A cross-sectional survey of educational psychologists' utilisation of dynamic assessment

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A cross-sectional survey of educational psychologists' utilisation of dynamic assessment

by

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I will praise you, Lord my God, with all my heart; I will glorify your name forever.

Psalm 86:12

“For I know the plans I have for you," declares the LORD, "plans to prosper you and not to harm you, plans to give you hope and a future.”

Jeremiah 29:11

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Ethics Statement

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

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Larise Kùhn
August 2016

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Ethical Clearance Certificate

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Declaration of Authenticity

"I, Larise Kùhn (27079156) declare that the mini-dissertation titled:

A cross-sectional survey of educational psychologists' utilisation of dynamic assessment which I hereby submit for the degree Magister Educationis (Educational Psychology) at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution."

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Larise Kühn

Signed on the _____ day of _____ 2016, Pretoria, South Africa.

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Declaration of Language Editor

26 August 2016

TO WHOM IT MAY CONCERN (DECLARATION OF EDITING)

Larise Kühn's dissertation, **A cross-sectional survey of educational psychologists' utilisation of dynamic assessment,** was language-edited by me in July-August 2016. It is the responsibility of the author to accept or reject my suggested changes.

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Abstract and keywords

This study set out to determine the extent to which educational psychologists in South Africa are familiar with and use dynamic assessment. The study also covered issues such as the dynamic assessment training that educational psychologists receive as well as their attitudes towards dynamic assessment. A review of the literature revealed that only international studies have been done on the use of dynamic assessment by school psychologists. The findings of international studies can, however, not summarily be generalised to the South African context. The only national study that has been done on the use of dynamic assessment by educational psychologists was a qualitative study. The present study endeavoured to address this research hiatus by conducting a national cross-sectional online survey that was sent to all educational psychologists in South Africa. The study sought to find an answer to the following primary research question: "To what extent are South African educational psychologists familiar with and use dynamic assessment?"

The sample was selected initially through purposive sampling and later through snowball sampling. The study found that of the 173 respondents who responded to the survey, 69,90% were familiar with dynamic assessment. However, this picture changed dramatically when they were asked *to what extent* they were familiar with dynamic assessment. A total of only 25,40% of the respondents indicated that they were quite familiar with dynamic assessment, and only 20,80% reported that they used dynamic assessment. Furthermore, only 8,10% had used dynamic assessment once a week during the past six months.

Keywords

- dynamic assessment
- educational psychologist
- use
- familiarity
- cross-sectional survey
- South Africa
- assessment
- learners

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Table of Contents

---oOo---

Chapter 1
Overview

---oOo---

Chapter 2
Literature Review

Page

---oOo---

Chapter 3
Research Design and Methodology

Page

---oOo---

Chapter 4
Research Results and Findings

Page

---oOo---

Chapter 5
Summary, Findings and Recommendations

---oOo---

---ooOoo---

List of Tables

Page

---oOo---

List of Figures

Page

---ooOoo---

Chapter 1
Overview

1.1 INTRODUCTION

A major contribution to the discipline of psychology was the development of objective, standardised psychometric assessment instruments (Foxcroft, Roodt, & Abrahams, 2009). However, many new advances have been made over the past decade in psychological assessment, one example of which is dynamic assessment (Grigorenko, 2009; Lidz, 1992; Murphy & Maree, 2009).

Dynamic assessment, which focuses on assessing potential for learning and makes provision for support and mediation in the assessment process, is a result of the change in psychologists' perceptions of assessment (Grigorenko, 2009; Lidz, 1992; Murphy & Maree, 2009). This change began when psychologists started to realise, roughly 50 years ago, that new approaches to psychological assessment were needed that would accommodate all individuals across cultures and languages (Birjandi & Sarem, 2012; Foxcroft, Roodt, & Abrahams, 2009; Haywood & Lidz, 2007; Kanjee & Foxcroft, 2009), and dynamic assessment was found to be one such approach (Murphy, 2002). It was also found to be a valuable alternative or complementary form of assessment to standardised testing (Haywood & Lidz, 2007; Losardo & Notari-Syverson, 2011; Murphy, 2002; Tzuriel, 2000), yet research indicates that it was not often used (Haywood & Lidz, 2007).

Various international studies have investigated the use of dynamic assessment by psychologists (Deutsch & Reynolds, 2000; Haney & Evans, 1999; Lidz, 1992; Molano, 2007). Lidz (1992) conducted a quantitative study in the United States with a sample of 120 respondents to determine the extent to which dynamic assessment had been incorporated into cognitive assessments by school psychologist[1] trainers (professionals who train future school psychologists). Lidz (1992) found that the trainers were familiar with dynamic assessment but did not use it in assessments largely because of the time it took.

Haney and Evans (1999), in their quantitative study involving 226 school psychologists, found that the psychologists had insufficient knowledge of dynamic assessment methods. In the study, 42% of the respondents indicated that they were reasonably familiar with the dynamic assessment model, and 39% indicated that they used the model once or more times a year. The study concluded that dynamic assessment was not used as often as might have been expected (Haney & Evans, 1999).

Molano (2007) conducted a quantitative study involving psychologists to determine if dynamic assessment with Latino children could decrease the bias against them when cognitive assessments were done. The study was based on the national survey of school psychology trainers (Lidz, 1992) and the national dynamic assessment survey (Haney & Evans, 1999). The results revealed that only 22,5% (n=18) of the 80

[1] School Psychologist is an international term used to refer to a psychologist working in a school setting. In the South African context, educational psychologists, counselling psychologists and to a lesser extent clinical psychologists can work in a school setting. This study was limited to educational psychologists.

psychologists in the sample were familiar with dynamic assessment and that of these 18 psychologists (respondents), nine (50%) became aware of the dynamic assessment model through reading and not through coursework, workshops (n=4, 22,2%), or in a clinical setting. Molano's (2007) study further revealed that of the 22,5% respondents who reported some familiarity with the dynamic assessment model, 27,5% said that they had used dynamic assessment one to four times in the past 12 months. The respondents reported that the dynamic assessment model had two major advantages: it decreased cultural bias and facilitated intervention (Molano, 2007).

Smit's (2010) qualitative study is the only national study to have been conducted on the use of dynamic assessment. In her study, Smit (2010) gauged the perceptions of 12 educational psychologists in the Western Cape on dynamic assessment using a semi-structured interview approach. Her findings were that the 12 psychologists regarded the dynamic assessment model as useful, but they did not feel comfortable using it because of their inadequate knowledge of the model. As a result of the small number of respondents, the results could not be generalised to the broader population of psychologists, and, therefore, it was recommended that a larger and more generalisable study be done in South Africa on the use of dynamic assessment. The studies mentioned above are discussed in more detail in Chapter 2.

Despite prior studies, both international and national, a gap in the literature exists in South Africa on how educational psychologists use dynamic assessment. In earlier studies done in South Africa, few specific reasons emerged for the low use of dynamic assessment and for educational psychologists' limited knowledge of such assessment. The South African study referred to above revealed that very few educational psychologists in the study were aware of dynamic assessment and its advantages and that their lack of knowledge of the model prevented them from using it (Smit, 2010). The findings of international surveys cannot summarily be generalised to the South African context and, for this reason, it was considered necessary to conduct a larger study on the use of dynamic assessment by educational psychologists in South Africa and to determine what factors influenced their use of the model.

An investigation into educational psychologists' use of dynamic assessment and the variables, such as knowledge and training, that affect its use, is necessary for several reasons. First, understanding the relationship between educational psychologists' knowledge of dynamic assessment and their use of the model could deepen the researcher's understanding of the factors influencing such use, particularly in South Africa. Secondly, the data obtained could reveal the training needs of educational psychologists. Thirdly, publication of the newly acquired information could raise awareness of dynamic assessment among educational psychologists.

1.2 PURPOSE OF THE STUDY

The purpose of this descriptive cross-sectional survey study was to describe the extent to which educational psychologists in South Africa are familiar with and use dynamic assessment. The study specifically covered issues such as the dynamic assessment training that educational psychologists receive as well as their attitudes towards dynamic assessment.

1.3 RESEARCH QUESTIONS

1.3.1 PRIMARY RESEARCH QUESTION

To what extent are South African educational psychologists familiar with and use dynamic assessment?

1.3.2 DESCRIPTIVE QUESTIONS

- What percentage of educational psychologists in South Africa are familiar with dynamic assessment?
- What percentage of educational psychologists in South Africa use dynamic assessment?
- How often is dynamic assessment used by educational psychologists?
- How likely are educational psychologists to use dynamic assessment when assessing learners from diverse cultures?
- What are the attitudes of educational psychologists towards dynamic assessment?
- What are the perceived advantages of dynamic assessment?
- What are the perceived disadvantages of dynamic assessment?
- What percentage of educational psychologists are interested in learning more about dynamic assessment?

1.4 CONCEPT CLARIFICATION

Some key concepts in this study are defined in the next section.

1.4.1 STANDARDISED ASSESSMENT

According to Haywood, Brown, and Wingenfeld (1990), standardised assessment is a process in which an assessor puts questions to learners and expects them to answer in a certain way. Standardised assessment is like a test where all the testees (learners) answer the same questions, in the same way, so that the assessor can evaluate them and compare them with other learners their age group (Hidden curriculum, 2014). Tzuriel (2005) compares standardised assessment with dynamic assessment, stating that standardised assessment focuses more on the result while dynamic assessment focuses on the process and the learning potential of learners.

In the research studies of Haywood, Brown, and Wingenfeld (1990), Tzuriel (2000; 2005), and Van Eeden and De Beer (2009), the terms ‘standardised’ and ‘static’ are often used interchangeably. Standardised assessment is commonly used as a term to describe static assessment where learners are asked a series of questions and are expected to answer them without any assistance or support – this is referred to as a static process in which change and the potential for learning are not part of the assessment goal. It is a highly structured and formal type of assessment with no mediation allowed (Tzuriel, 2005). Tzuriel (2000) states that static assessment is largely objective and based on psychometric properties with the assessor

terminating the assessment after a certain number of failures. It focuses also only on the current level of performance of the learner (Tzuriel, 2000).

It is important to note that dynamic assessment can also be performed in a standardised manner (Lidz, 1991). The various approaches to dynamic assessment are discussed in more detail in Chapter 2. However, for concept clarification, it should be noted that the interventionist approach to dynamic assessment, where the assessor focuses more on psychometric properties in order to quantify the amount of standardised assistance the learner receives (Bester & Kühn, 2016), can be termed a standardised assessment approach.

