions, the facilitator and participants were briefed. Each participant received a letter with background information on the project, including a consent form as well as a list of the questions. The participants were requested to sign the consent form to indicate that they gave permission that the information they provided could be used for the research project. They were also reassured that participation was confidential and that their names would not be mentioned in the research report. Signing the form of consent served as proof that a psychologist had participated in the group and that the group discussions took place on a certain day and time. Furthermore, if audio and/or video tapes were used as back-up, permission was given by all participants.

Research activities included taking notes and observing the participants in the group. For back-up purposes audiotapes and videotapes were used. To verify information, discussions were followed up by phone calls and/or electronic mail.

Although the process of facilitation progressed as planned, some limitations related to planning the focus groups, recruitment and research expertise need to be acknowledged, and are discussed in the next section.

Limitations

Recruitment limitations

- Focus groups of one hour in duration were arranged to suit practitioners, but more detailed information could have been obtained had more than one hour been set aside.
- Not all groups included psychologists of all cultural groups.
- The time of the year (end and beginning) when the groups were conducted posed some difficulties. Lecturers were involved in examinations at the end of the year, and in the beginning of the year they planned and prepared for the reception of first year students.

- Lack of available time on the part of private psychologists prevented some of them being able to attend a group discussion.
- Some CPD groups did not want to deviate from their planned programme and were neither able to arrange an additional date for a focus group nor persuade participants to stay for an additional hour after the CPD group for the focus group.
- Dates for two groups clashed and one of the groups could not arrange another time.

Due to the limitations listed above, of the 28 groups initially recruited, only 17 focus group discussions took place and 11 of the recruited groups did not materialise as anticipated.

Project limitations

- More CPD groups could have been arranged, but the budget limited the incentives available for facilitators.
- Networking could have started earlier, but the time taken for the project to be approved prevented this.

Research expertise

- More prompting by some of the facilitators could have resulted in richer information being gathered at times.
- Limited experience by the researcher in using focus groups as a qualitative method could have influenced the research activities to some extent.

Data Analysis

The information obtained from each group was transcribed and typed up by the researcher and uncertainties were clarified with group members telephonically or via electronic mail. The document from each group was then merged into one large document. The information was then grouped per question. Since discussions tended to overlap, some of the questions were grouped together. From the analysis of the text per question, ideas and themes were grouped and are documented later in this chapter. Two tables were compiled, namely, a list of all measures standardized for or classified for use in South Africa and a second list with all the international tests mentioned during discussions. Needs were listed and sorted according to the themes as reflected in this chapter. The same approach was used to identify strengths and weaknesses, and suggestions for a new agenda. Quotations were added to enrich and elaborate on the themes and sub-themes as necessary. The quotations are included verbatim in Section 2 of this chapter and have not been edited to improve their

linguistic accuracy. To maintain objectivity, the researcher did not review the results from the survey questionnaires and individual interviews, until the data from the focus groups had been analyzed and the findings of the larger project were integrated.

The themes and ideas that emerged are discussed in the following section. The themes and sub-themes were partly identified according to respondent discussions around the questions, and partly from information repeated in discussions across the groups.

SECTION 2:
THEMES AND SUB-THEMES

The following main themes were extracted from the focus group information:

Table 3.2

Summary of Themes and Sub-themes

Themes	Sub-themes
Tests add value if certain conditions are met	• The use of tests is central to the work of psychologists and provides structure • The value of tests depends on the practitioner • Tests help to establish baseline information • Tests add value if they are used in a culture-fair and ethical way • Tests add value if they are psychometrically sound • Outdated and culturally inappropriate tests and norms limit the value of tests • Tests are not used by all practitioners
Tests are used for various purposes	• Purposes of test use: Clinical psychologists • Purposes of test use: Educational psychologists • Purposes of test use: Industrial psychologists • Test use by Psychologists who are trainers and/or researchers • Test use by Psychologists in private practice
The use of tests in various applied settings	• The use of tests in industry • The use of tests in psychiatric hospitals • The use of tests for school readiness assessment • The use of tests in career assessment • The importance of following good practices in the choice of tests
The tests used by psychologists	• Tests for children • Tests of intellectual ability and aptitude • Objective personality tests • Projective techniques • Interest inventories and tests used in career counselling • Computerized tests • The basis on which practitioners choose tests
Issues related to test development and revision	• The importance of developing quality tests and constantly revising them • Tests need to be developed/revised to keep pace with changing contexts • Addressing culture in test development/revision • Addressing language issues in test development/revision • Establishing varied and culturally appropriate norms • The need for shorter tests (time factor) • Information on tests and their revision • Erosion of test development expertise • Cost of tests, quality of test materials, and service delivery

Themes	Sub-themes
Test-related needs	• Intellectual ability and aptitude • Personality • Interests • Children • Scholastic and school readiness • Forensic purposes/law • Alternative assessment methodologies • Tests for special needs groups
Role players and their responsibilities towards test development and use	• The role of an independent body • The role of the Professional Board for Psychology of the HPCSA • The role of the Psychological Society of South Africa (PsySSA) • The role of the Human Sciences Research Council (HSRC) • The role of universities

The main themes and the sub-themes of which they are comprised are discussed in detail below.

Theme 1: Tests add value if certain conditions are met

The majority of practitioners generally expressed the view that tests add value but only if certain conditions are met. These conditions will become clearer in the sub-themes presented below. A minority of practitioners did not use tests at all. Although this was a minority trend, this sub-theme is also addressed below.

Sub-theme 1.1: The use of tests is central to the work of psychologists and provides structure

Tests were seen as adding value to the quality of the service provided by psychologists and some practitioners felt that the use of tests is regaining popularity.

> Quote:
>
> *"The use of tests does add value to the quality of service, especially in clinical and forensic work. There is a move back to tests, and we know that many practitioners make use of foreign tests."* Participant: Group O.

> Quote:
>
> *"Psychologists cannot go without the use of tests. Observation and interviews are not sufficient; we also use tests for diagnostic purposes. Test information assists me in planning intervention."* Participant: Group N.

> Quote:
> *"A teacher will for example insist that the child has an intellectual problem or language problem, and often it is a psychological (emotional) problem. To use tests is an adjunct in our clinical neuropsychology work. Test results give us some idea about the individual."* Participant: Group Q.

The facilitator in a particular group asked:

> *"Can we work without tests?"* and the reply was: *"Definitely not, because individuals need structure, so tests are central in their work."* Participant: Group P.

The use of tests was thus considered by the participants to be central to the work of psychology practitioners. When practitioners use tests therapeutically their value lies in the fact that they provide "structure" for a session. When the psychologist maps out the test session for the client, the client can relax as he/she knows what to expect. The information obtained from a test battery can help both the practitioner and client to understand a presenting issue or to view a problem from a certain perspective. Since tests give information in an ordered way, the practitioner will in turn use that order in his/her feedback to the client on the test results. The view was also expressed that having test results available helps practitioners to write more objective reports.

> Quote:
>
> *"Tests helps me to get information on the emotional situation of my client. I also use tests therapeutically and in report writing when I have to include findings of tests. At times I have also used group tests, to observe how learners perform in the test situation."* Participant: Group Q.

> Quote:
>
> *"Using tests gives some objectivity in the writing of a report."* Participant: Group O.

Sub-theme 1.2: The value of tests depends on the practitioner

The value of tests depends on the practitioner and how well he/she uses the tests. The participating psychologists emphasized that tests are merely tools and not the *alpha and omega* in their service to clients. Participants in one of the focus groups expressed concern at the abuse of psychological tests by poorly trained psychologists. Psychological assessment was experienced negatively because of the inadequate training of psychologists**.**

Sub-theme 1.3: Tests help to establish baseline information

Since psychologists need to establish a baseline of their clients' functioning, tests also have practical value. A participant explained the value of tests in the specialized field of neuropsychology as follows:

> Quote:
>
> *"Tests and practitioners are linked. We have a clinical experience and the scores have not the most important value; we depend on tests for psychological and qualitative information. To compile baseline information we have to use tests together with psychological observation, especially if there is deterioration."* Participant: Group P.

Sub-theme 1.4: Tests add value if they are used in a culture-fair and ethical way

Tests add value if the prerequisite is met that psychologists use tests in a culture-fair way for the benefit of the client.

Quote:

"There is a difference in the responses of different culture groups. Psychometric research should focus on culture fairness and the differences in item functioning, e.g. mathematics. One cannot just accept scores; one must analyze and find reasons for differences in responses. So tests add value when they are culture fair and used to the benefit of a client or student." Participant: Group G.

This prerequisite stems both from the need for practitioners to employ fair, ethical assessment practices as well as from policy documents and laws pertaining to the use of tests and the standards to which tests and test use should adhere. The following quote from a participant captures this well:

Quote:

"Provinces interpret OBE different, and present policies related to the use of tests require culture fairness. There are laws in place that makes the use of tests difficult." Participant: Group I.

It was emphasized that because many tests could not be used across cultures some practitioners were moving away from using only tests in assessment and were incorporating other approaches as well. However, tests still serve as a baseline or starting point and highlight needs and problems, which could then be explored further. One participant commented as follows:

Quote:

"Tests cannot be used representatively; that is the reason why we are moving away from only using tests. It does serve as a baseline or starting point, for example to facilitate discussion, it is valuable." Participant: Group A.

In the interests of fair testing practices, the tester (psychologist) should administer a test in the language of the client. However, this is not possible at present as only 10% of the registered psychologists in South Africa (according to a participant) are African. Participants felt that this problem could be resolved by training more psychometrists and psychologists who speak African languages. Practitioners also acknowledged that it was not always easy to decide which would be the best language to assess a client in.

Quote:

"I may have to work with a Zulu client, who attends a white school, and learns English, which is not his home language, while in my work, I depend on a person's language ability to help me understand the client." Participant: Group O.

Sub-theme 1.5: Tests add value if they are psychometrically sound

Participants agreed that tests needs to be psychometrically sound (valid and reliable) for their results to be of value. This is especially true in forensic assessment, for example.

> Quote:
> *"In forensic work, the use of standardized psychological tests adds value, if the tests are valid and reliable (psychometrically) e.g. the Wechsler correlates well with a CAT scan (which gives a picture of the brain)."* Participant: Group E.

Sub-theme 1.6: Outdated and culturally inappropriate tests and norms limit the value of tests

The value of tests is limited to some extent at present because most of the tests available were not developed for our multicultural population and norms are outdated, or there are not norms for all culture groups. Participants emphasized that tests should be updated and made available for use with all cultural groups; although they acknowledged that this was no easy task.

> Quote:
> *"Using tests adds value to our service, but only to some extent. Many tests require modification. In some instances one doubt the validity and reliability. So, there are limitations, e.g. the tests are not culture free. We need tests with prediction value."* Participant: Group F.

> Quote:
> *"We experience a serious problem when working cross-cultural. Clients from the African population find it difficult to express themselves and also what they know on an intellectual level. The extreme between rural and urban make the problem even bigger. We don't have the knowledge to suggest a remedy, but we are aware that something must be done with regard to tests."* Participant: Group Q.

The concern was expressed that if new or updated tests were not available, practitioners would simply have to continue using outdated, culturally inappropriate tests.

> Quote:
>
> *"Tests are used with each student studying at the university, including clinical uses. The reason that existing tests are used is because nothing else is available".* Participant: Group F.

As regards norms, opinions of participants varied according to their work environments. Private practitioners who work with individuals require norms that are useful for their own unique purpose and the researcher observed that they do not necessarily question them. Researchers who work in a broad scope cross-culturally are much more aware of the need for norms that could be used across different groups. Participants also expressed the view that there should be a range of norms for different categories of people. The choice of norm to use would then largely depend on the characteristics of the person being tested and the referral problem.

Sub-theme 1.7: Tests are not used by all practitioners

Of the 141 participants, 3 participants (2.1%) indicated that they do not make use of tests at all. The reasons for this were related to the ethical use of tests, for example they felt that tests do not comply with the requirements of laws such as the Employment Equity Act, or that they prefer to do psychotherapy with clients, for which they do not need to use tests. A minority of the participants thus did not experience tests as adding value to the services they deliver.

Theme 2: Tests are used for Various Purposes

How and for what purpose tests are used was discussed according to the practitioners' category of registration as well as the setting in which they were used, for example, in a psychiatric hospital. In the group discussions, the practitioners usually indicated what their particular registration category was and their field of expertise, for example:

> Quote:
>
> *"I am an educational psychologist and I work with children in … [a] School for the Deaf."* Participant: Group C.

Participants reported that they used a wide range of tests for different purposes as reflected in Table 3.3. The perception of the researcher was that it is not always possible for psychologists to work exactly according to their field of "specialization" and that there will always be an overlap among the different registration categories. The practitioner (especially in terms of registration category), type of service, and the purpose of tests are innately related as can be seen from the sub-themes. During discussions, practitioners used the concept "level" to differentiate between clients at a school level, at a higher education level, or adults.

For the purposes of this report, sub-themes for this main theme will thus largely be reported according to the registration categories of participants. However, readers should be aware that when the sub-themes were identified, no sub-theme emerged related to counselling psychologists and the purposes for which they use tests.

Table 3.3

The practitioner, type of service, and purpose of test use

Type of client	Registration category	Purpose of tests
Primary and secondary level in education, (Grade 1 to 12)	Educational psychologists	**Therapeutic and diagnostic:** • School readiness • Learning difficulties • Cognitive functioning • Reading level • Career development.
	Clinical psychologists	**Therapeutic and diagnostic:** • Development • Forensic work (rape and abuse) • Work with family advocate in child custody cases. • On request of parents/guardians, medical practitioners & lawyers.
	Research psychologists	**Experimental** • Instrument development • Instrument reliability and validity • Program development.
Higher education training level	**Psychologists:** • Educational • Clinical • Counselling They are also lecturers and work with students (individuals and groups).	• Results are used for decision making related to training courses and career choice. • Participant response: Training … "*should be relevant to the needs of the community, taking into consideration the needs of South Africa in particular and of Africa and the world in general*." • Support individual students with personal problems, academic needs, study habits and language related problems.
	Research psychologists and lecturers	• Students participate in large scale research • Provide training in practice and theory of psychometric tests.
Adults/ families/ children	Clinical and counselling psychologists in private practice, clinics or psychiatric hospitals.	Use test batteries to: • Assist in marriage counselling • Help direct psychotherapy for personal growth • Guide vocational development • For forensic (e.g., Road Accident Fund decisions) and psycholegal purposes (e.g., retrenchment, affirmative action, criminal action, child custody, rape and sexual assault/harassment cases) • Diagnose post traumatic stress (e.g., hi-jacking & retrenchment) and plan trauma therapy/crisis interventions • Perform neuropsychological assessment.
	Industrial psychologists	• Identify team roles in company • Recruitment • Employee performance – to recommend appropriate intervention • Identify candidates for training and career development • Disputes between employee and employer • Assess individuals who request early retirement.

Sub-theme 2.1: Purposes of test use - Clinical psychologists

The participating clinical psychologists and psychologists in psychiatric clinics and hospitals found tests necessary in the following instances:

- Where neuropsychological assessment is performed to establish a baseline of functioning in order to measure change (deterioration or improvement).

- Where test information helps the psychologist to bridge the gap between the medical and the psychology professions.

Quote:

"*A problem experienced by psychiatrists is that they don't know the theories of psychology. The psychologists who make use of tests results usually confirm the diagnoses of the psychiatrist."* Participant: Group O.

- Where test information from psychiatric patients is useful for differential diagnosis. Many individual clients need support and therapy for post-traumatic stress. Examples could be a hi-jacking episode and retrenchment. For example, the use of test results in the case of retrenchment gives the psychologist an indication of the personality type and coping style of the client and what help the client may require in dealing with the retrenchment.
- Where test information is used for forensic purposes (which includes criminal, personal injury, divorce and custody cases). Scientific, objective information obtained from tests is of particular importance in forensic assessment.

Sub-theme 2.2 Purposes of Test Use: Educational psychologists

Educational psychologists reported that they used tests with school-going children for several reasons. Test information helps psychologists to obtain baseline information to help plan early intervention related to school-readiness and learning problems, school placement, and career options. Assessment of cognitive functioning is often requested by the teacher and parents in order to support them in addressing developmental difficulties in children. It is also required that they work with the parents, and therefore they may use tests with parents as well.

Quote:

"If a child achieves below his potential, test information is a useful tool to explain the functioning level of the child for purposes of decision making about realistic possibilities for career planning." Participant: Group P.

In general, tests are used at a school level in a diagnostic, proactive way, with the development of the child being the main focus. Test results are used to plan intervention and prevent the development of barriers to learning. With adolescents, the focus of services is on career guidance, the planning of post-school studies, and for mentoring purposes (facilitating personal growth). Educational psychologists also often have to assess children as part of custody and abuse cases or where the misuse of drugs is suspected.

Sub-theme 2.3: Purposes of test use: Industrial psychologists

The industrial psychologist who works with an employee will also need to make contact with the employer and or the family of an employee and may be requested to assess other family members. His/her role is to support the individual in job functioning and in issues related to the company such as work roles, team work achievement motivation, retrenchment or boarding due to ill health as well as harassment in the work place. Industrial psychologists in the focus groups indicated that they made use of psychological tests to:

- Identify team roles.
- Recruit personnel.
- Help identify possible psychological problems when an employee's performance deteriorates and recommend appropriate intervention.
- Identify candidates for training and career development.
- Assess whether an employee should be boarded due to ill health.
- Assess the impact of retrenchment on an employee's well-being so as to advise on how to reach an equitable agreement.

Lecturers in the field of industrial psychology indicated that they use tests with students for practicums, mentoring, human resources, to understand the world of work, for the development of students' interests, and as part of assessment centres.

> Quote:
> *"For internship the solution is exposure – e.g. the MBTI[2]. In the training of students, it is required to be up to date, also with regard to tests."* Participant: Group B.

Sub-theme 2.4: Test use by Psychologists who are trainers and/or researchers

Lecturers who provide training in psychometrics may be registered in one or more of the different registration categories although it may be required that training is given to students being trained in a different category to that of the trainer. It was observed that registered psychologists who are also lecturers have special insight in the field of testing and related needs. They are usually involved in research projects related to tests and assessment.

The participating psychologists gave the following reasons for using South African standardized tests in both individual and group assessment at a higher education level (including students at universities, former technikons and related training institutions):

- Tests are used in supporting individual students who experience personal problems.
- Test information is also used to address sexuality-related issues in a scientifically objective way. This could include harassment and rape.

[2]Acronyms were often used when referring to tests. The full test names are in Appendix A, B, and C.

- Psychologists do group assessments to assist students in decision making related to their proposed training courses and careers.

Sub-theme 2.5: Test use by Psychologists in private practice

Practitioners in private practice included clinical, counselling, educational and industrial psychologists. In private practice, psychological tests are used diagnostically for the enhancement of service to clients.

Tests are often administered at the request of individuals, parents and guardians, a school or teacher, medical practitioners and lawyers. For example, parents bring children for assessment because they want to know if their children can be expected to achieve at a certain level.

In private practice, the participating psychologists, regardless of registration category, used test batteries to support clients in marriage counselling, psychotherapy, crisis management, vocational counselling, criminal forensic matters, road accident fund payments, and to provide guidance to the court in custody decisions.

The perception of the researcher was that an overlap of services provided by psychologists registered in different categories exists in private practice. Furthermore, they make use of the same instruments in the assessment process, since they were trained in the use of them. For example, many practitioners use the Rorschach utilizing Exner's method for interpretation. When performing educational assessments, the tests that many practitioners use frequently are the Junior South African Individual Scales (JSAIS) and the Senior South African Individual Scales – Revised (SSAIS-R).

Theme 3: The use of tests in various applied settings

Practitioners commented on the use of tests in various applied settings or for specific purposes. The sub-themes that emerged around this theme are documented below.

Sub-theme 3.1: The use of tests in industry

Industrial psychologists indicated that they were aware that there is a debate around the use of tests and legal requirements regarding the use of tests and the standards that tests must meet (e.g., culture-fair, unbiased, valid and reliable). Consequently, they use tests together with other information as part of an assessment centre approach. Test results continue to provide useful information but are not used in isolation.

Quote:

"Tests are used in the case of discrepancy; the practitioner can use test information to justify decisions. By adding test results it enables one to have a more holistic view." Participant: Group B.

In some cases, psychological tests are not used as they have not been developed and standardized for all cultural groups.

Quote:

"According to our policy, [psychological] tests are not used. We make use of technical knowledge tests and interviews. No other tests can be used because of labour laws – we avoid using tests because of possible law suites that may arise because of using tests that have not been standardized on all culture groups." Participant: Group H.

Sub-theme 3.2: The use of tests in psychiatric hospitals

Tests are used frequently for the assessment of patients to establish in what ward they should be placed, for example. For forensic assessment purposes, tests are used in 90% of the cases. Psychometric information is obtained on 30% to 60% of the patients. In the case of interns, they use tests with most, if not all (100%), of the patients that they see.

Quote:

"Using tests during internship helps us in understanding a patient, and to plan therapy for a particular patient." Participant: Group B.

In the case of the childcare unit, tests are widely used. With adolescents, tests (e.g., the Draw-A-Person test and a mood assessment questionnaire) are used for differential diagnosis purposes. For the assessment of personality, the MMPI and the Millon Clinical Multiaxial Inventory (MCMI) are used often.

Sub-theme 3.3: The use of tests for school readiness assessment

Assessing children for school readiness is one of the areas in which psychologists use tests. However, in most of the groups, the development of a school readiness assessment instrument was suggested as an urgent need. Practitioners requested that such an instrument should be developmentally-focused, criterion-referenced, aligned with the learning outcomes of Grade 0 and Grade 1, and more qualitative in nature. Such an instrument should focus on development with help or input from an adult. It was also emphasized that a test for school readiness should not take long to administer.

Quote:

"Socio-economic status, age differentiation and chronological age should be considered. A test for school-readiness – or school-entry is required urgently. It should be scholastic in nature. Age-related laws make it very difficult. SES, age differentiation, chronological age." Participant: Group P.

Sub-theme 3.4: The use of tests in career assessment

The focus group psychologists used test information to enhance "post modern" career development approaches. The term "post modern" was explained in this context as follows:

> Quote:
>
> *"In an educational training environment the use of psychological tests has been and is perceived as negative and discriminating. Approaches have been devised to provide career guidance that excluded the use of tests. It soon materialized, however, that such approaches did not yield enough information to help make informed career decisions."* Participant: Group P.

To optimise the career guidance process, it became necessary to include standardized instruments for tapping interests, aptitude, and intellectual ability. Comprehensive biographical questionnaires were seen as invaluable adjuncts to psychological test batteries as biographical information provides critical contextual information against which test results have to be interpreted. The researcher observation was that the psychologists used the tests for the benefit of their clients, and that they took care not to discriminate against individuals or groups.

Sub-theme 3.5: The importance of following good practices in the choice of tests

Good assessment practice *inter alia* requires that the practitioner uses tests that are psychometrically sound as well as culturally and linguistically appropriate. Furthermore, test scores should be compared to appropriate norm groups and the normative data needs to be sufficiently recent. In general, very few tests were considered by practitioners to be sufficiently contemporaneous and culturally appropriate for use. The view was further expressed that it was unfair to train students in outdated tests that lacked norms for their own population group. This practice would furthermore perpetuate the use of inappropriate tests by newly qualified practitioners.

> Quote:
>
> "*We use test for training of psychometrists. A wide variety of tests are used. The problem is that very few tests are available for use with the Sotho-speaking population."* Participant: Group E.

Participants had evidently realized that using tests in a fair way had become a major problem. They suggested that training in culturally and linguistically appropriate tests should be given to qualified psychologists by a certified body to circumvent the problem of many training courses for continuous professional development purposes being expensive and not up to standard.

Theme 4: The tests used by psychologists

Practitioners commented on the tests that they used. Interestingly enough, they appeared to be more familiar with the acronyms used for most of the tests and preferred to use them rather than the full name of the test. When prompted about the full name of the test, they were not always sure of the title and author. Based on the information provided, two lists were compiled. The first list includes mainly South African standardized tests as well as scholastic tests, which have been classified by the Professional Board for Psychology. The second list consists of the tests referred to and used in South Africa, but which have mainly been developed in other countries and which do not necessarily feature on the list of tests classified by the Professional Board. In many cases the latter tests do not have norms for use with South African population groups. However, focus group participants commented that they find tests from other countries valuable and that the use of these tests permits practitioners to obtain the best information possible from their clients. Psychologists emphasized that these tests are used in the absence of similar South African tests, and that they use the test results qualitatively rather than quantitatively. On the other hand, some psychologists said that although they were aware that many practitioners used international tests not yet standardized for South African use, they perceived that very few of these tests were valid and thus preferred not to use them.

> Quote:
>
> *"As a professional one has a conscience and also an academic resistance to use such tests."* Participant: Group I.

Both lists were compiled by extracting information from the various focus group discussions and are not exhaustive. The different types of tests referred to in the focus group discussions included tests for individual and group assessment, computerized tests, and personality tests and inventories. Participants also referred to projective techniques and instruments for determining school-readiness. The two lists are presented in Tables 3.4 and 3.5. Thereafter, the opinions and perceptions of the participants on particular tests are discussed in terms of sub-themes by grouping the tests.

Table 3.4
Alphabetical list of classified tests referred to in the focus groups

1	APIL
2	Bender Visual Motor Gestalt Test
3	California Psychological Inventory (CPI)
4	Cattell Culture Fair Intelligence Tests
5	Children's Apperception Test (CAT)
6	Clinical Analysis Questionnaire (CAQ)
7	Columbus Picture Analyses of Growth towards Maturity
8	Developmental Test of Visual Perception (Frostig)
9	Differential Aptitude Tests: Forms R, S, K & L[a]
10	ESSI Spelling Test
11	19 Field Interest Inventory (19 FII) [a]
12	English Proficiency Tests
13	Goodenough-Harris Drawing Test
14	Group Test for 5/6 and 7/8 year-olds[a]
15	General Scholastic Aptitude Test (GSAT) [a]
16	High School Personality Questionnaire (HSPQ) [a]
17	Individual Scale for Southern Sotho-speaking pupils[a]
18	Individual Scale for General Scholastic Aptitude (ISGSA) [a]
19	Individual Scale for Northern Sotho-speaking pupils[a]
20	Individual Scale for Tswana-speaking pupils[a]
21	Individual Scale for Xhosa-speaking pupils[a]
22	Individual Scale for Zulu-speaking pupils[a]
23	Jung Personality Questionnaire (JPQ) [a]
24	Junior South African Individual Scales (JSAIS) [a]
25	Junior Aptitude Test (JAT) [a]
26	Learning Potential Computerised Adaptive Test (LPCAT)
27	Mathematics Proficiency Tests
28	Mental Alertness[a]
29	Miller Assessment for Pre-Schoolers (MAP)
30	Minnesota Multiphasic Personality Inventory (MMPI)
31	Myers-Briggs Type Indicator (MBTI)
32	Occupational Personality Questionnaire (OPQ)
33	Occupational Interest Survey (OIS*)*
34	Picture Vocational Interest Questionnaire for Adults (PVI)
35	Potential Index Battery (PIB)
36	Psytech tests
37	Programmer Aptitude Battery (PAB)(A/137) [a]
38	Matrices Test I, and
39	Matrices Test II.
40	Raven's Progressive Matrices (RPM)
41	Rorschach cards
42	Rothwell-Miller Interest Blank (RMIB)(C/134)
43	Scholastic Aptitude Test Battery for Pupils in Standards 4 and 5 (SATB Standards 4/5) [a]
44	School-readiness Evaluation by Trained Testers (SETT) [a]
45	Self-Directed Search Questionnaire (SDS) [a]
46	Senior Academic-Technical Aptitude Test (SATA) [a]
47	Senior Aptitude Tests (SAT) [a]
48	Senior South African Individual Scale - Revised (SSAIS-R) [a]
49	Siegmund System for Computerized Testing (pending final classification)
50	Sixteen Personality Factor (16-PF) [a]
51	Stress Burnout Inventory
52	South African Vocational Interest Inventory (SAVII) [a]
53	South African Individual Scale for the Blind (SAISB) [a]
54	South African Wechsler Adult Intelligence Scale (SAWAIS) [a]
55	Survey of Study Habits and Attitudes (SSHA) [a]
56	TAT cards (Murray)
57	Test for 5-6 year olds
58	Thomas International
59	Values Scale (VS) [a]
60	Wechsler Intelligence Scale for Children (WISC-III)
61	Wechsler Adult Intelligence Scale -Revised (WAIS-R)

[a]Test developed or adapted for use in South Africa by the Human Sciences Research Council (HSRC)

Table 3.5
International tests used by psychology practitioners in South Africa but not adapted/standardized for this context

Name of test	Constructs/purpose
Advanced Progressive Matrices by J C Raven. 1962.	Assesses the mental ability of people by means of nonverbal abstract reasoning tasks. Used for school and vocational counselling and placement and for research.
Beck Depression and Hopelessness Scale by A T Beck. 1988.	Assesses level of depression and the possibility of suicide. Used for clinical assessment and diagnosis.
Belbin / E-Interplace Electronic Inventories and Team Role Feedback Reports by R M Belbin. 1988.	Assesses team roles through the Self-Perception Inventory. South African Distributors are Performance Capacity Inc. in Cape Town.
Bender Visual Motor Gestalt Test by L Bender. 1938.	Assesses the visual-motor functions of individuals: Ages 3-adult. Also used to evaluate developmental problems in children, learning disabilities, retardation, psychosis and neuropsychological impairment.
California Psychological Inventory (CPI) by H G Gough. 1975.	Assesses normal adult personality and is an aid to educational, clinical, counselling and vocational choice.
Culture Fair Series: Scales 1, 2 and 3 by R Cattell and A K S Cattell. 1961.	Measures individual intelligence for a wide range of ages without, as much as possible, the influence of verbal fluency, cultural climate, and educational level. Identifies learning and emotional problems. Used in employee selection and placement, special education decisions, and college, career, and vocational counselling.
Computer Programmer Aptitude Battery (CPAB) by J M Palormo. 1974.	Measures potential for success in the computer programming field. Used to identify people with the aptitude for computer programming.
Columbia Mental Maturity Scale (CMMS) by B B Burgemeister, L H Blum and I Lorge. 1972.	Assesses mental ability. Used with preschoolers, kindergartners, or children with physical or verbal impairments.
The Cognitive Assessment System, develop by J A Naglieri and J P Das. 1997.	The CAS is an assessment battery designed to evaluate cognitive processing. Planning, Attention, Simultaneous and Successive (PASS) cognitive processes of individuals between the ages of 5 and 17 years.
Grassi Block Substitution Test for Measuring Organic Brain Pathology by J R Grassi. 1970.	Designed to demonstrate impairment of concrete and abstract performance due to organic brain dysfunction. Especially useful to detect early and minimal organic changes so that defects may be diagnosed in early stages of the disease process.
Kuder Occupational Interest Survey. 1971.	Assesses interests. Up-dated profiles can be bought through the internet.
Griffiths Scales of Mental Development (Griffiths, 1974).	Developmental assessment battery for infants and children up to 7 years 11 months.
Leiter International Performance Scale (LIPS) by R G Leiter and G Arthur. 1982.	Measures intelligence and mental age for individuals aged 2-18, including the deaf, cerebral palsied, non-English-speaking and culturally disadvantaged.
Luria-Nebraska Neuropsychological Battery by C J Golden, A D Purish, and T A Hammeke. 1980.	Assesses a broad range of neuropsychological functions for individuals of ages 15 and older. Used to diagnose specific neuropsychological dysfunctions/impairment and to select and assess rehabilitation programs.
Millon Clinical Multiaxial Inventory by T Millon. 1983.	Diagnoses Axis 1 and 2 conditions (personality disorders and more severe clinical scales) through a co-morbidity approach in adults. Used to screen individuals who may require more intensive clinical evaluation and treatment.
Minnesota Multiphasic Personality Inventory by S R Hatheway and C McKinley. 1951.	Assesses individual personality. Used for clinical diagnosis and research related to psychopathology.
Myers-Briggs Type indicator (MBTI) by I Briggs Myers and Katharine C Briggs. 1975.	Measures personality dispositions and interests based on Jung's theory of types. Used in personal, vocational, and marital counselling, executive development programs and personality research.
G Neale Analysis of Reading Abilities by M D Neale. 1957.	Assesses reading and spelling standard of children ages 6-12 years.
Neo PI-R Five Factor Personality Inventory [Questionnaire]	Measures five domains/factors of personality (Neuroticism, Extraversion, Openness, Agreeableness and

Name of test	Constructs/purpose
and the NEO Five-Factor Inventory (NEO-FFI) Costa & McCrae, revised 1992).	Conscientiousness} and six facets for each factors. Also in computerized report form.
Rey Complex Figure Test (ROCF) and Recognition Trial by J E Meyers and K R Meyers. 1941/1944.	The ROCF is a complex test taps visual-motor functioning, planning and memory. The newly developed Recognition trial measures recognition memory for the elements of the ROCF and assesses the respondent's ability to use cues to retrieve information.
Rothwell Miller Interest Blank by J W Rothwell and K M Miller. 1958.	Assesses the vocational interests of secondary school students and adults. Used for vocational and educational guidance.
Snijders-Oomen (SSON) by Snijders and Snijders. 1966.	Non-verbal intelligence scale for assessment of deaf children. Intelligence is defined in terms of learning ability, the extent to which children could profit from instruction at school.
Diagnostic and Attainment Testing by F J Schonell and F E Schonell.1960. 4th Edition. Oliver and Boyd, Edinburgh.	Tests of reading, spelling and arithmetic.
Stroop Color and Word Test by C Golden. 1978.	Evaluates personality, cognition, stress response, psychiatric disorders, and other psychological phenomena. Used to differentiate normal, non-brain-damaged psychiatric from brain-damaged subjects.
Tests for Auditory-Perception Skills (TAP) by M F Gardner.	Assesses the auditory functions of children. Used by psychologists, speech pathologists, language specialists, learning specialists, diagnosticians, and other professionals for ages 4-12 years old.
Taylor Johnson Temperament Analysis by R M Taylor and L P Morrison. 1971.	Provides a clinical assessment of personality. Used for premarital, marital and family counselling and educational and vocational guidance.
Torrance Tests of Creative Thinking by (TTCT) by E P Torrance. 1974.	Assesses the ability to visualize and transform words, meanings, and patterns. Used to identify gifted, creative individual.
Scenotest by G Von Staabs. 1948. No publishing information.	Test used with children aged 5 to 13. A revised version is available for use with adolescents. The test is used as a diagnostic test to explore emotional difficulties.
Wisconsin Card Sorting Test (WCST) by D A Grant and E A Berg. 1981.	Assesses perseveration and abstract thinking. Used for neuropsychological assessment of individuals suspected of having brain lesions involving frontal lobes. When used in con-junction with more comprehensive ability testing, it can help discriminate frontal from non-frontal lesions.
Wechsler Intelligence Scale for Children (WISC-III) by D Wechsler. 3rd Edition. 1991.	Assesses intellectual functioning in children aged 7 to 16 years.

Sub-theme 4.1: Tests for children

Three tests were referred to for young children: the WISC, the Griffiths and the Scenotest, developed by Von Staabs. Full-scale adaptation and normative studies have never been undertaken at a national level with any of these three measures in South Africa. The psychologists were cautious about using the WISC, apparently because there are two different sets of norms for South African use and the users were uncertain as to which norms would stand up in a court of law. The Griffiths test was sometimes used with children in custody cases.

The Scenotest was used to a lesser extent because the material has not been standardized for South African conditions. Intensive training in its use is also required but is not given by all the universities. Although the test was highly regarded, it was considered very expensive.

The researcher gained the impression that participants avoided using the JSAIS because of the fact that norms are outdated and are not available for all cultural groups, and also because of outdated and culturally loaded content (of the items as well as the test material). More comments will be made regarding the JSAIS in Sub-theme 4.2

Practitioners expressed a need regarding IQ tests for children.

> Quote:
> *"IQ-tests are a problem with children. We need revised tests and the existing ones should be regularly updated. We are not dissatisfied with existing tests and find them useful, except that they are out of date or need to be adapted."* Participant: Group C.

The need for tests that tap emotional and personality-related functioning in children was highlighted by the psychologists.

> Quote:
>
> *"We seriously need a test to identify sexual abuse – for children. There is also a need for a test to assess depression in children. The African children do not talk easily, and they give information indirectly, for example in the CAT (Children's Apperception Test). It should be made with pictures, because pictures are less threatening. Such a test should be culture fair, e.g. make use of animals, because all children can identify with animals."* Participant: Group O.

Practitioners also raised the difficulty of testing children with special needs (e.g., with attention deficit hyperactivity disorder).