Intervention, mediation, and the focus on the process are elements that distinguish dynamic assessment from static, standardised assessment (Bester & Kühn, 2016). Thus, for the purposes of this study, the term 'standardised assessment' refers to assessment practices that are static in nature as well as standardised for a specific group. The differences between standardised assessment and dynamic assessment are discussed in more detail in Chapter 2.

1.4.2 DYNAMIC ASSESSMENT

According to Losardo and Notari-Syverson (2011), dynamic assessment is an approach that is interactive in nature and includes intervention as part of the assessment process. Tzuriel (2001, p. 6) describes dynamic assessment as an "assessment of thinking, perception, learning and problem-solving by an active teaching process aimed at modifying cognitive functioning" and states that it is a more positive approach to assessment (Tzuriel, 2000). Dynamic assessment assesses learners' potential as well as their problem-solving skills and thought processes (Lidz & Pena, 1996). For the purposes of this study, dynamic assessment is referred to as an interactive approach that focuses on potential and includes intervention as part of the assessment process (Lidz & Pena, 1996; Losardo & Notari-Syverson, 2011; Tzuriel, 2000).

1.4.3 DIVERSITY

The term diversity is important in this study, especially when one considers the history of psychometric testing in South Africa and the key role variables that constitute individual differences play in equitable assessment practices (Kanjee & Foxcroft, 2009). According to Donald, Lazarus, and Lolwana (2010), diversity refers to various kinds of differences, and, in South Africa, language, culture, race, religion, educational background, age, gender and socio-economic status are some of the crucial variables to consider in psychological assessment. Psychological assessments that accommodate all variables of diversity and does not discriminate against any one is considered equitable and fair (Foxcroft, Roodt, & Abrahams, 2009).

For the purposes of this study, diversity constitutes differences in language, educational background, culture, race, circumstances, socio-economic status, age, physical disabilities, and gender.

1.5 INTRODUCING THE THEORETICAL FRAMEWORK OF THE STUDY

Three main theoretical constructs underpin dynamic assessment: Piaget's constructivist theory (Piaget, 1962); Vygotsky's sociocultural theory and specifically the concept of the zone of proximal development and scaffolding (Vygotsky, 1978); and Feuerstein's theory on mediated learning experiences (Feuerstein, Hoffman & Miller, 1979).

Piaget's constructivist theory (1962) holds that learners use accommodation and assimilation to make sense of the world around them by actively and independently exploring their surroundings. Piaget (1962) adds that development precedes learning and that learners cannot master certain tasks if their cognitive structures are not yet fully developed. His contribution can be seen in dynamic assessment where the learner is an active participant interacting with the assessor (Losardo & Notari-Syverson, 2011).

Vygotsky's (1978) sociocultural theory, on the other hand, highlights social interaction and the importance of older, more skilled people in the process of learning. In dynamic assessment, this interaction can be seen through the mediation and scaffolding that takes place. Vygotsky's (1978) zone of proximal development is another construct that underpins dynamic assessment. The zone of proximal development is the difference between what learners can do on their own and what they can achieve with the assistance provided by mediation and scaffolding.

Feuerstein's (1979) mediated learning experience theory highlights the importance of mediation as part of the intervention in a session. This links with Vygotsky's concept of scaffolding with learners being supported to reach their potential.

The theories relating to dynamic assessment are discussed in more detail in Chapter 2.

1.6 OUTLINE OF THE RESEARCH METHODOLOGY, APPROACH, AND PROCESS

An overview of the research approach and paradigm is shown in Table 1.1. The framework refers to the research process and includes a summary of the research questions, the purpose of the research, the research paradigm, the research design and sampling, the data collection and analysis, the quality criteria, the strategies for ensuring quality control, and the ethical considerations. A detailed discussion of the research methodology, approach, and process follows in Chapter 3.

Table 1.1: Framework of the research process (adapted from Venter, 2013, p.10)

<table>
<tr><th colspan="2">Literature review as background to the study (Chapter 2)</th></tr>
<tr><td colspan="2">Theoretical framework
Piaget's constructivist theory
Vygotsky's sociocultural theory
Feuerstein's theory on mediated learning experiences</td></tr>
<tr><td colspan="2">↓</td></tr>
<tr><th colspan="2">Research questions</th></tr>
<tr><th>Main research question</th><th>Descriptive research questions</th></tr>
<tr><td>To what extent are South African educational psychologists familiar with and use dynamic assessment?</td><td>Descriptive Questions
What percentage of educational psychologists in South Africa are familiar with dynamic assessment?
What percentage of educational psychologists in South Africa use dynamic assessment?
How often is dynamic assessment used by educational psychologists?
How likely are educational psychologists to use dynamic assessment when assessing learners from diverse cultures?
What are the attitudes of educational psychologists towards dynamic assessment?
What are the perceived advantages of dynamic assessment?
What are the perceived disadvantages of dynamic assessment?
What percentage of educational psychologists are interested in learning more about dynamic assessment?</td></tr>
</table>

OVERVIEW OF THE RESEARCH METHODOLOGY (Chapter 3)						
Research paradigm	**Research design and sampling**	**Data collection**	**Data analysis**	**Quality Criteria**	**Strategies to ensure quality criteria**	**Ethical considerations**
• Positivism (Cohen, Manion, & Morrison, 2007; Nightingale, 2012; Walliman, 2006) • Quantitative research (Babbie, 2012; Maree & Pietersen, 2010; Morgan & Sklar, 2012)	• Cross-sectional survey design (dos Santos Silva, 1999) • Single questionnaire per respondent (Maree & Pietersen, 2010) • Survey designed using existing surveys with permission from authors • Educational psychologists practising in South Africa • Purposive sampling initially used during study; snowball sampling developed (Babbie, 2012; Maree & Pietersen, 2010)	• Online web- based survey was sent to respondents via email • SurveyPlanet was the web- based platform used to distribute survey	• IBM SPSS Statistics Editor • Descriptive statistics • Percentages	• Content validity • Construct validity • Internal validity • Reliability	• Extensive literature review • Use of existing surveys to design current survey • Pilot study before emailing survey • Adapting survey according to feedback	• Permission obtained from Ethics Committee of the University of Pretoria • Permission obtained from the Health Professions Council of South Africa (HPCSA) • Informed consent (Elias & Theron, 2012) • Anonymity and confidentiality (Elias & Theron, 2012) • Integrity (Chambliss & Schutt, 2013)

1.7 LAYOUT OF THE STUDY

CHAPTER 1: ORIENTATION

Chapter 1 introduced the research topic and included an overview of the research methodology and all processes followed in the study. The chapter also looked at the rationale behind the study and its purpose.

CHAPTER 2: LITERATURE REVIEW

Chapter 2 covers past and current literature on dynamic assessment including what dynamic assessment entails. It also reviews the main differences between standardised assessment and dynamic assessment and the theories that underpin dynamic assessment. The literature study provided a theoretical framework for the research. Finally, previous studies relating to dynamic assessment are discussed.

CHAPTER 3: RESEARCH PROCESS

Chapter 3 discusses the research processes and paradigms in the study including how they were chosen, their relevance, and how they assisted the researcher to ensure validity and reliability in the study.

CHAPTER 4: RESULTS AND INTERPRETATION

Chapter 4 revisits the research questions and discusses the respondents and the sampling process. It then discusses and analyses the results beginning with the biographical details, followed by the descriptive questions. The chapter concludes with a discussion on how the results can be linked with those of earlier studies.

CHAPTER 5: CONCLUSION AND RECOMMENDATIONS

The final chapter provides answers to the research questions by linking the results and the literature study with the questions posed in Chapter 1. The limitations of the study and recommendations for future studies are also discussed.

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Chapter 2
Literature Review

2.1 INTRODUCTION

Chapter 2 commences with an overview of the history of dynamic assessment. The next section discusses what dynamic assessment is, the main characteristics of dynamic assessment, what the differences are between dynamic assessment and standardised assessment, the types of dynamic assessment and dynamic assessment in South Africa.

The theories underlying dynamic assessment are also discussed. Lastly, studies are considered that have specifically researched how often and for what reasons educational psychologists use dynamic assessment. Numerous studies have been done on dynamic assessment, yet only those focusing on how much psychologists know about dynamic assessment, whether they use it and how much they use it are included here.

2.2 HISTORY OF DYNAMIC ASSESSMENT

Dynamic assessment is not a new concept in psychological assessment (Haywood & Lidz, 2007). Its history goes back to antiquity, but its existence as a formal assessment approach is more recent (Haywood & Lidz, 2007; Lantolf & Poehner, 2004; Poehner, 2013). The inspiration behind formal dynamic assessment can be traced back to the ideas of Binet, Piaget, Vygotsky, and Feuerstein, yet these ideas were first applied only during the early 19th century (Murphy, 2008).

Binet, a French psychologist, investigated ability, defined intelligence, and invented the first practical and reliable intelligence measure, the Binet-Simon Scale (Binet, 1907; Foxcroft, Roodt, & Abrahams, 2009). His ideas on developing an individual's underlying abilities – focusing on the correct responses given by the individual – and his ideas on mediation are important concepts which were adopted in dynamic assessment. Piaget's constructivist cognitive theory made a contribution to dynamic assessment with his belief that learners learn best when they are actively engaged in the learning process (Piaget, 1962). Vygotsky, a Russian psychologist, is best known for his sociocultural theory and concepts such as scaffolding (occurs when an experienced facilitator changes the process and the quality of the support so that learners become more skilful in a particular area) and the zone of proximal development (difference between what learners can do on their own and what they can accomplish when given some assistance) (Vygotsky, 1978). These concepts are central to dynamic assessment in that dynamic assessment start from the notion that people's potential can be determined by looking at what they can do when assistance is offered to them (Vygotsky, 1978). Feuerstein, an Israeli psychologist specialising in clinical development and cognitive psychology, developed the theory of mediation and mediated learning experiences (Feuerstein, Hoffman, & Miller, 1979; Haywood & Lidz, 2007). In his theory, he maintains also that intelligence is modifiable rather that fixed when mediation takes place between a more skilled and a less skilled individual – this introduced the interaction and intervention component of dynamic assessment

(Feuerstein et al., 1979). Binet, Piaget, Vygotsky and Feuerstein's theories are developmental theories that hold that people are "collaborators in their construction of the world, as opposed to operating on the environment" (Murphy, 2008, p. 220).