> Quote:
>
> *"With ADHD a child is on medication, and when the test is administered, the medication is not working anymore, or the child is drowsy."* Participant: Group P.

Psychologists raised serious concerns about the availability of tests on the Internet that can be used with children.

Quote:

"Tests on the Internet give psychology a bad name. Children are exploited by the tests on the Internet and develop negative attitudes toward the value of tests, so that they don't take tests and test results seriously." Participant: Group C.

Sub-theme 4.2: Tests of intellectual ability and aptitude

Individual tests for measuring intellectual functioning were used regularly by all the practitioners. The SSAIS-R was considered an outstanding instrument, even if its norms need updating. The participants said that despite outdated norms, information about a client's strengths and weaknesses could still be used qualitatively.

Practitioners were less complimentary about the JSAIS.

Quote:

"The JSAIS is too long and laborious, especially if one has to administer all 12 tests, because one will not be able to see the child again – they live far away, and therefore recommendations have to be made on one evaluation. Participant: Group O.

The datedness of items and language use in intelligence tests was generally a concern for the practitioners.

Quote:

Many items of IQ tests, e.g. vocabulary are outdated (kompartement/compartment). The language in the Tswana and Zulu versions is not the common language." Participant: Group O.

The SAWAIS was often used with individuals, but was criticized by more than one practitioner on the grounds of the quality of the test material. Psychologists who worked with students and adults expressed a need for international norms to be available as students and adults sometimes need to compete internationally for study opportunities and jobs.

Quote:
"*The Wechsler for SA should be revised to be on international level."*
Participant: Group F.

The Individual Scale for General Scholastic Aptitude (ISGSA) was perceived as being useful by educational psychologists but there seems to be a need for training in its use. The practitioners requested the inclusion of an estimated IQ score in the ISGSA.

Quote:
"The ISGSA has been used in education set-ups, but not all knows it well, and it is a test that is not used often because we find it difficult to administer. We need training." Participant: Group C.

Users of the Differential Aptitude Test (DAT) made a similar request for an IQ score. The SAT and JAT aptitude tests were still often used despite the fact that the DAT was now available and has recent norms. However, users complained that the JAT and SAT were too long.

Quote:

"Tests like the JAT and SAT takes too long to administer. With the ISGSA there is a need for an estimated IQ." Participant: Group M.

Sub-theme 4.3: Objective personality Tests

Personality tests used by the psychologists included the 16-PF Personality Inventory, the Minnesota Multiphasic Personality Inventory (MMPI), the Millon Clinical Multiaxial Inventory MCMI), the Myers-Briggs Personality Type Indicator (MBTI), and the Neo Factor Personality Questionnaire.

The psychologists expressed an urgent need for a personality questionnaire that could be used with all South Africans. The High School Personality Questionnaire (HSPQ) was considered an excellent instrument, provided that it was updated and revised. The Occupational Personality Questionnaire (OPQ) was used by organizations for team building and for executive or competency-based assessments.

The 16-PF, of which the SA92 version is mostly used, needs reliable norms but was still used by many of the psychologists with individuals and in group testing contexts. Although the 16-PF was often used, and was mentioned by all the focus groups, the practitioners seemed to prefer using the MMPI-2 and the MBTI. One reason for preferring the MMPI-2 may be that, although the test is expensive, the training is good and the instrument is useful for diagnosing pathology.

Quote:

"We need personality tests similar to the MMPI. There is also a need for a test that differentiates between types of personality pathology. The 16-PF is used in the personality assessment of the average/normal person, and that is not what we want, because often, people have been assessed with the 16-PF many times before. Another need is that a test should be developed that gives an indication of the underlying mood of a person, or gives information on mood disorders. Such a test should be developed, unique for SA users." Participant: Group O.

Practitioners were also concerned about personality type inventories being available in the popular media, which could be abused as a result.

Quote:

> *"One can buy a book very similar to the MBTI about personality styles. Books like that raise issues for practitioners, and they feel there should be stronger control about who may use what tests."* Participant: Group L.

A further concern expressed by practitioners was that although the MMPI and MBTI were useful tests, they are internationally-based tests that have not undergone large-scale adaptation for the South African context. The implication of this is that they may not be appropriate to use with all sectors of the South African population.

> Quote:
>
> *"With about 15% of patients, international tests can be used, but with the other 70% it is not useful. A test must not require a higher level than grade 12."* Participant: Group O.

Sub-theme 4.4: Projective techniques

Projective techniques are used regularly. Tests mentioned by practitioners included the Thematic Apperception Test (TAT) and Children's' Apperception Test (CAT), the Rorschach (especially the Exner Comprehensive System with norms, which is not usually associated with projective testing), the Draw-A-Person test (DAP) and the Kinetic Family Drawing test (KFD). The practitioners agreed that the TAT was outdated although the technique was useful. The Rorschach was still highly regarded, although training was apparently needed in its use. There is concern that psychologists are not properly trained in the Rorschach and that they use this sophisticated instrument irresponsibly and unprofessionally. Apparently psychologists have been exposed to cases where the fairly radical Rorschach-hypotheses derived by untrained psychologists regarding the personalities of their clients proved to be unsubstantiated by other tests or facts, with potentially harmful consequences for the client. This sentiment concerning negligent psychological test usage was endorsed by other participants. Some psychologists also expressed concern that some of the projective techniques cannot be regarded as being culture fair for all South Africans.

Sub-theme 4.5 Interest inventories and tests used in career counselling

Interest inventories mentioned by participants include the Self-directed Search (SDS) and the 19-Field Interest Inventory. Participants were familiar with the Jung Personality Questionnaire (JPQ) and use it together with interest questionnaires for career counselling purposes, but participants had mixed views about the usefulness and value of the test. The Survey of Study Habits and Attitudes (SSHA) was considered a valuable instrument, but is very outdated.

> Quote:
> *"For interest assessment, the 19-Field Interest Inventory, SDS (Holland), Career Anchors and Value Scales are used frequently."* Participant: Group B.

Quote:

"Interest questionnaires are still useable, but tests should have valid norms similar to those required by the Western world. If a child in the Eastern Cape achieves low, he/she just have to get support to catch up. So, there should be only one norm group." Participant: Group I.

Sub-theme 4.6 Computerised tests

Computerised tests such as the Learning Potential Computerised Adaptive Test (LPCAT), the 15FQ+, the APIL and Tram 1 and 2 batteries were popular and were used regularly by some of the practitioners. However, many of the psychologists could not afford computers and printers for testing purposes, had not been trained in their use (i.e., did not feel sufficiently computer literate) and felt threatened by them. Computerised tests have practical value, provided that the user is computer literate, which poses problems in South Africa where computer literacy levels are generally low. It was felt that computerised tests were a time saving and objective tool both for use in applied settings and in research. Some of the practitioners expressed a need for more computerised assessment instruments. Other practitioners preferred not to make use of computerised tests because they believed that as test administrators they lost valuable observational information of a client's behaviour when using computerized tests.

The relatively lower use of computerised adaptive tests in comparison with other computerized tests is probably due to the fact that there are very few computerised adaptive tests available in South Africa.

Some of the negative aspects related to computerised tests were their costs as well as the cost and quality of the back-up service when screens freeze, for example. Practitioners also pointed out that the computerised tests available do not necessarily cover the entire age spectrum.

Quote:
"The reliability of the LPCAT is true in one situation, but once a person passed Grade 12 we do not know what to use. Perhaps dynamic assessment is the answer." Participant: Group N.

Psychologists were concerned that practitioners may too hastily start using computerised tests without appropriate training and research studies that can guide decisions around in what contexts computerised tests should and should not be used.

Quote:

"People get stuck on technology. Technology can create a problem. Computerised testing has value, but research is necessary on where it fits in. A requirement is that

the psychological practitioner needs adequate training and need to be experienced in all modes of testing." Participant: Group Q.

Quote:
It is necessary that there should be some form of control related to "tests" on the Internet." Participant: Group P.

Sub-theme 4.7: The basis on which practitioners choose tests

The practitioners referred to international tests that they use and admitted that they use them because South African equivalents do not exist (see list of tests in Table 3.5). Several practitioners refrained from specifying which international psychological tests they used, seemingly because they were wary about compromising themselves for possibly using tests unethically.

They emphasized that the tendency to use particular tests or batteries depended on their own preferences. Using a particular battery of tests was also related to an individual's psychometric training and the practical experience gained with testing in their internship programme.

Theme 5: Issues related to test development and revision

Sub-theme 5.1: The importance of developing quality tests and constantly revising them

Participants in all the group discussions agreed that test development and test revision is necessary. The impression of the researcher was that they did not have a clear idea of what test development and revision entail. They did not have an idea of the costs involved and they were not aware that the HSRC gradually received less government funding over the past few years. They are also not aware of all the restructuring that has taken place at the HSRC and the effect that this has had on the development and revision of tests. Their main concern is to have high quality tests available for a particular purpose.

Quotes:

"It is important that tests should be re-normed, that new relevant tests should be developed, and when a new test is available we should know in time. When we order tests, we need it at a certain date, and we don't receive it on time." Participant: Group Q

"South Africa must be on the same qualitative level as tests from overseas. Tests should be workable for best practices. It should be possible to compare South African tests with international tests." Participant: Group I.

"We need perhaps a new IQ test of good quality. Statistics indicate the declining rate of 4% per year in the value of tests if it is not updated. Take the Wechsler as an example." Participant: Group C.

Sub-theme 5.2: Tests need to be developed/revised to keep pace with changing contexts

Participants felt that any test had its advantages and disadvantages. However, they pointed out that it is important that tests are developed or revised in response to changing contexts. For example, the field of education has undergone a significant change in South Africa and an outcomes-based educational (OBE) approach has been adopted. The perception of practitioners is that OBE requires that psychological and educational tests should be aligned with tapping the learning outcomes for the various grades and phases in the schooling programme. To date, no new criterion-referenced tests have been developed nor have old tests been revised in accordance with the new learning outcomes and the developmental increments expected with respect to them for the various grades in a phase.

Psychologists who specialized in career guidance, emphasized that continuous changes in the world of work requires up-to-date interest questionnaires and instruments to guide clients with respect to the choice of school subjects, the choice of a career, or a change of job.

Sub-theme 5.3: Addressing culture in test development/revision

Participants in all the groups referred to culture as the most important issue to be addressed in the development and revision of tests in future. The researchers observed two issues. The first is that all practitioners expressed the need for culture fair and culture reduced instruments. The second is that many private practitioners work only with clients from their own culture. Participants from the training institutions and the academic environment feel strongly that the differences in the responses of different culture groups should be researched. The perception of practitioners is that psychometric research in South Africa does not focus sufficiently on bias research and differential item functioning.

> Quote:
>
> *We need culture fair tests to assist us in transformation, and we want to be fair in our assessment."* Participant: Group I.

Sub-theme 5.4: Addressing language issues in test development/revision

Language was identified as an important issue requiring urgent attention. Few tests are available for African language speakers, which poses a serious challenge when working cross-culturally with tests. Some African language clients find it difficult to express themselves in English and this often becomes exacerbated when working with rural clients. The participating psychologists all agreed that something had to be done about the available language versions of tests. Translation of the tests into African languages is needed to make them useful in a multilingual society.

However, participants acknowledged that the translation of tests poses many challenges. Not least among the challenges is the fact that there are 11 official languages in South Africa. A Zulu-speaking practitioner explained that a common form of Zulu exists in South Africa, which although not spoken by all, is understood by most. She suggested that in the development and revision of tests, researchers should involve people who speak the various target languages to assist with language issues.

There is a dire shortage of African language psychologists and psychometrists, consequently, practitioners pointed out that even if tests were available in all the home languages of their clients they would need to make use of interpreters. Psychologists said that interpreters required specialized training for work in the field of psychological assessment.

Sub-theme 5.5: Establishing varied and culturally appropriate norms

The norming of tests in South Africa is directly related to issues of culture and language. The following example was discussed in this regard:

> A child from Nelspruit speaks Swati and Zulu equally well. It is difficult for the psychologist to determine which norm group should be used when the child is tested.

This example raised the issue that practitioners probably need various sets of norms so as to either be able to choose the most appropriate set or to compare the scores to various norm groups to see whether a consistent pattern emerges (e.g., when comparing the child's performance to the norms for Swati and Zulu-speakers, it could be found that her performance falls in the average range for both sets of norms).

> Quote:
>
> *"All tests must be useable with the whole population of South Africa. Norms for different categories will be very useful. There should be a range of norms. It also depends on the person who does the testing".* Participant: Group J.

The researcher's impression was that although it is important for practitioners to use the correct norms when testing a client they do not really understand the process of norming and the related difficulties.

Sub-theme 5.6: The need for shorter tests (time factor)

Time was a factor mentioned by many of the participants. They called for tests that could be administered over a short period as clients from rural areas could usually visit the practitioner only once. Consequently, a battery of tests had to be completed on the day of the visit and decisions on treatment often had to be made on the same day.

Sub-theme 5.7: Information on tests and their revision

Regular printed information on tests and revisions should be provided.

Quote:

"*There is a need for a newsletter with examples of test results/ cases studies."*

Participant: Group D.

Sub-theme 5.8: Erosion of test development expertise

The perception of the researcher was that participants did not realise that the HSRC had discontinued the development and revision of tests. They did not realise how the restructuring at the HSRC eroded the test development expertise available in the country and the devastating impact that this has had in terms of curtailing test development and revision.

Sub-theme 5.9: Cost of tests, quality of test materials, and service delivery

The participants indicated that the present situation was disconcerting and confusing. Psychologists who ordered tests regularly experienced a lack of quality assurance. Participants express disappointment with the service when ordering tests and the high prices of tests.

Quote:

When we order tests, we need it at a certain date, and we don't receive it on time." Participant: Group Q.

Quote:

"We are not happy with our service providers, because the tests are too expensive and/or unaffordable. And after-sales service is also necessary because we need additional assistance for purposes of the court." Participant Group E.

Quote:

"Prices of tests, especially answer sheets are ridiculous expensive. The SSAIS-R booklet can be easily revised to be much more user friendly. At present it is a waste of paper and the HSRC limits their income, because people make copies all the time." Participant: Group C.

Theme 6: Test-related needs

Sub-theme 6.1: Intellectual ability and aptitude

The psychologists agreed that there was a need for a new, high quality intelligence test for use from Grade 1 to Grade 12 and higher. One psychologist warned that the concept of IQ has become out-dated and in some cases, as indicated by recent research in cognitive and

neuropsychological psychology, was perceived to be unscientific. Comments on tests of intellectual ability such as the Wechsler scales included that test developers should focus on how individuals of different cultures and language groups understand items and how they interpret them.

The problems the participating psychologists experienced in the use of tests were usually related to their needs, their clients and their practices. One psychologist bought the SAWAIS test a few years ago and was disappointed by the quality of the material, which she said needed the attention of test developers.

> Quote:
>
> "*There is a need for a cognitive instrument …tests to assess potential and cognitive abilities of students. We need particular tests because we are regional bound."* Participant: Group F.

> Quote:
>
> *"We need tests in different areas of psychological practice. In mainly white areas, tests can still be used; in rural areas, other or new tests are required.*
> *There are weaknesses in the Wechsler."* Participant: Group B.

> Quote:
> *"High on our list of needs is the Wechsler, NEO, Aptitude, Mental Alertness, Raven's and Cattell."* Participant: Group C.

Sub-theme 6.2: Personality

The practitioners expressed an urgent need for a test to diagnose certain personality disorders. The psychologists suggested that a hierarchy of tests should be considered for revision and that translations should be part of the process.

The need was expressed that a personality test should be developed similar to the MMPI. There is also a need for a test that differentiates between types of personality pathologies.

Sub-theme 6.3: Interest

A test considered to be valuable and that was often used qualitatively by some of the practitioners was the 19-Field Interest Questionnaire. Despite the out-datedness of the test, it was still used qualitatively in career guidance and career development. Strong opposition to this view came from one focus group where the 19-Field Interest Inventory was found to have limited predictive value and its marking was perceived to be cumbersome. All interest tests should be suitable for use with the entire population of South Africa.

Sub-theme 6.4: Children

Practitioners expressed a need for tests that tap emotional and personality-related functioning in children as well as a test to tap intellectual functioning.

Sub-theme 6.5: Scholastic and school readiness

The psychologists expressed an urgent need for a test that could be used to determine school-readiness and norms that could take into account factors such as socio-economic status and chronological age.

Sub-theme 6.6: Forensic purposes

Several psychologists expressed a need for more tests that can be used for forensic purposes. Two reasons emerged in this regard, namely, to have more measures to draw on so that more reliable court assessments can be performed, and so that informed suggestions for rehabilitation could be made. The practitioners agreed that it had become difficult to use tests for forensic purposes because the same test could be interpreted differently by different experts/professionals.

Sub-theme 6.7: Alternative assessment methodologies

Some practitioners value dynamic assessment procedures and batteries (such as learning potential assessments) and pointed to the significantly high correlations with external criteria such instruments now enjoy. The focus group participants suggested that tests should be more qualitative in terms of their nature and criteria. They referred to the zone of proximal development and dynamic assessment. Briefly, the zone of proximal development has to do with Vygotsky's reference to the range within which a child's performance improves with help or input from a mediator. Participants express the need and interest to have knowledge about modern test theory and advances in the psychometric field.

Sub-theme 6.8: Tests for special needs groups

The need was expressed for tests that can be used with various types of handicapped individuals (e.g., blind, deaf) and for individuals with varying degrees of a handicap (e.g., from partially sighted to blind).

Theme 7:
Role players and their responsibilities regarding test development and use

The participating psychologists were under the impression that psychology in South Africa was in a crisis. The fear was expressed that political motives would play a role in the future development and control of tests.

Sub-theme 7.1: The role of an independent body

The psychologists suggested that an independent body should be formed with representatives from universities, the Psychological Society of South Africa (PsySSA), the Professional Board for Psychology, and all test developers. Such a centrally based body could function similarly to the way in which the Test Commission did in the past. This body should regulate, manage and direct research on tests so that integrated information could be made available to psychologists, and a national test development and revision agenda could be established. The view was expressed that this project was a good start for the future planning of test development and responsible test usage.

An ethical monitoring committee of such an independent body should play a key role in the process of evaluating psychological tests for purposes of licensing and in setting good practice standards for practitioners. Furthermore, the independent body should control the sale of tests in that standardized tests should not be sold to individuals other than qualified and registered practitioners. The participants emphasized that the envisaged body should ensure that politics did not play a role in test development.

Sub-theme 7.2: The role of the Professional Board for Psychology of the HPCSA

The Professional Board should register tests and act as a watchdog. Licensing, registration and the system for continuous professional development should be addressed as a matter of urgency. Furthermore, the Board should educate the public and key stakeholders regarding the value and use of tests.

> Quote:
> *"Society must be educated to understand why and when it is good practice to use psychological tests."* Participant: Group N.

The Board should review whether it is wise for professionals from other disciplines to use psychological tests. Professionals from other disciplines often lack expert knowledge and should accordingly not be permitted to make decisions on psychological tests.

> Quote:
> *"We need guidance in the use of tests like that of Goleman (emotional IQ), because it is used by persons who are not trained as psychologists."* Participant: Group C.

It was suggested that decision-makers should look at the most widely used tests based on the survey conducted in this project and focus on them for revision first. From a more practical perspective, the focus group participants suggested that a hierarchy of tests should be considered for revision and that translations should be provided for all tests. All tests should be useable with the entire South African population. Norms for different categories would be useful; in other words, there should be a range of norms.

Decisions related to the future of tests (maintenance, revision of norms and new tests) should be made by all role players. Role players with expertise should join forces. Working groups were already in existence at the HPCSA, and they should be included in a new agenda together with societies such as PsySSA. Business experts, experts from the public and private sectors, as well as international experts should be involved. Clients should also have a say, including government stakeholders.

Practitioners also questioned the fees that they paid to the Professional Board since they do not know what the money is used for. They wondered whether a portion of their fees could be used to undertake test development projects.

Sub-theme 7.3: The role of the Psychological Society of South Africa (PsySSA)

The researcher perceived that practitioners often confused the activities of the HSRC with those of the HPCSA and PsySSA. There seems to be a lack of knowledge and communication between practitioners and these different bodies. The impression was also gained that they were dissatisfied with professionally-related issues in addition to test-related issues and the way in which PsySSA addressed these. Many psychologists indicated that they cannot afford to be members of PsySSA, given that the fees that they pay to the Professional Board are high.

Sub-theme 7.4: The role of the Human Sciences Research Council (HSRC)

The role of the HSRC as it functioned at present was no longer considered professional. The psychologists expressed the need for expert leadership, and not merely a body that would control them as practitioners. Participants felt that the role of the HSRC in test development should be redefined and it should be supported to address the current problems in test development. It should receive baseline funding for the task because

psychology services are a national priority and test development is intrinsic to the delivery of these services.

Partnerships would make test development in South Africa more relevant and, if all universities were included, the HSRC could obtain data for the development of norms from students. It was further suggested that the HSRC should coordinate the development of specific units for test development at universities. Certain universities already had expertise in particular areas of assessment. Students from such universities who were interested in research could assist with the research and fieldwork needed to revise or develop tests. However, some participants disagreed with this view (see Sub-theme 7.5).

It was furthermore suggested that private institutions should permit employees to participate in samples for purposes of the HSRC gathering data to standardize existing or new tests. Another suggestion was that if the HSRC does not see its way clear to redefine its position regarding test development, a new centralised institution could conceivably undertake test development, as the HSRC did in the past, but it would need to be overseen by an independent umbrella body (see Sub-theme 7.1).

Sub-theme 7.5: The role of universities

The psychologists in some of the focus groups felt that academic institutions had a role to play in future test development activities. Teams of researchers should receive financial support for this purpose.

> Quote:
>
> *Tests should be developed for use at universities. Validity is the criteria and research should be done continuously."* Participant: Group F.

However, in one focus group, the participants indicated that they could not see universities becoming involved in test development as described above, and that they (the participants) would prefer a central body for test development. They did not believe that universities had the finances to participate in test development. They suggested that test development could be outsourced on condition that there was still an independent body to control the licensing. They expressed the opinion that tests should not be developed in a competitive business environment.

SECTION 3:
SUMMARY AND CONCLUDING REMARKS

A wide range of participants in terms of registration categories, culture, and type of employment (e.g., private practice versus academic) participated in the focus group discussions. It would appear that participants experienced the discussions as valuable and informative. They verbally expressed that they derived personal benefit from participating and that with the wisdom of hindsight they would have liked the discussions to last longer than an hour.

The **key findings** that emerged from the focus group discussions were as follows:

- The majority of practitioners indicated that they use psychological tests, while only a very small minority indicated that they do not use psychological tests.

- Practitioners affirmed the value of using psychological tests from a number of perspectives. For example, practitioners argued that psychological testing was central to the work of psychologists, provided structure in sessions with clients, provided a framework for feedback and reporting, and assisted in gathering baseline information. However, practitioners qualified their affirmation of the value of psychological testing. They indicated, for example, that psychological testing only added value if tests are culturally appropriate and psychometrically sound, and are used in a fair and an ethical manner. There seemed to be a reasonably strong perception among the practitioners that many psychological tests are outdated and were not appropriate to use cross-culturally. Consequently, this diminished the value of psychological testing. This finding is similar to the findings obtained from the survey questionnaire where the out-datedness of tests and their lack of cultural appropriateness were also highlighted. Practitioners furthermore prefaced their perception that psychological testing was of value by pointing out that the value of testing depended on the practitioners' practices and the quality of their training.

- As was the case with the findings of the survey questionnaire, practitioners indicated that they use psychological tests for a variety of purposes. However, whereas the survey questionnaire only tapped test use related to applied practice contexts, the focus group information allowed for an expanded understanding of the purpose for which tests are used. For example, practitioners indicated that the purpose for which they use tests varies according to the presenting problem, the nature of the test-taker, whether the

testing is being undertaken for diagnostic or therapeutic (intervention) purposes, and the category in which they are registered. Of interest too was the fact that practitioners from training institutions provided a reasonably clearly differentiated description of the purposes for test use related to the different registration categories. However, when private practitioners provided their input it became clear that the purposes for which tests are used are fairly similar for practitioners from different registration categories that are in private practice. The question could thus be posed as to whether there is a disjunction between the views of the policy-makers and trainers regarding the scope of practice related to registration categories and what actually happens in practice.

- The types of tests psychological practitioners use are partly determined by the tests that they were trained to use. Furthermore, especially in industry, but in other areas of assessment as well, there is a move towards using psychological tests along with information gathered from other methods.

- Tests of personality functioning, intellectual ability and cognitive functioning, and interest questionnaires seemed to be among the types of tests that psychological practitioners tend to make use of. Furthermore, practitioners use both tests that have been classified by the Professional Board for Psychology as well as international tests which have not been normed and adapted for use here on a national basis. In addition, tests developed or adapted for use in South Africa by the HSRC are predominantly used by practitioners. These findings corroborate the findings of the survey questionnaire where intelligence, personality, and interest tests developed by the HSRC in particular were among those that are most frequently used by practitioners and where practitioners indicated a large number of tests that they use but which have not been classified by the Professional Board. However, it is interesting to note that the practitioners in the focus groups tended to find the 16PF less useful and preferred the MMPI-2, for example, as they could use the results from this test in a diagnostic way. The fact that practitioners use projective tests was again highlighted (as was the case in the survey questionnaire). However, concern was expressed regarding the training of practitioners in projective tests and also whether some projective tests were culturally loaded.

- Some practitioners, especially in educational settings, used computerized tests and found them useful. They indicated that they would like to use computerized tests more often but were handicapped by the fact that there was not a wide range of computerized tests available. On the other hand, some practitioners felt threatened by computerized tests given their own lack of computer familiarity; they were concerned about the loss of

information regarding test-taker behaviour and the cost of the tests as well as the quality of the back-up service. Practitioners pointed out the need to introduce computerized tests with caution, given the low levels of computer familiarity in the country, and called for better regulation of tests available on the Internet.

- Practitioners perceive that it is important to update existing and develop new quality, culturally and linguistically appropriate tests but were concerned about the erosion of test development expertise in South Africa. Furthermore they pointed out that tests constantly need to be updated so as to keep pace with the changing context in which tests are applied. Practitioners also expressed the need for varied sets of norms, especially from a cultural and a linguistic perspective. For the benefit of clients, tests should be developed that bridge or overcome language issues so that test administrators and test takers are confident that assessment is done in a fair way. Furthermore, whenever new tests are available or existing tests are updated or revised, practitioners would appreciate receiving information in this regard. Practitioners were also concerned about the cost of tests, and the quality of the test materials as well as the service delivery. Finally, practitioners indicated that they require shorter tests as they are often required to perform an assessment in a short space of time. With the exception of the last observation regarding the length of tests, all the other test-related needs expressed by practitioners triangulate well with the needs identified in the survey questionnaire.

- When it came to their needs related to specific tests, the practitioners raised issues that were very similar to those identified in the survey questionnaire. Practitioners felt that a new IQ test that can be used from five years of age to early adulthood was urgently needed, as was a school readiness assessment battery, a personality test that can be used to diagnose personality disorders (e.g., MMPI-2), and a test that taps emotional and personality-related functioning in children. Furthermore, practitioners indicated that psychometrically sound and culturally appropriate measures that could be used for forensic purposes were high on their list of priorities.

- Two aspects of the needs of practitioners related to specific types of tests were identified in the focus groups, which did not surface in the survey questionnaire. Firstly, practitioners expressed a need for tests that were designed using alternative assessment methodologies (e.g., dynamic assessment). Secondly, practitioners indicated that they required measures that could be applied to test-takers with special needs (e.g., visually impaired, hearing impaired).

- Practitioners are committed to the ethical use of tests. They thus suggested that the first step towards developing a new agenda would be to compile a hierarchy of existing tests that could be revised. Secondly, they suggest that new tests should be developed according to the needs expressed in the discussions that took place in the focus groups, and thirdly, that they would want to be part of the agenda setting process.

- When it came to the important role players as regards psychological testing in South Africa as well as how they see test development being addressed in the future, the practitioners presented some interesting and at times conflictual views. For example, practitioners seem to favour the establishment of an independent body comprised of all the key role players, including test developers, to oversee research related to tests, the setting of an agenda, the monitoring and coordination of test development, and even the monitoring of ethical assessment practices and the control of the sales of tests. As regards the Professional Board for Psychology of the HPCSA, practitioners felt that this should be the watchdog body which registers tests, licenses practitioners, puts a workable continuous professional development system in place, and educates the public regarding psychological testing. Practitioners were not clear on the role that PsySSA should play. As regards the HSRC, practitioners indicated that the HSRC needed to redefine itself. As test development was a national priority there might still be a role for the HSRC to play as regards a central test development agency, possibly by forming collaborative partnerships with test development teams at universities or in industry. When it came to the role of universities, however, divergent views were presented. Some felt that universities should collaborate with bodies such as the HSRC to undertake test development and revision studies, while others felt that this was an impossible task for universities to undertake as they had limited financial resources and time constraints. The latter practitioners felt that test development should not be undertaken in a competitive business environment and that it should ideally be undertaken by a central agency, which could possibly outsource such development to other agencies if necessary, but the central agency would control the development at a national level.

The information from the focus group discussions served to confirm many of the findings of the national survey. However, additional information was provided regarding the value of testing (provided that certain conditions are met), the test-related needs of practitioners, and their views on how test development should be tackled in South Africa. The results of the individual interviews are presented in the next chapter and it will be interesting to see if they verify the findings to date and expand on them.

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CHAPTER 4

Test Use and Needs: Research Findings Emerging from the Individual Interviews

CHAPTER OVERVIEW

This chapter deals with the individual interviews that were conducted with key stakeholders to further explore psychological test use patterns and the needs related to psychological tests and testing. In the first section, the research methodology employed when conducting the interview component of the study is discussed. The second section contains the key themes and sub-themes that were extracted from the information obtained in the interviews. In the third section concluding remarks are provided and the next chapter is introduced.

SECTION 1: METHODOLOGY

Introduction

In the early years of the 21st century, South Africa faces many challenges in terms of psychological test use, adaptation and development. As was pointed out in previous chapters, a comprehensive survey of the needs of psychological practitioners and key stakeholders regarding which tests are most frequently used and whether they should be updated or adapted, as well as what types of additional tests are required in practice, has not been conducted recently. The current larger project aimed to provide baseline information regarding the preference for tests and the practice of psychological assessment in South Africa. As one of the components of the larger multi-faceted project, the present chapter focuses on the information obtained through semi-structured interviews with psychological practitioners to gain in-depth insight into and information on the tests they use and their needs related to these tests to augment the information from the national survey and the focus groups.

Participants were invited to describe the current and ideal situation, state their needs and requirements clearly and make recommendations. The study should thus provide a picture of the tests currently in use and the testing practices favoured and will not only focus on determining the gap between the ideal and the real, as this is already known in many cases. Based on this information, recommendations are formulated to inform policy changes to provide a basis for

moving towards improved test development and testing practices in the field. In this study the needs analysis thus serves two broad purposes: diagnostic and evaluative (O'Sullivan, 2000), diagnosing the limitations as well as strengths, identifying the needs related to testing, and evaluating the efficacy of a research agenda.

The data gathering method employed is explored in the next section.

Interviews and Needs Assessment

Few studies in the literature explore the use of interviews in a needs assessment. This method is appealing because it gives participants the opportunity to express their needs and researchers the chance to access the participants' objective reality (professional capacity, institutional context, legal restrictions, etc.) as well as their subjective reality (their attitudes, views, opinions, etc.) (O'Sullivan, 2000). The participants were considered sufficiently experienced in the field of psychological testing to express valid needs in terms of psychological assessment. The use of a qualitative methodological approach allowed the researcher the opportunity to interpret social reality, attach meaning and then evaluate, rather than predict. An inductive process was followed, where the starting point was individual cases, incidents and experiences, after which more abstract, conceptual categories were developed to synthesise, explain and understand the data and the pattern of relationships within it.

Participants

Participants were purposively sampled to obtain views from relevant experts who were knowledgeable about the current trends in psychological testing. The participants practise at different levels in the field, as well as in different institutional contexts. The sampling was not designed to achieve representivity, but to ensure that all participants selected were familiar with the subject matter. The aim of the study was not to replicate or transfer the findings to a broader population, but to provide an accurate account of the perceptions and opinions of the particular participants.

It should be noted that the participants only included test users, and the views and experiences of non-users were not probed. This could lead to a gap in the information, as the reasons why some people choose not to use tests were not explored. This could be an area of interest to be explored by further research.

The participants included stakeholders working with people in all the critical life phases, that is, young and preschool children, school-going children, youth and adults. The focus was on critical

life events such as school readiness, career guidance, selection and placement, development, etc. in specific life phases, as well as understanding the link between the different life phases. Certain crosscutting themes were also addressed, for example identification of psychopathology through the use of psychological tests and the use of assessment tools for forensic purposes. These examples demonstrate that some psychological instruments can be used across the different life phases. The life phases, critical events, stakeholders and cross-cutting themes are tabulated below.

Table 4.1

Life phases, critical events, stakeholders and cross-cutting themes in selecting participants

Life phase	Critical event	Administering agent	Cross-cutting themes
Preschool children	School readiness	Psychologist (Educational)	• Identification and rehabilitation of brain disorders in Neuropsychology, e.g. Brain injury, seizure disorders • Diagnosing emotional and behavioural questions and issues that relate to law and legal systems- Forensic psychology • Use of psychological assessment in enhancing normal functioning • Use of psychological assessment in increasing self-awareness, and optimal functioning • Use of psychological assessment to accommodate life-long learning • Diagnosis and treatment of psychosis and emotional disturbances through Psychopathology • Assessing cross-cultural issues
School-going children	Career planning Career counselling Subject choices Remedial counselling Identification of learning problems Scholastic achievement	Career and guidance clinics. Universities responsible for the training of teachers and psychologists. Department of Education. Psychologists (Educational, Clinical and Counselling).	
Youth	Access to further education Career readiness Skills training Unemployment	Universities and other higher education institutions. Department of Labour for development and skills assessment. Industry. Psychologists (Counselling, Clinical, Industrial) Trade Unions.	
Adult	Selection and recruitment Social functioning Training and development Literacy Life long learning Identification of potential	Department of Labour. HR practitioners for selection and training in industry. Psychologists (Counselling, Clinical, Industrial). Trade unions.	

When selecting participants, inclusion from all the different Sector Education and Training Authorities (SETAs) was considered. As there are a large number of SETAs, a decision was made to group them together to cover broad areas of economic activity. At least one representative from each category was interviewed. The categorisation is depicted in Table 4.2.

Table 4.2

Categorisation of SETAs into Sectoral Groups

Category	SETA
Services	FASSET (Financial and Accounting Services) BankSETA (Banking Sector) INSETA (Insurance Sector) SERVICES (Services Sector) TETA (Transport) THETA (Tourism and Hospitality) W&RSETA (Wholesale and Retail Sector)
Public	DIDTETA (Diplomacy, Intelligence, Defence and Trade and Industry Sector) LGWSETA (Local Government, Water and Related Services) PSETA (Public Services)
Social Services	ETDP SETA (Education, Training and Development Practices Sector) HWSETA (Health and Welfare Sector) POSLECSETA (Police, Private Security, Legal and Correctional Services)
Manufacturing	TEXTILES (Clothing, Textiles, Footwear and Leather Sector) CETA (Construction) FOODBEV (Food and Beverages Manufacturing Industry Sector) MERSETA (Manufacturing, Engineering and Related Services) CHIETA (Chemical Industries)
Communication and Technology	ISETT (Information Systems, Electronics and Telecommunications Sector) MAPP (Media, Advertising, Publishing, Printing, Packaging Sector)
Resource-based	ESETA (Energy Sector) FIETA (Forest Industries Sector) MQA (Mining) PAETA (Primary Agriculture) SETASA (Secondary Agriculture Sector)

An additional consideration was to include large-scale users of psychological testing. Although the Department of Labour and Department of Education are listed as administering agents from the social services cluster (see Table 4.2), these departments influence training and development throughout the individual's life in terms of primary, secondary and higher education and training and lifelong development. Stakeholders in these institutions will therefore utilise psychological assessment when addressing a variety of critical events.

Interviews were also conducted with psychological test developers as well as experts in the field of Neuropsychology, Psychopathology and Forensic Psychology. Other service providers include Psychometrics lecturers from universities, as these stakeholders influence the training of future test users, that is, psychology students.