The dynamic assessment movement arose for several reasons (Haywood & Lidz, 2007; Murphy, 2008). In most non-Western countries, Western assessment practices were not allowed, which called for alternative ways of assessing low-functioning individuals (Murphy, 2008). Other reasons that led to the dynamic assessment movement were concerns about the fairness and the accessibility of assessment practices for minority groups (Lantolf & Poehner, 2013). This was because cultural contexts affect the way in which individuals learn and develop (Murphy, 2008). In the early 20th century, many researchers tested the idea that intelligence was flexible due to contributions of Binet, Vygotsky, and Feuerstein in this regard (Murphy, 2008). The upshot was the development of new schools of thought known today as neo-Vygotskian schools of thought (Murphy, 2008). Although there is some evidence of dynamic assessment in the early 1930s in Europe in South Africa evidence of dynamic assessment emerged only in 1961 (Lloyd & Pidgeon, 1961; Murphy, 2008).

A study of the history of psychological assessment in South Africa reveals that during the early years – the 1940s and 1950s – many psychological measures were developed, but that most of them were standardised measures applicable only to white English- and Afrikaans-speaking South Africans (Foxcroft, Roodt, & Abrahams, 2009). The main purpose of these measures was to facilitate the placement of people in special education settings (Foxcroft, Roodt, & Abrahams, 2009). According to Foxcroft, Roodt, and Abrahams (2009), it was acknowledged only after the 1960s that the standardised measures developed in the early 1900s were designed for a select few and that they were not suitable for the majority of South Africans, that is, blacks. In other words, numerous people could not benefit from the psychological assessment services offered (Foxcroft, Roodt, & Abrahams, 2009).

Many psychologists have come to realise that cultural factors and diversity can have a significant influence on the outcomes of psychological assessments, especially when standardised tests are used (Foxcroft, Roodt, & Abrahams, 2009; Tzuriel, 2000). In an attempt to counter the unfairness and bias of these measures, so-called culture-free tests were developed, but it was soon realised that it was not possible to exclude all the influences of culture and diversity in these tests (Birjandi & Sarem, 2012; Foxcroft, Roodt, & Abrahams, 2009). Despite all the debates on the applicability of psychometric tests, little progress has been made with the use of alternative assessment approaches (Foxcroft, Roodt, & Abrahams, 2009; Kanjee & Foxcroft, 2009).

In South Africa with all its diversity, approaches to psychological assessment are needed that will accommodate the majority, cut across cultures, and minimise language barriers (Birjandi & Sarem, 2012; Foxcroft, Roodt, & Abrahams, 2009; Haywood & Lidz, 2007; Kanjee & Foxcroft, 2009). Merely adapting and translating existing psychological tests will not properly address the unfairness and bias inherent in these tests (Kanjee & Foxcroft, 2009).

As a result of the unfairness, bias, and limitations of standardised and static assessment practices in assessing human development and potential (Grigorenko, 2009; Foxcroft, Roodt, & Abrahams, 2009; Kanjee & Foxcroft, 2009; Tzuriel, 2000), professionals in the field of psychological assessment realised that an assessment such as dynamic assessment could be used as a complementary means to provide assessors with in-depth information about learners' learning and potential. The unfairness of standardised assessment could be overcome by using the mediation in dynamic assessment to take learners' development level into account in the assessment procedure (Lantolf & Poehner, 2013). Psychological assessment is one of the core functions of a psychologist, and this will most likely not change – what needs to change, however, are the methods psychologists use to do accurate assessments that take into account the diverse needs of their clients (Foxcroft, Roodt, & Abrahams, 2009).

2.3 DYNAMIC ASSESSMENT

In this section, key concepts in dynamic assessment will be discussed as well as the major differences between dynamic assessment and standardised assessment. The types of dynamic assessment and the situations in which dynamic assessment was found to be appropriate will also be considered. The section ends with a discussion of the dynamic assessment measures available in South Africa and the value of dynamic assessment in South Africa.

2.3.1 CONSTRUCTS OF DYNAMIC ASSESSMENT

Dynamic assessment is a broad term that encompasses numerous approaches to assessment (Murphy & Maree, 2009) and is characterised by guided support, scaffolding, and mediation when assessing learners' potential to change (Losardo & Notari-Syverson, 2011). It is a method of assessing an individual's' hidden potential in a way that is process orientated and flexible and that is characterised by engagement and guidance (Murphy & Maree, 2009).

Dynamic assessment has some prominent features that distinguish it from other types of psychological assessment, for example, it includes instructional intervention, provides a positive assessment experience for both parties, is flexible, and is more process orientated (Lin, 2010; Losardo & Notari-Syverson, 2011). Instructional intervention occurs when the intervention is built into the assessment process to determine learners' potential for learning (Lin, 2010; Losardo & Notari-Syverson, 2011). The interactive nature of dynamic assessment and the positive outlook on assessment of the assessor gives rise to a positive assessment experience on the part of testees (Lin, 2010). Because of its flexibility (Murphy & Maree, 2009), it is easier to use this type of assessment with younger learners or learners who experience barriers to learning whether linguistic or cultural in nature. Dynamic assessment is process orientated, which means it focuses more on what happens in the assessment process than on the end result. This means that in dynamic assessment the process is just as important as the result (Losardo & Notari-Syverson, 2011). Phoener (2008) maintains that dynamic assessment is less biased towards the socially disadvantaged thus making it an appropriate assessment instrument when working with individuals who are diverse in terms of language, educational background, circumstances, and socio-economic status.

According to Haywood and Lidz (2007), a basic assumption of dynamic assessment is that certain learning abilities (such as problem-solving skills) cannot be assessed using standardised assessment measures. They believe that it is more meaningful to observe how learners learn something new than to focus on the products of learning and that teaching and guiding learners in the assessment situation may help assessors assess potential more accurately. Dynamic assessment is seen as a process that contextualises learners' learning and thinking and provides assessors with useful information about learners' problem-solving skills as well as the skills that promote or hinder successful learning (Haywood & Lidz, 2007). Dynamic assessment presumes also that all learners have the ability to learn (Haywood & Lidz, 2007; Losardo & Notari-Syverson, 2011). However, Sadeghi and Khanahmadi (2011) caution that dynamic assessment should not be seen as a substitute for other tests, but rather as complementing them. Because different tests provide different information about learners, assessors need to determine which measure will yield the most valuable information (Sadeghi & Khanahmadi, 2011).

Haywood and Brown (1990) state that the goals of the dynamic assessment process are, firstly, to assess the modifiability of learners' basic cognitive structures – in other words, what they can learn with some intervention; secondly, to assess the extent of intervention needed in a specific area; thirdly, to assess how generalisable the intervention achieved in a specific area is to other areas of functioning; and, lastly, to assess the extent of teaching/mediation required to achieve the desired degree of flexibility in cognitive functioning. Tzuriel (2005) adds two more goals: determining learners' preference for the modality of the presentation of the problem (i.e. pictorial, linguistic, numerical), in other words how they learn best; and determining which mediation is most effective, that is, what works and what does not work.

Dynamic assessment, like other assessment models, has been shown to have many advantages (Bester & Kühn, 2016; Losardo & Notari-Syverson, 2011; Tzuriel, 2000). It implies not only change, but also indicates the intervention that needs to take place for learners to reach their potential (Bester & Kühn, 2016). In addition to indicating the intervention, dynamic assessment also provides assessors with information on how learners learn, what tasks they will be successful at, and what teaching strategies will work best for them (Losardo & Notari-Syverson, 2011).

Tzuriel (2000) argues that since assessors who use dynamic assessment focus on what learners can do and their potential to solve problems, instead of on what they cannot do, learners may have a better chance of experiencing success and mastery. This gives learners a positive assessment experience.

Dynamic assessment is not only a learner-friendly approach to assessment, but also a clinically based approach that takes into account learners' thought processes as well as their approach to specific tasks (Losardo & Notari-Syverson, 2011). Dynamic assessment can help assessors determine whether learners are experiencing developmental delays, learning barriers, or culture-related barriers (Losardo & Notari-Syverson, 2011). This can also help assessors determine learners' real performance if learning barriers can be eliminated.

Dynamic assessment is not bound to a specific culture or language group, it can be adjusted in an assessment situation, and it takes into account the effect that an educational or social disadvantage may

have on learners (Losardo & Notari-Syverson, 2011). It thus decreases cultural bias in an assessment situation (Losardo & Notari-Syverson, 2011).

A criticism against dynamic assessment is that psychologists do not use dynamic assessment often because of its somewhat time-consuming nature (preparation, planning, and execution) (Losardo & Notari-Syverson, 2011; Tzuriel, 2013). Also, assessors need to be adequately trained and experienced before conducting dynamic assessment (Lidz, 2003; Losardo & Notari-Syverson, 2011; Tzuriel, 2013). In addition, they need to be able to implement curriculum-based interventions when necessary (Bester & Kühn, 2016). Dynamic assessment does not compare learners (who have been assessed) with other learners of the same age and does not provide assessors with standard scores (Tzuriel, 2013). Furthermore, due to the subjective nature of dynamic assessment, its validity and reliability can sometimes be questioned (Tiekstraa, Minnaerta, & Hessels, 2014). Lantolf and Poehner (2013) further argue that mediation in dynamic assessment could be considered unequal treatment and that that the goal should always be to assist learners by determining their potential for learning.

2.3.2 MAJOR DIFFERENCES BETWEEN DYNAMIC ASSESSMENT AND STANDARDISED ASSESSMENT

In order to understand the differences between dynamic assessment and standardised assessment, the researcher will first explain what standardised assessment is. This will then be followed by a comparison between the two approaches as described by Tzuriel (2005) in terms of the following categories: goals; what the assessment focuses on; administration of the assessment; interpretation of the assessment; the nature of the tasks performed during the assessment.

Standardised assessment is a process in which learners are given questions to answer without assistance (Haywood, Brown, & Wingenfeld, 1990). It is a highly structured and formal process where observers are not allowed in the assessment room while the assessment is being conducted (Tzuriel, 2005). Standardised assessment is objective and based on psychometric considerations. The assessor terminates the assessment after a certain number of failures on the part of the learners (Tzuriel, 2005). Standardised assessment focuses on the current level of performance of learners without any assistance provided to them (Tzuriel, 2005).

Standardised tests are less time consuming and more practical due to the explicit administration instructions (Van Eeden & De Beer, 2009). The results also provide assessors with a score that compares learners to their peers and remains objective (Tzuriel, 2001). In addition, standardised assessment are useful and have certain advantages when making diagnoses and when trying to determine what barriers learners are experiencing (Haywood, Brown, & Wingenfeld, 1990). However, at the same time, it has been found that standardised tests rarely give an accurate picture of learners' true abilities and potential for learning and that they often reflect merely the behaviour that was elicited in the assessment environment (Birjandi & Sarem, 2012). Research further suggests that standardised IQ tests can explain only 50% of the discrepancies in learners' academic performance (Tzuriel, 2005). A major criticism of standardised assessment is that it does not take into account non-intellectual aspects of behaviour and therefore cannot explain concepts/characteristics such as anxiety, intrinsic motivation, the need for mastery, locus of control,

and self-confidence. In a country such as South Africa where different cultures and languages impact on learners' performance, and where adversity levels are high, these concepts/characteristics become even more evident (Foxcroft, Roodt, & Abrahams, 2009).

As mentioned previously, dynamic assessment came to the fore as a result of the limitations of standardised assessment practices in assessing human development and potential. In contrast, dynamic assessment is characterised by interaction, instruction, scaffolding, and mediation, and it focuses more on the potential of learners. The process of dynamic assessment is also more subjective and flexible and can give learners feelings of competence (Tzuriel, 2005).

Assessing learners through dynamic assessment enables the assessor to determine whether they are experiencing barriers to learning that are the result of something more serious or just a language or a cultural barrier (Losardo & Notari-Syverson, 2011, Tzuriel, 2001). It also enables the assessor to assess learners' potential for learning and thus helps her[2] differentiate between cultural and language barriers. Dynamic assessment is considered a learner-friendly, clinical approach that does not focus only on learners' ability but also on how learners approach tasks and their thought processes (Losardo & Notari-Syverson, 2011).

A major strength of the dynamic assessment approach is that it is based on a positive outlook towards learners – it does not focus only on the tasks learners cannot do but also considers their problem-solving skills (Tzuriel, 2000). It links assessment with intervention and identifies how learners learn, what teaching strategies work best for particular learners, and what tasks they will be able to perform successfully (Losardo & Notari-Syverson, 2011).

[2] Feminine and masculine pronouns (she, he, her, him, hers, his) should be regarded as interchangeable.

Table 2.1: Comparison of dynamic assessment and standardised assessment (Bester & Kühn, 2016, p. 122-123)

Attribute	Dynamic assessment	Standardised assessment
Goals of the assessment	• Assesses learners' potential to learn. • Identifies the type of intervention (mediation) learners may need to achieve their full potential. • Highlights the areas where learners struggle. • Identifies skills that can be developed in learners. • Measures not only intellectual factors but also non-intellectual factors such as attitudes, emotions, and motivation.	• Assesses learners' performance at a specific stage and time. • Compares learners' performance with that of their peers. • Predicts the future achievements of learners.
Focus of the assessment	• How learners learn, think, approach tasks, and solve problems. • How learners think about their own learning and how they make sense of their mistakes.	• The scores that learners obtain. • The test scores, which provide a profile from which the assessor draws conclusions.
The assessment context (administration of the assessment)	• Dynamic assessment is an interactive process between assessor and learners. • This process allows learners to ask questions and receive guidance and support from the assessor during the assessment and feedback on completion. • Tasks are structured is such a way as to allow learners to experience success and mastery. • Parents and teachers are allowed to observe the assessment.	• The interaction between assessor and learners is formal and structured. • Learners play a passive role as they answer questions during the assessment. • Support is provided in standard format and is limited. • Learners' existing knowledge is assessed. • Parents and teachers are not usually allowed to observe the assessment.
Interpretation of results	• Results are interpreted largely subjectively as the assessor is actively involved in the assessment process. • Interpretation of results indicates not only learners' strengths but also areas of growth and extent to which they may be responsive to mediation and guidance. • Dynamic assessment focuses ultimately on the potential of learners and what can be done to harness their potential.	• Results are interpreted objectively based on fixed norms and standards. • Responses are either right or wrong. • Focus is on what learners can or cannot do. • Assessment results indicate learners' average performance.
Nature of tasks	• Tasks are specifically designed to assess learners' potential to learn. • Tasks assess learners' problem-solving skills and how learners think and learn.	• Assessment tasks are based on psychometric properties. • Termination of tasks is based on the number of errors learners make.

	• Tasks increase in difficulty level as learners progress and when determining their potential. • Tasks focus more on learners' successes than their failures.	

Dynamic assessment and standardised assessment both yield important and useful information based on the results of the assessment (Bester & Kühn, 2016; Tzuriel, 2000). Each type of assessment provides the assessor with different information about learners. Although standardised assessment appears often to be less appropriate because of the diverse needs of South African citizens, the information provided by these measures is still valuable. The role of standardised assessment in a repertoire of assessment strategies is acknowledged by psychologists, and, in this repertoire, dynamic assessment is considered a valuable complementary assessment measure (Bester & Kühn, 2016; Losardo & Notari-Syverson, 2011).

2.3.3 TYPES OF DYNAMIC ASSESSMENT

The two major approaches to dynamic assessment are the interventionist model and the interactionist model (Kapantzoglou, Restrepo, & Thompson, 2012; Lantolf & Poehner, 2004; Lin, 2010). In addition, dynamic assessment can be further categorised into four models: Feuerstein's intuitive clinical model; Budoff's model; Campione and Brown's graduated prompt response model; and Lidz's proposed model, that is, the curriculum-based model (Lidz, 2003).

The interventionist approach is quantitative in nature and allows for permitted standardised support and the use of psychometric elements (Bester & Kühn, 2016). Its aim is to determine how much assistance learners need and how quickly they learn new information. This model can be further divided into two formats: the 'sandwich' and the 'cake' format (Kapantzoglou, Restrepo, & Thompson, 2012; Lantolf & Poehner, 2004). In the "pre-test – intervention – post-test" approach, the assessor uses the 'sandwich' format; in other words, mediation is adapted to suit learners' needs and can be either implicit or explicit mediation (Bester & Kühn, 2016). According to Kapantzoglou, Restrepo, and Thompson (2012) and Lantolf and Poehner (2004), the process is as follows: first, the assessor presents the learners with a task, usually in a fixed format such as a question, and the learners have to provide an answer; second, the learners' barriers to learning are observed through the intervention that the assessor mediates; lastly, the learners are given an equivalent task so that the assessor can observe their method of learning.

In comparison to the 'sandwich' format, in the 'cake' format the standardised intervention is already incorporated into the administration of the test. Both implicit and explicit mediation, as well as prompts, is acceptable when it is evident that the learners are struggling with the task at hand (Bester & Kühn, 2016; Kapantzoglou, Restrepo, & Thompson, 2012; Lantolf & Poehner, 2004).

The interactionist approach to dynamic assessment is more individually focused. It is qualitative in nature, allows interaction between the assessor and the learners, and makes use of scaffolding or mediation to help the learners (Lin, 2010). This approach focuses on the learners' zone of proximal development as well

as their development in the assessment situation. It helps the assessor understand what the learners can do with some assistance and what their potential is. It focuses more on the process that takes place rather than the end result (Kapantzoglou, Restrepo, & Thompson, 2012; Lantolf & Poehner, 2004).

According to Lidz (1991), Feuerstein's intuitive clinical model was the first model to have been categorised under dynamic assessment. In his work, Feuerstein used the learning propensity assessment device (LPAD), which involves paper and pencil activities, together with an intervention that assesses cognitive functioning (Feuerstein et al., 1979). Feuerstein's LPAD helps determine what intervention will be necessary for learners to solve problems (Bester & Kühn, 2016). Lidz (2003) maintains that Feuerstein's model requires assessors to have a good understanding of his theory, which involves cognitive modifiability and mediated learning experiences, in order to apply the model. Mediated learning experiences includes a process where the assessor observes learners' learning in order to identify any barriers to learning and then addresses them as part of the assessment procedure (Lidz, 2003). It is an unstructured model, with no step-by-step guide, whose effectiveness depends on learners' feedback (Lidz, 2003).

Budoff's model is the second model (also referred to as the 'sandwich' format, discussed above) that can be followed when conducting dynamic assessment. Feuerstein's model and Budoff's model are similar in that they both incorporate paper and pencil activities (Lidz, 2003). However, they also differ in the sense that Budoff's intervention is standardised and planned in advance thereby providing all learners with the same intervention (Bester & Kühn, 2016).

Campione and Brown's graduated response model (Campione & Brown, 1987), also known as the 'cake' format, is the third model that can be used in dynamic assessment. The zone of proximal development is emphasised in this intervention as the assessor wants to determine what the learners can do with some support. The focus is on how many clues the learners require in order to succeed in a particular activity (Lidz, 2003).

Lidz's (2003) curriculum-based model is the last model that can be used in dynamic assessment. In this model, the learners' curriculum forms part of the assessment procedure. A task from the curriculum is selected and presented to the learners. An error analysis is then done to identify the errors made (Lidz, 2003). The assessor determines the learners' prerequisite knowledge as well their skills after which a pre-test – intervention – post-test takes place (Bester & Kühn, 2016). This model reflects both the process and the intervention.