Twenty-two interviews were conducted with senior decision-makers and important stakeholders. However, in some cases more than one person participated in a particular interview. For example, four union members sat in on the interview that the researcher conducted with a union representative. In total, 31 individuals participated in 22 separate interviews. Half of the participants

were female, and the majority was white. The low representivity of black people in decision-making positions is of concern. The overwhelming majority of decision-makers with regard to psychological testing are still white. It should be noted that this report does not adequately reflect concerns of black people with regard to psychological testing**.**

All the interviews were conducted with registered psychologists across the registration categories (clinical, industrial, counselling, educational, and research), with the exception of two, where union representatives and decision-makers in the Department of Education were interviewed.

Table 4.3 provides information on the characteristics of the participants.

Table 4.3
Demographic information of participants

Demographic information of participants									
Gender		**Culture**		**Area of work* Urban / rural**					
Male	**Female**	**Black**	**White**	**Services**	**Public**	**Social Services**	**Manufacturing**	**Communication and Technology**	**Resource-based**
16	15	5	26	9	3	13	2	2	2

* See Table 4.2

Data-gathering Technique

Instrument Design

Data were gathered through structured individual interviews with experts in the field of psychological testing to gain insight into the experiences and opinions of the participants. The interview can be described as topical, as the researcher and participant interacted on a defined issue, that is, psychological assessment.

The research questions were based on certain indicators that were identified as relevant to the current and ideal future state of psychological testing. The type of data required to enable an effective assessment of practitioners' needs was carefully considered, which **influenced the** structure and content of the research questions. The critical aspects or indicators which guided the focus of the interviews were:

- Psychological tests currently in use.
- Strengths and limitations of psychological tests currently in use

- Suggestions and requirements for the development of new tests.
- Importance of psychometric properties such as reliability, validity and norming.
- Monitoring and management of the quality of psychological services and tests.
- The functions, powers and responsibilities of a central test agency

An interview schedule, which served as a guideline for the interviews, was developed and refined from the above indicators. Although a standard format was followed, the schedule was adapted according to the specific areas of expertise and interest of the different participants. After piloting the interview schedule, questions were added to include areas considered of relevance, which were not covered by the first draft. This revision was also informed by data from the national survey and focus group interviews. The research questions were discussed with colleagues and the schedule was then printed. A cover sheet was compiled to document demographic information about the participant.

Analysis commenced as soon as the bulk of the interviews had been conducted. Through the analysis, certain themes and areas of interest were identified that required further exploration. These additional themes were included in the last round of interviews and the information was integrated into the findings reported in this chapter.

Interview Approach

The interview contained elements of a quantitative approach in that it was structured and a standardised format was followed, but it is important to note that the interviewer becomes a participant in interaction with the phenomenon and the data gathered was qualitative in nature. The researcher herself is thus a tool in data gathering. But as an individual in a social context, she also attributes meaning and is sensitive to and cognitively aware of her surroundings. Various levels and forms of self-disclosure take place as the researcher and participant engages in conversation.

Ethical considerations

Confidentiality

The aim of the research project was explained to the participants and they were informed of the confidential nature of the data and provided written consent.

Tape recording

Twenty of the twenty-two interviews were recorded and transcribed. Notes were taken during the remaining two interviews. The participants were asked to give permission before recording commenced. Some participants were reluctant to speak on tape, and this might have influenced

the nature of the data obtained. The tape recordings ensured that a certain degree of standardisation and objectivity was achieved during the interviews.

Personal experience

The researcher knew some of the participants, as the field of psychometrics is a specialised area. This led to the development of a professional relationship as the participant and the researcher were both from the same background and understood the context of psychological testing. The researcher was aware of personal bias and preconceived notions and preferences when conducting the interviews and analysing the data.

Role of the researcher

The researcher acted as data collector and analyser. Although some criticism can be levelled against this practice, it was advantageous in that the researcher became very familiar with and immersed herself in the data. This enabled her to unpack themes to a greater depth.

Methodological Issues

Objectivity

The interviewer and interviewee were both participants, engaging in an interactive, dynamic relationship. The interviewer attempted to maintain a measure of objectivity by providing the interviewee with the opportunity to speak frankly and ensuring the protection of confidentiality. The interviewer thus attempted throughout to manage the element of subjectivity appropriately.

Reliability

Reliability as a criterion was imposed on the **research procedure** and **findings**. The **procedures** followed were reliable in that the techniques, data-gathering instrument (interview schedule and framework) were designed to facilitate an analysis of needs in terms of the use of psychological tests and the quality of psychological testing in general. Peer examination was used to enhance internal reliability in that the research team provided critical input during the design phase of the study. It was endeavoured to maximise reliability in the **findings** in that only one interviewer conducted the interviews, with assistance from other researchers. The assisting researcher sat in on the interviews and read the transcription to confirm its accuracy. The interviews were conducted over a four-month time span. Data analysis and report writing occurred concurrently.

Validity

A comprehensive register of data was kept and both theoretical and methodological memoranda were compiled to enhance the content or substantive validity of the study. The interviewer was assisted by other researchers in validating these notes and memoranda through cross-checks. The

research framework was aligned with the research paradigm and methodology, which enhanced the logical validity.

Comparing the data from the interviews and the survey and focus groups also allowed for the triangulation of the findings. The findings are also compared to and enriched by a literature review that is presented in the next chapter.

Data Analysis Procedure

Data analysis went through the following stages:

i. *Defining analysis in terms of research goals:* The aim of the research was kept in mind and it was ensured that appropriate and sufficient data were collected.

ii. *Familiarisation and immersion:* The researcher became familiar with the data by reading the material thoroughly.

iii. *Annotating:* Themes were induced from the data and research memos were written.

iv. *Tagging data:* Baptiste (2001) refers to tagging as the process of selecting from an amorphous body of materials, bits and pieces that satisfy the researcher's curiosity, and help support the purpose of the study. For the purpose of this study, tagging was also employed as a means of crosschecking and corroborating evidence. Tagging takes the form of open coding, where the focus is on potential meaning, and pre-existing codes are not used.

v. *Grouping tagged data into categories:* The themes were elaborated by grouping the data together according to certain criteria. These categories were guided by the research question. The categories were mutually exclusive as far as possible.

vi. *Making connections:* The data were interpreted through defining and redefining the themes. Certain patterns of relationships and concepts were identified.

SECTION 2:

THEMES AND SUB-THEMES

The themes presented in Table 4.4 were extracted from the analysis of the individual interviews.

Table 4.4

Main themes and sub themes extracted from the interviews

Main themes	Sub themes
Theme 1: Use of psychological tests	1.1. Perceptions of psychological testing 1.2. Volume and application of tests
Theme 2: Purposes for which psychological tests are used	2.1. Variety of purposes 2.2. Selection and training 2.3. Using tests in an enabling manner
Theme 3: Profile of test-takers	
Theme 4: Tests currently in use	4.1. Range of tests 4.2. Purchase of tests 4.3. Test Batteries 4.4. Reasons for excluding certain tests
Theme 5: Difficulties when administering psychological tests	5.1. Administration and logistical difficulties 5.2. Cost of testing 5.3. Computerised testing as a barrier or benefit 5.4. Language issues 5.5.Test material and ease of use 5.6. Shortage of tests for people with disabilities 5.7. Lack of confidence in unregistered tests 5.8. Test distributors and questionable practices 5.9. Market and competition and the effect on choice 5.10. Changing world of work 5.11. Inadequate training and qualifications of administrators 5.12. Limited expertise of users to do own norming 5.13. Resistance and negative perceptions 5.14. Lack of clear guidelines for users
Theme 6: Ethical use of tests	6.1. Defining the ethical use of psychological tests 6.2. Unregistered tests 6.3. Criticism against the registration process of psychological tests 6.4. Inadequate policy implementation and monitoring 6.5. Inadequate training
Theme 7: Official policy regarding psychological testing	
Theme 8: Strengths of psychological tests and testing practice	
Theme 9: Limitations of psychological tests and testing practice	
Theme 10: Requirements for using tests and test results	
Theme 11: Norming/Re-norming	
Theme 12: Test development and adaptation	
Theme 13: Needs related to tests and test usage in South Africa	13.1. New tests 13.2. Centre for information on tests 13.3. Technology 13.4. Importance of feedback 13.5. Guidelines 13.6. Addressing the needs
Theme 14: Quality assurance of tests and test practices	
Theme 15: Central test agency	

The main themes and the sub-themes are discussed in detail below. Readers should note that many of the quotes used to illustrate the theme were originally in Afrikaans but were translated into English for the purposes of this report. The Afrikaans version of each translated quote has been included as an endnote at the end of this chapter.

Theme 1: Use of psychological tests

This theme covers changes in the overall usage of tests with reference to volume and variety.

Sub-theme 1.1: Perceptions of psychological testing

Participants reported that although there has been some resistance to psychological testing in the past, the frequency of psychological test usage is increasing.

> "I think 10 years ago there was a very negative sentiment regarding testing, (and) I think that people started seeing that even an interview can be unfair. They saw that there are alternatives, which also have inherent problems, and I think people started appreciating the objectivity of the kind of information you get [from tests]"[1] Participant, Communications and Technology.

Psychological tests are viewed as valuable and the negative perception of tests are changing. Organisations who are not currently using tests are reconsidering including psychological tests in their repertoire of assessment measures.

> Because there is such controversy around testing and test use and tests use has become very expensive with the private test developers, it has been used less and less and there is a need. Our line managers ask … which tests can they use and who will do it for them. So I think there will be a resurgence … in terms of testing. So it will definitely be used more"[2] Participant, Services

Sub-theme 1.2: Volume and application of tests

Psychological tests are used in various fields and for a range of purposes. Testing is done on a large scale (between 1000 and 35 000 people per organisation annually) and nationally. In most cases it is reported that psychological testing is done on a daily or weekly basis. In some cases the frequency of testing depends on the time of year, or the availability of certain specialist positions for which assessment is required. In other cases, testing follows a regular 18-month cycle where the same respondents are tested repeatedly.

A description of the purposes for which tests are used is provided in the following section.

Theme 2: Purposes for which psychological tests are used

Sub-theme 2.1: Variety of purposes

Psychological tests are used for a range of purposes. Table 4.5 identifies the purposes, ranging from the most to the least frequently cited by the participants.

Table 4.5

Purposes for which psychological tests are used

Most frequently cited	Cited to an extent	Least frequently cited
• Selection and recruitment • Training and development • Team development • Diagnosing psychopathology • Interpersonal skills and self-improvement • Career counselling and development • Succession planning	• Identification of potential • Research • Diagnosing learning problems • Screening of large numbers of people • Access to tertiary institutions • Identification of brain trauma or developmental arrest and a range of matters related to Neuropsychology • Assessment in legal matters such as custody hearings, medical malpractice and competence to stand trail, etc. related to Forensic Psychology • Rehabilitation • Aging	• Optimal fit and placement • Retention • Determining literacy levels • Accreditation of qualifications • Promotion • Identifying behaviour problems • Job analysis • Development of leadership • Bursaries and evaluation • Training of users • Therapy

Sub-theme 2.2: Selection and training

The goal of testing for selection purposes was explained as follows:

> "Yes, for me the end result is to get the right person for the right job. He should be able to do his job now, but also when I put up my succession planning, I should be able to promote him. I look at it as a supply chain, the guy comes, but I have to be able to move him a couple of levels."[3] Participant, Manufacturing

The link between testing for selection and consequent training and development was stressed:

> "You must have a very good development program in place to put those people on the same standard. Because remember, after selection … development or training takes place. That is the next step in any situation."[4] Participant Social services

The link between selection and training and development can be compared to the link between diagnosis and treatment in clinical or therapeutic settings. In the same way that testing in industry should not be separated from training, testing in a therapeutic context should be followed up with development and treatment.

Sub-theme 2.3: Using tests in an enabling manner

Access to training should not be moderated by test results, and should not prevent people from being exposed to training and development opportunities:

> "I try and separate learning and testing, because testing often has a negative connotation. I think it is used indirectly when we look for apprentices and we train people there, obviously we use testing there. But if someone wants to study further, I recommend that they look at performance first and then at the rest. But don't do a set of tests then to decide whether we want to do it or not"[5] Participant, Manufacturing

In the business environment, the main purpose of psychological testing is to achieve person-job fit and not necessarily movement within the organisation, that is, promotion. In the individual context, psychological testing is used for career guidance and diagnosis of emotional or brain/neurological trauma.

Theme 3: Profile of test-takers

Psychological testing is performed across a broad spectrum of people. Tests are performed on all age groups, ranging from young children to adults. Males and females are included equally in the testing group. Different tests are designed to be used with respondents with all levels of qualifications, which makes it possible to test people with limited education (lower than Grade 10) up to graduates and people with higher education qualifications. Different test batteries are administered to all levels of workers in the organisation, from unskilled labour up to executive management. The testing population includes all cultural groups and testing is done in groups or on an individual basis. In most cases testing is done nationally, which implies that testing is done across urban and rural contexts.

It seems as if two groups of people are not catered for adequately in psychological assessment, that is, people with disabilities and people with low literacy levels. These themes are discussed in depth later in this chapter.

Theme 4: Tests currently in use

Sub-theme 4.1: Range of tests

The participants indicated that they use a range of psychological tests. These tests were categorised according to the purpose of use and the frequency with which they were cited from the most to the least cited per category of purpose of use.

The tests listed in Table 4.6 show many similarities with the top 20 tests identified in the national survey (e,g,, 16PF, Wechsler Scales, SSAIS-R, JSAIS) as well as those identified during the focus groups (e.g., APIL, Beck Depression and Hopelessness Scale, Raven's Progressive Matrices).

About 22% of the tests listed in Table 4.6 were developed by the Human Sciences Research Council (HSRC). This suggests that although the HSRC tests remain popular, practitioners are increasingly using tests developed by other testing agencies.

Table 4.6
Tests currently in use

Purpose of use	Psychological test
Cognitive tests	Potential Index Batteries (PIB) Situation-specific Evaluation Expert Batteries (SpEEX Batteries) South African Wechsler Adult Intelligence Scale (SA WAIS)[b] Cognitive Process Profile (CPP) Wechsler Adult Intelligence Scale (WAIS-III) [b] Senior South African Individual Scale (SSAIS) [b] Junior South African Individual Scale (JSAIS) [b] IRIS[a] Ravens Progressive Matrices
Aptitude and ability	Differential Aptitude Test (DAT) and Senior Aptitude Test (SAT) [b] Clerical Test Battery (CTB) Academic Aptitude Test (AAT) [b] General Scholastic Aptitude Test (GSAT) [b] Various tests measuring spelling, language proficiency and reading comprehension[a] McCarthy Scales Developmental Test of Visual-motor Integration (Beery) Bender Visual Motor Gestalt
Personality	16PF [b] Meyers Briggs Type Indicator (MBTI) Occupational Personality Questionnaire (OPQ) 15 Factor Personality Inventory (15 FQPlus) Minnesota Multiphasic Personality Inventory (MMPI) Jung Personality Questionnaire (JPQ) [b] California Psychological Inventory (CPI) Giotto Integrity Questionnaire MCMI (Million Clinical Multi-Axial Inventory) [a]
Interest	South African Vocational Interest Inventory (SAVII) [b] Advanced Occupational Interest Inventory (AOII) [a] Self-Directed Search (SDS) [b] Meyer Interest Questionnaire (MB10)
Judgment	CPA (Career Path Appreciation) [a] Career Anchors
Potential	Learning Potential Computerised Adaptive Test (LPCAT) APIL, TRAM I and II
Projective techniques for a range of purposes including personality, interpersonal functioning, diagnosing emotional disturbances, etc.	Rorshach Inkblot Test Thematic Apperception Test (TAT) Draw a Person (DAP) Children's Apperception Test (CAT) Michigan Picture Test[a] Robertson Apperception Test[a] Columbus Picture Analysis Growth towards Maturity
Interpersonal relationships and emotional intelligence	BarOn Emotional Quotient Inventory (BarOn EQ-i) Belbin Team Role Inventory[a] Beck Depression and Hopelessness Scale[a]
Simulation exercises	Vienna Test System Simulation exercises developed by the users themselves[a]
Neuropsychological and Forensic Psychology instruments	Luria Neuropsychological Investigation[a] Rey Complex Figure Test[a] Trail Making Test[a] Der Sceno Test Von Staabs[a] Stroop Colour and Word Test[a] Various brief instruments designed to evaluate brain functioning[a]
Other	Assessment centres[a] Role Play[a] In-tray[a] 360 Assessment[a]

[a] Tests not classified as reserved for psychologists by the Psychometrics Committee of the Professional Board of Psychology for the Health Professions Council of South Africa as on Feb 2004-02-23. These instruments might either be under consideration for classification or they might not have been submitted for classification.

[b] Tests developed or adapted for use in South Africa by the Human Sciences Research Council (HSRC).

Participants feel comfortable using international tests, as long as they have been standardised and adapted for use in South Africa. International tests have to be supported by local, empirical information. However, there are criticisms against using international tests:

> "… you cannot always import things from other countries into your country. You must look at whether that system will be suitable for your environment as a developing country." Participant, Trade Union.

Sub-theme 4.2: Purchase of tests

In some cases the participant used a range of products from different test developers and publishers according to their specific needs. In other cases the participants chose to only use tests developed by one developer, because the tests link together and the participant has developed a good relationship with the distributor.

Sub-theme 4.3: Test Batteries

Assessment practitioners employ a range of tests in their batteries. Typically these include a personality and cognitive ability measure, as well as inventories addressing constructs such as interpersonal functioning, values, judgment and team-work. This applies to assessment in selection, development, career guidance and access to higher education institutions.

Psychological tests are also used in combination with other methods

> "Such a combination of tests, simulations, interviews, and you name it, always work the best, but you obviously have to look at time and money." [6] Participant, Public

Sub-theme 4.4: Reasons for excluding certain tests

Participants cited many reasons why some tests are no longer used and are thus excluded from their test battery. These reasons include: (i) the test becoming outdated, (ii) the test not being culture friendly, (iii) poor research on the application of the test, (iv) insufficient support from the distributor, (v) exorbitant prices, and (vi) a changing population.

Tests are not used across all fields of psychology and in all settings. Some sub-disciplines do not rely as strongly on psychological testing (e.g., psychodynamic therapists feel that tests become a barrier between client and therapist). The psychologist's training and background, as well as her area of specialisation determines whether she will be inclined towards using testing technology. Practitioners in organisational settings are less aware of the value and usefulness of psychological tests and tend to use other methodologies.

Theme 5: Difficulties when administering psychological tests

There are a number of different issues and problems relating to general access to appropriate and relevant tests and testing opportunities in our society. For ease of analysis the difficulties and problems have been grouped into four broader sub-themes. The first sub-theme, which relates to *access* refers to the following: administration and logistical difficulties, cost of testing and computerised testing as a barrier or benefit. The second sub-theme refers broadly to matters related to the *content of testing*, which includes language of test construction, test material and ease of use, and the need to test people with disabilities. The next sub-theme refers to difficulties arising from the current *marketing and availability of tests*, and includes lack of confidence in unregistered tests, test distributors and questionable practices, marketing and competition and the effect on choice, and the changing world of work. The last sub-theme pays attention to general *support* for institutions that do testing, which includes training and qualifications of administrators, limited expertise of users to perform their own norming, resistance and negative perceptions, and lack of clear guidelines for practitioners.

Sub-theme 5.1: Administration and logistical difficulties

Testing is sometimes done in rural, isolated areas, which makes administration more difficult. The administrator has to account for factors such as lack of electricity and access to writing materials as well as test-takers who travel long distances without food and water to attend testing sessions. These adverse situations could thus disadvantage these test-takers.

On the other hand, psychometric testing is sometimes used to level the playing fields. Many test-takers from previously disadvantaged backgrounds who have not received quality education have the opportunity to compete with others on an equal basis on a psychological test, such as a test designed to measure potential. Skills previously acquired are not measured with these tests, but the focus is rather on identifying potential.

Sub-theme 5.2: Cost of testing

Assessment is very time consuming, which requires a substantive investment from the client and end-user in terms of time and money. Some distributors link the price of the tests to continued research, but this a counterproductive practise. The market is very price sensitive.

The majority of participants feel that the instruments are very expensive, which makes it inaccessible to a large group of users. In some cases, testing is only done on members of senior management, and people from lower ranks are excluded.

> "There are test developers that don't contribute to South Africa's development with their high costs of instruments"[7] Participant, Social Services

The HSRC's prices were seen as being reasonable and many practitioners bought these tests in the past because it was the only tests they could afford.

Sub-theme 5.3: Computerised testing as a barrier or benefit

Computerising tests will make testing more accessible to a wider group of practitioners and test-takers. Computer-generated reports save time and money. In career counselling, test score interpretation can be computer-generated, which will provide the client with a narrative report, which reduces the amount of time psychologists spend on the assessment process.

Some participants were heavily opposed to this practice, and felt that only psychologists can meaningfully interpret reports, and that using a computer-generated report, without the aid of a psychologist, is irresponsible. The information in these reports should be treated as confidential.

Some participants did not use computerised testing as they did not have computers and equipment available. This is especially true for government departments that do not have access to computer laboratories.

Computerised testing is potentially very problematic in South Africa, if the low levels of familiarity with computers are taken into account. As some test takers are unfamiliar with computers, this distraction might influence their performance negatively.

However, performance on computerised tests is a complex matter and many other factors can be influential in determining level of performance. It is therefore simplistic to overemphasize the absence of familiarity with technology as a causal factor of poor test performance. It is interesting to note that practitioners' views do not correspond with the latest research on computerised testing. It will be beneficial to test-takers and assessment practitioners if awareness around computerised testing could be raised.

Sub-theme 5.4: Language issues

The most frequently cited hindrance to the administration of psychological tests was language. Language can be problematic on two levels: (i) the language of the test and (ii) the language competence of the test-taker. Participants raised two very different arguments.

Some participants felt that the assessment practitioners should be able to administer psychological tests written in English, regardless of the test-taker's home language, as an inability to deal with language barriers will negatively influence their performance at work. They argue that the business language is English and the participant should be able to converse fluently in the language before she can be considered for a position.

> "… but in terms of culture, the job has certain demands. And it doesn't matter what culture you are from, these demands have to be met." Participant Services

Other participants argued that test takers do not understand the language of the test and as a result might perform poorly on a cognitive test as a result of poor language skills instead of lower cognitive ability. This can be a problem for English second language speakers, as well as first language speakers, because the language used in certain tests is outdated or irrelevant. If the test-takers do not understand the words and prompts, the test is incapable of delivering reliable information. The test-taker will be discriminated against in terms of language proficiency rather than in terms of the psychological construct being assessed.

Language is closely tied to culture. Certain constructs and terms are experienced differently in different cultures and become culturally unfriendly. Cultural context particularly becomes a problem when doing personality assessment. For example, a participant stated that people from different cultures experience time in different ways, and black people tend to encounter more difficulty when doing time-based (speed) assessments.

The participants pointed out the need to overcome the language issue in assessment:

> "… where language and educational difficulties are a problem, we have to be creative in terms of how to measure it in a more tangible, concrete way." Participant, Services

Some participants believe that the instructions and instruments have to be translated from English and Afrikaans into indigenous African languages. Although the *lingua franca* is English, the participants believe that assessment in the vernacular will provide a more accurate description of a person's abilities. From these test results it will be possible to judge a person's potential and ability to learn, and not her level of proficiency in English. Other participants objected to the idea of translating tests, as it might change the constructs being measured, requires additional money for re-standardisation, and English is the medium of instruction at most higher education institutions and in business. This argument depends on the aim of the testing and the individual being assessed.

The issue of language can be avoided by using tests that do not use language, like non-verbal tests and projective techniques. However, the test-taker's response has to be translated when using projective techniques and the finer nuances of the language can be lost through this process. It is also important to keep in mind that existing projective techniques are culture-bound and will be interpreted differently across cultures.

The test-taker can also firstly be evaluated on a language proficiency test to see whether she is capable of competently completing the psychological test in that language. A narrative approach

was also suggested, as the test-taker can respond in a language and with concepts she is familiar with. In this approach, tests are not interpreted normatively, but only provide guidelines for assessing the candidate. It signifies a move away from standardised procedure and administration, and relies strongly on the psychologist's clinical skills.

It was strongly argued that language should not prevent people from benefiting from psychological testing:

> "But the most important thing is not to use it as a barrier. Do not say that it keeps the person away from training, but that it is an indication to him or the organisation that he first improves his language ability, because if he improves his language ability, he will perform better academically. Because if the language is bad, language becomes your barrier academically." [8] Participant, Social Services

Sub-theme 5.5: Test material and ease of use

Answer sheets are customised for specific purposes, and if the practitioner wants to use other tests, they have to replace the answer sheets. This increases the cost of testing.

To validate the tests used, the assessment practitioner has to look after data carefully and must have an effective system in place to connect and store data.

Some tests are very difficult to administer and the participants report that they find the manuals and interpretation guidelines confusing. It is difficult to determine at which level the test-taker is functioning prior to administering the test as well as to decide which reference group to use. This is problematic if more than one form of a test exists, catering for different ability and educational levels, and the administrator has to decide at which level to 'pitch' the test. This ties in with another challenge assessment practitioners have to face. Psychological tests are in general not developed to interface with non-formal qualifications and currently do not align with the National Qualifications Framework. It is therefore difficult to decide whether a test is suitable for a particular test-taker, if the test-taker has no formal schooling, but has been working in a particular job for a certain time period.

Sub-theme 5.6: Shortage of tests for people with disabilities

There seems to be a lack of tests catering for people with disabilities. This is problematic, seeing that a significant percentage of the population is disabled, and will thus be excluded from assessment.

> "… for example testing for blind people, we don't have equipment and stuff to do it. But if someone that is in a wheelchair applies for specialist selection, he has to meet the same requirements. So if he can write and see, we will include him in the normal testing situation." [9] Participant, Social services

Participants experience problems assessing people with disabilities and request that tests should be developed to meet this need, or be adapted to be suitable for disabled candidates.

Sub-theme 5.7: Lack of confidence in unregistered tests

Participants are wary of using tests that are not registered with or classified by the Psychometrics Committee of the Professional Board for Psychology. They also avoid tests that any unqualified person can use. They feel that sensitive information generated by psychological tests should not be for public consumption, and advised against line managers and clients having direct access to such information.

Assessment practitioners should be aware that Section 37 of the Health Professions Act (Act 56 of 1974) in fact determines whether an assessment act is psychological or not, whether or not the test has been classified as such by the Professional Board and irrespective of the claims of the test publisher. Furthermore, assessment practitioners need to be clear about what the registration or classification of tests encompasses. If a test has been classified by the Psychometrics Committee of the Professional Board for Psychology it does not imply that the test is necessarily of a high standard. The main concern of the Psychometrics Committee is to classify a test as being of a psychological nature or not, and in the process comment on aspects of the test's psychometric properties. However, it does not do a comprehensive quality review. There is thus a possibility that classified or registered tests are not necessarily of high quality and practitioners should be aware of this. Furthermore, it is also possible that some of the unregistered tests are of a high quality. These aspects are discussed further in later sections of this chapter.

The psychologist should be well-trained, competent and ethical as she plays an important role in the successful implementation of psychological tests. One test distributor commented as follows:

> "Another practical difficulty is to get the psychologist to understand your business. We typically train our own psychologists internally. But it is difficult to find the right people who are business orientated, who care about their clients rather than just getting a whole lot of money all the time." Participant, Manufacturing

Sub-theme 5.8: Test distributors and questionable practices

Test developers sometimes approach clients with tests that may yield bogus results. These consultants market tests as being non-psychological and convince unsuspecting clients that they will be protected by law if they use it. Participants were very negative about this 'hard sell" approach.

> "There is a lot of junk available and companies are taken in, because they're ignorant, and this does a lot of damage eventually."[10] Participant, Public

Many managers in industry are not aware of the benefits and complications of using psychological tests. Assessment practitioners cannot always effectively choose appropriate tests and become

confused when confronted with a wide variety of tests. This lack of awareness should be addressed, to empower them to make an informed decision. Test developers should also compile and agree on a code of practise for test developers, which will guide them in developing tests, and will protect the public when purchasing decisions have to be made.

Notwithstanding the above, the participants perceived that most test developers back their products with sound research and are trusted by practitioners.

Sub-theme 5.9: Market and competition and the effect on choice

Participants felt that an increase of test developers and the consequent competition should lead to an improvement in the quality of tests material, and keep the price under control. Competition in the marketplace ensures that distributors constantly upgrade and improve their tests, as the client has the opportunity to compare products. A monopoly in test distribution is unacceptable, as this leads to bad service and exorbitant prices.

> "There should be more competition so that prices are lowered, because the prices are exorbitant" [11] Participant, Public

There is also a need for a wider range of tests measuring the same constructs. More tests have to be developed in South Africa that are appropriate for our multi-lingual, multi-cultural society in rapid transition.

On the other hand, competition between test developers can have a negative consequence because it:

> "… prohibits doing joint validity studies and thorough theoretical research. Because we all come from our own point of view and I think it creates a bad image of the industry with the users."[12] Participant, Test Development

Participants complained that the distribution of tests has become too decentralised. It is very difficult to gather information on the range of tests available in South Africa, and the process is not customer-focussed. It is also difficult to get objective information on the strengths and weaknesses of tests from the developers themselves. There is tension between the need for centralised information on the one hand, and concerns that centralisation might lead to a monopolistic situation in the test development market. Although the participants were critical about the fragmentation of the test development service, they feel that competition and clearly demarcated products results in higher quality and lower prices.

Sub-theme 5.10: Changing world of work

Practitioners observed that psychological tests do not keep up with the changing world. In this regard they commented that tests are outdated and irrelevant.

> " [I think those things have to be updated every 5 years] in this fast changing world in which we live. Because at present you are only making inferences. You carry certain information over to other fields,

> because these fields are not being measured. And your population is changing."[13] Participant, Manufacturing

Sub-theme 5.11: Inadequate training and qualifications of administrators

Some participants feel that the negative connotations around psychometric testing could be ascribed to unqualified, incompetent administrators, and not the tests themselves.

> "The weaknesses here are not bad tests, but bad psychologists that use things incorrectly, or that use it exclusively, as if tests always give the complete picture. That is not true – it is only a tool."[14] Participant, Manufacturing

The participants stress the importance of improving the quality of training for assessment practitioners. They commented further that the Health Professions Council of South Africa (HPCSA) should regulate the training provided.

Participants felt that distributors are inconsistent with their requirements for the use of their instruments. They are expected to attend training, which is expensive, although the criteria pertaining to who should be allowed to attend the training are either lax or inconsistently applied. People without postgraduate degrees in Psychology are also allowed to attend such training and this lowers the standard of the training and consequently impacts negatively on the administration of the test and the interpretation of the results. Participants stated that initial training should be free or minimal, as the consumer is already paying a lot of money for the tests.

Sub-theme 5.12: Limited expertise of users to do own norming

Some institutions have the resources and data available to develop situation-specific norms and to do statistical analysis themselves. Private practitioners may not have such a facility or expertise at their disposal, and thus experience difficulty in generating norms tailored to their unique needs. It was suggested that a facility should be created where private practitioners could contribute to a database of information on a test and could then get access to up-to-date psychometric data.

Sub-theme 5.13: Resistance and negative perceptions

Many people view psychological testing with scepticism. They question the validity and relevance of testing and suggest using other methods of assessment. This negative perception has to be changed, and can only be done by providing valid, reliable and fair instruments.

> "If those things are stipulated beforehand and everybody knows what the situation is, we don't have a problem with testing"[15] Participant, Trade Union

Sub-theme 5.14: Lack of clear guidelines for users

The participants emphasised the importance of getting clarity on certain guidelines in terms of the classification and application of psychological tests. According to the specifications of the Professional Board for Psychology, some tests can be administered by "suitably trained" people

which does not necessarily entail a qualified psychologist or psychometrist. These and other specifications and guidelines should be clarified. A policy document stating when, where and how psychological tests can be used should be available and easily accessible. The participants observed that they do not get enough support from the HPCSA:

> "I get the feeling the only thing they are worried about is the CPD points."[16] Participant, Public

and

> "I can't see that I'm getting any value from the HPCSA in terms of assessment… That they address the matter, have debates about it, do training, have workshops or develop guidelines [and] regulations..." Participant, Services

Theme 6: Ethical use of tests

Psychological assessment will be an acceptable practice if it meets the following criteria:

> " As a trade union we say it must be fair with reference to our members and equal. It has to be transparent. And the moment we see it is not equal, transparent and fair, we have a problem."[17] Participant, Labour union

Sub-theme 6.1: Defining the ethical use of psychological tests

The ethical use of psychological tests was described by one participant as entailing:

> "… it must be a responsible test and it should be responsibly used. It must be relevant firstly and interpretation must be done responsibly by suitably trained people." Participant, Services

If practitioners follow good assessment practices they will not use psychological tests in isolation, but will utilise them in conjunction with other methods such as interviewing, reference checking and clinical insight, so as to ensure that the requirements and objectives of the assessment are met. The use of tests in business was particularly highlighted and the following quote emphasizes the scepticism from some quarters regarding whether any appropriate tests exist and whether they can be used in an ethical way:

> "We are sceptical about using psychometric tests. You have to bring us a proper thing that I believe in, that my members believe in. And if there is any uncertainty [in the union] there will be no way that we will accept it. Or that we will let employers continue with it." [18] Participant, Trade Union

Using test results irresponsibly to guide decision-making in the business world can lead to the loss of money (e.g., if the wrong person is hired) and trust in the practice of assessment.

One participant asserted that assessment practitioners are guilty of unethical testing practises when:

> "…they use it simplistically, mechanistically, without understanding the full context. It is irresponsibly used – it's like using a medicine that you are not trained to use." Participant, Services

Some further examples of unethical practices in the implementation of psychological tests as provided by practitioners were:

- In some cases tests and test material are used to advance the users' agenda. This can be political or financial in nature.
- Unqualified people use psychological tests.
- Some users apply the test in isolation, do not integrate the results with other measures, and show a disregard for responsible feedback and application. This can be especially problematic in Neuropsychology and Forensic Psychology if test scores are used in isolation. Tests scores have to be integrated with other normative and qualitative data, as scores alone can be misleading.

Sub-theme 6.2: Unregistered tests

The use of tests not registered with the Professional Board for Psychology of the HPCSA happens not only because of wilful malpractice, but links to difficulties experienced in terms of testing and is a symptom of a wider problem. The reasons for using unregistered tests can be because of the accessibility of such tests, a lack of awareness and a need to be responsive to the environment, and the fact that many of the unregistered tests are more up to date than the registered tests. In particular, it was pointed out that:

- Many test-users utilise tests not registered with HPCSA because these tests are more easily accessible as the test-user does not have to be a registered psychologist. A wider range of people can thus administer these tests and the organisation can save money by not employing a psychologist.
- Many test users have moved away from the old HSRC tests that have been registered with the HPCSA. The perception exists that these tests are outdated and discriminatory.
- Organisations are forced to use tests that have not been classified by the HPCSA as psychological tests because they do not employ psychologists or psychometrists.
- There is a lack of awareness and knowledge about which tests are registered and which not. Industry is not fully aware of the role of the psychologist in the administration and interpretation of tests.
- There is a need for tests that cover specific areas which are not included in the list of tests provided by the HPCSA. The user is then forced to use other available measures, which might not be registered by the HPCSA. In some cases, the users develop tests themselves to suit their unique needs and circumstances.
- Tests with an international reputation and solid base of research are used in South Africa, without considering the fact that these tests are not standardised for use in South Africa.
- Organisations are constantly searching for cutting-edge tools to enhance their competitive advantage. These tests tend to be new on the market and have often not been through the registration process.

- Before test classification and registration can take place, tests have to be piloted in the field to ensure reliability, validity and minimising of bias. Test users administer these tests and feed the information back to the distributors for developmental purposes.
- Some tests are in the process of being registered (e.g., a list of Neuropsychological tests covering a broad range of constructs and behavioural domains has been sent for classification and registration), but a final decision is still pending.

Most companies feel very uncomfortable using unregistered tests, as this leaves them open for litigation according to the law. There is also a perception that charlatans sell psychological instruments.

Sub-theme 6.3: Criticism against the registration process of psychological tests

The registration process with the Psychometrics Committee is viewed as being very stringent, bureaucratic and in many ways confusing. It is also expensive to submit tests for registration. The thoroughness of the process is questioned and participants suggested that there should be independent studies to validate results. The decision about which tests to table for registration, should not be left to the test developer.

Sub-theme 6.4: Inadequate policy implementation and monitoring

The assessment practitioners are often not aware of the requirements and regulations guiding the use of psychological tests. The absence of clear guidelines, control and governance may lead to the abuse of tests and test results. Test-takers are not always aware of their rights and may thus be subjected to unethical assessment practises.