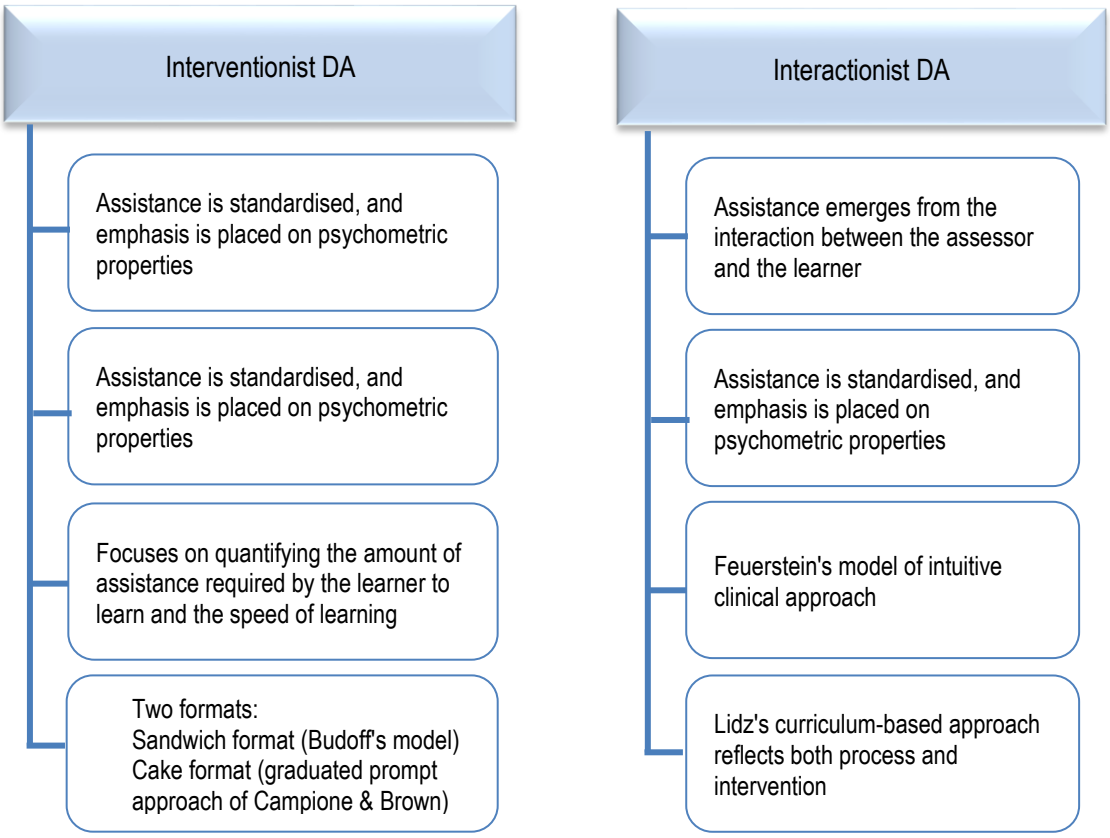

Figure 2.1: **Four models of dynamic assessment** (Bester & Kühn, 2016, p. 127)

2.3.4 SITUATIONS AND CONTEXTS IN WHICH DYNAMIC ASSESSMENT IS SUITABLE FOR USE

Dynamic assessment has been used successfully in different contexts. According to Lin (2010) and Tzuriel (2001) situations in which dynamic assessment can be used successfully are, for example where English is a second or third language; with socially disadvantaged learners; with learners with cognitive handicaps; with deaf learners; with gifted learners; with learners who experience barriers to learning; with pre-school learners or young learners; and with learners from ethnic minority groups.

Tzuriel (2001) maintains that dynamic assessment can be especially useful in the following situations. First, where an assessment has been done, and the standardised assessment scores produced low or borderline scores on cognitive measures. Second, where learners' performance does not match their abilities, in other words where there seems to be a discrepancy between their abilities and their scholastic performance. Third, where inequalities, such as low socio-economic status, affects learners and their ability to perform. Fourth, where an assessment measure that has been standardised for a certain race or language group differs from the learners' background, race, or language. Lastly, where an emotional difficulty, personality disorder, or learning barrier is present in the learners' functioning.

Haywood and Lidz (2007) list three additional situations where dynamic assessment can be useful: where factors such as cognitive impairment and a lack of motivation restrict learners' learning; where there appears to be a language difficulty such as delayed vocabulary or a delay in language development; and where learners' mother tongues differ from the language they are being taught in.

2.3.5 DYNAMIC ASSESSMENT IN SOUTH AFRICA

In a country such as South Africa with 11 official languages, and where many learners are assessed in their second, third, or even fourth language, dynamic assessment has proven to be very useful (Foxcroft, Roodt, & Abrahams, 2009; Murphy & Maree, 2009). Landsberg, Krüger and Swart (2016) too, state that dynamic assessment approaches were helpful in situations where learners were assessed in a second language. It is especially the flexibility and adaptability of the dynamic assessment process that accommodates language and other barriers to learning in learners. Because dynamic assessment enables the assessor to assess learners' potential for learning, it can assist in differentiating between cultural and language barriers. Dynamic assessment has also been found to predict high school performance in cross-cultural groups (Tzuriel, 2000).

Access to standardised dynamic assessment tests is problematic for many psychologists in South Africa today. The assessment measures are not easily obtainable from South African test distributers, and the administration of some of the dynamic assessment tests requires specialised training (LPAD). These factors plus the expense of the tests may explain the infrequent use of dynamic assessment in South Africa (Z. Amod, personal communication, February 25, 2015).

2.4 THEORIES UNDERLYING DYNAMIC ASSESSMENT

Piaget's constructivist theory (Piaget, 1962), Vygotsky's sociocultural theory (Vygotsky, 1978) and specifically the concept of zone of proximal development and scaffolding, and Feuerstein's theory on mediated learning experiences (Feuerstein, 1979) are the theoretical constructs that underpin dynamic assessment. According to Piaget's (1962) constructivist theory, learners learn best when they are active participants in the process of learning (Losardo & Notari-Syverson, 2011). Piaget (1962) made a major contribution to the dynamic assessment model with his theory on constructivist cognitive development.

Vygotsky's (1978) sociocultural theory highlights the importance of culture and social interaction (Rowe & Wertsch, 2002) in cognitive development. Vygotsky (1978) believed that learners' learning is more meaningful when learners interact with more knowledgeable people. This construct in Vygotsky's theory contributed to the conceptualisation of dynamic assessment. Besides this construct, Vygotsky's (1978) theory states that mediation can also enhance learners' cognitive development. Mediation is described as a process in which "a more knowledgeable individual interprets a learner's behaviour and helps transform it into an internal and symbolic representation that means the same thing to the learner as to others" (Snowman, 2013, p. 34). In the process of mediation, this construct can be seen in the interaction between the learners and the assessor. During this process, the assessor may mediate between the task and the learners by providing feedback, instruction, and support when the learners ask questions pertaining to the work.

Vygotsky's (1978) zone of proximal development is another construct that underpins dynamic assessment. Dynamic assessment is aimed at cutting through culture and language barriers to determine learners' potential (Losardo & Notari-Syverson, 2011). The zone of proximal development is the difference between

what learners can do on their own and what they can accomplish when given some assistance, for example through scaffolding and mediation. Two zones are discussed in Vygotsky's theory: the first is the zone of actual development and the second is the zone of proximal development (Lidz, 2003). The zone of actual development refers to the work learners can do without any support – the skills they can master independently, while the zone of proximal development refers to those skills and abilities that learners can master with support from an experienced facilitator (Lidz, 2003). Vygotsky (1978) believed that knowing and measuring where learners are now is just as important as measuring and knowing where they could be.

Donald, Lazarus, and Lolwana (2010) add another zone known as the anxiety zone. This zone refers to the abilities that learners cannot master with or without any support thus leading to learner anxiety (Donald, Lazarus, & Lolwana, 2010). The different zones are shown in Figure 2 below.

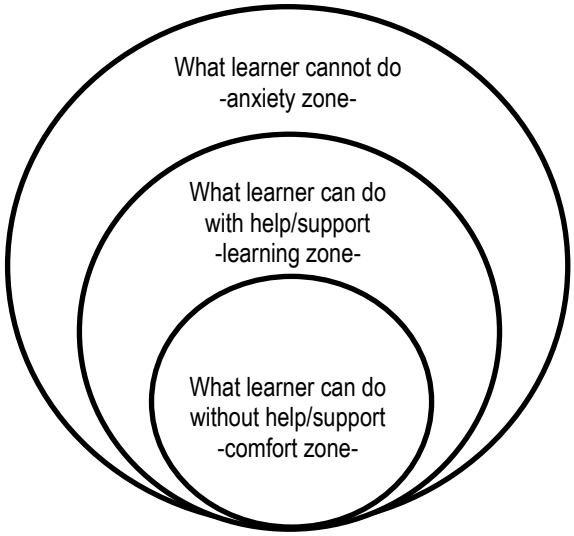

Figure 2.2: Zone of proximal development (Donald, Lazarus, & Lolwana, 2010)

Scaffolding is another construct in Vygotsky's theory that informs dynamic assessment. It occurs when an experienced facilitator changes the process and the quality of the support so that learners become more skilful in a particular area (Tzuriel, 2000). This means that when the learners still do not fully understand the activity, a skilled facilitator will break it down into smaller tasks so that the learners understand exactly what to do. Scaffolding can also be called guided participation, where a person builds on that of what is already known to a less skilled person (Losardo & Notari-Syverson, 2011). An example of scaffolding is helping learners answer difficult questions or solve problems by giving hints or asking leading questions.

Feuerstein's mediated learning experiences theory has three key elements: intentionality and reciprocity, meaning and purpose, and transcendence (Tzuriel, 2001). It postulates that all learners are able to learn and that the mediator plays a critical role in the learning process (Feuerstein et al., 1979; Losardo & Notari-Syverson, 2011).

Feuerstein (Feuerstein, Hoffman, & Miller, 1979) believed that when a more experienced person, acting like a mediator, intervenes between the learners and their learning content, the experience of learning are more meaningful to the learners. According to Lidz and Pena (1996), the mediation takes place during the intervention part of the assessment. This links up with Vygotsky's concept of scaffolding, where learners are supported to reach their potential.

2.5 STUDIES DONE ON THE USE OF DYNAMIC ASSESSMENT

Studies (Deutsch & Reynolds, 2000; Haney & Evans, 1999; Lidz, 1992; Molano, 2007; Smit, 2010) on the use of dynamic assessment were discussed briefly in Chapter 1. In this section, the researcher will elaborate on the findings of these studies since these studies and their surveys informed the survey used in the present study.

Lidz (1992) conducted a national quantitative survey to determine the extent to which dynamic assessment had been incorporated into cognitive assessments done by school psychology trainers (the professionals who educate future school psychologists). Lidz (1992) sent the survey to 231 school psychology trainers of whom 120 responded to the survey.

Lidz (1992) found wide familiarity with dynamic assessment among the school psychology trainers who, however, did not often use dynamic assessment in their assessments. Of the 120 respondents, 31 (26%) reported that they were quite familiar with dynamic assessment; 44 (37%) reported that they were somewhat familiar with dynamic assessment; 20 (17%) reported that they were barely familiar with dynamic assessment; and 25 (20%) reported that they were not familiar with dynamic assessment at all (Lidz, 1992). In response to the question on how they became familiar with dynamic assessment, the responses were as follows: 73 (56%) stated that they became aware of dynamic assessment through reading; 32 (26%) reported becoming aware through workshops; 13 (10%) reported becoming aware through their coursework; and 4 (3%) reported becoming aware through another source.

In Lidz's (1992) study, the majority of the respondents reported that a major advantage of dynamic assessment was the change in the focus of assessment, that is, the change from product to process (Lidz, 1992). The two main limitations of dynamic assessment reported by most of the respondents were the technical adequacy and research support needed to conduct it and the time required to assess learners dynamically. The respondents rated the limitations as moderate (Lidz, 1992).

The second study that will be elaborated on here was that done by Haney and Evans (1999) who conducted a quantitative survey to determine the use of dynamic assessment by school psychologists. A ten-question, multiple-choice questionnaire was posted randomly to 500 members of the National Association of School Psychologists (Haney & Evans, 1999). Again, where a total of 226 psychologists responded to the survey. Of these respondents, 56% reported that they were not at all familiar with dynamic assessment. The respondents who reported that they were somewhat familiar with dynamic assessment, but did not use it often, said that this was due to their inadequate knowledge of the dynamic assessment model (Haney & Evans, 1999).

Haney and Evans (1999) found that the school psychologists in their survey did not have sufficient knowledge of dynamic assessment methods. In the present study, 42% of the respondents reported that they were somewhat familiar with the dynamic assessment model, and 39% reported that they used dynamic assessment once or more often a year. Dynamic assessment was thus not used as often as had been expected. The respondents indicated that they became familiar with dynamic assessment through reading (46%); through workshops (26%); through coursework (10%); through internships (7%); and through other sources (2%) (Haney & Evans, 1999).

Deutsch and Reynolds (2000) conducted a study to investigate the use of dynamic assessment by educational psychologists in the UK. They focused their study on educational psychologists who had received some form of training in dynamic assessment between 1994 and 1999. The survey was mailed to 119 educational psychologists, 88 of whom responded. The results indicated that although all the respondents were somewhat familiar with dynamic assessment, since they had received training in it, not all used dynamic assessment often (Deutsch & Reynolds, 2000). The 59% who reported using dynamic assessment said two of the major advantages were the positive experience for the learners and the educational psychologist and the practical information it provided to teachers (Deutsch & Reynolds, 2000). The respondents also reported time as the main disadvantage of dynamic assessment as it is a time-consuming process that takes longer to complete than other assessments (Deutsch & Reynolds, 2000).

Molano (2007) conducted a quantitative study in 2006 to determine if the use of dynamic assessment with Latino learners could decrease the bias against them when cognitive assessments were performed. A further goal was to determine why practitioners often did not use dynamic assessment when assessing Latino learners. Molano (2007) used two existing surveys for her study: The National Survey of School Psychology Trainers by Lidz (1992) and The National Dynamic Assessment Survey by Haney and Evans (1999). A paper-based survey was used to gather responses and 80 respondents responded to the survey. Molano (2007) stated that the sample of respondents did not accurately reflect the population of psychologists who conduct assessments on a day-to-day basis.

Of the 80 psychologists who responded in the study, only 18 (22,5%) were aware of dynamic assessment, and of the 22,5%, only 16,7% were quite familiar with dynamic assessment; 9 (50%) became aware of the dynamic assessment model through reading; 5 (27,8%) through a different way; 4 (22,2%) through workshops; 3 (16,7%) through a clinical setting; one (5,6%) through coursework; and 0% during their internships. The majority of Molano's (2007) respondents stated that they were in private practice.

According to Molano's (2007) study, of the 22,5% who indicated some familiarity with the dynamic assessment model, 27,5% indicated that they had used dynamic assessment one to four times in the past 12 months. The respondents reported that the dynamic assessment model had two major advantages: it decreased cultural bias, and it related meaningfully to intervention (Molano, 2007).

In Molano's (2007) study, 9 (50%) of the respondents said that they experienced lack of technical adequacy and research support as major disadvantages of dynamic assessment. Another disadvantage that 44,4%

(n=8) of the respondents experienced was the lengthy administration time. Time constraints were also a reason they did not often use dynamic assessment.

Only two national studies have been done on the use of dynamic assessment, namely those of Murphy and Maree (2009) and Smit (2010). Maree and Murphy (2009) conducted a qualitative study to determine the issues surrounding the use of dynamic assessment as it is not as commonly used as initially thought it would be. Their sample consisted of professionals in the field of psychology known for their knowledge of dynamic assessment. Of the 100 questionnaires that were emailed, only 11 were returned. Murphy and Maree (2009) found that due to the variations within the dynamic assessment model, they are of belief that dynamic assessment will produce greater utilisation and advantages when professionals in the field comprehend the different theoretical features.

Smit's (2010) sample was selected according to the following criteria: the respondents had to be registered as educational psychologists with the Health Professions Council of South Africa (HPCSA); they had to reside in the Western Cape; and they had to be familiar with dynamic assessment. Smit's (2010) qualitative study was about the perceptions of educational psychologists in the Western Cape of dynamic assessment. Smit (2010) interviewed 12 educational psychologists on the basis of a semi-structured interview, and the findings revealed that the psychologists regarded dynamic assessment as useful, but they did not feel comfortable using it as they believed their knowledge of dynamic assessment was inadequate. Because of the small sample size and its qualitative nature, Smit's (2010) study was not generalizable, and she therefore recommended that a larger and more generalisable study be done to investigate the use of dynamic assessment by psychologists throughout South Africa. Although other studies have been done on dynamic assessment, they did not focus specifically focus on its use. The present study therefore included only studies on psychologists' use of dynamic assessment.

2.6 CONCLUSION

In this chapter, an in-depth literature review provided background information on dynamic assessment as an assessment model and how it came to be used alongside standardised assessment practices. Against the background of this information and dynamic assessment theory, studies on the use of dynamic assessment were also discussed. These international studies (Deutsch & Reynolds, 2000; Haney & Evans, 1999; Lidz, 1992; Molano, 2007) and national studies (Murphy & Maree, 2009; Smit, 2010) show that although dynamic assessment is seen as a useful complementary means of assessment, it is often not used. In the present study, the researcher set out to investigate the reasons for this infrequent use in South Africa.

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Chapter 3
Research Design and Methodology

3.1 INTRODUCTION

This chapter covers the research paradigm, the methodological paradigm (in greater detail), the descriptive cross-sectional survey method used, the sampling method, and the data collection and analysis strategies. The chapter ends with the researcher's views on the validity, reliability, and ethical considerations of the study.

3.2 PARADIGMATIC PERSPECTIVE AND METHODOLOGICAL PARADIGMS

The meta-theoretical and methodological paradigms are discussed in the next section. In each section, the paradigms are considered together with their advantages and disadvantages. The justification for the paradigmatic perspective and the methodological paradigm is also given.

3.2.1 META-THEORETICAL PARADIGM

Positivism was the research paradigm selected for this study. Positivism holds that only factual knowledge gained through observation (the senses) and measurement are trustworthy (Babbie, 2012). In positivistic studies, the role of the researcher is limited to collecting and interpreting data through an objective lens. The research findings are usually observable and quantitative (Babbie, 2012). Positivism is based on seven meta-theoretical assumptions that will be discussed under ontology, epistemology, research object, method, theory of truth, validity, and reliability (Weber, 2004).

Ontology refers to the reality of "what can be known" (Morgan & Sklar, 2012, p. 70). Positivistic researchers believe that there is only one objective reality (Nieuwenhuis, 2010), which is based solely on facts and the view that the world is external and objective (Babbie, 2012). Positivists also believe that research data should remain objective and that this can be achieved only if the researcher has no or very little influence on the research results (Nieuwenhuis, 2010; Weber, 2004). The researcher is not directly and actively involved in the data collection process, which means that he or she has little impact on the phenomenon under investigation (Nieuwenhuis, 2010; Weber, 2004).

Epistemology refers to "how something can be known" (Morgan & Sklar, 2012, p. 70), or the discipline of knowing (Babbie, 2012), and how results are interpreted (Ferreira, 2012). In other words, epistemology is the way the researcher makes sense of the data collected in order to guide his or her findings (Weber, 2004). An assumption of positivist epistemology is that objective reality, which is based on facts, occurs in a much broader context than just the human mind and that, therefore, the discovered knowledge can assist in understanding why something happens (the phenomenon) (Nieuwenhuis, 2010). A phenomenon is something that one can observe and simplify (Nieuwenhuis, 2010).

The next assumption is the research object. The research object refers to a group of people experiencing the same phenomenon or to a specific quality that the researcher wants to find out more about (Weber, 2004). This assumption is based on the view that the phenomenon and the respondents the researcher is investigating have qualities that are separate from those of the researcher and that they are not socially constructed (Weber, 2004). In other words, the qualities or the phenomenon being researched exist independently from the rest of the population's experiences, thus offering an independent and objective truth (Nieuwenhuis, 2010).

The next assumption underlies the research method. Positivist researchers use experiments, field experiments, and surveys to collect data (Weber, 2004). The aim of a research method such as surveys is to gather large amounts of data that can be analysed statistically to describe a phenomenon or the characteristics of a particular sample (Morgan & Sklar, 2012).

The theory of truth is the next assumption of positivism (Weber, 2004). When a research finding is based on the data obtained through a scientific method, the data are regarded as an accurate representation of the truth (Weber, 2004). Thus, when the researcher believes that research objects are independent and have an objective truth, only then can he or she make true and accurate statements about the phenomenon.

Validity and reliability are the last two meta-theoretical assumptions of positivism (Weber, 2004). Validity refers to how valid research results are and how accurately they correspond with the populations experience (Neuman, 2011). Validity is also the certainty a researcher has that the data accurately reflect the reality (Weber, 2004). Reliability, on the other hand, refers to the replicability of research results and if they can be reproduced accurately using the same data collection instrument (Morgan & Sklar, 2012). Weber (2004) maintains that researchers should consider the different types of validity (face validity, construct validity, internal validity, external validity) as well as the different types of reliability (researcher bias, inconsistencies, and measurement errors) when adopting a positivistic approach. Validity and reliability in this study are discussed in more detail in Section 3.7.