There is confusion around the distinction between a psychological test and a competency-based instrument. Competency-based tests are distributed to a range of users, although some measure psychological constructs. An official policy, developed by the Psychometrics Committee, is in place, but the monitoring of end-users is lacking. There are no measures in place to ensure that policy is implemented and adhered to, and not enough evidence is seen of enforcement of the regulations.

The test developer should ensure that all the criteria for a well-developed and researched test are met. The test user has a responsibility to ensure that the instrument is valid for the purposes for which they use the tests and should review issues such as reliability and norming. Ensuring the ethical use of instruments is therefore a shared responsibility between the test developer and user.

Sub-theme 6.5: Inadequate training

Assessment practitioners are not always adequately trained in the application and administration of psychological tests. The responsibility lies with universities and the HPCSA in terms of the

accreditation examination to ensure that practitioners are informed and skilled in the ethical and appropriate use of tests.

Distributors were criticised for providing training courses to accredit users to administer certain tests as this could be misleading:

> "There is this false idea that some distributors think that they can accredit people to use tests. That is illegal. I might be the distributor, but I can't accredit someone to use a test. The law of the land does that. There is a professional body that looks at that. It has already been done." [19] Participant, Test Development

It was felt that although training at tertiary level includes test construction and psychometrics, as well as courses in test usage, the training is not as thorough at all universities and some limitations in the training of psychologists and future test users have come to the fore.

Theme 7: Official policy regarding psychological testing

Most institutions have official policies in place to govern the use of psychological tests in their organisation. These policies are based on the ethical code as prescribed by the HPCSA and comply with legislation in terms of the Employment Equity Act. Furthermore, the International Test Commission has included guidelines on developing a psychological assessment policy in the *International guidelines for test use* (International Test Commission, 2001). The afore-mentioned policies and guidelines can be used when developing a policy suited to the unique needs of the assessment practitioner. In general the policies cover the areas stipulated in Table 4.7.

Table 4.7

Aspects covered by an Assessment Policy

Areas of interest	Description
Rationale for usage of tests	• Justify the use of tests in a specified context. • Explain and prove the relevance of using psychological tests. Doing a job analysis and compiling a profile that links with the job requirements can avoid irrelevant testing. • Specify the target population for testing. • The instrument must have a clear demonstrable relation to the work behaviour that they are intended to describe or predict.
Psychometric properties	• Instruments must be constantly monitored and improved in terms of reliability, validity and fairness. • If impossible to apply a test without bias, the test should then be used in a responsible manner.
Procedures	• Minimise unfair discrimination and strive towards equitable use. • Cultural relevance and adaptation should be addressed. In most cases South African tests are used, or norming is done for a South African context. • Specify which tests and measures are appropriate and acceptable. • Systems have to be in place to promote equitable use of tests.
Storage	• Test material and results should be stored in a safe place.

Areas of interest	Description
Rights of testees	• Address rights such as equitable and fair treatment in terms. of the application of tests. • Right of the test-taker to feedback, provided by a suitably trained person (qualified psychologist).
Application of test results	• Test results are an additional source of information and should not be used in isolation.
Access	• State who is allowed to use the test (e.g., qualified psychologists, and psychometrists under the supervision of a psychologist). • State who has access to the results. • Results and reports are treated as highly confidential.

Having an assessment policy ensures that users are aware of their responsibility towards ethical application and utilisation of tests and tests results – it also increases a sense of ownership in terms of the administrator. However, in most cases, the policy has been developed, but has not been implemented widely, as there are often no strategies or measures available to enforce implementation.

Theme 8: Strengths of psychological tests and testing practice

Most participants feel that there has been a move towards a more positive **perception** of psychological tests and testing as acceptable practice, as psychological testing are seen as a more **objective** measure when compared to other methods such as interviews. This objectivity is backed by research.

> "Standardised tests act as equaliser, regardless of colour and background". Participant, Public

Psychological tests provide an indication of **constructs** such as knowledge and skills and psychological attributes, which are impossible to measure with other methods. Existing tests cover a **broad spectrum of measurable areas**, and the assessment practitioners can choose between different tests to meet specified needs. Existing tests provide for the assessment of psychopathology and for deductions to be made regarding therapeutic interventions.

Existing tests provide access to more **subtle parts** of human behaviour, and are geared towards the identification of the **potential** to develop. If the test is customised to the unique needs of the user, it provides a **competitive advantage**. It can be used as a **screening** mechanism to reduce the number of applicants in selections. It is imperative that the test meets the requirements of validity, reliability and cross-cultural applicability and that it is used in an unbiased and fair way in accordance with legislation.

> "… you must assess what you are supposed to be assessing, you are not allowed to discriminate [unfairly], you've got to be fair in your processes and ethical." Participant, Services

Psychological test results are a source of **scientifically standardised information** and provide an **overview** of an the individual's performance, including gaps, which can be addressed thorough training. Test results provide a wealth of information in a **short time**. This information forms a basis for **comparison** and the testee can be evaluated against her peers. The test-taker also benefits in that she is given the opportunity to increase her **self-awareness** and focus on her strengths. This can only be achieved when the test-taker is provided with extensive feedback.

Psychological tests are useful if they are used in **combination** with other methods and results should never be evaluated in isolation. Together with other methods tests provide a **total** picture of the individual. When a test is well-designed, well-researched and relevantly applied, valid predictions can be made and an indication can be obtained of the probability of success at a job, for example. This is extremely important in an organisational setting, as inappropriate appointments can lead to huge financial losses in the long term.

South Africa has many experts with knowledge and expertise in the field of psychological test development. A good **knowledge base** already exists, and there is a move towards developing more tests suited to the South African context.

Theme 9: Limitations of psychological tests and testing practice

Psychological tests can act as a **gate-keeper** when they are used in high-stakes selection contexts, if the test is inappropriately applied, or used in isolation, without verifying the results against other measures.

Many international tests are imported and used in South Africa. These tests are sometimes **unsuitable** for use in the South African context and with our cultural groups. There is thus a need for South African validity, reliability and cross-cultural bias studies to be undertaken and for such tests to be adapted for use here. Furthermore, continuous research and improvement of tests should be undertaken for both tests developed in South Africa as well as for international tests.

Existing tests are not appropriately aligned with the levels of the National Qualifications Framework (NQF). Such alignment needs to take place both in terms of the norm groups used, as well as what type or level of qualification a test-taker needs to have attained to be able to complete, for example, a personality questionnaire.

Psychometric data is **inaccessible** to ordinary people, as the concepts are not popularised and presented in an understandable format. This can alienate people from testing and its potential benefits.

There are many tests available measuring the same construct. The difficulty of making a **choice** between tests is exacerbated by the fact that information regarding the classification of tests according to performance-driven criteria is not always available. The applicability of tests in terms of the target population, cultural context, etc. should be carefully documented. There should be a coordinated research effort to investigate the administration of tests in different contexts.

The wrong approach is sometimes followed when selecting tests: instead of starting with clarifying the purpose of testing, the availability of a test is used as the criterion, and the purpose is adjusted to the kind of information that a particular test can provide. The selection decision is thus sometimes resource based and not competency based.

Some tests are **old and irrelevant** in the new South Africa and the changing world of work. Applying these tests can lead to misuse and incorrect conclusions can be drawn. There are many tests catering for an **elite group** of people, but there are very few tests for the disadvantaged majority.

Many psychological tests follow a **self-report** format, and the underlying limitations of this method, especially when it is used cross-culturally, should be considered when interpreting results.

Although **computerised testing** decreases testing-time, computer-generated results should be viewed with caution as the clinical perspective of a trained psychologist is irreplaceable. Depending on the computer program, the language used in the report could be judgemental and destructive. These reports should thus only be handled by psychologists, especially when providing feedback to test-takers. There is also scepticism about the numerous types of reports that can be derived from only one test. The question was raised whether one test reliably measures diverse psychological constructs. Furthermore, where computer-generated reports are available for a variety of constructs, they usually present the practitioner with a fragmented view of the client and the practitioner will have integrate the diverse reports to form a more complete picture of the client.

In many cases, the quality of the tests is adequate, but the problem lies particularly in the manner in which they are **applied,** as tests are sometimes used incorrectly and irresponsibly.

> "The question mark drawn over psychometric testing was 5% about the content of the test. Ninety five percent was about the people that used it. People used it to keep the system in place. I think that still happens in some environments where people use the test or test material to keep their agendas in place. That can be political or financial agendas."[20]
> Participant, Social Services

Inadequate **training** of assessment practitioners can be one of the causes that leads to inappropriate administration.

There is a need for the creation of a research **forum** where debate can take place around the quality of tests and test usage. Test distributors need to follow a customer-focused approach and should address the needs of their clients timeously.

Theme 10: Requirements for using tests and test results

The participants stated some requirements for the use of tests:

- A strategy should be in place to guide decision-making regarding when to use tests and when not to use tests. This strategy should be developed in cooperation with all stakeholders. In some cases other methods of assessment may be more effective, and testing is not the preferred recourse in all situations.

> "I think you can support testing if testing is one of the elements that is considered, … if it is adaptable and if it can't be manipulated, if I have a clear indication of what is measured for which category of people." [21] Participant, Labour Union

- In a business context, predictive validity is of utmost importance. A test should thus only be used if it effectively predicts success in the job.
- The assessment practitioner should be certain about which norms should be applied. The test manual should be explicit in defining the context, rationale, target group and applicability of the particular test. The norms should reflect our multi-lingual, multi-cultural society in rapid transition.
- When using a range of tests in a battery (especially for neuropsychological purposes), special attention should be given to achieving internal validity when the results are integrated. Decisions should not be based on the results of only one test, and different test results should be triangulated with other sources of information to identify a pattern that supports a particular brain syndrome or organic impairment.
- The use of tests needs to be backed up with research on a continuous basis. In this regard, test users and developers can form a partnership so as to jointly research tests. Tests need to be researched in terms of their cross-cultural applicability and the influence of language, educational and socio-economic status on results. Test should also be adapted for different language groups. This implies complicated, time consuming research:

> " … with all tests you have to do continuous research, the same for local and international tests. But to develop a test is a long process. Our dilemma is that our cross-cultural situation is so different from other countries, that basic matters such as language aren't always addressed properly. So the changes required will be radical and you will have to standardise the things again to ensure that it still does what it is supposed to." [22] Participant, Public Service

In particular, research can be done on the effect of language in personality assessment.

- Participants feel it is important to have access to a centralised test information body when making enquiries about tests. This body should provide an evaluation of tests and make recommendations in terms of the suitability of tests, which will help practitioners identify the most appropriate tests to use. They feel that the absence of such a structure at present is frustrating and leads to abuse.

Theme 11: Norming / renorming

The issue of norming or renorming psychological tests is a sensitive matter, which requires careful consideration of all the related factors such as age, education, gender, etc. Norming can be seen as a benchmarking process. A participant in the manufacturing category emphasised the importance of norming as such:

> "I don't think you can go without norms. How will you compare? Our job in industry is to compare, not discriminate, but differentiate. Better, worse – that is our job. And you have to compare people to do this." [23] Participant, Manufacturing

Using norm groups as reference points requires skill from the psychologist. Norms should never be taken at face value and the specific context in which the norms are being used should be considered. When renorming tests, inappropriate items should be removed (i.e., the test should be adapted). Norming is thus seen in conjunction with test adaptation.

All the participants stressed the importance of appropriate norms, but they had varied suggestions for achieving equitable and fair use of norms. Some participants argued for the use of different categories as reference groups. They believed norms have to be developed based on age, race, educational background and language because of the variation of past opportunities in our society and a history of disparity in education. It would be unfair to compare people from different educational backgrounds to the same norm group. Others felt that the development of different norms for different groups can be construed as discriminatory and can be perceived as analogous to apartheid practices. Using race and language as a divider may also not be relevant any more:

> "I think it will be unfair to have a disadvantaged norm. I also don't think it will have practical value. I think you have to make distinctions based on more than language and race, because there is a lot of mixing. The groups are not as purely advantaged or disadvantaged as 10 years ago." [24] Participant, Social Services

Other participants argued for a more qualitative, content-driven interpretation of test results, or being able to access various alternative norm groups.

> "So that we have more than one alternative norm group against which you can compare the person. You can see how well he performs when compared to a typical Western norm and how he would have performed if he was compared to a general mixed norm."[25] Participant, Resource-based.

If the practitioner has access to a variety of sets of norms, the practitioner could then decide which would be the most relevant norms for a test-taker. This is of special importance when using international tests.

> " … the norms again may be an issue. We have international standards and there is the South African standard. We should have access to both standards and you decide, are we a global company or are we inwardly focused. Which ones do we use?" Participant, Services

International norms are important when a candidate has to be compared against a global standard, but situation-specific norms in the South African context are also meaningful. Industry has followed the route of developing *situation-specific norms*, where all people are measured against a benchmark for a specific job. Factors such as age, gender, race, etc. are not taken into consideration and all candidates have to meet a uniform standard. This enables the psychologist to justify decisions based on job requirements – all successful applicants have to meet these requirements, regardless of demographic differences. The key word is predictive validity, which is facilitated through situation-specific norming. It is important to note that although there is one norm group for each job, every different job will have a different norm group, e.g. different norm groups for executive management and clerical staff.

Norms have to be updated on a regular basis. The South African society is constantly changing, which makes norming a challenging and controversial issue. The norming process should be scientifically approached and attention should be given to large, representative, appropriate sample sizes and the stratification of the sample.

> "You should not develop a norm on those people for whom the test does not work. That is a prerequisite: you can only norm on groups where your test is reliable enough to use. "[26] Participant, Services

Theme 12: Test development and adaptation

The participants made some observations regarding issues related to the development and adaptation of tests, namely that:

- Test development and adaptation requires personal commitment and competence on the side of the developer. There is a perceived lack of competence in the market place and there is also the perception that the enthusiasm for developing tests might be lacking at the HSRC at present.
- The issue of under-representation of black test developers and psychologists working in the field of psychometrics should be addressed.
- Language issues have to be addressed, especially when doing personality and cognitive assessment. A possible suggestion for solving the language issue is to translate reading material and vocabulary tests into the vernacular. The test will then measure the individual's language ability in the mother tongue. It will then be possible to infer the person's potential and

ability to learn new things from her performance in the vernacular. Another strategy is to use non-verbal measures, which do not depend to such an extent on an understanding of language.

- There is a view that in some instances existing tests should not be adapted, but new tests should be developed from scratch. Attention should be given to item format, construct validity, relevance of content and appropriate use of language within the South African context. It is believed that some personality measures, such as the 16 PF, can never be adequately adapted for South Africa.
- Psychological tests should be based on NQF levels and should take into account qualifications that are not formally obtained.
- Although there is still a need for paper-based tests, computer-based testing has many advantages. There is a need for sophisticated technology and the software has to be network-compatible and user-friendly.
- Existing measures should be reviewed every five years to keep pace with the changing world of work.

The researcher observed that very little information was gathered around the topic of test adaptation. It is possible that the participants do not give the adaptation of existing tests enough thought in their ordinary day-to-day functioning. Users might not be aware of how the limitations of existing tests can be addressed, or they might be content with the tests they are using. Very little adaptation is done in organisations, and this is a gap that could be researched further.

The participants also made some suggestions regarding the use of alternative assessment methodologies. For example, they pointed out that a narrative approach (e.g., a clinical interview) can serve as an alternative to traditional psychometric testing, where the test-taker is invited to engage in conversation with the psychologist. Tests are only used as guidelines, and a direct, brief approach is followed.

Theme 13: Needs related to tests and test usage in South Africa

In terms of the development of new tests, the participants require that all tests meet the following criteria: predictive validity, cross-cultural appropriateness and unbiasedness, relevance and reliability. The market would welcome tests developed in South Africa.

Sub-theme 13.1: New tests

Organisational tests should be more practical and should focus on the actual work situation. There is a need for the development of work samples, role play and assessment centres that are stream-lined and cost-effective. The tests should have proven predictive validity.

> "… where you place someone in a simulation situation, where you simulate the work he will have to do. That is for me the future of psychological testing. Because it is not based on prediction, but on real-life current situation and behaviour. That situation will definitely predict the behaviour it is simulating." [27] Participant, Public

Tests should not only be developed from a clinical model focussing on deficiencies and pathology, but should focus on identifying and enhancing strengths and coping skills.

> " Testing should be adapted to be more focused on employers, and not only for a clinical set-up. We have to make these things practical. We say all this wonderful things: that testing is an aid for decision-making, but if you can't use it, it can't be an aid. And if you use it wrongly, it won't be an aid." [28] Participant, Manufacturing

The following areas in which practitioners would like new tests to be developed were identified:

- Identifying potential and developmental areas in people with lower and high educational qualifications
- Identifying learning potential in children from all cultural groups
- Measuring cognitive potential with non-verbal instruments
- Leadership in the South African context
- Emotional intelligence
- Integrity
- Culture-friendly projective techniques for the diagnosis of emotional problems
- Diagnosing dyslexia
- Individual intelligence tests for children
- Group intelligence tests with revised norms
- Language skills assessments
- Standardised national scholastic performance test (not only for diagnosis, but also remediation)
- Pre-selection screening test to indicate whether further in-depth testing is required
- Team performance
- Stress tolerance
- Updated interest inventory reflecting new areas of work
- University selection and access
- Technical career guidance
- Educators should be able to administer tests, because the education system doesn't have the resources to employ psychologists for all learners
- Personality test for people with low literacy
- Relationship between parent / guardian and the child
- Measuring anxiety, depression, stress and Post-traumatic Stress Disorder with an instrument developed and standardised in South Africa
- Sexual abuse (victim and perpetrator)
- Measuring a range of thinking skills, for example, memory, reasoning, problem solving, etc. with one instrument
- Subject choice and career entrance
- Parental alienation
- Addressing needs of illiterate adults and unemployed youth.

A new interest test urgently needs to be developed as the tests currently being used are out-dated for the modern world of work. Furthermore, there seems to be a need for tests that assess cognitive processes instead of intelligence (IQ), because the applicability and relevance of IQ tests are questioned:

> "Now what relevance does IQ have on the person's performance? I could have a very high IQ, what does that mean in terms of my competence and ability to deliver and have drive and energy?" Participant, Services

When it comes to tests used in educational settings, participants indicated that they would like to have tests being made more accessible to educators in schools. Educators should be able to administer the tests, because the education system does not have the resources to employ many psychologists. Tests developed for use in the education system should be reasonably priced and standardised for use across all cultures. Both individually administered and group administered tests are needed. The tests should add value and not be too time-consuming to administer. The focus should be on meeting the needs of the majority of learners

> "There are enough sophisticated tests for a small, elite group of people."[29] Participant, Public Service

Sub-theme 13.2: Centre for information on tests

There is a need for the creation of an information centre which keeps a record of registered psychological tests and assessment practitioners. This centre should have the expertise and knowledge to be able to make recommendations in terms of the applicability of tests. The centre should be built on a business model and should be customer-focused. This centre should not only rely on technical skills in terms of test development, but should market and promote the use of psychological tests. The function of the information centre was described by one participant as:

> "They have to set guidelines and requirements, and they have to evaluate test material to see whether the tests meet the standard. At the same time they should be a support service for when the tests don't meet the criteria to give advice in terms of adapting the instrument or further research to prove that the test does meet the requirements."[30] Participant, Public Service

Sub-theme 13.3: Technology

There is a need for computerised tests, especially in career counselling. Information should be easily accessible through the internet and online assessment will be beneficial.

Sub-theme 13.4: Importance of feedback

To enhance the value of psychometric tests, the test-taker has to benefit from the process. This can be achieved if feedback is done sensitively by a psychologist and if the focus is on areas that can be developed.

Sub-theme 13.5: Guidelines

Guidelines should be drawn up stipulating ethical and professional considerations in terms of how and when testing should be applied, factors influencing interpretation, the importance of feedback, etc. The assessment practitioner also has to be aware of the influence that she has on the testing situation, as well as on the test-taker's performance.

> "You know, the whole idea of experimental bias, the person who presents a test to you, motivates you, has an impact on the performance or has the ability to have an impact on performance. ", Participant, Services

Sub-theme 13.6: Addressing the needs

The first step in addressing the needs in terms of psychological testing should be to create a forum for discussion and debate, where needs can be identified and addressed. All stakeholders should be invited to participate in this process, that is, universities, the Departments of Education, Health, and Labour, test developers, etc. and guidelines and strategies should be put in place to govern the development, administration and distribution of tests.

Workshops have to be held to address cultural, language and educational issues that relate to psychological testing. During these workshops, priority areas should be identified and the way forward should be discussed. Through discussion and debate, testing should be reinstalled as a front-line core business technique for the psychologist in an individual and organisational setting.

When developing tests, the practical limitations of the South African context should be taken into consideration. There are many underprivileged people who don't have access to water and electricity and many areas are isolated. Testing will be more difficult due to these constraints.

Theme 14: Quality assurance of tests and test practices

The participants felt that there was currently very limited control and governance over the quality of tests utilised and testing practices in South Africa. They were sceptical about the ability of the Professional Board for Psychology of the HPCSA to monitor the implementation of policies and guidelines. Currently the Professional Board can only intervene when a formal complaint has been laid. Colleagues are resistant to report one another, and the public is not aware of their rights. The system becomes flawed when transgressors cannot be identified through other means. Malpractice and the unethical usage of tests are not being monitored. Currently the individual's integrity and training alone assures the ethical use of psychological tests.

> I think it is about the person's integrity and training. If you work in court you expose yourself, and if you don't use the stuff ethically and professionally, you would have exposed yourself. [31] Participant, Private Practice

Presently, as the HPCSA can only respond to complaints, participants felt that it does not take a proactive approach to promoting and growing the field of psychometrics and providing protection and support to its members. It was stated by participants that South Africa had wonderful talent in this area, but issues such as in-fighting and poor leadership hindered governing bodies like the Professional Board of Psychology and PSySSA. Participants felt that visionary, strategic leadership could rectify this.

There is a mechanism for the classification of tests in place, but this process is also confusing and not transparent. Participants are also unclear about certain definitions in the classification of tests. There is no provision in the guidelines of psychological assessment for testing in a human resources (HR) capacity.

> "it is difficult to even find a person responsible in setting out the guidelines, but there is no active energy in the ball game. It is like: if they do or don't, who cares? South Africa has the most regulated test environment in the world, but in practise it is difficult to implement." Participant, Social Services

Participants indicated that they employ measures in their institutions to ensure the ethical use of tests. This takes the form of Custodianships or Best Practice Centres. The members of these structures have regular meetings and set measures in place to ensure that tests are applied in a fair and responsible manner.

Participants proposed the establishment of a Centre of Excellence for Testing, which will be an encompassing monitoring and advisory body. The centre should consist of a combination of various experts in the field, which includes test developers, representatives from the HPCSA and Departments of Education, Health and Labour, as well as practitioners in industry, private practice and academia. The centre should not only provide guidelines, but should have the ability to prosecute transgressors. There should be a direct link between this centre and the Psychometrics committee of the Professional Board, which will give it regulatory powers. Of utmost importance is the independence of this body, and it therefore should not employ people with a vested interest in particular tests. A monopoly of test development should be avoided. The Centre of Excellence should receive money from government, as well as a subsidy from the HPCSA. It should be service-driven but not commercially oriented. It should only have one *raison d'etre*, namely:

> "It's only vested interest is maintaining ethical and professional usage of tests." Participant, Services

The functions of the Centre of Excellence are spelt out in Table 4.8.

Table 4.8

Functions of a Centre of Excellence for Testing

Function	Description of function
Setting guidelines	• In terms of the registration and classification of psychological tests • In terms of responsible and ethical test usage • Related to test development and quality standards • Setting the examination for qualifying practitioners, together with the Professional Board
Monitoring and coordination	• Monitoring the implementation of tests in practice • Auditing test users on a regular basis • Keeping a register of all tests and test users • Prosecuting malpractice • Protecting the public
Research	• Comprehensive quality review of existing psychological tests • Developing a database of information on existing tests (including the information provided to the Psychometrics Committee in the earlier registration process of psychological tests) • Provide test developers with advice on how to prepare their test for successful registration with HPCSA in terms of outstanding information and sound research practice. • Research cross-cultural dimensions relevant to psychological testing
Expert advisory capacity	• Provide users with information on existing tests and making expert recommendations regarding the use of tests for specific purposes. • Present training in the ethical use of psychological tests

The centre should be involved in the management of quality control, but should also be involved in independent research and the review of existing tests. Tests could, for example, be graded according to a star system following evaluation. This will make it unnecessary to outlaw and police the use of certain tests, as users will automatically prefer to utilise tests with a higher grade.

The Professional Board for Psychology only concerns itself with the domain of psychological testing. However, an advantage of the Centre of Excellence, being an independent body, is that it will be able to keep a register of all tests (e.g., psychological, educational, work-related) and all test-users (e.g., psychologists, psychometrists, HR managers, educators). This is something practitioners and people in industry have been calling for a long time.

The Centre of Excellence with its various functions, as explained in Table 4.8., and its cooperation with other key stakeholders is depicted visually in Figure 4.1.

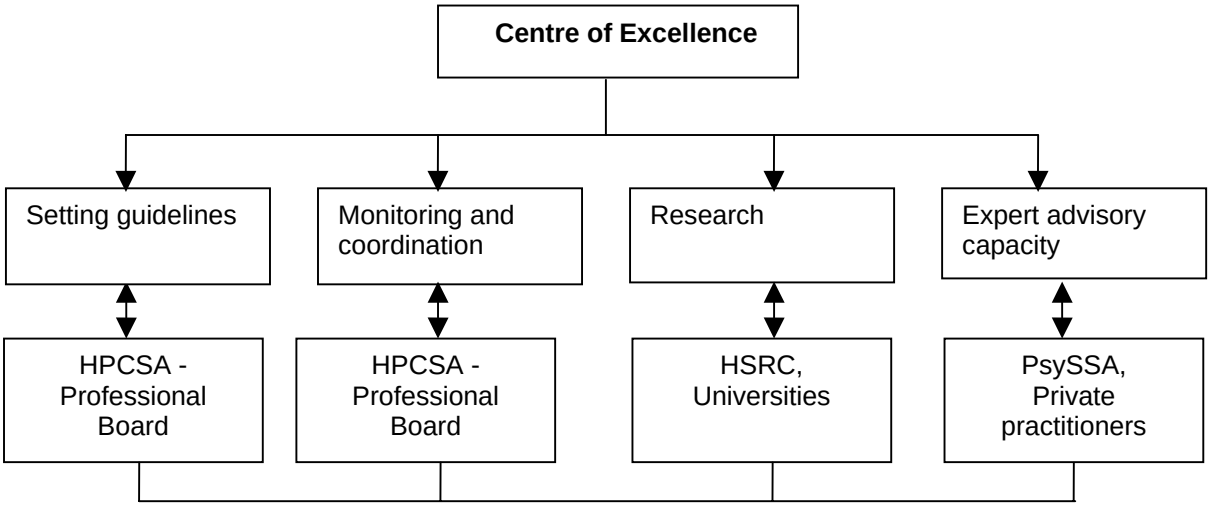

Figure 4.1: Centre of Excellence: Functions and Key Stakeholders

Theme 15: Central test agency

There was a mixed response regarding the viability of a central test agency in South Africa. Some participants felt that there was no need for a central test agency. They felt that there should be many decentralised test developers and distributors as this would encourage competition and ensure that prices stay reasonable, while the quality of the products improve. The notion of a centralised testing agency funded through government subsidy was criticised. The fear was expressed that when government subsidizes test development, the central test agency will have to develop tests that suit the government's agenda, without looking at the broader range of needs in the country.

> "It can't be a governmental institution or subsidised by government, because then it looses all its credibility." [32] Participant, Labour Union

On the other hand, some participants felt that a central agency would contribute to ensuring the development and improvement of tests of national interest. However, they felt that this agency should not be run by one entity, but should be a collaborative effort of different stakeholders with training in the various sub-disciplines of psychology. The tests developed by a central test agency should be state-funded and should serve a national purpose. In this case, the tests have to be accessible and cost-effective and will probably be used primarily by government, that is, the Departments of Labour, Health, and Education.

> "Are you saying money is put into the development of relevant psychological assessment? Definitely.", Participant, Services

The main function of a central test agency should be to develop tests that meet a national need. It should develop and be governed by a national test development strategy and it could develop nationally standardised tests for school-leavers. The test agency could also be responsible for

distributing research money and outsourcing test development and research on assessment related matters to other stakeholders.

In the past, the HSRC fulfilled the role of a central test agency in South Africa. Participants were asked whether they still saw the HSRC fulfilling this role. The perception of the participants was that the HSRC has lost too much momentum and credibility to re-enter the field of test development and psychometrics. The HSRC tests were criticised as being old and outdated, with irrelevant and inappropriate norms. Existing HSRC tests would have to be "rebranded" to change negative political perceptions.

> "… it is unfortunately true that the HSRC has a bit of a stigma, that it is not culture free and that the norms are not right.. and it discriminates against black people. These are things you have to address with your marketing and research. That it doesn't discriminate, that the norms are good. You have to market that so that the people will then use HSRC tests again." [33] Participant, Communications and Technology.

Taking all this into account, participants felt that the HSRC might therefore not be the only suitable candidate to take on the role of a central agency. Participants argued that the future role of the HSRC should be as an organisation that can develop tests of national importance, which will require big samples and representivity of all groups. An example was given of the HSRC developing standardised tests for evaluating access to tertiary institutions.

SECTION 3:
SUMMARY AND CONCLUDING REMARKS

The **key themes** that emerged from the interviews were as follows:

- While there are lingering negative perceptions around psychological testing, there is a perception that test usage is on the increase and that a more positive perception of testing is beginning to develop. This corresponds to similar findings related to an upswing in the perception of the value of testing identified through the postal survey and the focus groups. However, the interview information coloured in the picture further by highlighting that some of the positive perception is due to the fact that tests are being perceived to be objective and more useful than alternative methods (e.g., interviews).
- There is uncertainty about what constitutes a psychological test and the difference between a psychological test and competency-based assessment. The term should be clearly defined in terms of criteria like psychometric properties and applicability.
- As was found with the other two data-gathering techniques (i.e., survey questionnaire and focus groups), participants in the interviews indicated that tests are used for a variety of purposes. However, the interviews elicited more information on the use of tests for

selection and training purposes. Furthermore, the fact that tests can be used in enabling ways to provide a link between selection and training (development) was highlighted in the interviews.

- Psychological tests are applied to a wide spectrum of people. However, the information unique to the interview data revealed that there appears to be two groups of people who are not catered for adequately in the available array of psychological tests, namely, people with disabilities and people with low literacy levels.
- Practitioners indicated that they use a wide range of tests and the tests mentioned were largely similar to those identified during the postal survey and the focus groups. However, participants in the interviews stressed the use of tests together with other information to a far greater extent. Furthermore, participants provided reasons why they excluded some tests from their repertoire. Among these were that some tests were outdated (especially as regards the world of work), were not culture-reduced, did not have a strong research base on which to draw, were not sufficiently supported by the distributor, were too exorbitantly priced, and did not interface well with the needs of a changing population.
- The imperative from the Professional Board that practitioners should only use classified or registered tests posed some difficulties for the participants. On the one hand, some companies were anxious that they would face litigation if they did not comply with the Board's requirement. On the other hand, however, questions were raised as to whether the list of registered tests necessarily implied that these tests were all high-quality tests, and covered all the constructs or behavioural domains that practitioners needed to assess. Consequently, practitioners provided cogent reasons why they resorted to using unregistered, and often international, tests. Their preference was to use international tests that had been standardised or adapted for the South African context, but they sometimes even had to resort to developing their own tests. A disturbing finding was that companies that did not employ a psychologist tended to opt for using unregistered tests as these could then be applied by non-psychologists. A further disturbing finding was that as companies strive to find cutting-edge tools to give them a competitive advantage, they tended to look for new tests that have probably not yet been classified or registered by the time they need to start using them.
- Certain strengths and limitations of tests were highlighted in the interviews. Among the strengths were the objective nature of the data gathered and the fact that a wealth of data could be gathered in a short space of time. Among the limitations were the fact that some tests were old and outdated and could only be applied to an elite group of South Africans. Critical comments were also made regarding the use of computer-generated test reports, and the importance of having a psychologist interpret such information was stressed.
- Participants pointed out that certain difficulties related to test administration and logistics, especially when assessing test-takers in rural areas.

- Practitioners observed that the norm tables and target population of most tests were not appropriately aligned with the NQF. This made it difficult to decide whether a test was suitable for a certain test-taker, especially if most of the test-taker's learning had taken place in a non-formal way (e.g., in the workplace).
- As was found with the other data-gathering techniques used in the larger project, the issue of language both in terms of the administration of the test, and the language usage in test items was identified as problematic, although practitioners expressed divergent views on this issue. Some practitioners felt that the tests needed to be translated into various languages so that the test-taker could be assessed in her first language. Others felt that given that English was the *lingua franca* in the business world and that it was the medium of instruction at most higher education institutions, test-takers should be tested in English in these contexts. The participants in the interviews also strongly argued that given the difficulties attached to trying to address the language issues in testing, it was nonetheless important that language issues should not prevent anyone from being able to benefit from testing, even if the implication of the testing was that the test-taker first needs to improve her language proficiency. Practitioners provided some interesting suggestions regarding how to start addressing the issue of language in testing. Their suggestions ranged from using mainly non-verbal tests, to first evaluating the test-taker on a language proficiency test to determine whether the test-taker is sufficiently proficient in the language that the assessment practitioner intends administering the test in. Furthermore, a more qualitative, narrative approach to assessment was suggested which would rely heavily on the clinical skills of the practitioner and the results would not be compared to a norm group.
- Participants had mixed feelings about computerised testing. On the one hand, they saw the benefits of large-scale computerised testing, but on the other hand the lack of computer familiarity among test-takers and assessment practitioners was seen as posing a barrier. However, one of the needs that they identified was that more computerised tests needed to be developed. Essentially similar findings emerged in the focus groups and in the postal survey.
- Providing suitable norms would appear to be no simple matter as practitioners had fairly divergent views on this issue. While some wanted norms for various groups, others felt that this could be perceived to be discriminatory. There seemed to be some consensus that if a practitioner had access to a variety of norm tables, a choice could then be made as to which one was most suitable for a certain test-taker. Furthermore, something that did not emerge from the other data gathering techniques used in the larger study was the fact that in selection testing, international norms are important to use when a candidate has to be compared against a global standard, but situation-specific norms should be used if the applicant was being considered for a position in South Africa.

- While practitioners attempted to follow good, ethical assessment practices, they expressed the need for clearer practise guidelines and indicated that the Professional Board for Psychology did not provide sufficient support in this regard. Furthermore, practitioners felt that an aspect related to the ethical use of tests was the fact that the results needed to be integrated with other sources of information before a conclusion could be reached.
- Unique to the interview data was the fact that participants provided some thoughts related to the requirements for using tests. These included having a strategy to guide decision-making with respect to when to test and when not to test, focusing on the type of validity that is the most critical in the context in which the test is being used, triangulating test results with other information, and backing up the use of a test with continuous research especially with respect to the influence of language, culture, socio-economic and educational status.
- Observations were made with respect to test adaptation and development. Practitioners are concerned about the lack of test development competence in the country, the fact that there are too few black test developers and assessment practitioners, and the fact that tests are not reviewed and updated on a systematic basis so as to keep pace with a rapidly changing world. Practitioners are of the opinion that there are some tests that cannot be adapted or updated (e.g., certain personality tests) and that in such instances, new tests need to be developed.
- Practitioners made general suggestions regarding the development of new tests and suggested an expanded number of areas in which new tests needed to be developed as the constructs were not adequately assessed in existing tests. As was the case with the postal survey and the focus groups, practitioners expressed a need for a new interest test to be developed in keeping with the changing nature of the world of work, a culturally appropriate personality test to be developed especially for people with low literacy levels, an intelligence test or a test that taps cognitive processes, and tests that can be used in educational contexts and administered by educators. They particularly see the need for more computerised tests that can be used for career counselling as well as tests for people with disabilities.
- Although participants alluded to questionable practices among some test distributors, they were in favour of a larger number of distributors as this had a positive spin off on test prices. The negative side to this was that they struggled to get a picture of all the tests available in the country as no one body stored all the information and a central database did not exist. Furthermore, some criticisms were levelled at the training courses run by test distributors, both in terms of the cost of the courses and the criteria used to decide who can attend a training course. It was furthermore suggested that test developers and distributors compile a code of practise so as to guide their test development and marketing practices and to protect the public.

- Participants felt that test distribution had become too decentralised and that they struggle to get objective information on tests. In addition, they did not have a holistic view of all the tests available to South African practitioners.
- Questions were raised around the quality and appropriateness of the training provided to assessment practitioners. It would appear as if practitioners would like more skills related to how to generate local norms and psychometric data themselves and they wanted clear guidelines related to good, ethical assessment practices. Employers also indicated that psychologists working in industry needed to be better prepared for working in the business sector.
- Many issues were raised that pertain to the Professional Board for Psychology. Practitioners perceive the test classification process carried out by the Psychometrics Committee to be confusing, expensive, and very stringent, although they also indicated that they did not feel that the process was sufficiently thorough. They felt that test developers should be compelled to submit tests for classification and independent reviews should be conducted to validate the findings of the Professional Board regarding the classification of a test. Furthermore, practitioners felt that although there were official policies related to test use and assessment practices, the Professional Board was not highly effective in implementing the policies and controlling the abuse of tests by prosecuting those who transgressed the regulations related to test use.
- Practitioners expressed a strong need for a centralised test information body, which could be perceived to be a Centre of Excellence for Testing. Given the limited capacity of the Professional Board for Psychology to currently monitor test use and assessment practices and that people other than psychologists perform testing, the idea of a Centre of Excellence for Testing was emphasised. This Centre would be an all encompassing monitoring and advisory body, and although key stakeholders should be represented on it, it should nonetheless be an independent body. The Centre should establish guidelines related to test use and the quality standards for tests, monitor and coordinate test use, review and research tests, provide information on tests, and advise practitioners regarding the use of tests for specific purposes.
- There was a mixed response concerning the existence of a central test agency. Although the need for such an organisation was recognised by some especially as regards developing tests that met a national need, others felt that the field would be better served by having a number of smaller test developers as this could result in cost savings for practitioners. Furthermore, when asked whether the HSRC, who previously fulfilled the role of a centralised test development agency, should continue to fulfil such a role, practitioners felt that the HSRC had lost too much momentum and credibility to regain its position as a central test development agency. Instead, they suggested that the HSRC should rebrand itself and that it should consider only developing tests of national importance.

Certain cross-cutting themes that emerged from the interviews were as follows:

- **The role of the state**

Participants wrestled with the role of the state in test development. Although the importance of funding was recognised, users did not want to give the government prescriptive powers in dictating the nature of tests that should be developed. Government also has a role in implementing and monitoring policy ensuring the quality of tests and test usage.

- **Who should be allowed to use psychological tests**

The question is raised regarding who should be allowed to use psychological tests. Interpretation requires the expertise of a qualified psychologist, but tests can be made more accessible and widely applicable if “suitably trained” people are permitted to administer the tests. These people can include educators and other service providers.

- **Equity vs. productivity**

In South Africa there is tension between achieving equity in the workplace without lowering productivity. This debate has relevance where it comes to the application of psychological tests and the selection of norms. The argument was raised that standards should not be lowered and all cultural groups should meet the same standard, especially when competing in a global economy. The counter argument raised was that psychological tests should take into consideration the inequality of the past and different norms and standards should be set for different cultural groups.

- **Training**

Training was highlighted as a strategy to improve the quality of tests and testing practices in South Africa. Students in psychology as well as psychologists have to receive relevant and applicable training. Established psychologists have to be retrained and updated in new developments and practices in psychological assessment.

The information from the interviews served to enrich and expand on the information obtained from the postal survey and the focus groups. In particular the reasons for practitioners using unregistered or unclassified tests were highlighted and innovative suggestions were made regarding a Centre of Excellence for Testing in an attempt to exercise better control over test use, testing practices, test quality, the cost of tests, and the dissemination of information on tests.

In the next chapter, the information obtained from the three components of the survey of test use patterns and the needs related to tests are triangulated and integrated and reflected against national and international literature for verification purposes.

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CHAPTER 5

Test Use and Needs: An Integrative Overview

CHAPTER OVERVIEW

In this chapter the information obtained from the postal survey, focus group interviews, and the individual interviews is integrated to form a holistic picture of the psychological test use patterns and the needs related to psychological tests and testing in South Africa. An overview of the overarching key themes identified across the various data-gathering methods is firstly provided. Thereafter each overarching key theme is discussed by integrating and triangulating the information obtained from the three data-gathering methods and then reflecting this against national and international literature for verification purposes. Concluding remarks are made at the end of the chapter. Suggestions for establishing an agenda to guide psychological testing in South Africa are made in Chapter 6.

INTRODUCTORY REMARKS

This research project was undertaken to answer the following questions:

1. What psychological tests are South African psychological practitioners currently using?
2. To what extent do the tests currently being widely used require either adaptation for the multicultural South African context or updating, and what additional tests do practitioners require?
3. What should the agenda be for psychological test development and adaptation in South Africa?
4. What role should the HSRC play in the development and adaptation of psychological tests?

To address these questions a multifaceted approach was used to gather information via a postal survey questionnaire, focus-group interviews with psychological practitioners, and individual interviews with practitioners working in key areas of psychology or for key psychological service providers. The results generated from these three information gathering methods have been comprehensively reported in Chapters 2, 3, and 4 of this report. What is clear from the wealth of information that has been generated is that the project has far exceeded initial expectations. Other than providing information on the four main research questions, additional themes emerged that are of importance to the field of psychological testing in South Africa. Consequently, while this chapter aims to consolidate and integrate the information gathered with respect to the four research questions, it will also aim to

synthesize the additional information that emerged so as to provide a holistic picture of psychological test-use patterns and the needs of psychological assessment practitioners. In the next section, the overarching key themes identified across the three data-gathering methods are presented and each theme is then discussed in greater depth in the remaining sections of the chapter.

While the volume of information that the project generated is encouraging, each data-gathering method had its flaws and limitations. For example, the response rate for the postal survey was low, some of the planned focus groups did not materialize, which could have skewed the sample towards the private practitioners and those working in the education and training sector, and very few Black practitioners were interviewed as there appears to be very few Black psychological practitioners in key decision-making positions. In view of the methodological limitations of the project, it is thus important from a trustworthiness perspective that the key information obtained across the data-gathering methods be triangulated and reflected against literature. The present chapter will attempt to do this when each overarching key theme is discussed.

OVERARCHING KEY THEMES

By synthesizing the wealth of information and themes presented in the previous three chapters, six overarching key themes tend to emerge. These themes are presented in Table 5.1. An asterisk (*) is used in Table 5.1 to indicate that the overarching key theme was identified by a particular data-gathering method. The reader will note that for each of the overarching themes, there is an asterisk next to each data-gathering method in all but one instance. This supports the notion that these themes are overarching as they were identified to a greater or a lesser extent by each of the data-gathering methods.

Table 5.1

Overarching Key Themes

Overarching Key Theme	Identified in postal survey	Identified in focus groups	Identified in interviews
Perceptions related to the value of psychological tests and testing	*	*	*
Tests are used for a variety of purposes with a wide array of clients	*	*	*
Types of tests used and patterns of use	*	*	*
Needs related to psychological tests and test use	*	*	*
The control and regulation of tests and testing practices		*	*
Perceptions regarding who should develop tests	*	*	*

Having identified the overarching themes, these themes are unpacked in greater detail for the reader in the subsequent sections of this chapter. This is done both in terms of integrating and triangulating the relevant information obtained from each data-gathering method and by consulting national and international literature to see whether previous studies have identified a similar theme.

PERCEPTIONS RELATED TO THE VALUE OF PSYCHOLOGICAL TESTS AND TESTING

Practitioners commented on perceptions related to the value of psychological tests and testing to a greater extent in the focus groups and interviews than in the survey questionnaire. This was because the survey questionnaire did not include a specific question related to the value of psychological testing. Practitioners commented on the value of psychological testing by questioning what constitutes a psychological test, indicating whether testing is perceived to be positive or negative, and contemplating what value psychological tests add to the assessment process. These three aspects will be discussed below.

Defining a psychological test

In Chapter 1, the definition of a psychological test was provided by considering how the Health Professions Act, 56 of 1974, defines a psychological act related to evaluating human behaviour.

Practitioners should be aware of this definition of what constitutes a psychological test as it is contained in various policy documents of the Professional Board for Psychology that pertain to the use and control of tests. Nonetheless, during the interviews it emerged that there is uncertainty among practitioners about what constitutes a psychological test and the difference between a psychological test and competency-based assessment. This is quite interesting as it suggests that the problem in defining what a psychological test is, arises when it must be distinguished from other similar tests. With the advent of the National Qualifications Framework and an outcomes-based approach to education and training in South Africa as well as with the promulgation of the Employment Equity Act, there is a greater awareness in our society that assessment generally needs to be closely linked to the desired outcomes or competencies. Consequently, in business and educational contexts terms such as “competency-based testing” and “criterion-referenced testing” have become buzz-words in recent times. However, the constructs tapped by a competency-based test could be very similar to those tapped by traditional psychological tests (e.g., decision-making skills, critical thinking skills). This raises the question whether some of the competency-based tests that have been developed could be classified as psychological tests according to the criteria that the Professional Board for Psychology uses? Be this as it may, given the increased focus on assessment in the transforming South African society, psychological assessment practitioners are grappling with how to define what the unique features of a psychological test are to differentiate it from other types of tests which have emerged. It is important that the discipline and profession of Psychology urgently addresses this question as the value that psychological tests can add to the field of assessment is closely aligned with what the unique features of psychological tests are that give them a competitive advantage over other methods.

A perusal through the literature suggests that it has been difficult to reach general agreement on an all encompassing definition of terms such as “tests” and “testing”. Given the multifaceted nature of “tests” and “testing”, those who have attempted to provide definitions end up being criticised for excluding certain aspects (International Test Commission, 2001). Consequently, there is a trend in recent literature to highlight the important characteristics of tests and testing instead of trying to provide a precise definition (e.g., Foxcroft & Roodt, 2001; International Test Commission, 2001). Some of these characteristics are highlighted when the way in which psychological tests add value is addressed in a later section of this overarching theme.

Perceptions regarding the value of psychological testing

Any account of the history of psychological testing both internationally and nationally will reveal that there are periods when the value of tests and testing is strongly affirmed and there are other periods when tests and testing are perceived negatively (Foxcroft & Roodt, 2001; Kaplan & Saccuzzo, 1997).

Based on the information obtained from practitioners in this project, it would appear that psychological testing is being perceived in a somewhat more positive light than was the case a decade ago.

Information from the focus groups and interviews revealed that while there are lingering negative perceptions around psychological testing, test usage is on the increase and it appears that testing is being perceived more positively in South Africa. This was further corroborated by the fact that the postal survey revealed that practitioners in all registration categories are using tests fairly extensively in applied practice.

Practitioners affirmed the value of psychological testing from a number of perspectives. For example, practitioners in the focus groups argued that psychological testing was central to the work of psychologists, provided structure in sessions with clients, provided a framework for feedback and reporting, and assisted in gathering baseline information. From another perspective, practitioners who were individually interviewed indicated that one of the reasons for the more positive perception of testing is due to the fact that tests are being perceived to be objective and more useful than alternative methods (e.g., interviews).

Despite this upsurge in viewing psychological testing in a more positive light, practitioners in the focus groups, and to a lesser extent in the individual interviews, qualified their affirmation of the value of psychological testing. They indicated, for example, that psychological testing only added value if tests are culturally appropriate and psychometrically sound, and are used in a fair and an ethical manner by well-trained assessment practitioners.

The fact that there is much interest in psychological testing and that its value is being perceived in a more positive light in South Africa is in keeping with a similar upsurge of interest, for example, in psychological testing in Europe over the last two decades (Gregoire, 1999; Muniz, Prieto, Almeida, & Bartram, 1999). Furthermore, Bartram (2001) argues that there is currently a more positive view of tests, and testing is re-establishing itself as a central tool in psychological service delivery. The finding that South African psychologists perceive testing to be central to their professional functioning is thus in keeping with historical and current trends in this regard.

Why tests add value

During the individual interviews, practitioners highlighted various characteristics of tests, which enable them to add value especially when compared with what other measures offer. Practitioners argued that psychological tests:

- Are objective.
- Are underpinned by a sound research base.
- Assess constructs which are impossible to measure with other methods.
- Cover a broad spectrum of constructs and assessment practitioners can choose between different tests to meet specified needs.
- Provide for the assessment of psychopathology and for deductions to be made regarding therapeutic interventions.
- Tap the more subtle aspects of human behaviour and are geared towards the identification of the potential to develop (i.e., tests are enabling).
- Can be used as a screening mechanism to reduce the number of applicants in job selection.
- Provide a wealth of information in a short space of time.
- Provide standardised information, which makes it possible to compare and contrast the performance of test-takers with each other in high-stakes selection testing, for example.

Many of these characteristics were also identified by respondents in an HSRC stakeholder analysis survey conducted by England and Zietsman (1995). However, as was the case in the survey conducted by England and Zietsman (1995), practitioners in the present project were quick to point out that tests can only add value if they meet the requirements of validity, reliability and cross-cultural applicability and if they are used in an unbiased and fair way in accordance with legislation. Furthermore, practitioners indicated that psychological tests increase in value if they are used in combination with other methods.

The above information could form the basis of a richer or “thicker” description of a psychological test and the value that it can add, which practitioners can use when marketing the value of psychological tests and testing.

TESTS ARE USED FOR A VARIETY OF PURPOSES WITH A WIDE ARRAY OF CLIENTS

The information from the postal survey, the focus groups and the interviews revealed that psychological tests are used for the following broad purposes:

- To assess psychological constructs and aspects of human behaviour (e.g., intelligence, cognitive functioning, personality, potential, neuropsychological functioning).
- For diagnostic purposes (e.g., to identify psychopathology, level of school readiness, learning problems, post-traumatic stress disorder, the presence of brain impairment following a head injury).
- For development purposes (e.g., to assist with career choice, to develop study skills, to identify areas of development requiring stimulation in preschoolers, to stimulate personal growth).
- To direct psychotherapeutic and counselling interventions and trauma debriefings.
- For selection, training and development purposes in employment contexts. The fact that tests can be used in enabling ways to provide a link between selection and training (development) was particularly highlighted in the interviews.
- To perform specialist assessments (e.g., for forensic purposes, in the case of a personal injury such as a head injury sustained in a motor vehicle accident, in child custody cases, for retrenchment purposes).
- For conducting research and investigating the properties of tests. However, this aspect seems to lag behind the other purposes for which tests are used. The Employment Equity Act, however, seems to have prompted industrial psychologists to conduct more research related to the tests that they use.

The list of purposes described above is in keeping with the purposes of psychological testing described in the literature. For example, Yates and Taub (2003) suggested that testing and assessment *inter alia* has the following purposes: to describe personality, intellectual and other functioning, to diagnose and classify, to suggest a prognosis and make a prediction, and to select treatment goals.

Some interesting information was found related to the purposes for which psychological practitioners in the different registration categories use tests. For example, the postal survey revealed that educational psychologists appear to use tests more frequently and for a greater variety of purposes than practitioners from the other registration categories.

Furthermore, from both the postal survey and the focus groups, it appeared that the scope of practice of practitioners in the various registration categories does not seem to be clearly defined when it comes to the purposes for which tests are used. For example, in the focus groups it became clear that the purposes for which tests are used are fairly similar for practitioners from different registration categories that are in private practice. Of particular concern was the fact that psychologists across all registration categories as well as psychometrists were using tests for forensic purposes. This is considered to be a specialized type of assessment, which does not fall within the scope of practice of all registered psychology professionals.

The postal survey, focus groups and interviews revealed that psychological tests are applied to a wide spectrum of test-takers ranging from children through to adults, urban and rural dwellers, and test-takers who speak a wide variety of languages. However, during the interviews, it appeared that there are two groups of people who are not catered for adequately in terms of the available array of psychological tests, namely, people with disabilities and people with low literacy levels.

TYPES OF TESTS USED AND PATTERNS OF USE

Frequently used tests

From the postal survey, the 20 most frequently used tests were identified for the sample as a whole (see Table 2.17) and the 10 most frequently used tests per registration category were also identified (see Tables 2.18 to 2.23). Tests that tap intelligence, personality and interests featured in all the tables. These types of tests were also identified in the focus groups as well as in the interviews. Furthermore, the postal survey found that there was a reasonable degree of similarity among the test-use patterns of clinical, counselling, and educational psychologists. The pattern of test use for the industrial psychologists, however, was somewhat different. The test-use pattern for research psychologists bore some resemblance to that of other registration categories.

The number of projective tests that featured in the list of the most frequently used or referred to tests was interesting. However, practitioners in the focus groups expressed concerns regarding the adequacy of the training that practitioners receive in projective tests and also the cultural appropriateness of some projective tests.

The information gathered from the postal survey, focus groups, and interviews about the specific tests that practitioners use has been synthesized separately for tests registered with the Professional Board and those that are not registered. The resultant information is provided in Tables 5.2 and 5.3

respectively. An asterisk (*) is used in Tables 5.2 and 5.3 to indicate that the test was identified when using a particular data-gathering method. The reader will note that for each of the tests listed in the two tables, there are at least two asterisks next to each of the tests listed and in the majority of cases there are three.

Table 5.2

Registered Tests that are used by Practitioners (Consolidated list)

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

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

Of the 25 tests listed in Table 5.2, 11 (44%) were developed or adapted for use in South Africa by the Human Sciences Research Council (HSRC). As was pointed out previously, the HSRC used to be the sole test development agency in South Africa until the early 1990s. It is thus not surprising that practitioners are still using a relatively high proportion of tests developed by the HSRC. However, the fact that more than half (56%) of the tests listed in Table 5.2 have been developed by or are distributed by other test development agencies show a changing trend in the field.

Another observation that can be made regarding the tests listed in Table 5.2 is that while the SAWAIS is featured in it, the more recently adapted WAIS-III is not. Why? It is possible that practitioners are either not aware of the newer version (they complain that they do not get information on tests) or that

the high cost of the WAIS-III might have resulted in some practitioners deciding to continue using the old SAWAIS.

Table 5.3

Unregistered tests that practitioners use (Consolidated list)

Test name	Postal Survey	Focus Groups	Individual Interviews	South Africa or International
Beck Depression Inventory	*	*	*	International
Belbin Team Role Inventory		*	*	International
Griffiths Scales of Mental Development	*	*		International – SA adaptation
Kinetic Family Drawing test	*	*		International
Millon Clinical Multiaxial Inventory	*	*	*	International
Neale Analysis of Reading	*	*		International
Raven's Progressive Matrices		*	*	International – some SA adaptation
Rey Complex Figure Test	*	*	*	International
Scenotest (Von Staabs)		*	*	International
Schonell Spelling Test	*	*		International
Stroop Colour and Word Test		*	*	International
Trail making test	*		*	International

Before comparing the types of tests used in South Africa with those used internationally, a few comments need to be made about the information contained in Tables 5.2 and 5.3. Of the 37 tests listed in the two tables, 23 (62%) were not developed in South Africa, and only one of these international tests has been fully adapted for use here, while two have been partially adapted. While there might be translations and some local psychometric and normative studies for the remaining international tests, full-scale adaptations and national normative studies have not been conducted on them to date.

In a survey conducted by England and Zietsman (1995), the tests used for selection and development purposes in large companies were *inter alia* explored and are provided in Table 5.4. An asterisk (*) is used in Table 5.4 to indicate that the test identified in the survey conducted by England and Zietsman (1995) was also identified in the present study**.**

Even although the two surveys were conducted almost a decade apart, as can be seen from Table 5.4, of the 28 tests identified by England and Zietsman (1995), 12 (43%) were also identified in present study. Certain cognitive, personality, and interest tests thus appear to have remained popular over time.

Table 5.4

Tests identified in England and Zietsman's (1995) survey

Cognitive Tests Used	Personality and Interest Tests Used
Wechsler Adult Intelligence Scale (WAIS)*	Sixteen Personality Factor Inventory (16PF)*
High, Intermediate and Normal Batteries	Structured Objective Rorschach Test
Figure Classification Test	Personal Profile Analysis (PPA)
Blox	Myers-Briggs Type Indicator*
Mechanical Comprehension Test	Thematic Apperception Test*
Senior Aptitude Test*	Jung Personality Questionnaire*
Industrial Test Battery	Minnesota Multiphasic Personailty Inventory (MMPI)*
Basic Abilities Test	Draw-A-Person test (DAP)*
Manpower Aptitude Test Battery	Incomplete Sentences
Trade Aptitude Test Battery	Test of Supervisory Skills
High Level Estimation Test	FIRO-B
General Scholastic Aptitude Test (GSAT)	Rorschach*
	Nineteen Field Interest Inventory (19FII)*
	Rothwell-Miller Interest Blank
	Self-Directed Search Questionnaire (SDS)*
	South African Vocational Interest Inventory (SAVII)*
	KODUS Interest Questionnaire

Two more recent surveys were conducted by Van der Merwe (1999, 2002) to explore test- use patterns in industry and in human resource management. Although these surveys were conducted in one area of applied practice and samples were only drawn from Port Elizabeth and its environs, it could nonetheless be interesting to compare the results of Van der Merwe's investigations with those of the present project. The tests that Van der Merwe identified as being frequently used in industry or in the field of human resource management are provided in Table 5.5.

An asterisk (*) is used in Table 5.5 to indicate that the test identified in the surveys conducted by Van der Merwe (1999, 2002) was also identified in the present study. For the tests used in industry, just less than 50% of the tests identified by Van der Merwe (1999) were also identified in the present study. Given that the list of frequently used tests in the present study was compiled from information supplied by practitioners in all the different registration categories and are used across the entire age spectrum, there is a reasonable overlap between Van der Merwe's (1999) findings and those of the present study. As would be expected there was a much smaller overlap between the findings of the present study and those of Van der Merwe's (2002) study in the field of human resource management.

Nonetheless, about a third of the tests identified by Van der Merwe (2002) were identified in the present study as well.

Table 5.5

Tests identified in recent SA surveys of limited scope

Tests used in industry (Van der Merwe, 1999)	Tests used in human resource management (Van der Merwe, 2002).
1. 16PF* 2. SORT 3. TAT* 4. MBTI* 5. MMPI* 6. 19 Field Interest Inventory* 7. High Level Battery 8. Intermediate Battery 9. Normal Battery 10. SAT* 11. Academic Aptitude Test 12. Programmer Aptitude Battery 13. SAWAIS* 14. Career Path Appreciation*[1] 15. Dover/Vienna Test System	1. 16PF* 2. SAWAIS* 3. Intermediate Battery 4. MMPI* 5. SAT* 6. Career Path Appreciation*[1] 7. Dover/Vienna Test System 8. High Level Figure Classification Test 9. Occupational Personality Questionnaire* 10. Customer Contact Styles Questionnaire 11. MBTI* 12. SORT 13. 19 Field Interest Inventory* 14. High Level Battery 15. SDS* 16. Personnel Test Battery 17. Technical Test Battery 18. TAT* 19. Normal Test Battery 20. Academic Aptitude Test 21. Programmer Aptitude Battery 22. Management and Graduate Item Bank 23. Critical Reasoning Test 24. Customer Contact Aptitude Series 25. Perceptual Battery 26. Raven's Progressive Matrices* 27. Mechanical Comprehension

[1] Only identified in the individual interviews

More extensive surveys have been carried out to examine patterns of psychological test use internationally. Only a few of these studies will be included in this discussion to serve as illustratory examples. There are some differences and similarities in the patterns of test use and results between countries (Bartram, 2001). By comparing the data from the different studies it is possible to identify similarities and differences in patterns of test use internationally with those in South Africa.

In 1996 the International Test Commission (ITC) and the European Federation of Psychological Associations (EFPA, previously known as EFPPA) jointly designed an international survey and data were obtained from 37 of the 48 countries (Bartram, 2001). Various researchers analysed the resultant data to identify test-use patterns. For example, Muniz, Bartram, Evers, Boden, Matexci, Glabeke,

Hernadez-Hermida and Zaal (2001) explored test use and practices in Europe (Spain, England, Netherlands, Slovakia, Croatia and Belgium). A further study was conducted to investigate how tests are currently used in Ibero-America, Spain and Portugal (Muniz, *et al*., 1999). Turning to the United States of America, Camara, Nathan and Puente (2000) conducted a survey of clinical psychologists and neuropsychologists to explore the psychological tests used in the USA. The most frequently used tests identified in these studies are indicated in Table 5.6.

Table 5.6

Most frequently used tests in international studies

Tests most often used in Spanish and Portuguese-speaking countries (Muniz, *et. al*., 1999)	**Tests most often used in Europe (Muniz, *et. al*., 2001).**	**Tests most frequently used for clinical & neuropsychological purposes in USA (Camara, Nathan & Puente, 2000)**
1. Wechsler Scales*	1. WISC*	1. WAIS R
2. MMPI*	2. WAIS*	2. MMPI I and II*
3. Rorschach*	3. WPPSI	3. WISC R III*
4. Raven*	4. MMPI*	4. Rorschach*
5. 16PF*	5. TAT*	5. Bender*
6. Bender*	6. CBCL	6. TAT*
7. D-48/D-70	7. Rorschach*	7. Wide Range Achievement Test R III
8. Draw-a-Person*	8. CAT*	8. House-Tree-Person Test
9. DAT*	9. Raven's Matrices*	9. Wechsler Memory Scale Revised *
10. TAT*	10. Rey Complex Figure*	10. MCMI*
		11. Beck Depression Inventory*

An asterisk (*) is used in Table 5.6 to indicate that the test identified in the international survey was also identified in the South African study. From the large number of asterisks it is evident that the types of tests identified in the South African survey correspond relatively closely to those identified in surveys conducted in Europe and the United States.

In Spanish and Portuguese-speaking countries, projective tests are in the majority, whereas psychometric instruments are used most often in Europe. In Europe, tests most frequently used are intelligence tests, personality questionnaires and depression scales, although the patterns of use differ according to the function of application (clinical, educational or occupational) and country (Bartram, 2001).

With regard to psychological assessment in Asia, Chueng and Leong (2003) report that clinicians use psychological tests for diagnostic and treatment decisions and objective tests are the most commonly used assessment method. Major western instruments such as the Wechsler Intelligence scales for Adults and Children and the Minnesota Multiphasic Inventory have been translated and adapted for

use in many areas of Asia, including Mainland China, Hong Kong, India, Japan, Korea, Taiwan, Thailand and Vietnam.

The patterns of test use also appear to change over time. Studies done from 1971 to 1983 reported in Reynolds and Elliot (1983) point to the recurring emphasis on personality (mainly projective) and ability/intelligence testing. However, a survey conducted in the late 1990's revealed that a majority of service providers are changing their assessment practices in response to changing demands. The focus is shifting to doing less time-consuming testing and incorporating self-report questionnaires and symptom-focused measures when delivering psychological services (Yates & Taub, 2003). The latter was not evidenced among the frequently used tests in the present survey, although practitioners repeatedly requested that shorter, less time-consuming measures are needed as they often have a short period of time to assess a client.

In conclusion, there is a reasonable degree of synergy between the findings of the present survey with respect to the types of tests being used by South African psychological practitioners and previous national and international test-use surveys. This synergy enhances the trustworthiness of the present findings.

The test-use patterns identified in the present survey were particularly influenced by whether or not a test has been registered or classified by the Professional Board for Psychology as being a psychological test (see Tables 5.2 and 5.3). This aspect is addressed in the next sub-section.

Use of registered or classified tests

The postal survey, focus groups, and interviews revealed that the imperative from the Professional Board that practitioners should only use classified or registered tests posed some difficulties for the practitioners. On the one hand, anxiety was expressed that practitioners and companies could face litigation if they did not comply with the Board's requirement. On the other hand, questions were raised as to whether all the registered tests were necessarily high-quality tests and concern was expressed that the list of registered tests does not cover all the constructs or behavioural domains that practitioners need to assess. Consequently, practitioners provided cogent reasons why they resorted to using unregistered, and often, international tests. Although their preference was to use international tests that have been standardized or adapted for the South African context, this was not always possible and they sometimes even have to resort to developing their own tests. It is hoped that the findings of the present study related to the more frequently mentioned unregistered tests (see Table 5.3) will provide some clarity and guidance to the Professional Board regarding which international

tests should be earmarked for adaptation and standardization in South Africa so that they can be added to the list of registered tests in time to come. Without undertaking studies to adapt and standardize these international tests for South Africa, unethical testing practices will continue as practitioners will continue to use these tests as they have indicated that these tests fill gaps in the repertoire of tests that they need.

Seen from another perspective, the findings of the present study raise concerns regarding whether the requirement that practitioners should only use registered tests has resulted in unintended negative consequences. For example, a disturbing finding was that companies that did not employ a psychologist tended to opt for using unregistered tests as these could then be applied by non-psychologists. It would appear that there is a perception that only registered tests are psychological tests whereas unregistered tests are not. A more user-friendly description of what a psychological test is, which was alluded to in the first sub-section of this theme, would go a long way to educating practitioners and the users of test information that a psychological test is a psychological test whether or not it is registered with the Professional Board for Psychology. Furthermore, the Professional Board should strongly consider shifting the emphasis away from insisting that practitioners use registered tests to insisting that practitioners use high-quality, culturally appropriate tests. This would go a long way to improving ethical test use practices in South Africa. However, it would imply that a test quality review system would need to be introduced to evaluate the quality of tests and this information would need to be readily available to practitioners.

It also appears as if the system that the Psychometrics Committee of the Professional Board uses to classify tests is not well understood by practitioners and participants in the focus groups and the interviews. The participants made critical remarks regarding the classification system and the manner in which it is implemented. It is a long and costly process and practitioners would prefer it if the Professional Board's decision could be verified by external, independent reviews. Furthermore, the classification process needs to be completed in a shorter space of time as companies strive to find cutting-edge tools to give them a competitive advantage and they thus require that newly developed tests should be classified promptly so that they can start using them.

There is an interesting trend in the international literature regarding the classification of psychological tests. Whereas in past decades the spotlight fell on the use of the system of classifying tests as a level A, B, or C test, with only psychologists being able to use C-level tests, in recent years there has been a shift away from this approach. The emphasis is now placed on providing quality reviews of tests and developing test user qualifications that produce practitioners who have the competence to use certain types of tests. For example, in the United Kingdom various levels of test user qualifications have been

developed and the types of tests that each level of user can competently use have been specified (Bartram, 1996). In addition, a comprehensive test review system has been developed to assist practitioners to choose quality tests to use (Bartram, 1996). Similarly, the Netherlands has a rigorous sophisticated model for reviewing tests by their professional body (Muniz, *et. al*., 2001).

Practitioners in the present study expressed a need for research and review information on the tests that they use so as to inform their choice of tests. Currently, without a comprehensive review system in place, practitioners struggle to make informed choices. The Professional Board and professional associations such as PsySSA are urged to seriously consider instituting a test review system along the lines developed in Europe, for example.

Other than grappling with whether or not to use a registered test, the present survey revealed other factors that also influenced practitioners when choosing tests.

Factors influencing the choice of tests

From the information obtained in the focus groups and the individual interviews it appears that practitioners base their choice of tests on the following:

- The purpose of the assessment.
- The range of tests that they were trained to use. On the one hand, this reflects good assessment practice as practitioners should only use tests that they were trained to use. On the other hand, if sufficient continuous professional development training opportunities are not provided, there is a danger that practitioners will not update their knowledge of tests or be introduced to new tests, which will restrict their repertoire of tests and ultimately impact on the extent to which they are following good assessment practices.
- The way in which a specific test complements information gathered from other methods.

Furthermore, participants in the interviews provided reasons why they excluded some tests from their repertoire. Among these were that some tests were:

- Outdated (especially as regards the world of work).
- Not culturally appropriate.
- Not well interfaced with the needs of a changing population and society.
- Not supported by a strong research base on which practitioners could draw.
- Not sufficiently supported by the test distributor.
- Too exorbitantly priced.

All of the factors listed above, with the exception of the cost of a test, can be linked to the test user competencies included in the *International Guidelines for Test Use* (ITC, 2001). It would thus appear that the basis that assessment practitioners use to choose tests is in accordance with internationally acceptable guidelines.

NEEDS RELATED TO PSYCHOLOGICAL TESTS AND TEST USE

Practitioners expressed a variety of needs related to psychological tests and their use of tests. These needs are summarized in this section.

Needs related to the limitations of currently available tests

Among the limitations related to currently available tests that practitioners referred to in the postal survey, the focus groups, and the interviews was the fact that many of the tests that have been developed in South Africa are:

- Old and outdated (in terms of item content, the language used, norms, and the alignment of the test with the rapidly changing world of work and nature of education).
- Not culturally appropriate and can only be applied to an elite group of South Africans.
- Not available in all the official languages spoken in South Africa.

Furthermore, when it comes to international tests that are currently being used in South Africa, very few have been adapted for use here via nationally-driven test adaptation and normative studies. Such tests are also often only available in English, and where they have been translated, standardized and scientifically sound principles have not always been employed when performing the translation.

In view of these limitations, frequently used South African and international tests should be comprehensively reviewed to identify which ones should be earmarked for adaptation, revision and updating and which ones should be tagged as being inappropriate to continue using as they are too outdated or cannot be adapted cross-culturally. The list of tests provided in Tables 5.2 and 5.3 could serve as a starting point for identifying the tests that need to be reviewed with a possible view to adaptation and revision. It should be noted here that practitioners were sceptical whether any of the existing personality tests could be adapted so as to make them more culturally appropriate and expressed the view that new personality tests probably need to be developed. The needs related to

the provision of relevant norms and how to address language issues in testing are particularly complex and are thus not dealt with here but will be discussed more fully in later sub-sections.

Previous South African studies have also highlighted the need for more cross-culturally appropriate tests that are available in a variety of languages. For example, Van der Merwe (2002) found that an important theme that emerged among test users in the human resource management field was that they needed culture-fair tests which were applicable across different groups of people. Similarly, participants in England and Zietsman's (1995) survey perceived that most tests were not culture fair and were biased, especially against black South Africans.

The international literature attests to the fact that linguistic and cultural differences hamper the cross-cultural use of psychological tests. Where measures are imported from another culture, attention should be paid to the quality of translations, linguistic equivalence, length of items, inappropriate items and/or content, cultural relevance, psychometric equivalence, procedural and normative equivalence and the cross-cultural validity of adapted instruments (Sue & Chang, 2003). The importance of investigating the aspects of equivalence mentioned by Sue and Chang (2003) does not only apply to the adaptation of imported or international tests, it should also apply to tests developed in South Africa that are used with diverse cultural and language groups. It will thus be important that when existing tests are adapted, revised, and updated for our multicultural and multilingual population, that rigorous bias and equivalence studies should be conducted so as to guide decisions around which groups the test can be confidently applied to. Furthermore, the International Test Commission's *Guidelines for Adapting Educational and Psychological Tests* (Hambleton, 1994) should be used to benchmark the test adaptation process followed when adapting and revising tests for use in South Africa.

Appropriate and varied norms are needed

Practitioners repeatedly indicated that they needed relevant norms for the tests that they use. However, the provision of suitable norms is a complex matter and practitioners had fairly divergent views on this issue. While some wanted norms for various groups (especially for different cultural and language groups), others felt that this could be perceived to be discriminatory. Nonetheless, there was some consensus that if a practitioner had access to a variety of norm tables, a choice could then be made as to which one was most suitable for a certain test-taker or a test-taker's performance could be compared to a few possible norm groups and the practitioner could see whether the results converge and a consistent pattern emerges.

The purpose of the assessment often dictates the types of norms that are needed. For example, given the globalisation of the world of work, both national and international norms may be needed for selection testing purposes. The international norms are important to use when a candidate has to be compared against a global standard, but situation-specific norms should be used if the applicant is being considered for a position in South Africa.

In both the focus groups and the individual interviews, practitioners observed that the norm groups and target population of most tests were not appropriately aligned with the NQF. This makes it difficult to decide whether a test is suitable for a certain test-taker, especially if most of the test-taker's learning has taken place in a non-formal way (e.g., in the workplace). Furthermore, it is difficult to decide which norm group the test-taker's performance should be compared to. Consequently, when new tests are normed or when old tests are re-normed, it will be important to develop norm tables for the different grade groups and for the different levels of the NQF, and care should be taken to investigate whether the test does not unfairly discriminate between those who acquire their qualifications through formal and non-formal routes.

Having appropriate norm groups to compare a test-taker's performance to is important, but having access to recent normative information is equally important for practitioners. In South Africa we do not have a system in place to regularly update tests and normative information. Such a system is urgently needed.

The Standing Committee on Tests and Testing of the European Federation of Psychologists Associations (EFPA) has developed a rigorous, sophisticated, standard model for reviewing tests (Muniz, *et. al*., 2001). In the EFPA model, the appropriateness of test norms is evaluated against:

- Appropriateness for local use (e.g., are local norms or relevant international norms available).
- Appropriateness for intended applications. The availability of a range of norm tables for relevant groups (e.g., culture, age, gender) that are appropriate for the intended applications (e.g., selection testing) is seen as being critically important.
- Availability of information on the effects of culture, gender, age, etc. on test performance.