In conclusion, positivism has been described as an objective approach (Babbie, 2012; Creswell, 2014; Nightingale, 2012; Walliman, 2006) that holds that real knowledge comes from our senses and scientific observation (Cohen, Manion, & Morrison, 2007) and determines the causal relationship between certain factors (Ferreira, 2012). Positivism holds also that the goal of knowledge is simply to understand experienced phenomena (Nightingale, 2012). Neuman (2011) defines positivism as an approach involving surveys or experiments that researchers use when they prefer accurate quantitative data.

An advantage of the positivistic paradigm is that it allows the research to be value free as no influence or bias is imposed by the researcher (Nightingale, 2012). This means minimal interaction with respondents. Another advantage of the positivist paradigm is that the supernatural and the abstract have to be explicable in terms of scientific laws (Nightingale, 2012) thereby providing a clear theoretical focus (Morgan & Sklar, 2012). Besides these advantages, the data gathered are also easily comparable (Morgan & Sklar, 2012).

A criticism of the positivist paradigm is that it is based on objectivity. Although this can be an advantage, it can also cause researchers to alienate themselves from a study (Cohen, Manion, & Morrison, 2007; Weber, 2004). Weber (2004) believes that researchers can never fully remove themselves or their emotions from a study they are involved in. Inflexibility may be another shortcoming as all data are measured and calculated (Cohen, Manion, & Morrison, 2007) with the result that positivistic researchers do not engage with qualitative data or the emotions of respondents (Trochim & Donnelly, 2006).

3.2.2 METHODOLOGICAL PARADIGM

The methodological paradigm for the present study was quantitative in nature. A quantitative study is closely associated with the positivist approach as data are presented numerically and involve quantities that the researcher can measure. The data are also often collected on a single occasion (Neuman, 2011). Quantitative research design has a formal structure and is objective, meaning that the researcher is not an active respondent in the process (Morgan & Sklar, 2012). In quantitative research, the researcher uses data collection methods such as surveys to generate numerical data (Neill, 2007) and thereby endeavours to explain what is observed by constructing statistical models (Creswell, 2014). A quantitative approach is appropriate when a study is based on larger populations and when the researcher wants to collect projectable data (Morgan & Sklar, 2012).

An advantage of the quantitative approach is that the findings can be generalised to the larger population and allow predictions when the data are sufficient and the sampling is random (Maree & Pietersen, 2010). Another advantage of quantitative research is that it is based on objectivity, and the results are not influenced by the researcher's perceptions and opinions (Maree & Pietersen, 2010). Quantitative methodology can also be time efficient as the data collection and analysis, using computerised software, can be done quickly (Creswell, 2014).

3.2.3 JUSTIFICATION FOR THE POSITIVIST/QUANTITATIVE PARADIGM

The purpose of this study was to ascertain the extent to which educational psychologists in South Africa are familiar with and use dynamic assessment. Numerous international but few national studies were found on the use of dynamic assessment. A study was therefore needed to determine South African educational psychologists' view and use of dynamic assessment. In order to reach as many educational psychologists in South Africa as possible, the researcher had to use a data collection instrument that could be easily distributed to most of them, and, in terms of time and finances, a survey was considered the most suitable instrument.

The positivist and quantitative paradigm in this study had several advantages and disadvantages. For example, the researcher was able to reach many educational psychologists around South Africa by using a survey in a short time and at minimal cost. The researcher had limited contact with the respondents and did not actively engage in the research process, which meant the study remained objective and the theoretical focus was clear. The researcher did, however, have some email contact with the respondents when the survey was sent out and thus was not completely alienated from the study.

3.3 RESEARCH DESIGN

A descriptive cross-sectional survey was used as the data collection instrument. Such a survey can be seen as a method of observation that entails the analysis of data collected at a specific point in time (Babbie, 2012; Creswell, 2012; Creswell, 2014). It is the instrument a researcher uses to ask questions and record respondents' answers numerically (Trochim & Donnelly, 2006). Web-based surveys are based on the same principles as other surveys except that they are sent, completed, and returned via the internet (Babbie, 2012).

A descriptive cross-sectional survey involves the whole population or a part thereof in investigating a specific interest or the frequency of a specific characteristic (Olsen & St. George, 2004). According to Olsen and St. George (2004), cross-sectional surveys are valuable when evaluating attitudes, perceptions, beliefs, and knowledge about something specific. Cross-sectional studies are carried out at single point in time or over a short period (Babbie, 2012). A cross-sectional design uses a single questionnaire per respondent (Maree & Pietersen, 2010). Thus, a defining feature of a cross-sectional study is that it can compare different population groups at a single point in time (Creswell, 2012). Cross-sectional surveys also include a description of data as well as inferences from the survey data (Seabi, 2012).

Descriptive cross-sectional surveys have several advantages as well as disadvantages. The advantages are that they enable the researcher to gather data relatively quickly (Seabi, 2012), they are more economical (Babbie, 2012; Seabi, 2012; Maree & Pietersen, 2010; Neuman, 2011), and there is limited influence from the researcher. Disadvantages of surveys are that no one assists respondents with any questions they may have (Maree & Pietersen, 2010); only a few respondents may return the survey; and the researcher may have little control over the environment and therefore cannot clarify answers for in-depth understanding or prevent incomplete surveys (Van Vuuren & Maree, 1999).

In the present study, the advantages were that the researcher could use existing surveys to compile the survey that was used in the study – this meant that the data could be collected within two weeks of the initial email. Web-based surveys are economical as there are no postage fees, and all communication can take place via email. In this study, the disadvantages were that not as many respondents replied as hoped for, even though reminder emails were sent out.

3.4 SAMPLING

Sampling in the study began as purposive sampling but progressed to snowball sampling. Purposive sampling is used when a researcher is looking for a specific sample with a specific goal in mind (Maree & Pietersen, 2010). The purposive sampling here was done by stipulating inclusion criteria and selecting the population that met the criteria.

The inclusion criteria in this study did not interfere with the sampling methods. The survey was not sent to all psychologists in South Africa as the sampling was purposive and included only educational psychologists. The aim was to investigate how educational psychologists use dynamic assessment with

children. The sample used for the study represented the population from which the sample was selected, and, as Babbie (2012) mentioned, everyone was included in the sample. The following criteria were used for the purposive sampling.

- educational psychologists
- educational psychologist who are registered with the board as an educational psychologist
- educational psychologists who assess children
- educational psychologists currently practising in South Africa
- educational psychologists who have access to an email address

Snowball sampling is a non-probability sampling technique existing respondents' recruit future subjects from their acquired network (Babbie, 2012). Snowball sampling occurs when the population that receives the survey makes contact with their own professional and/or social networks and further distributes the survey (Babbie, 2012). In the present study, when the survey was sent out to the 1200 educational psychologists on the mailing list, two psychologists approached the researcher, via email, requesting permission to distribute the survey to other educational psychologists in their network. It emerged that not all educational psychologists in South Africa received the survey as they were registered in two registration categories or incorrect or no email addresses were on the HPCSA distribution list.

Based on information obtained from the HPCSA, 1500 educational psychologists were registered with the HPCSA in September 2015 of whom only 1200 had email addresses. These email addresses were then purchased from the HPCSA. The sample therefore consisted of 1200 educational psychologists. Of this initial sample, 165 email addresses were incorrect, which reduced the sample to 1035. However, this number grew to 1086 after snowball sampling.

3.5 DESIGNING THE SURVEY

As stated in Chapter 1, the survey for this study was compiled using existing surveys (Haney & Evans, 1999; Lidz, 1992; Molano, 2007) and customising them to the South African context with the permission of the authors (see Appendix E). The following surveys were used: the National Survey of School Psychology Trainers (Lidz, 1992); the National Dynamic Assessment Survey (Haney & Evans, 1999); the dynamic approach – decreasing cultural bias in the cognitive abilities assessment of Latino children (Molano, 2007). See Appendix C for the original surveys used in earlier studies (Haney & Evans, 1999; Lidz, 1992; Molano, 2007). In addition to the questions from the existing surveys that were used, other questions that emerged from an in-depth literature review by the researcher were also included in the survey. See Table 3.1 for the questions from the existing surveys as well as those added to the present survey.

The survey consisted of 29 questions. The respondents, however, did not have to answer all 29 questions as a result of the customisation of the survey, which will be discussed later in Section 3.5.1.2. The survey was created using SurveyPlanet, which is a platform for creating web-based surveys and sending them via

email to respondents. The survey was available only in English and consisted of different sections. See Table 3.1 for the questions and sections of the survey.

3.5.1 SELECTION OF ITEMS

The items that were included in the survey were selected using a deductive process that commenced with an in-depth literature review as well as a review of existing surveys. The items that were considered suitable for the study were then selected. Babbie (2012) describes a deductive study as one that starts with a general principle and then moves towards a more specific principle. The sequence in which this takes place usually begins with a more logical and theoretical orientation after which there is a move to observations that are used to verify the expected phenomenon, trends, or patterns (Babbie, 2012). According to Babbie (2012), the starting point of deductive reasoning is always the question 'why', which then moves to answer 'whether' questions. Deductive reasoning is also considered a process where the researcher starts with broader literature to develop a research question and then collects data to support the research question (Driscoll, 2011). Diagram 3.1 below indicates how this study was deductive in nature.