The fact that South African assessment practitioners are calling for access to a variety of norm groups is thus in keeping with what the EFPA review model suggests regarding the appropriateness of norms. However, the EFPA model goes a step further in requiring that not only should there be norms for various groups, but that research is also needed into how the performance of these groups might differ so that this can be taken into account when the test scores are interpreted.

Mechanisms need to be found to bridge language issues in tests and assessment

Nell (1994) asserts that language is one of the most critical moderator variables impacting on test performance in the multilingual South African society. It is thus not surprising that the issue of language both in terms of the administration of the test and the language usage in test items was identified as problematic by practitioners who participated in the various aspects of the present survey. However, practitioners expressed divergent views on how language issues could be addressed so as to remove current barriers in this regard. Some practitioners felt that the tests need to be translated into various languages so that the test-taker can be assessed in her first language. However, it is often not easy to decide which language is a test-taker's first language. Is it their home language or is it the language in which they are educated in? Many South Africans are educated in a language that is different to their home language. Certain concepts might thus be more accessible to them in the language in which they have been educated, while others will be more accessible in their home language. This poses a challenge to fair testing practices. Interestingly, the assessment practitioners did not suggest that one of the ways of dealing with language issues in the assessment process would be to perform bilingual assessment. However, this implies that the assessment practitioner would have to be proficient in a variety of languages or otherwise an interpreter would have to be used.

At the other end of the spectrum, some practitioners felt that given that English is the *lingua franca* in the business world and that it is the medium of instruction at most higher education institutions, test-takers should be tested in English in these contexts. Furthermore, the postal survey revealed that although the home languages of clients cover the full spectrum of the official languages in South Africa, the majority of clients are being assessed in either English or Afrikaans. If assessment practitioners do not firstly establish that their client is sufficiently proficient in the language in which they intend administering the test in, it will be difficult to untangle whether poor performance on the test is due to language or communication difficulties or to the fact that test-takers have a low level of the construct being assessed.

Practitioners provided some interesting suggestions regarding how to start addressing the issue of language in testing. Their suggestions ranged from using mainly non-verbal tests to first evaluating the test-taker on a language proficiency test to determine whether the test-taker is sufficiently proficient in the language that the assessment practitioner intends administering the test in. Furthermore, it was suggested that a more qualitative, narrative approach to assessment could be used, which would rely heavily on the clinical skills of the practitioner and the results would not be compared to a norm group. As was pointed out previously it is noticeable that practitioners did not mention the possibility of bilingual assessment as one of the ways whereby language issues could be addressed**.**

New tests need to be developed to cater for gaps in the existing array of tests

The information gathered regarding the needs of practitioners related to aspects for which they cannot find suitable tests has been synthesized across the postal survey, the focus groups and the individual interviews. These test-related needs can be classified into 12 broad areas which cover all the aspects mentioned by practitioners. These broad areas will be listed below. South African practitioners require tests of:

1. Potential:

- To identify the potential to develop in people with varying degrees of educational qualifications (from the lowest to the highest level of qualifications).
- To identify learning potential in children.
- To tap cognitive potential with a non-verbal measure.
- To tap potential cross-culturally.

2. Intelligence and cognitive functioning:

- Culturally appropriate individual intelligence tests for children and adults.
- Group intelligence tests which are culturally appropriate.
- Tests that measure cognitive processes as opposed to intellectual ability
- Measuring a range of thinking skills (e.g., memory, reasoning, problem solving, etc.) with one instrument.
- Emotional intelligence tests.

3. Tests that tap emotional functioning:

- Culture-friendly projective techniques for the diagnosis of emotional problems.
- Tests that tap stress tolerance.
- Tests that tap anxiety.
- Tests that tap depression.

4. Personality tests and tests that tap personality-related functions:

- Personality test appropriate for all cultures in the South African context.
- Personality test that can be used with people with low literacy levels or with those who are illiterate.
- Leadership test appropriate for the South African context.
- Test that taps integrity.

5. Scholastic tests and tests that can be used in learning contexts:

- Standardised national scholastic performance tests (not only for diagnosis of learning problems, but also for remediation purposes)
- Test that assists in the diagnosis of dyslexia.
- Assessment of language proficiency.
- School readiness test battery.
- Tests that can guide access and admission to higher education institutions.
- Tests that educators can administer as too few psychologists are being employed in the educational system.

6. Tests for children:

- Test battery for diagnosing Attention Deficit with Hyperactivity Disorder (ADHD).
- Test that taps anxiety.
- Test that taps depression.

7. Tests used for career guidance:

- Updated interest inventory reflecting new trends and careers in the world of work.
- Tests that tap technical aptitude to facilitate career guidance in this regard.
- Tests to facilitate subject choice.
- Tests to assist with career decision-making.
- Updated aptitude test battery.

8. Tests that can be used in industry:

- Pre-selection screening tests to indicate whether further in-depth testing is required.
- Tests that measure team performance.

9. Test that can be used for psychodiagnostic purposes:

- Tests that tap anxiety, depression and Post-traumatic Stress Disorder.
- Tests that identify psychopathology.

10. Tests used for specialized assessments:

- Neuropsychological tests.
- Tests that can be used in sexual abuse contexts (victim and perpetrator).
- Tests that tap relationship between parent/guardian and child.
- Tests to use when assessing parental alienation.

- Tests that can be used in child custody assessments to identify parenting style.

11. Tests for special needs groups:
- Tests that can be used with illiterate adults.
- Tests that can be used with people who have disabilities and handicaps (e.g., hearing and visually impaired).

12. Tests based on alternative or new testing methodologies:
- Dynamic assessment tools.
- Computerised tests.

Practitioners also pointed out that when new tests are developed, test developers should be mindful of the fact that the tests should not take too long to administer as assessments often have to be performed in a short space of time. Two observations can be made regarding the aspects identified by practitioners where new tests are needed. Firstly, the list cited above provides test developers with valuable information regarding where practitioners see that gaps exist in the market. Secondly, there are already tests that tap many of the aspects mentioned, but clearly these tests are either not culturally appropriate or are out of date, otherwise practitioners would not have identified them as being among the gaps in their toolkit.

It should also be noted that while practitioners indicated that they need certain new tests to be developed and that certain existing tests need to be adapted or updated, practitioners expressed concern about the lack of test development competence in the country and the fact that there are too few Black test developers. In fact, there are no training programmes available that specifically skill learners as regards test development and adaptation. Training institutions need to urgently start developing and offering qualifications aimed at producing skilled test developers.

Tests need to be regularly updated

Practitioners perceive that it is important to update existing tests in terms of:
- The language used.
- The relevance of their norms.
- The contemporaneous nature of the item content.
- Keeping pace with the changing context in which they are applied (e.g., in the world of work).

Tests, like many other commodities have a limited shelf life. Good assessment practices require that practitioners use up-to-date tests so as to obtain valid and reliable assessment results (ITC, 2001). There is currently no formal procedure in place in South Africa which requires that test developers and distributors need to update their tests after a certain period of time. It would seem that it is important that a policy be put in place regarding the frequency with which tests should be updated (e.g., every 5 to 10 years). Mechanisms will also need to be found to monitor the implementation of such a policy so as to ensure that test developers and distributors comply with the requirements.

Seen from the test developers' and distributors' perspective, they could develop strategies to facilitate the process of regularly updating their tests. For example, they could provide a discount for assessment practitioners who purchase their test and who are prepared to forward them raw data on the test. The developer or distributor could then use this data to constantly update their norms.

Awareness needs to be raised regarding good practices in computerised testing

Especially in the focus groups and the individual interviews, but also in the postal survey, participants expressed mixed feelings about computerised testing. On the one hand, some practitioners saw the benefits of large scale computerised testing. For example, some practitioners in educational settings used computerised tests and found them useful. They indicated that they would like to use computerised tests more often but were handicapped by the fact that there was not a wide range of computerised tests available. On the other hand, some practitioners felt threatened by computerised tests given their own lack of computer familiarity; they were concerned about the lack of computer familiarity among test-takers in South Africa; they were concerned at the loss of information regarding test-taker behaviour and the cost of the tests as well as the quality of the back-up service. Nonetheless, among the needs that practitioners identified were that more computerised tests need to be developed, provided that they are used with caution with test-takers who have low levels of computer familiarity.

In a previous South African survey conducted by England and Zietsman (1975), participants displayed a similar ambivalence towards computerised testing, with about half being in favour of computerised testing and a quarter not being in favour. Nonetheless, Plug (1996) asserted that "computerised testing is the direction of the future" (p. 16). As he saw an increasing need for computerised tests to be developed, he thus urged the HSRC to maintain and even expand the expertise that they had in this area at that stage.

Conflicting findings have been found in the literature when the influence of past computer experience on performance in computerised tests has been studied (Powers & O'Neill, 1993). Lee (1986) found, for example, that previous computer experience significantly affects performance on computerised tests, while Wise, Barnes, Harvey, and Plake (1989) and Gallagher, Bridgeman, & Calahan (2000) found no direct relationship between computer familiarity and computerised test performance. Powers and O'Neill (1993) concluded that "[p]erformance on a computer-based test does not necessarily depend heavily on examinees' computer skills, as some critics have assumed" (p. 170). However, a more consistent finding has been that familiarizing test-takers to computers and the requirements of taking a specific computer-based test (CBT) reduces the disadvantage that test-takers who are less familiar with computers may have (Lee, 1986; Powers & O'Neill, 1993; Taylor, Jamieson, Eignor, & Kirsch 1998). Of interest is that Schaeffer (1995) remarks that, although research indicates that test-takers with little or no computer familiarity can learn to use a testing system effectively, not enough research has been done on test-takers who are not familiar with technology in general.

The need to provide test-takers with sufficient computer-based skills so that their test scores are not affected by any lack of previous computer experience is emphasised in the guidelines for computer-based tests developed by the International Test Commission (Bartram & Coyne, 2003). Research supports the importance of such training. Powers and O'Neill (1993), for example, concluded that computer familiarization procedures reduced to "an inconsequential level" the amount of variance due to computer administration. Taylor *et al*. (1998), in their study examining the impact of a tutorial prior to administering the TOEFL, reported that there was no meaningful difference, after controlling for language ability, in performance between candidates with low and high levels of computer familiarity. Nonetheless, in a South African study, Foxcroft, Watson, Greyling and Streicher (2001) found that despite adequately preparing test-takers, a matched sample of first-time computer users performed significantly worse on language and numerical proficiency computerised tests than their peers who had higher levels of computer familiarity.

In the current survey, critical comments were also made by practitioners regarding the use of computer-generated test reports and the importance of having a psychologist interpret such information was stressed. This resonates well with the critical aspects of computer-generated reports found in the literature related to good assessment practices. It is critical that computer-generated reports meet certain quality standards. In this regard, the standard EFPA model for reviewing tests (Muniz, *et. al*., 2001), devotes an entire section to the evaluation of the quality of computer-generated reports. In this model, computer-generated reports are evaluated in terms of their scope or coverage, accuracy or reliability, relevance or validity, fairness or freedom from systematic bias, acceptability,

practicality, and length. It will be useful for South African practitioners and test developers/distributors to consult the EFPA review criteria so that they can evaluate the quality of the computer-generated reports which they use. Other than being of a high quality, computer-generated reports also need to be used in appropriate ways by practitioners. In the *International Guidelines on Computer-based and Internet Delivered Testing* (Bartram & Coyne, 2003), it is indicated that good practices in the use of computer-generated reports include being aware of the limitations of the interpretations provided and the rationale on which the interpretation is based, ensuring that the language of the report fits with the needs of the intended audience, and adding information from other sources to the interpretation provided so as to get a more rounded picture of the client. It is probably the latter aspect that practitioners in the current survey had in mind when they indicated that a psychologist needs to interpret the information from a computer-generated report so as to integrate it with other information on the client.

Practitioners in the current survey furthermore called for better regulation of tests available on the Internet. The currency of online assessment and issues related to it is underlined by the proliferation of publications on the subject (e.g., Bartram, 2002, Oakland, 2002). Online assessment is presenting new challenges related to the regulation and quality control of psychological assessment. Given the accessibility of online testing, it has become possible for people with little understanding of the principles and processes involved in the development of psychometric testing to produce their own "tests" (Bartram & Bayliss, 1984). Existing regulations will have to be made applicable to computerised assessment to address the security and copyright of tests (Barak & Buchanan, 2003). The ITC is in the process of drafting and updating guidelines to regulate the use of computerised and Internet assessment where good practices will be outlined and awareness will be raised amongst stakeholders of ethical and practical issues around computerised and online assessment (Bartram & Coyne, 2003). The APA has created a Task Force on Internet Testing, and various professional groups have developed guidelines and standards explicitly for computerised testing, for example the Association of Test Publisher's *Guidelines for Computer-Based Testing* and the British Standards Institution's *A Code of Practice for the Use of Information Technology for the Delivery of Assessments* (Drasgow & Naglieri, 2002).

Guidelines are needed to raise awareness regarding ethical assessment practices

Information from the interviews and focus groups suggested that practitioners are aware of and try to follow ethical assessment practices. In this regard they indicated that ethical assessment practices *inter alia* entail:

- Having a strategy to guide decision-making with respect to when to test and when not to test.

- Focusing on the type of validity that is the most critical in the context in which the test is being used and seeing whether there was information on this type of validity for a specific test that they wanted to use.
- Triangulating test results with other information so as to internally verify and integrate assessment information.
- Backing up the use of a test with continuous research especially with respect to the influence of language, culture, socio-economic and educational status on test performance.
- Have an assessment policy in place to guide their assessment practices.

While practitioners attempted to follow good, ethical assessment practices, they expressed the need for clearer guidelines and indicated that the Professional Board for Psychology did not provide sufficient support in this regard. The Professional Board has published a comprehensive ethical code, but it appears that practitioners would welcome more specific and detailed guidelines related to assessment. Practitioners furthermore indicated that they needed quality tests so as to practise assessment in an ethical manner. In this regard, practitioners expressed the hope that the present survey could lead to a list of tests being compiled that were in need of revision.

The setting of guidelines is viewed as an important endeavor to minimize misconduct. Historically, psychological testing guidelines and regulations were influenced by public and legislative scrutiny of educational testing and a surge of research on bias in mental testing (Reynolds & Elliott, 1983). In general, regulations in some form and varying in levels of prescriptiveness are in place to inform the control of tests and criteria for establishing user competency and rules for tests use are in place in many countries (Gregoire, 1999). The success of enforcing regulations varies between countries. In general, there are limited legal constraints on test developers and users, and it is very difficult to enforce regulations (Gregoire, 1999).

Various codes of good assessment practice have emerged over the years and have been developed by national associations such as the British Psychological Society (BPS), the European Federation of Psychology Associations (EFPA), and by the American Psychological Association (APA) in North America. In the USA, common elements between educational and psychological testing are addressed in the *Standards for Educational and Psychological Testing,* which was developed by the National Council on Measurement in Education (NCME), APA and the American Educational Research Association (AERA). A study of Spanish and Portuguese-speaking countries showed that the most frequently used technical standards are those of the AERA/APA/NCME (Muniz, *et. al*., 1999). In Belgium, the Standards for Educational and Psychological Testing (AERA/APA/NCME) were

adapted instead of developing a new set of standards (Gregoire, 1999). Countries differ greatly in the degree (if any) of statutory control over the use of testing and the consequences if regulations are transgressed (Bartram, 1998).

Tests are used in multinational assessment and should meet the needs of a mobile workforce where test-takers from different countries are assessed on the same instrument. Foreign tests have to be regulated in the local context of each separate country. Consequently, the need for international guidelines became desirable to set general benchmarks against which local standards could be compared (Bartram, 1998). Consequently, the International Test Commission (ITC) developed guidelines for good practices in test use (Bartram, 2001).
The ITC guidelines for test use have been adopted by the Professional Board for Psychology and have been adapted for use in industry in South Africa (Society for Industrial Psychology, 1998). Nonetheless, it would appear that practitioners are not aware of the ITC guidelines and of their adaptation for assessment in industry in South Africa. The Professional Board and the Psychological Society of South Africa should do more to bring this to the attention of practitioners and should also consider whether further adaptation and expansion of the guidelines in other contexts (e.g., educational, forensic) is needed.

The training provided should be of a high quality and should be ongoing

Practitioners in the postal survey, focus groups and interviews raised questions related to training from two perspectives. Issues were raised around the quality and appropriateness of the initial as well as the ongoing training provided to assessment practitioners. There was an indication that when it comes to the initial training of assessment practitioners, training programmes should focus more on guidelines related to good, ethical assessment practices; the adaptation, application and interpretation of tests and test results in cross-cultural contexts; and providing qualifying practitioners with skills related to how to generate local normative and psychometric data themselves. To this, employers added that qualifying psychological practitioners need to be better prepared for the demands of specific work environments in which they are likely to find employment (e.g., working in the business sector). It would thus appear that there could be room for improvement in current training programmes. Consequently, it may be useful for the Professional Board for Psychology to conduct an audit of the psychometric components of professional training programmes and to set minimum competency-based training standards.

The findings also suggest that practitioners have a strong need for ongoing training regarding assessment, psychometrics, and the cross-cultural use of psychological tests. It appeared from the

comments of practitioners that their needs in this regard are not currently being met by the range of Continuing Professional Development (CPD) activities on offer. CPD providers should thus be alerted to the assessment-related needs of practitioners so that workshops on specific tests (especially if they are new or have been updated), assessment practices, new assessment technologies (e.g., computer-based and Internet testing), and so on can be offered to meet the needs of practitioners.

Research has revealed that the primary cause of test misuse is that the assessment practitioner has insufficient knowledge (e.g., Fremer, 1996). This in turn points to the importance of adequate training (Scherrer, Louw & Moller, 2002). Muniz, *et al*., (2001, p. 202) argue that:

> *Ensuring that test users are competent, through the provision of sufficient training and good information about the tests they use, appears to be the most effective strategy in the long term. (p. 202)*

Training in the use of tests is limited and is not centrally standardized. Currently, although there is a very clear indication of the need for more and better training (Bartram, 2001), there has been a dramatic decrease in teaching and training in test theory and tests (Gregoire, 1999). The growing number of test users and the internationalisation of testing serves to emphasise the importance of good training (Bartram, 1998). Bad practice can ultimately lead to the discrediting of psychological testing as a practice.

Various countries are looking critically at the assessment training that is offered and they invariably question the adequacy of the training provided. For example, Cheung and Leong (2003) assert that Asian psychological practitioners received a very limited level of training with regard to psychological assessment. A study of test usage in Europe by Muniz, *et. al*. (1999) highlighted that the psychometric and assessment training received by those who obtain a psychology degree in Europe is insufficient and that test users require continuous training in the correct use of tests.

Muniz, *et. al*. (1999) suggest that training should be provided by accredited institutions like universities, professional associations, private companies, test publishers and/or government institutions, and should at least address the following issues:

1. Specialisation level required by the practitioner using various tests.
2. The type of professional who may use the various tests.
3. Specialist field in which tests may be applied.
4. Proper use of tests.
5. Psychometric knowledge.
6. Confidentiality of results.

7. Precision of scores.
8. Respect for rules.
9. Feedback and interpretation of results.

Although training should cover concepts such as reliability, validity and test standardization, the complexities of testing individuals from culturally diverse groups should also be included (Huysamen, 2002). Training in ethics should form a critical aspect in all training (Scherrer, *et al*., 2002).

As was pointed out in a previous section, there is a critical need to offer comprehensive training in test development and adaptation for those who want to pursue a career in psychological test development in South Africa. This should be kept in mind when an audit is conducted of existing training programmes so that institutions that have the capacity and expertise to offer training in test development can be identified and a suitable training programme can be developed.

Test distributors should produce quality test materials and follow sound practices when marketing and distributing tests

Practitioners generally welcomed the fact that of late there were an increasing number of test distributors in South Africa as they felt that this could have a positive impact on test prices. However, the flip side of the coin was that this resulted in information about available tests being fairly scattered and practitioners struggled to get a global picture of all the tests available in South Africa. In this regard, practitioners expressed the need for information on tests to be stored in a more centralised way so that they could access the information easily. A central database with information on all tests should be maintained.

Furthermore, especially in the focus groups and individual interviews, participants alluded to questionable practices on the part of some test distributors. Concerns were raised about the high cost of tests which made them unaffordable at times, the quality of the test materials, and the quality of the service delivery and back-up provided. Furthermore, some criticisms were levelled at the training courses run by test distributors, both in terms of the cost of the courses and the criteria used to decide who can attend a training course. It was furthermore suggested that test developers and distributors compile a code of practise to guide their test development and marketing practices and to protect the public.

Foxcroft and Roodt (2001) assert that nationally and internationally the need for a code of conduct for test developers, publishers and distributors is being acknowledged. Indeed, the *Code of Fair Testing*

Practices in Education (1996) includes pointers related to fair assessment practices for test developers and distributors. Similarly, the *International Guidelines on Computer-based and Internet Delivered Testing* (Bartram & Coyne, 2003) include standards that test developers, publishers and distributors should adhere to when developing and marketing computer-based tests. From existing codes and guidelines as well as based on the observations of practitioners in the present survey, it appears that a code for test developers, publishers and distributors should outline:

- The information that practitioners need to be able to decide whether or not a test is appropriate to use in a certain context (e.g., purpose of test, target population, psychometric data).
- The qualifications and special training requirements needed to administer, score and interpret the test.
- Information that can assist practitioners to interpret test scores, especially in a multi-cultural context.
- Information on the applicability of the measure for various groups and the outcome of bias studies.

THE CONTROL AND REGULATION OF TESTS AND TESTING PRACTICES

The Role of the Professional Board for Psychology

The use of psychological tests is under statutory control in South Africa and the Professional Board for Psychology is tasked with regulating the use of psychological tests here. To assist the Professional Board in this task, the Psychometrics Committee was established in 1996. This is in keeping with international trends where task forces or committees are established to oversee psychological test use and to set agendas to improve testing and assessment practices (e.g., Wechsler, 2003).

Many issues were raised in the present survey related to the Professional Board for Psychology. As pointed out previously, practitioners perceive the test classification process carried out by the Psychometrics Committee to be confusing, expensive, and very stringent, although they also indicated that they did not feel that the process was sufficiently thorough. They felt that test developers should be compelled to submit tests for classification and independent reviews should be conducted to validate the findings of the Professional Board regarding the classification of a test. Furthermore, practitioners felt that although there were official policies related to test use and assessment practices, the Professional Board were not highly effective in implementing the policies and controlling the abuse of tests by prosecuting those who transgress the regulations related to test use.

Practitioners felt that the Professional Board should play the role of a watchdog body which:

- Registers psychological tests.
- Sets competency standards for the various levels of assessment practitioners.
- Accredits, sets quality standards and regularly reviews and audits training programmes.
- Licenses/accredits practitioners.
- Puts a workable continuous professional development system in place and maintains the system.
- Educates the public regarding psychological testing.

However, probably in view of the concerns expressed with respect to the Professional Board, practitioners proposed that a further body be established, which would play a somewhat more significant role than the Professional Board in monitoring and regulating test use in general, and not only psychological test use. This body is discussed in more detail in the next section.

A new all encompassing body is needed to monitor testing

Given the limited capacity of the Professional Board for Psychology to currently monitor test use and assessment practices and in view of the fact that people other than psychologists perform testing, the idea of establishing a Centre of Excellence for Testing (CET) was proposed. Practitioners expressed a strong need for a centralised body, which would be an all encompassing monitoring, advisory and research body. Although practitioners felt that key stakeholders (e.g., practitioners, test developers, training institutions, Professional Board) should be represented on it, they nonetheless saw the CET as an independent body. It was proposed that the CET should:

- Establish guidelines related to test use and the quality standards for tests.
- Monitor test use.
- Establish a national test development agenda
- Monitor and coordinate test development and revision (updating).
- Establish a standard system for reviewing tests, implement the review system, and publish reviews.
- Research tests.
- Store and disseminate research and review information on tests via a centralised database.
- Advise practitioners regarding the use of tests for specific purposes.
- Offer CPD workshops related to tests and assessment practices.
- Monitor and advise on the price of tests.

The Centre for Excellence in Testing would need to work very closely with the Professional Board for Psychology and other professional and regulatory bodies concerned with testing and assessment. Furthermore, if CET were to be established, most practitioners felt that it should be partly subsidised by the government, partly funded by the private sector, and it could generate it's own funding as well. In conceptualising CET as playing a more extensive monitoring, coordinating, reviewing, and information dissemination role than the Professional board currently does, practitioners were echoing a sentiment expressed by Bartram (2001). Bartram (2001) describes this need as such:

> There does appear to be a need for a single organization to take ownership, within a country, of the issues of quality and good practice in testing, and to do this within the framework of an internationally agreed set of guidelines. (p. 179)

Given the fact that the practitioners indicated that they felt that a Centre of Excellence in Testing should be established in addition to the Professional Board, it would appear that they see CET rather than the Professional Board for Psychology as being the driving force behind testing and assessment practice in South Africa. Interestingly enough, practitioners could not clearly conceptualise what role national societies such as the Psychological Society of South Africa (PsySSA) should play as regards testing and assessment. National societies should thus deliberate regarding their vision for contributing to the improvement of test use and assessment practices in South Africa.

PERCEPTIONS REGARDING WHO SHOULD DEVELOP TESTS

Central Agency versus Smaller Test Development Companies

Until a decade ago, psychological test development was almost exclusively undertaken by a central agency, namely, the HSRC. There was a mixed response from practitioners surveyed concerning whether there was a need for a central test agency to undertake most of the test development in South Africa. Although the need for such an organisation was recognised by some especially as regards developing tests that meet a national need, others felt that the field would be better served by having a number of smaller test developers as this could result in cost savings for practitioners. Furthermore, if a body such as the Centre for Excellence in Testing, or the Professional Board for Psychology monitored and coordinated test development initiatives, appropriate tests that tap a wide array of functions could be provided and could be revised and updated as the need arose. In the process of doing this, there would be a centralised database that practitioners could tap into to get information on the range and quality of tests available.

The Role of the HSRC

When asked whether the HSRC, who previously fulfilled the role of a centralised test development agency, should continue to fulfil such a role, practitioners felt that the HSRC had lost too much momentum and credibility to regain its position as a central test development agency. Instead, they suggested that the HSRC should redefine and re-brand itself and that it should consider only developing tests of national importance (e.g., tests related to gaining access to university studies). The HSRC could also consider developing tests for people with special needs (e.g., partially sighted) as it is unlikely that commercial test development companies will perceive the development of such tests to be financially viable. Something that was not directly mentioned by the practitioners but which is alluded to in the findings is that although a reasonable percentage of the most frequently used tests were developed by the HSRC, practitioners indicated that most of these tests were outdated, needed to be adapted for cross-cultural use, and should be translated into the various African languages. With this in mind, the HSRC needs to consider whether it wishes to update and adapt some of its popular measures that are still widely used (e.g., 19 Fields Interest Inventory, and SSAIS-R).

The suggestion was made that when the HSRC develops or adapts tests, it could explore the possibility of forming collaborative partnerships with test development teams at universities or in industry. When it came to the role of universities, however, divergent views were presented. Some felt that universities should collaborate with bodies such as the HSRC to undertake test development and revision studies, while others felt that this was an impossible task for universities to undertake as they had limited financial resources and time constraints.

This study has also highlighted the need for more policies related to test use and assessment practice as well as the need to audit and possibly re-design training programmes. The background research that needs to inform policy-making as well as research into test-user competencies, training programmes for practitioners, and training programmes for test developers could conceivably also be undertaken by a national body such as the HSRC.

It is interesting to note that when Plug (1996) evaluated the test construction and psychological services supported by the HSRC, he reached very similar conclusions regarding the role of the HSRC. He recommended *inter alia* that the HSRC should update their successful tests, should undertake collaborative research with local and international researchers and institutions, and could undertake contract research especially with a view to research capacity building. Similarly, England and Zietsman (1995) recommended *inter alia* that the HSRC should evaluate their existing tests and update those found to be valid and reliable, and should translate their tests into African languages.

CONCLUDING REMARKS

This chapter has attempted to draw together the overarching themes that emerged from the various data collection methods used in this study. A consolidated view was provided of the tests that could be evaluated with a view to adapting or updating them as well as the types of new tests that need to be developed. Furthermore, other needs of practitioners related to the practice of assessment were highlighted. Views were also consolidated regarding the role of the Professional Board for Psychology in regulating test use and the suggestion of establishing a Centre of Excellence for Testing was explored further. In the process, clear pointers have emerged that can guide the setting of an agenda for test use, development and regulation in South Africa. This is the topic of the final chapter of this report.

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CHAPTER 6

Test Use and Needs: Towards an Agenda

CHAPTER OVERVIEW

The key overarching themes identified in Chapter 5 are used as a springboard in this concluding chapter to generate a tentative agenda to guide test development and assessment practice in South Africa. Some thoughts are also provided regarding who should take ownership for driving this agenda.

TOWARDS AN AGENDA

Based on the findings of this project, some tentative suggestions can be made regarding the development of an agenda for psychological testing in South Africa. Given the urgent needs and concerns that have been highlighted by practitioners who participated in this project, if an agenda is not developed and implemented, these needs and concerns will remain and the field of psychological testing will suffer in the long run.

To address the needs of psychological assessment practitioners, test-takers, and key stakeholders, and to coordinate test development and adaptation in South Africa, the present survey has provided pointers for the agenda that needs to be set. The findings of the survey suggest that the following aspects should be included in the agenda to be developed to guide psychological testing and assessment into a new era in South Africa:

1. Develop a clear description of what a psychological test is (in terms of its characteristics) and how it is differentiated from other types of tests. The description should include an outline of the characteristics of tests that add value to the assessment of human behaviour. This description can then be used to inform test-takers and the users of test information in the market-place regarding the competitive advantage which psychological testing offers.

2. The enriched description of what a psychological test is should be included in a wider, user-friendly policy document pertaining to who may use psychological tests and should be widely disseminated to companies and organisations that use tests. This would serve to prevent the current situation where organisations simplistically argue that if a test is not registered with the Professional Board

for Psychology, it is not a psychological test and therefore non-psychologists can use it. The emphasis needs to shift from whether or not a test is registered or classified as a psychological test to what a psychological test is and who may use such a test.

3. A clearer delineation of the scope of practice of the various professional registration categories related to the purposes for which they use tests needs to be developed. This will have implications for the training of practitioners. Training programmes will need to be aligned with providing trainee practitioners with learning opportunities related to the tests and the purposes for which they will use the tests in practice.

4. The requirement that practitioners should only use registered tests, needs to be reviewed by the Professional Board for Psychology as a matter of urgency for three reasons. Firstly, there is a need to clarify misperceptions in the field that tests are only considered to be psychological tests if they are registered, which has led to a proliferation in the use of unregistered tests, many of which would qualify to be classified as a psychological test, by non-psychology professionals. Secondly, it is not possible for practitioners to currently only use tests from the list of registered tests as the list does not sufficiently cover all the domains that practitioners need to assess. Suggestions have been provided in this report related to which international tests could be earmarked to be adapted for use in South Africa so that they can be added to the list. Thirdly, the present study has raised questions related to whether, instead of requiring practitioners to use registered tests, the emphasis should rather be placed on requiring practitioners to use high-quality, culturally appropriate tests.

5. The test classification system and process used by the Psychometrics Committee of the Professional Board for Psychology needs to be reviewed. In view of the fact that psychological testing in South Africa falls under statutory control, there will always be a need to classify a test as a psychological test or not. However, the current system and process used goes further than just making a classification decision by also adding elements of a test review. This limited review, however, is not comprehensive enough, is not updated on a regular basis, and is not published anywhere so that practitioners have access to it. It might be wiser to revise the current classification system and process so that it only focuses on the issue of test classification. The issue of the quality review of tests can then be dealt with in another way (see the next point). Attention should also be paid to completing the process of classifying a test as speedily as possible and for ensuring that mechanisms are put in place so that all tests are submitted for classification.

6. A comprehensive test review system needs to be urgently introduced in which all tests are systematically reviewed using a standardised format and the results of the review can be easily accessed by practitioners. Without access to test review information, the ethical practice of psychological testing in South Africa cannot be enhanced.

7. As part of the Continuous Professional Development (CPD) system that has been introduced for psychologists, specific training opportunities should be provided on an ongoing basis to enable practitioners to expand their knowledge of testing and psychometrics, broaden and update their repertoire of tests, and introduce them to newer assessment methodologies such as computerised testing. Training should raise awareness regarding ethical assessment practices, and practitioners should be empowered to grapple with assessment-related issues in a multicultural and a multilingual context.

8. Existing South African and international tests need to urgently be adapted, revised and/or updated. Attention should particularly be paid to issues related to culture and language when adapting tests and to the appropriateness of the test for the world of work when revising and updating tests. The current survey generated the names of possible tests that can be reviewed with a view to deciding whether they should be adapted or updated (see Tables 5.2 and 5.3).

9. New culturally and linguistically appropriate tests need to be developed to fill gaps in the toolkits of assessment practitioners and to replace existing tests that cannot be adapted. Some of the newer assessment technologies such as computerised testing should also be catered for when the new tests are developed.

10. Competency standards need to be developed for all levels of psychological assessment practitioners. Thereafter, an audit should be conducted of the psychometric and psychological assessment components of all professional training programmes to see to what extent they are producing practitioners with the necessary competencies and where revisions are needed to the programme offerings.

11. Training programmes in test development and adaptation are urgently needed to grow our test development expertise and our pool of Black test developers.

12. A Code of Practice should be developed for test developers, publishers and distributors.

13. The role of the Professional Board for Psychology in monitoring and regulating test use should be critically evaluated. In the process, consideration should be given to whether the interests of testing in general in South Africa would not be better served by establishing a Centre of Excellence for Testing, which would have a greater capacity to monitor, coordinate, and review tests and advise practitioners.

14. Professional societies, such as the Psychological Society of South Africa, need to establish what contribution they wish to make to the field of psychological testing and assessment in South Africa.

15. The question as to who should develop tests needs to be unpacked. Generally, it seems to be wise to have a variety of test developers as opposed to one dominant central development agency. However, there nonetheless appears to be a role for a national agency such as the HSRC to develop tests of national importance and for test-takers with special needs. However, such a national agency could form collaborative partnerships with universities and even industry when developing and researching tests.

TAKING OWNERSHIP OF THE AGENDA

While a tentative agenda has been suggested in the previous section, this agenda needs to be translated into action otherwise the valuable contributions made by practitioners to the present survey will have been in vain. On the one hand, it could be argued that all the various stakeholder groups should identify from this report, and especially from the tentative agenda, what they find most meaningful and they can then decide how to respond. However, a thread that has been interwoven throughout this report has been the fact that practitioners perceive that strong, centralised leadership and coordination is necessary if we are going to succeed in uplifting the standard of test use and assessment in South Africa. With this in mind, it is suggested that the Professional Board for Psychology in its role as the legal custodian of psychological assessment in South Africa, initially takes ownership of the tentative agenda by establishing a task force of all the relevant stakeholders (e.g. the Departments of Education. Health, and Labour; professional associations; practitioners; test development and distribution agencies; and higher education institutions). This task force should be tasked with firming up the agenda, establishing who will be responsible for driving the various aspects of the agenda, and setting timeframes. The task force could also coordinate the implementation of the agenda and should be accountable to the Professional Board in that it will have to provide the Board with regular progress reports.

CONCLUDING REMARKS

The survey of test-use patterns and the needs of psychological assessment practitioners yielded a wealth of information, which has made it possible to suggest a tentative agenda to address areas of concern and needs that emerged. Thanks are extended to all the practitioners who invested their time and energy to contribute to this project. The research team hopes and believes that your voice has been heard. Thanks are also extended to the research team who spent many hours gathering and analysing data and in compiling this report.

It is hoped that this project has set the benchmark for more regular surveys to be conducted with respect to test use patterns and the needs of psychological practitioners in South Africa.

APPENDIX A

HSRC

PSYCHOLOGICAL TEST USE, DEVELOPMENT AND ADAPTATION IN SOUTH AFRICA: A NEEDS ASSESSMENT – OCTOBER 2003

The field of psychological test use, development and adaptation in South Africa faces many challenges at present. To be able to meaningfully respond to these challenges, it is important to firstly gain an understanding of the tests currently being used by psychological practitioners and their needs related to the types of tests, normative information, etc. that they see as being necessary in their everyday practice. From this information, it should be possible to generate a test development and adaptation agenda for South Africa as well as to provide pointers regarding how to translate such an agenda into action. With this in mind, a questionnaire has been developed to assist in analysing the needs of practitioners in terms of their usage of psychological tests.

We would appreciate it if you could complete the following questionnaire and return it to us in the self addressed envelope provided before 24 October 2003. This questionnaire is also available in electronic format. Please contact nleroux@hsrc.ac.za and write "Survey questionnaire" in the subject line if you prefer a copy to be emailed to you. Complete it and return electronically or fax it to 012 324 2183. Visit the HSRC website at www.hsrc.ac.za for more information on the project.

DO NOT WRITE YOUR NAME ANYWHERE ON THIS QUESTIONNAIRE. The confidentiality of your responses will be protected and there is no way that we can link the data to you directly. Your co-operation is voluntary and will be greatly appreciated.

RECORD NUMBER

SECTION A

When asked to mark an option, please circle (2) the appropriate number.

1.1 What are the languages that you use most in your communication with clients?

(Circle one or more) e.g. 05 Tshivenda (1)

01	Sepedi	1	05	Tshivenda	1	09	isiNdebele	1
02	isiSwati	1	06	Xitsonga	1	10	isiXhosa	1
03	Sesotho	1	07	Afrikaans	1	11	isiZulu	1
04	Setswana	1	08	English	1	12	Other, please specify	

1.2 What are the home languages of your clients?

(Circle one or more) 05 Tshivenda (1)

01	Sepedi	1	05	Tshivenda	1	09	isiNdebele	1
02	isiSwati	1	06	Xitsonga	1	10	isiXhosa	1
03	Sesotho	1	07	Afrikaans	1	11	isiZulu	1
04	Setswana	1	08	English	1	12	Other, please specify	

1.3 What is your gender

Male	01	*Female*	02

When asked to mark an option, please circle ◯ the appropriate number.

1.4 Where are you employed?
(Circle one or more)

01	Private practice (self-employed)	1
02	University	1
03	Industry	1
04	Private clinic	1
05	If government department, indicate which:	
06	Other, please specify:	

1.5 Indicate your category of registration:
(Circle one or more)

		(Circle categories of your registration)	**How long have you been practicing?** (In completed years)
01	Clinical	1	
02	Counselling Psychology	1	
03	Industrial Psychology	1	
04	Educational Psychology	1	
05	Research Psychology	1	
06	Psychometrist	1	
07	Psychotechnician	1	
08	Registered counsellor	1	
09	Student	1	
10	Student - Intern	1	
11	Other, please specify	1	
12	Other (For office use only)	1	

SECTION B

1.1 Please indicate the extent to which you use psychological and educational tests:

Use the following rating scale: **1** Never use tests (0%) **2** Sometimes use tests (1% - 40 %) **3** Frequently use tests (41% - 100%)		Circle one for each statement		
		Never 1	**Sometimes 2**	**Frequently 3**
01	In applied (clinical, counselling, industrial or educational) practice	1	2	3
02	With children in applied practice	1	2	3
03	With adolescents in applied practice	1	2	3
04	With adults in applied practice	1	2	3
05	For research purposes	1	2	3
06	Other, please specify			

1.2 As far as the cross-cultural use of tests is concerned, please indicate the extent to which:

Use the following rating scale: **1** Never (0%) **2** Sometimes (1% - 40 %) **3** Frequently (41% - 100%)		Circle one for each statement		
		Never 1	**Sometimes 2**	**Frequently 3**
01	You find that the current tests you use are appropriate for cross-cultural use	1	2	3
02	You feel that more culturally appropriate tests are needed	1	2	3
03	You would like to receive further training in cross-cultural test use, adaptation, and interpretation	1	2	3

When asked to mark an option, please circle ◯ the appropriate number.

1.3 Please indicate the extent to which you use tests for the following purposes in your practice or in research:

Use the following rating scale: **1** Never use tests (0%) **2** Sometimes use tests (1% - 40 %) **3** Frequently use tests (41% - 100%)		Circle one for each statement		
		Never **1**	**Sometimes** **2**	Frequently **3**
01	Psycho-educational assessment	1	2	3
02	School readiness assessment	1	2	3
03	Assessment of learning problems	1	2	3
04	Intellectual assessment	1	2	3
05	Assessment of potential	1	2	3
06	Career assessment / development	1	2	3
07	Assessment of personality	1	2	3
08	Neuropsychological assessment	1	2	3
09	Child custody assessment	1	2	3
10	Forensic assessment	1	2	3
11	Employment selection assessment	1	2	3
12	Selection of people for training in employment contexts	1	2	3
13.	Other, please specify:			

1.4 To what extent have you done one or more of the following?

Use the following rating scale: **1** Never (0%) **2** Sometimes (1% - 40 %) **3** Regularly (41% - 100%)		Circle one for each question		
		Never **1**	**Sometimes** **2**	**Regularly** **3**
01	Gone on courses to learn how to use new or updated measures since you qualified?	1	2	3
02	Been able to find reviews of tests that you use frequently?	1	2	3
03	Read research reports about the tests that you use frequently?	1	2	3
04	Gone on courses to update your psychometric knowledge since you qualified?	1	2	3
05	Conducted studies to establish local validity and reliability information on the tests that you use?	1	2	3
06	Used computer-based tests?	1	2	3
07	Used computer-generated test reports	1	2	3
08	Remained abreast of technological and psychometric advances in the field of psychological testing?	1	2	3
09	Attended psychological testing and assessment courses for CPD purposes?	1	2	3

1.5 How do you think appropriate psychological test development and standardisation should be undertaken in South Africa?

Number the following from 1 to 3 in your order of preference **1** = Least preferred **2** = Preferred **3** = Most preferred		
01	By a central government subsidised body developing the tests itself	
02	By a central government subsidised body determining priorities and subcontracting the development of tests to academics and other qualified persons	
03	The development and standardisation should be left to private enterprise	

1.6 Should there be a central test development agency for developing and standardizing tests in South Africa?

Yes	01	**No**	02

If yes, what should the function of such an agency be?

Please indicate **YES** (1) or **NO** (2) for each of the following statements:		Circle one for each statement	
		YES 1	**NO 2**
01	Develop psychological tests	1	2
02	Adapt overseas psychological tests	1	2
03	Adapt South African psychological tests		
04	Regularly update their tests	1	2
05	Publish research findings of their tests	1	2
06	Run CPD courses to update the psychometric knowledge of practitioners	1	2
07	Run CPD training courses on the tests that they develop	1	2
08	Develop more computer-based tests	1	2
09	Develop more tests that cater for the linguistic diversity in South Africa	1	2
10	Commission the development and standardization of tests rather than develop tests themselves	1	2
11	Other, please specify:		

1.7. If yes, how should such an agency be funded?

Please indicate **YES** (1) or **NO** (2) for each of the following statements:		Circle one for each statement	
		YES 1	**NO 2**
01	Government subsidised	1	2
02	Private enterprise	1	2
03	Self-funded	1	2
04	A combination of the above	1	2
05	Other, please specify:		

When asked to mark an option, please circle ◯ the appropriate number.

SECTION C

1.1 Please give information about the tests that you use at present:

For any additional information you wish to add, circle the number of the test, refer to that number in section C1.3 and add your suggestions and comments.

	Name of test	Use the key and circle to indicate how frequently you make use of the tests listed below: **1 = Never 2 = Sometimes 3 = Frequently**			Use the key and circle to indicate if you have information available with regard to local reliability and validity data: **Yes = 1 No = 2**		Does the test need revising? **Yes = 1 No = 2**		Use the key and circle to indicate how useful you find the test? **1 = Not useful 2 = Useful to some extent 3 = Very useful**		
1.	19 Field Interest Inventory (19 FII)	1	2	3	1	2	1	2	1	2	3
2.	16 Personality Factor Inventory SA 92 (16PF)	1	2	3	1	2	1	2	1	2	3
3.	Abstract Reasoning Test (AR2)	1	2	3	1	2	1	2	1	2	3
4.	Academic Aptitude Test (AAT)(Standard 10)	1	2	3	1	2	1	2	1	2	3
5.	Academic Aptitude Test (AAT)(University)	1	2	3	1	2	1	2	1	2	3
6.	Academic-Technical Aptitude Tests (ATA)	1	2	3	1	2	1	2	1	2	3
7.	Adjective Checklist (EWL) - Part of Vienna Test System	1	2	3	1	2	1	2	1	2	3
8.	Adolescent Self Concept Scale	1	2	3	1	2	1	2	1	2	3
9.	African Profile Technique	1	2	3	1	2	1	2	1	2	3
10.	Anomalous Concept Test (ACTA)(A/133),	1	2	3	1	2	1	2	1	2	3
11.	Anomalous Figure Test (AFTA)(A/134), and	1	2	3	1	2	1	2	1	2	3
12.	Anxiety Questionnaire for Pupils (AFS) - Vienna Test System	1	2	3	1	2	1	2	1	2	3
13.	APIL	1	2	3	1	2	1	2	1	2	3
14.	Aptitude Dimension Test	1	2	3	1	2	1	2	1	2	3
15.	Aptitude Profile Test	1	2	3	1	2	1	2	1	2	3
16.	Aptitude Test Battery for Adults (AA)	1	2	3	1	2	1	2	1	2	3
17.	Aptitude Test Battery for Pupils in Standards 6 and 7 (ATB Standards 6/7)	1	2	3	1	2	1	2	1	2	3
18.	Aptitude Tests for School Beginners (ASB)	1	2	3	1	2	1	2	1	2	3
19.	BarOn Emotional Quotient Inventory (BarON EQ-item)	1	2	3	1	2	1	2	1	2	3
20.	Bayley Scales II	1	2	3	1	2	1	2	1	2	3
21.	Beck Tensor (TENSOR) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
22.	Bender Visual Motor Gestalt Test	1	2	3	1	2	1	2	1	2	3
23.	Benton Visual Retention Test	1	2	3	1	2	1	2	1	2	3
24.	Blox Test (A/80)	1	2	3	1	2	1	2	1	2	3
25.	Brain Compass	1	2	3	1	2	1	2	1	2	3
26.	Broad Band Competency Assessment Battery (Dec 2002)	1	2	3	1	2	1	2	1	2	3
27.	Business Comprehension Scale	1	2	3	1	2	1	2	1	2	3
28.	California Psychological Inventory (CPI)	1	2	3	1	2	1	2	1	2	3
29.	Campbell Interest And Skill Survey tm (CISS®)	1	2	3	1	2	1	2	1	2	3
30.	Career Development Questionnaire (CDQ)	1	2	3	1	2	1	2	1	2	3
31.	Cattell Culture Fair Intelligence Tests	1	2	3	1	2	1	2	1	2	3

When asked to mark an option, please circle the appropriate number.

	Name of test	Use the key and circle to indicate how frequently you make use of the tests listed below: **1 = Never 2 = Sometimes 3 = Frequently**			Use the key and circle to indicate if you have information available with regard to local reliability and validity data: **Yes = 1 No = 2**		Does the test need revising? **Yes = 1 No = 2**		Use the key and circle to indicate how useful you find the test? **1 = Not useful 2 = Useful to some extent 3 = Very useful**		
32.	Children's Apperception Test - Human Figures (CAT-H)	1	2	3	1	2	1	2	1	2	3
33.	Children's Apperception Test - Supplement (CAT-S)	1	2	3	1	2	1	2	1	2	3
34.	Children's Apperception Test (CAT)	1	2	3	1	2	1	2	1	2	3
35.	Children's Personality Questionnaire (CPQ)	1	2	3	1	2	1	2	1	2	3
36.	Clerical Checking Test (CC2)	1	2	3	1	2	1	2	1	2	3
37.	Clerical Test Battery (CTB2)	1	2	3	1	2	1	2	1	2	3
38.	Clinical Analysis Questionnaire (CAQ)	1	2	3	1	2	1	2	1	2	3
39.	Cognitive Process Profile (Magellan Consulting)	1	2	3	1	2	1	2	1	2	3
40.	Cognitrone (COG) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
41.	Columbus Picture Analyses of Growth towards Maturity	1	2	3	1	2	1	2	1	2	3
42.	Communication and Insights Analysis Questionnaire (CIAQ)	1	2	3	1	2	1	2	1	2	3
43.	Computerized Adaptive Test of General Reasoning Ability (GSAT Senior)	1	2	3	1	2	1	2	1	2	3
44.	Concentration under Monotony Test (Q1) - Austrian Road Safety Board	1	2	3	1	2	1	2	1	2	3
45.	Conceptual Reasoning Test (A/138)	1	2	3	1	2	1	2	1	2	3
46.	Continuous Attention Test (DAUF) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
47.	Continuous Symbol Checking Test (CSC)(A/84)	1	2	3	1	2	1	2	1	2	3
48.	Copas Cognitive and Potential Assessment	1	2	3	1	2	1	2	1	2	3
49.	Critical Reasoning Test Battery (CRTB1)(CRTB2)	1	2	3	1	2	1	2	1	2	3
50.	Culture-fair Abilities and Motivation Test (C-FAM)	1	2	3	1	2	1	2	1	2	3
51.	Customer Contact Styles Questionnaire (CCSQ)	1	2	3	1	2	1	2	1	2	3
52.	Customer Contract Styles Questionnaire (CCSQ)	1	2	3	1	2	1	2	1	2	3
53.	Decision Preference Analysis	1	2	3	1	2	1	2	1	2	3
54.	Decision Reaction Test (DR2) - Austrian Road Safety Board	1	2	3	1	2	1	2	1	2	3
55.	Deductive Reasoning Test (B/112)	1	2	3	1	2	1	2	1	2	3
56.	Determination Test – Vienna Test System										
57.	Developmental Test of Visual Perception (Frostig)	1	2	3	1	2	1	2	1	2	3
58.	Developmental Test of Visual-Motor Integration (Beery)	1	2	3	1	2	1	2	1	2	3
59.	Differential Aptitude Tests: Forms R, S, K & L	1	2	3	1	2	1	2	1	2	3
60.	Differential Interest Test (DIT) - Part of Vienna Test System	1	2	3	1	2	1	2	1	2	3
61.	Discus Behavioural Profile System	1	2	3	1	2	1	2	1	2	3
62.	Easy Steps	1	2	3	1	2	1	2	1	2	3
63.	Electronic Diagnostic Systems (SADF)	1	2	3	1	2	1	2	1	2	3
64.	ESSI Reading and Spelling Tests	1	2	3	1	2	1	2	1	2	3

When asked to mark an option, please circle the appropriate number.

	Name of test	Use the key and circle to indicate how frequently you make use of the tests listed below: **1 = Never** **2 = Sometimes** **3 = Frequently**			Use the key and circle to indicate if you have information available with regard to local reliability and validity data: **Yes = 1** **No = 2**		Does the test need revising? **Yes = 1** **No = 2**		Use the key and circle to indicate how useful you find the test? **1 = Not useful** **2 = Useful to some extent** **3 = Very useful**		
65.	Experience of Work and Life Circumstances Questionnaire (WLQ)	1	2	3	1	2	1	2	1	2	3
66.	Eysenck Personality Inventory	1	2	3	1	2	1	2	1	2	3
67.	Eysenck Personality Profiler (EPP)	1	2	3	1	2	1	2	1	2	3
68.	Factors of Aggressiveness Questionnaire (FAF) - Part of Vienna Test System	1	2	3	1	2	1	2	1	2	3
69.	Family Assessment Device	1	2	3	1	2	1	2	1	2	3
70.	Family Functioning in Adolescence Questionnaire (FFAQ)	1	2	3	1	2	1	2	1	2	3
71.	Fifteen Factor Questionnaire (15FQ)	1	2	3	1	2	1	2	1	2	3
72.	Fifteen Factor Questionnaire Plus (15FQPlus) (previously 16PF Industrial (16Pi)	1	2	3	1	2	1	2	1	2	3
73.	Figure Classification Test (A/121)	1	2	3	1	2	1	2	1	2	3
74.	Filing and Typing Test	1	2	3	1	2	1	2	1	2	3
75.	First View Assessment	1	2	3	1	2	1	2	1	2	3
76.	Form Series Test (Industrial Version)(A/79)	1	2	3	1	2	1	2	1	2	3
77.	Functional Reasoning Test Battery (FRTB)	1	2	3	1	2	1	2	1	2	3
78.	Fundamental Interpersonal Relations Orientation-Behavior tm (FIRO-B) Tm	1	2	3	1	2	1	2	1	2	3
79.	General and Graduate Test Batteries	1	2	3	1	2	1	2	1	2	3
80.	General Reasoning Test Battery (GRT2)	1	2	3	1	2	1	2	1	2	3
81.	General Scholastic Aptitude Test (GSAT)	1	2	3	1	2	1	2	1	2	3
82.	Gesell Developmental Test	1	2	3	1	2	1	2	1	2	3
83.	Giessen Test (GIESS) - Part of Vienna Test System	1	2	3	1	2	1	2	1	2	3
84.	Giotto Integrity Questionnaire	1	2	3	1	2	1	2	1	2	3
85.	Goodenough-Harris Drawing Test	1	2	3	1	2	1	2	1	2	3
86.	Graduate Abstract Reasoning Test (AR1)	1	2	3	1	2	1	2	1	2	3
87.	Graduate Numerical Reasoning Test (NR1)	1	2	3	1	2	1	2	1	2	3
88.	Graduate Reasoning Test Battery (GRT1)	1	2	3	1	2	1	2	1	2	3
89.	Graduate Verbal Reasoning Test (VR1)	1	2	3	1	2	1	2	1	2	3
90.	Graz Assertiveness Test (GAT) - Part of Vienna Test System	1	2	3	1	2	1	2	1	2	3
91.	Group Test for 5/6 and 7/8 year-olds	1	2	3	1	2	1	2	1	2	3
92.	The Group Embedded Figures Test (GEFT)										
93.	Grover-Counter Scale of Cognitive Development	1	2	3	1	2	1	2	1	2	3
94.	Guidance Test Battery for Secondary Pupils (GBS)	1	2	3	1	2	1	2	1	2	3
95.	Hamburg Neuroticism and Extroversion Scale (HANES) - Vienna Test System	1	2	3	1	2	1	2	1	2	3
96.	High Level Battery (B/75)	1	2	3	1	2	1	2	1	2	3
97.	High Level Figure Classification Test (A/129)	1	2	3	1	2	1	2	1	2	3
98.	High School Interest Questionnaire (HSIQ)	1	2	3	1	2	1	2	1	2	3
99.	High School Personality Questionnaire (HSPQ)	1	2	3	1	2	1	2	1	2	3
100.	Hypothesis Formation Test (HYPO) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
101.	Individual Scale for General Scholastic Aptitude (ISGSA)	1	2	3	1	2	1	2	1	2	3

When asked to mark an option, please circle the appropriate number.

	Name of test	Use the key and circle to indicate how frequently you make use of the tests listed below*:* **1 = Never** **2 = Sometimes** **3 = Frequently**			Use the key and circle to indicate if you have information available with regard to local reliability and validity data**:** **Yes = 1** **No = 2**		Does the test need revising**?** **Yes = 1** **No = 2**		Use the key and circle to indicate how useful you find the test? **1 = Not useful** **2 = Useful to some extent** **3 = Very useful**		
102.	Individual Scale for Northern Sotho-speaking pupils	1	2	3	1	2	1	2	1	2	3
103.	Individual Scale for Southern Sotho-speaking pupils	1	2	3	1	2	1	2	1	2	3
104.	Individual Scale for Tswana-speaking pupils	1	2	3	1	2	1	2	1	2	3
105.	Individual Scale for Xhosa-speaking pupils	1	2	3	1	2	1	2	1	2	3
106.	Individual Scale for Zulu-speaking pupils	1	2	3	1	2	1	2	1	2	3
107.	Industrial Test Battery (ITB) - includes	1	2	3	1	2	1	2	1	2	3
108.	Integrity Profiles (IP-200)	1	2	3	1	2	1	2	1	2	3
109.	Intelligence Structure Test (IST 70) - Vienna Test System	1	2	3	1	2	1	2	1	2	3
110.	Intermediate Battery (B/77)	1	2	3	1	2	1	2	1	2	3
111.	Interpersonal Relations Questionnaire (IRQ)	1	2	3	1	2	1	2	1	2	3
112.	Intra- and Interpersonal Relations Scale (IIRS)	1	2	3	1	2	1	2	1	2	3
113.	IPAT Anxiety Scale	1	2	3	1	2	1	2	1	2	3
114.	Jackson Personality Inventory – Revised (JPI-R)	1	2	3	1	2	1	2	1	2	3
115.	Job Profiling Expert (JP Expert)	1	2	3	1	2	1	2	1	2	3
116.	Jung Personality Questionnaire (JPQ)	1	2	3	1	2	1	2	1	2	3
117.	Jung Type Indicator (JT12)	1	2	3	1	2	1	2	1	2	3
118.	Junior Aptitude Test (JAT)	1	2	3	1	2	1	2	1	2	3
119.	Junior Eysenck Personality Inventory	1	2	3	1	2	1	2	1	2	3
120.	Junior South African Individual Scales (JSAIS)	1	2	3	1	2	1	2	1	2	3
121.	Kolby Conative Index (KCIA TM)	1	2	3	1	2	1	2	1	2	3
122.	Learning Potential Computerised Adaptive Test (LPCAT)	1	2	3	1	2	1	2	1	2	3
123.	Life Role Inventory (LRI)	1	2	3	1	2	1	2	1	2	3
124.	Line Labyrinth Test (LL5) - Austrian Road Safety Board	1	2	3	1	2	1	2	1	2	3
125.	London House Personnel Selection Inventory (PSI-3)	1	2	3	1	2	1	2	1	2	3
126.	McCarthy Scales of Children Abilities	1	2	3	1	2	1	2	1	2	3
127.	Mechanical Reasoning Test (MR2)	1	2	3	1	2	1	2	1	2	3
128.	Meyer Interest Questionnaire (MB-10)	1	2	3	1	2	1	2	1	2	3
129.	Miller Assessment for Pre-Schoolers (MAP)	1	2	3	1	2	1	2	1	2	3
130.	Minnesota Multiphasic Personality Inventory - Short Form (MMPIK)	1	2	3	1	2	1	2	1	2	3
131.	Minnesota Multiphasic Personality Inventory (MMPI)	1	2	3	1	2	1	2	1	2	3
132.	Movement Assessment Battery for Children	1	2	3	1	2	1	2	1	2	3
133.	Myers-Briggs Type Indicator	1	2	3	1	2	1	2	1	2	3
134.	NEO PI-R (P Morris & C Wilford)	1	2	3	1	2	1	2	1	2	3
135.	NEO-PI-R (Jopie van Rooyen)	1	2	3	1	2	1	2	1	2	3
136.	Non Verbal Matrices Intelligence Test (M30) - Austrian Road Safety Board	1	2	3	1	2	1	2	1	2	3
137.	Normal Battery (A/76)	1	2	3	1	2	1	2	1	2	3
138.	Number Combination Test (ZVT) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3

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139.	Numerical Ability Test (NA2)	1	2	3	1	2	1	2	1	2	3
140.	Numerical Reasoning Test (NR2)	1	2	3	1	2	1	2	1	2	3
141.	Occupational Interest Profile (OIP)	1	2	3	1	2	1	2	1	2	3
142.	Occupational Personality Profile (15 PR)	1	2	3	1	2	1	2	1	2	3
143.	Occupational Personality Profile (OPP)	1	2	3	1	2	1	2	1	2	3
144.	Occupational Personality Questionnaire (OPQ)	1	2	3	1	2	1	2	1	2	3
145.	Organisational Personality Construct Scale	1	2	3	1	2	1	2	1	2	3
146.	Orpheus Personality Questionnaire	1	2	3	1	2	1	2	1	2	3
147.	Paper and Pencil Games (PPG)	1	2	3	1	2	1	2	1	2	3
148.	Paranoid Depressiveness Scale (PDS) - Vienna Test System	1	2	3	1	2	1	2	1	2	3
149.	Pattern Relations Test (B15/1)	1	2	3	1	2	1	2	1	2	3
150.	Perceptual Motor Survey (Kephardt)	1	2	3	1	2	1	2	1	2	3
151.	Personal Value Profile (PVP)	1	2	3	1	2	1	2	1	2	3
152.	Personal, Home, Social and Formal Relations Questionnaire (PHSF)	1	2	3	1	2	1	2	1	2	3
153.	Picture Motivation Tests (PMT)	1	2	3	1	2	1	2	1	2	3
154.	Picture Vocational Interest Questionnaire for Adults (PVI)	1	2	3	1	2	1	2	1	2	3
155.	Porteus Mazes	1	2	3	1	2	1	2	1	2	3
156.	Potential Index Battery (PIB)	1	2	3	1	2	1	2	1	2	3
157.	Predictive Index (PI)	1	2	3	1	2	1	2	1	2	3
158.	Procedures Test, Matrices Test I, and Matrices Test II.	1	2	3	1	2	1	2	1	2	3
159.	Programmer Aptitude Battery (PAB)(A/137) - includes	1	2	3	1	2	1	2	1	2	3
160.	Profile of Mood States (POMS)										
161.	Psychological Map	1	2	3	1	2	1	2	1	2	3
162.	Questionnaire to Assess the Risks of Suicide (FBS) - Part of Vienna Test System	1	2	3	1	2	1	2	1	2	3
163.	Questionnaire: Assessing Willingness to take Risks (FRF) - Austrian Road Safety Board	1	2	3	1	2	1	2	1	2	3
164.	Raven's Progressive Matrices (RPM)	1	2	3	1	2	1	2	1	2	3
165.	Raven's Progressive Matrices – SPM PLUS (1998 ed)	1	2	3	1	2	1	2	1	2	3
166.	Reaction test – Vienna Test System	1	2	3	1	2	1	2	1	2	3
167.	Rorschach cards	1	2	3	1	2	1	2	1	2	3
168.	Rotate and Flip Test (RAFT)(A/136)	1	2	3	1	2	1	2	1	2	3
169.	Rothwell-Miller Interest Blank (RMIB)(C/134)	1	2	3	1	2	1	2	1	2	3
170.	Sales Preference Questionnaire TM (SPQ*Gold®) (May 2003)	1	2	3	1	2	1	2	1	2	3
171.	Scholastic Aptitude Test Battery for Pupils in Standards 2 and 3 (SATB Standards 2/3)	1	2	3	1	2	1	2	1	2	3
172.	Scholastic Aptitude Test Battery for Pupils in Standards and 5 (SATB Standards 4/5)	1	2	3	1	2	1	2	1	2	3
173.	School-readiness Evaluation by Trained Testers (SETT)	1	2	3	1	2	1	2	1	2	3
174.	Self Scoring Interest Bank Test (Dec 2002)	1	2	3	1	2	1	2	1	2	3
175.	Self-Concept Scale	1	2	3	1	2	1	2	1	2	3

When asked to mark an option, please circle the appropriate number.

	Name of test	Use the key and circle to indicate how frequently you make use of the tests listed below: **1 = Never 2 = Sometimes 3 = Frequently**			Use the key and circle to indicate if you have information available with regard to local reliability and validity data: **Yes = 1 No = 2**		Does the test need revising? **Yes = 1 No = 2**		Use the key and circle to indicate how useful you find the test? **1 = Not useful 2 = Useful to some extent 3 = Very useful**		
176.	Self-Directed Search Questionnaire (SDS)	1	2	3	1	2	1	2	1	2	3
177.	Senior Aanlegtoets vir Swaksiendes (SAT-S)	1	2	3	1	2	1	2	1	2	3
178.	Senior Academic-Technical Aptitude Test (SATA)	1	2	3	1	2	1	2	1	2	3
179.	Senior Aptitude Tests (SAT)	1	2	3	1	2	1	2	1	2	3
180.	Senior South African Individual Scale - Revised (SSAIS-R)	1	2	3	1	2	1	2	1	2	3
181.	Series Induction Test (SIT)(A/135).	1	2	3	1	2	1	2	1	2	3
182.	Sexual Adaptation Functioning Test (SAFT)	1	2	3	1	2	1	2	1	2	3
183.	Short Questionnaire for Problem Detection (KFP30) - Part of Vienna Test System	1	2	3	1	2	1	2	1	2	3
184.	Siegmund System for Computerized Testing (pending final classification)	1	2	3	1	2	1	2	1	2	3
185.	Signal Detection (SIGNAL) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
186.	South African Individual Scale for the Blind (SAISB)	1	2	3	1	2	1	2	1	2	3
187.	South African Vocational Interest Inventory (SAVII)	1	2	3	1	2	1	2	1	2	3
188.	South African Wechsler Adult Intelligence Scale (SAWAIS)(C/35)	1	2	3	1	2	1	2	1	2	3
189.	Spatial Reasoning Test (SR2)	1	2	3	1	2	1	2	1	2	3
190.	Spelling Test (SP2)	1	2	3	1	2	1	2	1	2	3
191.	Spielberger Trait/State Anxiety Scale	1	2	3	1	2	1	2	1	2	3
192.	Strong Interest Inventory tm (SII)	1	2	3	1	2	1	2	1	2	3
193.	Structure of Intellect (SOI)	1	2	3	1	2	1	2	1	2	3
194.	Structured-Objective Rorschach Test (SORT)	1	2	3	1	2	1	2	1	2	3
195.	Suid-Afrikaanse Groeptoets vir Swaksiendes: Intermediêr (SAGS:I)	1	2	3	1	2	1	2	1	2	3
196.	Survey of Study Habits and Attitudes (SSHA)	1	2	3	1	2	1	2	1	2	3
197.	TAT cards (Murray)	1	2	3	1	2	1	2	1	2	3
198.	Technical Aptitude Test Battery for Low Literates (TAB)	1	2	3	1	2	1	2	1	2	3
199.	Technical Test Battery (TTTB2)	1	2	3	1	2	1	2	1	2	3
200.	Test of Encounter Stress (TESS)	1	2	3	1	2	1	2	1	2	3
201.	Test to Examine Peripheral Perception (PVT) - Austrian Road Safety Board	1	2	3	1	2	1	2	1	2	3
202.	Test to Examine Reactive Stress Tolerance (RSTS) - Austrian Road Safety Board	1	2	3	1	2	1	2	1	2	3
203.	Thomas International	1	2	3	1	2	1	2	1	2	3
204.	Three-dimensional Contour Tracking (3KTR) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
205.	Three-dimensional Point Tracking (3PTR) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
206.	Time and Distance Estimation Test – Vienna Test System	1	2	3	1	2	1	2	1	2	3
207.	Toets vir Bestuurskennis	1	2	3	1	2	1	2	1	2	3
208.	Total View Assessment	1	2	3	1	2	1	2	1	2	3
209.	Trade Aptitude Test Battery (TRAT)	1	2	3	1	2	1	2	1	2	3
210.	TRAM-1, TRAM-2	1	2	3	1	2	1	2	1	2	3

When asked to mark an option, please circle the appropriate number.

	Name of test	Use the key and circle to indicate how frequently you make use of the tests listed below: **1 = Never 2 = Sometimes 3 = Frequently**			Use the key and circle to indicate if you have information available with regard to local reliability and validity data: **Yes = 1 No = 2**		Does the test need revising? **Yes = 1 No = 2**		Use the key and circle to indicate how useful you find the test? **1 = Not useful 2 = Useful to some extent 3 = Very useful**		
211.	Two-dimensional Contour Tracking (2KTR) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
212.	Two-dimensional Labyrinth Tracking (2LTR) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
213.	Two-dimensional Point Tracking (2PTR) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
214.	Two-hand Co-ordination (2HAND) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
215.	Values and Motives Inventory	1	2	3	1	2	1	2	1	2	3
216.	Values Scale (VS)	1	2	3	1	2	1	2	1	2	3
217.	Verbal Reasoning Test (VR2)	1	2	3	1	2	1	2	1	2	3
218.	Vienna Matrices Test (VMT) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
219.	Vigilance (VIGIL) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
220.	Visual Acuity Test (VA2)	1	2	3	1	2	1	2	1	2	3
221.	Visual Situation Specific Evaluation Expert Batteries (VSPEEX (Basic) VSPEEXLI)	1	2	3	1	2	1	2	1	2	3
222.	Vocational Interest Questionnaire for Pupils in Standards 6 to 10 (VIQ)	1	2	3	1	2	1	2	1	2	3
223.	Wechsler Adult Intelligence Scale -Revised (WAIS-R)	1	2	3	1	2	1	2	1	2	3
224.	Wechsler Intelligence Scale for Children (WISC-III)	1	2	3	1	2	1	2	1	2	3
225.	Wechsler Memory Scale -Revised (WMS-R)	1	2	3	1	2	1	2	1	2	3
226.	Wechsler Pre-School and Primary Scale of Intelligence-Revised (WPPSI-R)	1	2	3	1	2	1	2	1	2	3
227.	Work Orientation Scale	1	2	3	1	2	1	2	1	2	3
228.	Work Performance Test Series (ALS) - Vienna Test Catalogue	1	2	3	1	2	1	2	1	2	3
	Educational Assessment tests										
229	Initial Evaluation test in Mathematics for Standards 3, 4, 5, 6, 7, 8, 9 and 10	1	2	3	1	2	1	2	1	2	3
230	Diagnostic Tests in Mathematical Language for Standards 6 to 8	1	2	3	1	2	1	2	1	2	3
231	Diagnostic Tests in Basic Algebraic Concepts, Principles and Skills for Standards 7 to 10	1	2	3	1	2	1	2	1	2	3
232	Diagnostic tests in Basic Algebra for Standards 7 and 8	1	2	3	1	2	1	2	1	2	3
233	Diagnostic Tests in Basic Geometry for Standards 6 to 10	1	2	3	1	2	1	2	1	2	3
234	Performance Tests in English First Language for the Elementary level: Standards 2, 3 and 4	1	2	3	1	2	1	2	1	2	3
235	Reading Performance Test in English for the Advanced Level Standards 8, 9 and 10	1	2	3	1	2	1	2	1	2	3
236	Standardized Achievement Tests in English First Language for Standards 5, 6, 7, 8, 9 and 10	1	2	3	1	2	1	2	1	2	3
237	Initial Evaluation Tests in English Second Language for Standards 2, 3, and 4	1	2	3	1	2	1	2	1	2	3
238	Performance Tests in English Second Language for the Elementary Level: Standards 2, 3 and 4	1	2	3	1	2	1	2	1	2	3

	Name of test	Use the key and circle to indicate how frequently you make use of the tests listed below*:* **1 = Never** **2 = Sometimes** **3 = Frequently**			Use the key and circle to indicate if you have information available with regard to local reliability and validity data**:** **Yes = 1** **No = 2**		Does the test need revising**?** **Yes = 1** **No = 2**		Use the key and circle to indicate how useful you find the test? **1 = Not useful** **2 = Useful to some extent** **3 = Very useful**		
239	Reading Performance Test in English Second Language for the Intermediate Level Standards 5, 6 and 7	1	2	3	1	2	1	2	1	2	3
240	Standardized Achievement Tests in English Second Language for Standards 2 to 10	1	2	3	1	2	1	2	1	2	3
241	Standardized Proficiency Tests in English Second Language: Intermediate Level (Standards 5-7 and Advanced Level (Standards 8-10)	1	2	3	1	2	1	2	1	2	3
242	Reading Performance Test in English for the Advanced Level Standards 8, 9 and 10	1	2	3	1	2	1	2	1	2	3

When asked to mark an option, please circle ◯ the appropriate number.

1.2 List other psychological tests you use, which do not appear in the list given above. Rate each test as well.

Name of test	*Use the key and circle to indicate how frequently you make use of the tests:* **1 = Never 2 = Sometimes 3 = Frequently**			Use the key and circle to indicate if you have information available with regard to local reliability and validity data: **Yes = 1 No = 2**		**Does the test need revising? Yes = 1 No = 2**		Use the key and circle to indicate how useful you find the test? **1 = Not useful 2 = Useful to some extent 3 = Very useful**		
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3
	1	2	3	1	2	1	2	1	2	3

1.3 Aadditional information about the psychological tests mentioned in Section C1.1 and C1.2

Write down the number of the test you circled in the Section C1.1 and C1.2 and add your suggestions and comments.

1.4 Comments and suggestions

List any aspects of human functioning that you would like to assess, but where you have not yet been able to identify a suitable test.

Thank you for your cooperation and assistance in completing the questionnaire.

APPENDIX B

Frequency of Test Use for Registered Tests obtained from Postal Survey (N = 881)

Name of test	Frequencies	%
19 Field Interest Inventory (19 FII)	456	51.8
16 Personality Factor Inventory SA 92 (16PF)	545	61.9
Abstract Reasoning Test (AR2)	23	2.6
Academic Aptitude Test (AAT)(Standard 10)	87	9.9
Academic Aptitude Test (AAT)(University)	53	6.0
Academic-Technical Aptitude Tests (ATA)	22	2.5
Adjective Checklist (EWL) - Part of Vienna Test System	5	0.6
Adolescent Self Concept Scale	78	8.9
African Profile Technique	1	0.1
Anomalous Concept Test (ACTA)(A/133),	8	0.9
Anomalous Figure Test (AFTA)(A/134), and	9	1.0
Anxiety Questionnaire for Pupils (AFS) - Vienna Test System	18	2.0
APIL	75	8.5
Aptitude Dimension Test	4	0.5
Aptitude Profile Test	6	0.7
Aptitude Test Battery for Adults (AA)	23	2.6
Aptitude Test Battery for Pupils in Standards 6 and 7 (ATB Standards 6/7)	40	4.5
Aptitude Tests for School Beginners (ASB)	187	21.2
BarOn Emotional Quotient Inventory (BarON EQ-item)	68	7.7
Bayley Scales II	20	2.3
Beck Tensor (TENSOR) - Vienna Test Catalogue	7	0.8
Bender Visual Motor Gestalt Test	478	54.3
Benton Visual Retention Test	68	7.7
Blox Test (A/80)	59	6.7
Brain Compass	0	0.0
Broad Band Competency Assessment Battery (Dec 2002)	4	0.5
Business Comprehension Scale	0	0.0
California Psychological Inventory (CPI)	18	2.0
Campbell Interest And Skill Survey tm (CISS®)	26	3.0
Career Development Questionnaire (CDQ)	168	19.1
Cattell Culture Fair Intelligence Tests	59	6.7
Children's Apperception Test - Human Figures (CAT-H)	268	30.4
Children's Apperception Test - Supplement (CAT-S)	175	19.9
Children's Apperception Test (CAT)	336	38.1
Children's Personality Questionnaire (CPQ)	173	19.6
Clerical Checking Test (CC2)	27	3.1
Clerical Test Battery (CTB2)	29	3.3
Clinical Analysis Questionnaire (CAQ)	18	2.0
Cognitive Process Profile (Magellan Consulting)	31	3.5
Cognitrone (COG) - Vienna Test Catalogue	13	1.5
Columbus Picture Analyses of Growth towards Maturity	74	8.4
Communication and Insights Analysis Questionnaire (CIAQ)	2	0.2

Name of test	Frequencies	%
Computerized Adaptive Test of General Reasoning Ability (GSAT Senior)	31	3.5
Concentration under Monotony Test (Q1) - Austrian Road Safety Board	5	0.6
Conceptual Reasoning Test (A/138)	28	3.2
Continuous Attention Test (DAUF) - Vienna Test Catalogue	6	0.7
Continuous Symbol Checking Test (CSC)(A/84)	12	1.4
Copas Cognitive and Potential Assessment	8	0.9
Critical Reasoning Test Battery (CRTB1)(CRTB2)	50	5.7
Culture-fair Abilities and Motivation Test (C-FAM)	8	0.9
Customer Contact Styles Questionnaire (CCSQ)	29	3.3
Customer Contract Styles Questionnaire (CCSQ)	20	2.3
Decision Preference Analysis	2	0.2
Decision Reaction Test (DR2) - Austrian Road Safety Board	3	0.3
Deductive Reasoning Test (B/112)	25	2.8
Determination Test – Vienna Test System	13	1.5
Developmental Test of Visual Perception (Frostig)	92	10.4
Developmental Test of Visual-Motor Integration (Beery)	208	23.6
Differential Aptitude Tests: Forms R, S, K & L	85	9.6
Differential Interest Test (DIT) - Part of Vienna Test System	2	0.2
Discus Behavioural Profile System	25	2.8
Easy Steps	38	4.3
Electronic Diagnostic Systems (SADF)	1	0.1
ESSI Reading and Spelling Tests	68	7.7
Experience of Work and Life Circumstances Questionnaire (WLQ)	37	4.2
Eysenck Personality Inventory	18	2.0
Eysenck Personality Profiler (EPP)	8	0.9
Factors of Aggressiveness Questionnaire (FAF) - Part of Vienna Test System	1	0.1
Family Assessment Device	19	2.2
Family Functioning in Adolescence Questionnaire (FFAQ)	30	3.4
Fifteen Factor Questionnaire (15FQ)	43	4.9
Fifteen Factor Questionnaire Plus (15FQPlus) (previously 16PF Industrial (16Pi)	72	8.2
Figure Classification Test (A/121)	42	4.8
Filing and Typing Test	9	1.0
First View Assessment	1	0.1
Form Series Test (Industrial Version)(A/79)	13	1.5
Functional Reasoning Test Battery (FRTB)	4	0.5
Fundamental Interpersonal Relations Orientation-Behavior^{tm} (FIRO-B)	28	3.2
General and Graduate Test Batteries	8	0.9
General Reasoning Test Battery (GRT2)	37	4.2
General Scholastic Aptitude Test (GSAT)	159	18.0
Gesell Developmental Test	13	1.5
Giessen Test (GIESS) - Part of Vienna Test System	0	0.0
Giotto Integrity Questionnaire	11	1.2
Goodenough-Harris Drawing Test	326	37.0
Graduate Abstract Reasoning Test (AR1)	10	1.1
Graduate Numerical Reasoning Test (NR1)	10	1.1
Graduate Reasoning Test Battery (GRT1)	15	1.7
Graduate Verbal Reasoning Test (VR1)	11	1.2
Graz Assertiveness Test (GAT) - Part of Vienna Test System	1	0.1

Name of test	Frequencies	%
Group Test for 5/6 and 7/8 year-olds	76	8.6
The Group Embedded Figures Test (GEFT)	2	0.2
Grover-Counter Scale of Cognitive Development	40	4.5
Guidance Test Battery for Secondary Pupils (GBS)	7	0.8
Hamburg Neuroticism and Extroversion Scale (HANES) - Vienna Test System	0	0.0
High Level Battery (B/75)	65	7.4
High Level Figure Classification Test (A/129)	50	5.7
High School Interest Questionnaire (HSIQ)	111	12.6
High School Personality Questionnaire (HSPQ)	311	35.3
Hypothesis Formation Test (HYPO) - Vienna Test Catalogue	1	0.1
Individual Scale for General Scholastic Aptitude (ISGSA)	50	5.7
Individual Scale for Northern Sotho-speaking pupils	26	3.0
Individual Scale for Southern Sotho-speaking pupils	27	3.1
Individual Scale for Tswana-speaking pupils	23	2.6
Individual Scale for Xhosa-speaking pupils	24	2.7
Individual Scale for Zulu-speaking pupils	33	3.7
Industrial Test Battery (ITB) – includes	14	1.6
Integrity Profiles (IP-200)	8	0.9
Intelligence Structure Test (IST 70) - Vienna Test System	2	0.2
Intermediate Battery (B/77)	66	7.5
Interpersonal Relations Questionnaire (IRQ)	83	9.4
Intra- and Interpersonal Relations Scale (IIRS)	23	2.6
IPAT Anxiety Scale	224	25.4
Jackson Personality Inventory – Revised (JPI-R)	6	0.7
Job Profiling Expert (JP Expert)	27	3.1
Jung Personality Questionnaire (JPQ)	302	34.3
Jung Type Indicator (JT12)	53	6.0
Junior Aptitude Test (JAT)	214	24.3
Junior Eysenck Personality Inventory	8	0.9
Junior South African Individual Scales (JSAIS)	420	47.7
Kolby Conative Index (KCIA TM)	9	1.0
Learning Potential Computerized Adaptive Test (LPCAT)	37	4.2
Life Role Inventory (LRI)	68	7.7
Line Labyrinth Test (LL5) - Austrian Road Safety Board	1	0.1
London House Personnel Selection Inventory (PSI-3)	0	0.0
McCarthy Scales of Children Abilities	12	1.4
Mechanical Reasoning Test (MR2)	25	2.8
Meyer Interest Questionnaire (MB-10)	125	14.2
Miller Assessment for Pre-Schoolers (MAP)	5	0.6
Minnesota Multiphasic Personality Inventory - Short Form (MMPIK)	37	4.2
Minnesota Multiphasic Personality Inventory (MMPI)	175	19.9
Movement Assessment Battery for Children	2	0.2
Myers-Briggs Type Indicator	318	36.1
NEO PI-R (P Morris & C Wilford)	23	2.6
NEO-PI-R (Jopie van Rooyen)	19	2.2
Non Verbal Matrices Intelligence Test (M30) - Austrian Road Safety Board	0	0.0
Normal Battery (A/76)	21	2.4
Number Combination Test (ZVT) - Vienna Test Catalogue	1	0.1

Name of test	Frequencies	%
Numerical Ability Test (NA2)	13	1.5
Numerical Reasoning Test (NR2)	22	2.5
Occupational Interest Profile (OIP)	24	2.7
Occupational Personality Profile (15 PR)	13	1.5
Occupational Personality Profile (OPP)	55	6.2
Occupational Personality Questionnaire (OPQ)	105	11.9
Organizational Personality Construct Scale	4	0.5
Orpheus Personality Questionnaire	2	0.2
Paper and Pencil Games (PPG)	25	2.8
Paranoid Depressiveness Scale (PDS) - Vienna Test System	2	0.2
Pattern Relations Test (B15/1)	13	1.5
Perceptual Motor Survey (Kephardt)	4	0.5
Personal Value Profile (PVP)	11	1.2
Personal, Home, Social and Formal Relations Questionnaire (PHSF)	151	17.1
Picture Motivation Tests (PMT)	35	4.0
Picture Vocational Interest Questionnaire for Adults (PVI)	8	0.9
Porteus Mazes	30	3.4
Potential Index Battery (PIB)	32	3.6
Predictive Index (PI)	2	0.2
Procedures Test, Matrices Test I, and Matrices Test II.	9	1.0
Programmer Aptitude Battery (PAB)(A/137) – includes	12	1.4
Profile of Mood States (POMS)	10	1.1
Psychological Map	2	0.2
Questionnaire to Assess the Risks of Suicide (FBS) - Part of Vienna Test System	5	0.6
Questionnaire: Assessing Willingness to take Risks (FRF) - Austrian Road Safety Board	2	0.2
Raven's Progressive Matrices (RPM)	178	20.2
Raven's Progressive Matrices – SPM PLUS (1998 ed)	57	6.5
Reaction test – Vienna Test System	20	2.3
Rorschach cards	275	31.4
Rotate and Flip Test (RAFT)(A/136)	5	0.6
Rothwell-Miller Interest Blank (RMIB)(C/134)	56	6.4
Sales Preference Questionnaire TM (SPQ*Gold®) (May 2003)	3	0.3
Scholastic Aptitude Test Battery for Pupils in Standards 2 and 3 (SATB Standards 2/3)	25	2.8
Scholastic Aptitude Test Battery for Pupils in Standards and 5 (SATB Standards 4/5)	30	3.4
School-readiness Evaluation by Trained Testers (SETT)	47	5.3
Self Scoring Interest Bank Test (Dec 2002)	4	0.5
Self-Concept Scale	34	3.9
Self-Directed Search Questionnaire (SDS)	241	27.4
Senior Aanlegtoets vir Swaksiendes (SAT-S)	9	1.0
Senior Academic-Technical Aptitude Test (SATA)	15	1.7
Senior Aptitude Tests (SAT)	305	34.6
Senior South African Individual Scale - Revised (SSAIS-R)	497	56.4
Series Induction Test (SIT)(A/135).	8	0.9
Sexual Adaptation Functioning Test (SAFT)	49	5.6
Short Questionnaire for Problem Detection (KFP30) - Part of Vienna Test System	2	0.2
Siegmund System for Computerized Testing (pending final classification)	27	3.1

Name of test	Frequencies	%
Signal Detection (SIGNAL) - Vienna Test Catalogue	8	0.9
South African Individual Scale for the Blind (SAISB)	4	0.5
South African Vocational Interest Inventory (SAVII)	119	13.5
South African Wechsler Adult Intelligence Scale (SAWAIS)(C/35)	291	33.0
Spatial Reasoning Test (SR2)	19	2.2
Spelling Test (SP2)	68	7.7
Spielberger Trait/State Anxiety Scale	8	0.9
Strong Interest Inventory tm (SII)	14	1.6
Structure of Intellect (SOI)	1	0.1
Structured-Objective Rorschach Test (SORT)	100	11.4
Suid-Afrikaanse Groeptoets vir Swaksiendes: Intermedi?r (SAGS:I)	1	0.1
Survey of Study Habits and Attitudes (SSHA)	134	15.2
TAT cards (Murray)	404	45.9
Technical Aptitude Test Battery for Low Literates (TAB)	11	1.2
Technical Test Battery (TTTB2)	18	2.0
Test of Encounter Stress (TESS)	4	0.5
Test to Examine Peripheral Perception (PVT) - Austrian Road Safety Board	0	0.0
Test to Examine Reactive Stress Tolerance (RSTS) - Austrian Road Safety Board	2	0.2
Thomas International	46	5.2
Three-dimensional Contour Tracking (3KTR) - Vienna Test Catalogue	2	0.2
Three-dimensional Point Tracking (3PTR) - Vienna Test Catalogue	3	0.3
Time and Distance Estimation Test – Vienna Test System	13	1.5
Toets vir Bestuurskennis	2	0.2
Total View Assessment	1	0.1
Trade Aptitude Test Battery (TRAT)	16	1.8
TRAM-1, TRAM-2	38	4.3
Two-dimensional Contour Tracking (2KTR) - Vienna Test Catalogue	3	0.3
Two-dimensional Labyrinth Tracking (2LTR) - Vienna Test Catalogue	4	0.5
Two-dimensional Point Tracking (2PTR) - Vienna Test Catalogue	4	0.5
Two-hand Co-ordination (2HAND) - Vienna Test Catalogue	16	1.8
Values and Motives Inventory	33	3.7
Values Scale (VS)	128	14.5
Verbal Reasoning Test (VR2)	35	4.0
Vienna Matrices Test (VMT) - Vienna Test Catalogue	4	0.5
Vigilance (VIGIL) - Vienna Test Catalogue	3	0.3
Visual Acuity Test (VA2)	8	0.9
Visual Situation Specific Evaluation Expert Batteries (VSPEEX (Basic) VSPEEXLI)	9	1.0
Vocational Interest Questionnaire for Pupils in Standards 6 to 10 (VIQ)	27	3.1
Wechsler Adult Intelligence Scale -Revised (WAIS-R)	176	20.0
Wechsler Intelligence Scale for Children (WISC-III)	104	11.8
Wechsler Memory Scale -Revised (WMS-R)	80	9.1
Wechsler Pre-School and Primary Scale of Intelligence-Revised (WPPSI-R)	47	5.3
Work Orientation Scale	6	0.7
Work Performance Test Series (ALS) - Vienna Test Catalogue	2	0.2
Initial Evaluation test in Mathematics for Standards 3, 4, 5, 6, 7, 8, 9 and 10	21	2.4
Diagnostic Tests in Mathematical Language for Standards 6 to 8	14	1.6

Name of test	Frequencies	%
Diagnostic Tests in Basic Algebraic Concepts, Principles and Skills for Standards 7 to 10	8	0.9
Diagnostic tests in Basic Algebra for Standards 7 and 8	6	0.7
Diagnostic Tests in Basic Geometry for Standards 6 to 10	9	1.0
Performance Tests in English First Language for the Elementary level: Standards 2, 3 and 4	15	1.7
Reading Performance Test in English for the Advanced Level Standards 8, 9 and 10	15	1.7
Standardized Achievement Tests in English First Language for Standards 5, 6, 7, 8, 9 and 10	8	0.9
Initial Evaluation Tests in English Second Language for Standards 2, 3, and 4	7	0.8
Performance Tests in English Second Language for the Elementary Level: Standards 2, 3 and 4	9	1.0
Reading Performance Test in English Second Language for the Intermediate Level Standards 5, 6 and 7	12	1.4
Standardized Achievement Tests in English Second Language for Standards 2 to 10	7	0.8
Standardized Proficiency Tests in English Second Language: Intermediate Level (Standards 5-7 and Advanced Level (Standards 8-10)	7	0.8
Reading Performance Test in English for the Advanced Level Standards 8, 9 and 10	7	0.8

APPENDIX C

Consolidated List of Tests Referred to by Practitioners in the Postal Survey

Name of test
1 minute Math test (U.P)
1 minute reading GED
16 PF 5th ED
3 dimensional projective technique
Accuplacer Algebra CPT
Accuplacer Arithmetic CPT
Accuplacer Reading Comprehension CPT
Adolescent projective test battery
Analysis Problems
Aptitude Test for School Beginners (ASB)
Arithmetic Reasoning Test
Assigned Group Exercises
Assortment of perceptual tests
Auditory Analysis - UP
Auditory Discrimination Test - UP
Austin Maze
B/G STEEM self esteem
Behavioural Assessment of Dysexecutive Syndrome (BADS)
Behavioural Assessment of Family/Gesins tekening (BAF)
Ballard Scholastic tests
Bar Ilan Picture Test
BASC
Basic checking
Beck's Anxiety Inventory
Beck's Depression Inventory
Beery Buktenika Test of Visuo motor integration
Behaviour Assessment Scale for Children
Belbin Self Perception Scale
Bene Anthony (Family relations)
Birthord recognition
Boston Aphasia Battery
Boston Naming test
Brain Preference Questionnaire
Brief Symptom Inventory
Brief Test of Attention
Brown Holtzman Survey of Study Habits and attitudes
Burt Graded Reading Test
CAGE
Canadian tests (Imported)
Cancellation test (detail observant test)
Cape scale
Career Anchors Test (Schein)
Career Mentor

Name of test
Career orientation inventory
Career Path Appreciation
Career Preference Inventory
Career rank order questionnaire
CARS Childhood Autism Rating scale
CAS Cognitive Assessment System by Naglieri (PASS)
Casstuk Spelling Test
Cattell's 16 PF - computerized
CCB
CFAM
Child Behavior checklist
Children’s Apperceptive Story telling Test
Children’s Global assessment
Childrens Depression inventory
Children's Relational Image Profile
Cognitive Control test battery (Santostefano)
Cognitive Process Profiling
Colour Trials Test
Compassion Fatigue test
Complexity Navigation test
Concept attainment Test
Concept Generation Test
Conflict Tactics Scales
Conner's Rating Scale revised
Connors Evaluation for ADHD
Controlled Oral Word Association test (COWAT)
Coping inventory
CPA
Curriculum box Assessment
Customer services skills inventory
Daniel and Diack Reading test'
Denver's Development Screening Test
Depressive Personality Disorder Inventory DPDI
Design fluency
Detroit test of attention to syllables
Detroit test of visuographic speed
Diagnostic - Phonics
Dictation test
Digit symbol incidental recall
Dissociative event scale
Dot counting test
Draw a bicycle test
Draw a Person (DAP)
Durban Westville Mathematics
Durell reading of words
Durell visual discrimination
Durell visual memory words
Duss Projective test/ Duss Fabels test
Dynamic assessment
EAT 26

Name of test
EDI
Edinburg Reading test
Edinburgh reading comprehension
EEG Spectrum- Neuro feedback
ELSA - Intermediate - English lit, Numeracy - ABET level
Emotional Profile Index (EPI)
EQ
Essay "my day"
Estimation Test
Fact - finding exercises
Family relations indicator
FAS Test of verbal fluency
Figures classification A/129
Finger tapping test
Frances Hemp shopping list
Gardner card game
Gegradeerd Leestoets (Graded Reading test) – UP
General Health questionnaire
General Science Test
Genesis
Geometric Drawing Reproduction
Geriatric depression scale
Gestalt techniques
Gottschaldt Figures test
Graded reading
Graded spelling
Graham Kendall Memory for Designs
Grassi Blocks
Griffiths Scales of Mental Development
Grooved Pegboard
Group Test for School readiness - UP
Grune Which One Procedure
Guilford Zimmermann Interest
Haboka Reading Test
Halifax Mental States Scale
Halstead Reitan Neuropsychological test battery
Hans Huber Personality
Harding Questionnaire
Harvard Trauma Questionnaire
Heimler Scale for social functioning
Herman Brain Dominance
Hersier impact van gebeure
Holborn Reading Scale
Holland – Self …..questionnaire (career assessment)
Hooper Visual Organization Test
Hostility direction and hostility questionnaire
House tree person test
HSRC Diagnostic reading tests for Afrikaans first language
Ice spelling test
Impact of Events Scale (Horowitz)

Name of test
In-Baskets
Informal Mathematics Test (UP)
Initial Recruitment Interview Schedule (IRIS)
Insights
Internet tests
Interpersonal Behavioural survey
Interplace team roles (dr. Meredith Balbin)
ISASA
Jackson Vocational Interest Survey (JVIS)
K-ABC - Kaufman Assessment Battery for Children
Kahn Test of Symbol Arrangement
Key math diagnostic test
Key Net Arithmetic
Kidcope
Kinder Depressie Skaal (Maria Kovacs)
Kinetic Family Drawing
Kinetic school drawing
Kirton Adaption Innovation Inventory
Kodus
Kottmeyer spelling test
Kuder Preference Record
Lady walking in rain
Lateral Preference Exam
LEAD Leadership Effectiveness and Adaptability Description (Hersey & Blanchard)
Leadership Effectiveness Analysis
Learning Style inventory
Leicester Maths test (number concept test)
Life History questionnaire
Line bisection test
Listening comprehension tests
Locus of control (Rotter)
Luria Nebraska Neuropsychological screening
Luria Nebraska Neuropsychological test
Lydia Jackson
MACI
Madelein Thomas Stories
Management and graduate item bank (MGIB)
Managerial Grid (Jay Hall)
Maslach Burnout Inventory
Maths UDW
Mattis dementia scale
MB10
McMillan Reading tests
Mechanical insight
Memory Scale for Children
Mental Adjustment to Cancer Scale
Mental Alertness Test
Michigan Picture Test
Millon Clinical Multiaxial Inventory 3rd Edition (MCMI-III)
Milne 4 computations

Name of test
Mini mental state examination
MMTIC
Mooney problem checklist
MSEIT
Neale Analysis of Reading
Neethling Brown profile
Neuropsychological Tests
Newlands School clinic Scholastic Battery
Non assigned group exercises
Nottingham Maths test
Numerical Critical Reasoning
Numskills – Aprolab
Occupational Stress Inventory -R
Olset achievement tests
Omni-cab (Competency test
OSAIS
Other maths tests
Other spelling tests
Pain patient profile
PAIR - Marriage Counseling
Paragraph Memory
Parent stress inventory
PASL
Pauli test (endurance test)
PCI Personality Instrument
Pendulum Auditory Perception Test
Perceived Well-being Survey
Personality inventory for children
Personality projective test
Personnel test battery
Piers - Harris Selfkonsept Vraelys
Post partum Screening Scale (Cheryl Beck)
Post-traumatic stress diagnostic scale
Problems booklet
Psychtech
Purcell unfinished sentences'
Purdue Pegboard
Quality of Life Scale for specific Concerns
Quick Neurological Screening Test (QNST)
Raven’s Coloured Progressive Matrices
Reading accuracy and speed test
Reason for living'
Reitan Indiana Neuropsychological Test battery (RINTB)
Reitas Word Test
Revalt
Revised Children's Manifest Anxiety Scale (RCMAS)
Rey 15 item malingering test
Rey Auditory Verbal Learning Test (RAVLT)
Rey Complex Figure Test
Rey Visual Design L.T.

Name of test
Rey Visual Learning test
Reynold’s Children’s Depression Scale
Reynold's Children's Manifest Anxiety Scale
Rivermead test of everyday memory functioning
Roberts Apperception test
Rosenzwieg
Rotter Incomplete sentences
Sad persons (Suicide Risk)
SAL spelling
Sales aptitude checklist
Salford Sentence Reading Test
SAT Coordination Test (11)
SAT Speed writing Test (12)
Scales of Psychological well-being
Scholastic Tests
Schonell Creative Writing Test
Schonell Graded Word Reading Test
Schonell Reading Comprehension
Schonell Reading Comprehension
Schonell Scholastic tests
Schonell Spelling test
School Readiness Ability
School Readiness Screening Test
School Readiness Test for blind children
Schuhara (?) Colour blindness test
Selective reminding
Self description Inventory
Self Esteem Inventory
Self Evaluations
Self ondersoek beroeps vraelys
Self rating Anxiety Scale
Serial Digit Modalities Test
SHL tests
Short Category Test
Short Category for Children
Slosson
SOC Scale
SORT reading test
SPEEX battery
Stress Response Scale (SRS)
Standford Binet scale of intelligence
Standford diagnostic reading test
Std 7 Subject choice questionnaire
Stoney Brook Psychiatric Questionnaire
Stroop Colour and word test
Study orientation Questionnaire in Mathematics (SOM)
Symbol Digit modalities test
Symptom Checklist - 90 Revised (SCL-90-R)
Taylor Complex Figure
Taylor -Johnson

Name of test
Teacher Temperament Questionnaire (TTQ)
TED Math test
TED Reading,
TED Spelling test
Test of managerial knowledge and insight (TMKI)
Test of Non Verbal Intelligence (TONI)
Test of Variable Attention (TOVA)
Tests for attentional and inter personal Style (TAIS)
Thomas Killman Conflict Mode Instrument
Token test for children
TOLP
Tower of London
Trail Making Test
UCT Scholastic tests
UCT Spelling test
Unhealthy reaction to stress Questionnaire
Vassi Mathematics
Veranderde Willemse Toets
Vernon Graded arithmetic test
Vinelands Adaptive Behaviour Scale
Vinelands Social maturity Scale
VISIT
Visual Auditory Learning Test (VALT)
Visual Discrimination Test - UP
Visual, Aural Digit Span Test (Koppitz)
Von Staabs Sceno… test
WAIS 3rd Ed (UK edition)
WAIS III
Wepman Auditory Discrimination Test
Wechsler Memory Scale-Revised (WMS-R) and WMS 3rd Ed. (UK edition)
Weschter Objective Reading Test
Wheel (Fund leadership) Sweden
Willams Test of Visual Recall
Wechsler Intelligence Scale for Children (WISC-III)
Wisconsin Card Sorting test
WOLD language written expression and comprehension
WOND Numerical Reasoning
Woodcock Reading Mastery
Word Association test
WORD basic spelling
Word fluency
Work Styles Questionnaire
Work Values
Wide Range Achievement Test (WRAT)
Zoo Map test

APPENDIX D

Verbatim Quotes from the interviews that were translated into English for the purposes of this report.

1 “Ek dink daar was 10 jaar terug baie negatiewe sentiment oor toetse en ek dink soos mense ook gesien het selfs ‘n onderhoud kan onbillik wees en gesien het maar wat is die alternatiewe en dat [dit] ook maar hulle inherente probleme het so dink ek mense het weer waardering gekry vir die objektiwiteit van hierdie tipe inligting wat jy kan kry [van toetse].”

2 “A.g.v. die feit dat daar so ‘n polimiek rondom toetsing en toetsgebruik [is en dit] duur geraak het rondom die privaatontwikkelaars, is dit al minder en minder gebruik en daar ontstaan regtig ‘n behoefte. Ons lynbestuurders spesifiek vra ook … watse toetse kan hulle gebruik en wie gaan dit vir hulle doen. So ek dink daar gaan ‘n redelike oplewing … spesifiek wees in terme van toetsing. So dit gaan definitief nou meer gebruik word.”

3“… Ja, vir my is die eindresultaat om die regte persoon in die regte pos te kry sodat hy nou sy job kan doen maar wanneer ek later my succession planning moet opsit dat ek hom later kan bevorder ook. So vir my, ek kyk absoluut uit amper soos ‘n supply chain daarna; die outjie kom, maar ek moet hom kan skuif ‘n paar vlakke.”

4“ jy [moet] ‘n baie goeie ontwikkelingsprogram in plek hê om daai mense dan op dieselfde standard te plaas. Want onthou na seleksie … vind ontwikkeling plaas of opleiding. Dis die volgende stap in enige situasie”

5 “Ek probeer eintlik dat ons leer en toetsing van mekaar af weghou omdat toetsing baie keer ‘n baie negatiewe persepsie het. Ek dink indirek word dit wel gebruik maar as ons artisans soek of ons soek apprentices en ons moet mense laat oplei, obviously ons gebruik toetsing daar, maar as iemand iets wil gaan studeer is my aanbeveling werk eerstens op performance en kyk dan na die res. Maar moenie dan ‘n stel toetse doen om te besluit of wil ons dit doen nie.”

6 “So ‘n kombinasie van toetse, simulasies, onderhoude en you name it, werk altyd die heel beste, maar mens moet natuurlik kyk na geld en tyd.”

7 “… ek dink daar is toetsverspreiders wat nie ‘n bydrae maak tot Suid-Afrika se ontwikkeling nie deur hul hoë koste …”

8 Maar die belangrike ding is om dit nie te gebruik as ‘n hekkie nie. Om nie te sê dat dit die persoon weghou van opleiding nie, maar dat dit vir hom ‘n aanduiding is of vir die maatskappy dat dat hy eers sy taalvaardigheid kan opknap want as hy sy taalvaardigheid opknap gaan hy beter doen akademies. Want as die taal swak is raak die taal self jou hekkie akademies.

9 “… byvoorbeeld keuring vir blinde mense, maar ons het nie daai toerusting en goeters om dit te doen nie. Maar as ‘n ou aansoek doen wat in ‘n rolstoel sit en vir spesialis keuring gaan, moet hy aan dieselfde vereistes voldoen. So as hy kan skryf en hy kan sien, dan gaan ons hom in die gewone toetssessie hanteer.”

10 “Daar is baie gemors beskikbaar en baie maatskappye val daarvoor, want hulle weet nie van beter nie en dit doen baie skade eventually.”

11 “Daar moet eintlik meer plekke kom wat die kompetisie net strawwer maak, dat die pryse kan afkom, want die pryse is buitensporig.”

12 “ … belemmer dat mens gesamentlike geldigheidstudies doen en behoorlike teoretiese navorsing. Want ons kom elkeen uit ons eie oogpuntjie uit en ek dink dit skep ‘n swak beeld van die industrie teenoor die gebruikers…”

13 “ … maar ek dink regtig dat in hierdie snel veraderende wêreld waarin ons leef behoort daai tipe van goed elke 5 jaar hersien te word. Want op hierdie stadium maak ‘n mens eintlik net inferensies. Jy dra sekere inligting oor na ander velde toe, want daardie velde word eenvoudig nie gemeet nie. En jou populasie verander..”

14 “Die swakpunte hier gaan nie oor swak toetse nie, maar dit gaan oor swak sielkundiges wat goed verkeerd gebruik of wat dit te absolutisties gebruik, asof toetse altyd die volledige prentjie gee. Dis doodgewoon nie waar nie – dis ‘n hulpmiddel”

15 “As daai goed vooraf vir ons uitgespel word en almal weet wat die situasie is, het ons nie ‘n probleem met toetsing nie.”

16 “Ek kry die gevoel dat al waaroor hulle op hierdie stadium stadium gepla is, is die CPD punte”

17 “Dat as ‘n vakbond sê ons dit moet billik wees ten opsigte van al ons lede billik en gelyk en equal wees. Dit moet transparent wees. En die oomblik dat dit nie vir almal wat deel vorm van die onderhoud, equal transparent en regverdig gaan wees nie dan het ek ‘n probleem. Dan het ek ‘n probleem daarmee.”

18 “Ons is skepties teenoor psigometriese toetse. Jy moet vir ons ‘n ordentlike ding bring wat ek in glo, en wat my lede in glo. En as daar enigsins twyfel is [by die vakbond] is daar nie ‘n manier wat ons dit sal aanvaar nie. Of dat ons sal toelaat dat ‘n werkgewer daarmee voortgaan nie.”

19 “En daar is hierdie valse idee dat sommige uitgewers dink hulle kan mense akkrediteer om die toets te gebruik. Nou dit is onwettig. Ek mag die toetsuitgewer wees, maar ek kan niemand akkrediteer om ‘n toets te gebruik nie. Die wet van die land doen dit. Daar is ‘n professionele raad daarvoor wat daarna kyk. Dis klaar gedoen.”

20 “Die vraagteken wat oor psigometrie getrek is het dalk vyf persent gegaan oor die inhoud van die toets. Vyf en negetig persent daarvan het gegaan oor die mense wat dit gebruik het. Mense het dit gebruik om die sisteem instand te gehou. Ek dink daai ding word nogsteeds in sekere omgewings gedoen dat mense die toets of toetsmateriaal gebruik om hul eie agendas in stand te hou. Of dit nou politike en of finansiele agendas is.”

21 “Ek dink ‘n mens kan selfs toets en ondersteun as toetse een van julle elemente is wat in ag geneem word, …, as hy aanpasbaar is, as hy nie gemanipuleer kan word nie, as ek duidelik weet wat getoets moet word vir watter kategorie ouens.”

22 “Met al die toetse moet jy eintlik maar jou voortgesette navorsing doen, so dit sou dieselfde wees vir lokale en buitelandse toetse. Maar om ‘n toets te ontwikkel is ‘n vreeslike lang proses. Ek dink net ons dilemma is baie keer ons kruis kulturele opset hier is so anders as wat dit in van die ander lande is dat ek dink daai basiese goed soos taal word altyd noodwendig reg aangespreek nie. So die wysigings wat waarskynlik nodig gaan wees kan redelik radikaal wees en dan het jy nodig om maar weer die goed te standaardiseer want as jy moet begin verander dan moet jy maar net check dat hy nog dit doen wat hy veronderstel is om te doen.”

23 “Ek dink nie jy kan sonder norms nie. Hoe gaan jy vergelyk? Ons rol in industrie is om te vergelyk, nie te diskrimineer nie, maar om te differensieer. Beter, swakker – dis ons werk. En jy moet mense kan opweeg om dit te kan doen.”

24 “Ek dink dit sou onbillik wees om noodwendig ‘n benadeelde norm te hê. Ek weet ook nie of dit prakties waarde sal hê nie, maar ek dink mens moet die onderskeid tref op ander grense as net op taal of ras. Want ek dink daar is te veel vermenging al klaar. Die groepe is nie meer so suiwer bevoordeel of benadeel soos wat hulle 10 jaar terug was nie”

25 Dat ons miskien meer as een alternatiewe normgroepe het waarteen ons die persoon kan vergelyk. Jy kan sê hoe vaar hierdie persoon as mens hom vergelyk met ‘n tipiese westerse norm en hoe sou hy gevaar het as mens hom sou vergelyk het met ‘n algemene gemengde norm.

26 So jy behoort nie ‘n norm te maak op daai mense as die toets nie werk op daai mense nie. So dit is ‘n voorbehoud. Jy moet net normeer op mense waarop jou toets betroubaar genoeg is om die toets te kan gebruik

27 “waar jy iemand in ‘n simulatiewe situasie plaas waar jy amper die werk of die situasie wat hy in die pos gaan doen simuleer. Dis vir my die toekoms in sielkundige meting. Want dit is nie gebaseer op prediction of voorspelling nie maar meer op real life current situation en gedrag. Daai situasie gaan verseker die gedrag wat dit in die werklike situasie naboots voorspel.”

28 “toetsing moet aangepas word om baie meer gerig te wees op werkgewers wat mense moet employ en nie net ontwikkel word vir ‘n kliniese setup nie. Ons moet daai goed prakties maak. Ons het al hierdie wonderlike goed van toetsing moet ‘n aid wees van decision making maar as jy hom nie kan gebruik nie kan hy nie ‘n aid wees nie. En as jy hom verkeerd gebruik is dit ook nie die regte aid nie.”

29 “Daar is genoeg gesofistikeerde toetse vir ‘n elite groepie mense.”

30 “Hulle moet die riglyne stel van wat is die vereistes en dan moet hulle die evaluering doen van toetsmateriaal om te sien of die toetse aan die standaarde voldoen en ek dink hulle moet ook terselfde tyd ‘n ondersteuningsdiens vir wanneer die goed nog nie daaraan voldoen nie en vir mense kan raad gee en sê maar wat kan jy verder doen om hetsy die instrument aan te pas of verdere navorsing te doen om die inligting te kry om te kan wys dat die instrument wel aan die vereistes voldoen.”

31 “Ek dink maar dat dit gaan oor die opleiding van die persoon en ja die persoon se integriteit. As ‘n ou nou hofwerk doen en jy kom nou in die hof dan stel jy jou bloot en as jy nie die goed professioneel of eties gebruik het nie, dan het jy jouself blootgestel.”

32 “Moenie ‘n regeringsinstelling wees of ‘n regeringsgesubsidieerde instelling nie, want dan dan is die geloofwaardigheid mos daarmee heen.”

33 “dit is nou maar so dat ongelukkig het die RGN ook so ‘n bietjie van ‘n stigma ook gekry dat dit nie kultuurvry is nie die noms is nie reg nie … en dit diskrimineer teen swartmense. So dit is goeters wat julle sal moet aanspreek met die bemarking en met die navorsing. Dat dit nie diskrimineer nie, die norms is reg … Daai goeters is dit wat julle moet bemark om ouens te kry om weer van jul toetse te gebruik.”