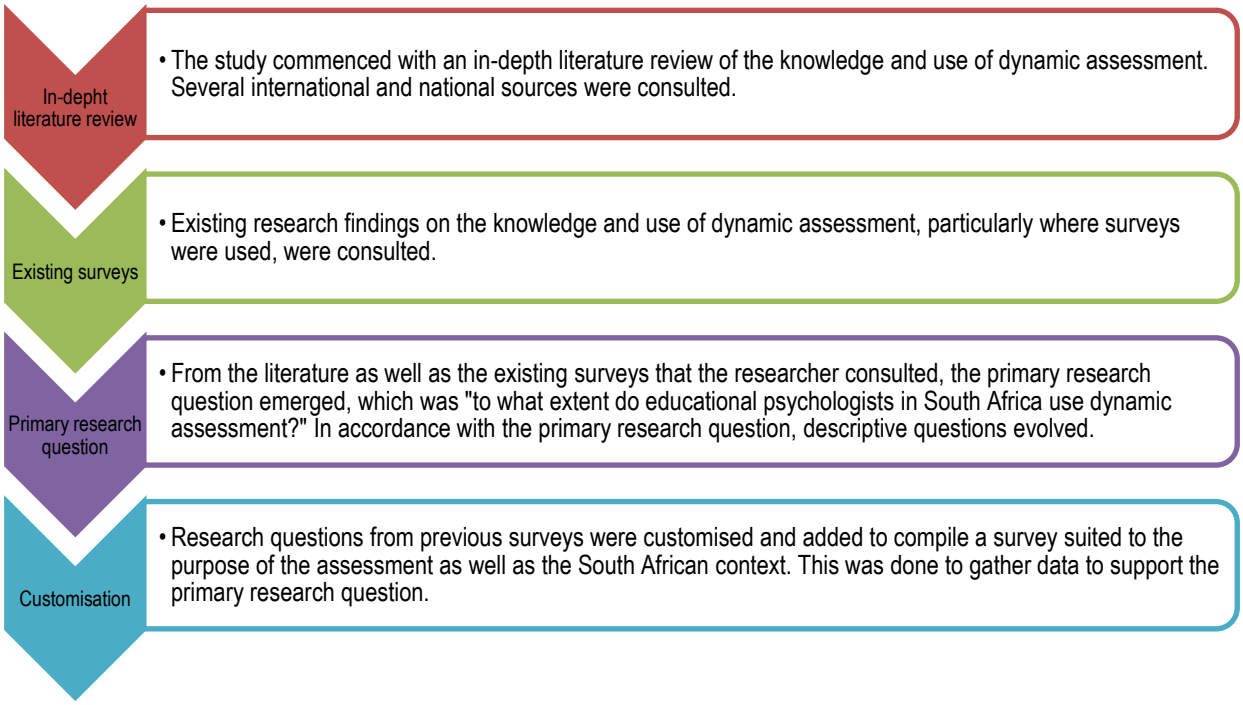

Figure 3.1: Deductive reasoning in the study

Table 3.1 below lists the questions that were included in the survey. The questions were not numbered in the survey but were in the sequence as indicated in Table 3.1, which provides the following information: the question number in the sequence it appeared in the survey; the question; the options the respondents could select from; whether the question was from existing surveys, adapted, or newly added; the objective of the question; and, lastly, whether the question was a 'customised' question.

Table 3.1: Selection of items for the survey

Question number	Question asked	Options that could be selected	Included from existing surveys	Objective of question	Customisation question[3]
1	What is your year of birth?	• Year in which the educational psychologist was born.	Yes, Molano (2007).	To contribute to biological information and to create the context from which the educational psychologist answered.	No.
2	What is your gender?	• Male. • Female.	Yes, Molano (2007).		No.
3	What is your level of education?	• Master's degree. • Doctoral degree.	Yes, Molano (2007).		No.
4	How many years have you been practising as an educational psychologist?	• Less than 3 years. • 4-7 years. • 8-11 years. • 12-15 years. • 16 or more years. • Other, please specify.	Yes, Haney and Evans (1999), Lidz (1992), and Molano (2007).		No.
5	In which type of setting are you currently employed? ➢ Respondents could select more than one option in this question	• School setting. • Private practice. • Hospital setting. • Community mental health setting. • Outpatient medical/psychiatric clinic. • Other, please specify.	Yes, Haney and Evans (1999), Lidz (1992), and Molano (2007).		No.
6	In what province are you currently practising?	• Gauteng. • Western Cape. • Northern Cape. • Free state. • Limpopo. • KwaZulu-Natal. • Mpumalanga.	Yes, adapted from Haney and Evans (1999), Lidz (1992), and Molano (2007) to suit the South African context.		No.

[3] Customisation questions will be discussed in more detail in Section 3.5.1.2 under Customisation

		• North West. • Eastern Cape.			
7	Please indicate the number of psychological assessments that you (and/or someone you supervise) have conducted in the past 12 months:	• 0. • 1-10. • 11-20. • 21-30. • 31-40. • 41-50. • More than 50. • Other, please specify.	Yes, Molano (2007).		No.
8	Which assessment instruments do you mainly use when measuring the cognitive abilities of children? ➢ Respondents could select more than one option in this question	• Senior South African Individual Scale Revised (SSAIS-R). • Junior South African Individual Scale (JSAIS). • Wechsler Scales. • Kaufman Assessment Battery for Children. • The Learning Potential Assessment Device. • Cognitive Modifiability Battery. • Individual Scale for General Scholastic Aptitude (ISGSA). • Grover Counter Scale (GCS). • Paper and Pencil Games. • Cognitive Assessment System (CAS). • Raven's Progressive Matrices. • Learning Potential Computerized Adaptive Test (LPCAT). • Other, please specify.	Yes, Molano (2007). This question was adapted to suit the South African context. South African assessment measures were included in this study.		No.

9	Please read the following statement and answer the subsequent questions. ➢ Respondents could select both options in this question	• I read the passage. • Other, please specify.	Yes, Molano (2007).	The purpose of this question was to orient the respondent to the questions about dynamic assessment that followed.	No.
10	Are you familiar with dynamic assessment?	• Yes. • No.	Yes, Lidz (1992) and Molano (2007).	Aimed at determining what percentage of educational psychologists are familiar with dynamic assessment.	Yes. • If a respondent answered "yes", he/she was taken to Question 14 to investigate the extent of his/her familiarity and to continue with the survey. • If a respondent answered "no", he/she was taken to Question 11 to find out whether he/she would like to find out more about dynamic assessment.
11	Would you like to know more about dynamic assessment?	• Yes. • No.	No.	The purpose of this question was to determine whether educational psychologists wanted to know more about dynamic assessment if they indicated that they were not aware of the model. This was important to the researcher as it has implications for future recommendations on courses or future training.	Yes • If a respondent answered "no", he/she was taken to Question 12 to find out why he/she does not want to know more about dynamic assessment. • If a respondent answered "yes", he/she was taken to Question 13 to investigate how he/she would like to find out more about dynamic assessment.
12	Please indicate why not.	Any reason why the educational psychologist does not want to know more about dynamic assessment.	No.	The purpose of this question was to determine why educational psychologists do not want to know more about dynamic assessment if they	Yes, after answering this question, the respondent exited the survey with a "thank you message" to thank him/her for his/her responses.

				reported that they were not familiar with dynamic assessment.	
13	How would you like to be informed about dynamic assessment? ➢ Respondents could select more than one option in this question	• Universities. • CPD courses. • Online courses. • Private training. • Other, please specify.	No.	The purpose of this question was to determine how educational psychologists want to be informed about dynamic assessment if they reported that they were not familiar with dynamic assessment but want to know more about what it entails.	Yes, after answering this question, the respondent exited the survey with a "thank you message" to thank him/her for his/her responses.
14	To what extent are you familiar with dynamic assessment?	• Barely familiar. • Somewhat familiar. • Quite familiar.	Yes, adapted from Haney and Evans (1999), Lidz (1992), and Molano (2007). In this study, the researcher decided that the response "not at all familiar" should not be an option as the respondents had already answered that they were familiar with dynamic assessment.	The purpose of this question was to find out how familiar educational psychologists are with dynamic assessment.	No.
15	How did you obtain your knowledge about dynamic assessment? ➢ Respondents could select more than one option in this question	• Reading. • Workshop. • Coursework. • Internship. • Clinical setting. • Academic training. • Other, please specify.	Yes, adapted from Haney and Evans (1999), Lidz (1992), and Molano (2007). The researcher added the option of academic training to investigate whether tertiary institutions contribute to knowledge about dynamic assessment.	The purpose of this question was to determine how educational psychologists became aware of dynamic assessment.	No.
16	Did your training equip you to perform dynamic assessment competently?	• Yes. • No.	No.	The purpose of this question was to determine whether educational psychologists experience their tertiary	Yes. • If the respondent answered "no", he/she was taken to Question 17 to determine

				education as sufficient in training them to use dynamic assessment.	whether he/she would like to know more about dynamic assessment. • If the respondent answered "yes", he/she was taken to Question 20 to continue with the survey.
17	Would you like to know more about dynamic assessment?	• Yes. • No.	No.	The purpose of this question was to determine whether the educational psychologists wanted to know more about dynamic assessment if they had indicated that they were not aware of the model.	Yes. • If the respondent answered "no", he/she was taken to Question 19 to answer why he/she did not want to know more about dynamic assessment. • If the respondent answered "yes", he/she was taken to Question 18 to determine how he/she would like to learn more about dynamic assessment.
18	How would you like to be informed about dynamic assessment? ➢ Respondents could select more than one option in this question	• Universities. • CPD courses. • Online courses • Private training • Other, please specify	No.	The purpose of this question was to determine how the educational psychologists would like to be informed about dynamic assessment if they had reported that they did not experience their academic training as sufficient but wanted to know more about dynamic assessment and how to use it.	Yes, after answering this question, the respondent exited the survey with a "thank you message" to thank him/her for his/her responses.
19	Please comment why not.	Any reason why educational psychologists do not want to know more about dynamic assessment.	No.	The purpose of this question was to determine why the reasons educational psychologists did not want to know more about dynamic assessment if they had reported that they did not	Yes, after answering this question, the respondent exited the survey with a "thank you message" to thank him/her for his/her responses.

				experience their academic training as sufficient.	
20	What is your attitude towards dynamic assessment?	• Very positive. • Somewhat positive. • Not very positive. • Other, please specify.	No.	The purpose of this question was to determine educational psychologists' attitudes to dynamic assessment.	No.
21	Which of the following advantages of dynamic assessment have you experienced? ➢ Respondents could select more than one option in this question	• Considers the child's potential as well as existing problem-solving skills. • Positive assessment experience for the child. • Informs intervention. • Identifies how the child learns. • Identifies teaching strategies that will work best for the child. • Implies change. • Makes provision for the effect of educational and social disadvantage. • Indicates how the removal of learning barriers may change a child's performance. • Focuses on the child's ability but also on how the child approaches tasks and which thought processes are used. • Decreases cultural bias in assessment. • Other, please specify.	Yes, adapted from Haney and Evans (1999), Lidz (1992), and Molano (2007). The researcher added more advantages of dynamic assessment by doing a thorough literature review and combining it with the existing surveys.	The purpose of this question was to determine what the educational psychologists saw as the advantages of dynamic assessment.	No.
22	Which of the following disadvantages of dynamic assessment have you experienced? ➢ Respondents could select more than one option in this question	• Approaches used in dynamic assessment are lengthy in terms of the mediation of learning processes.	Yes, adapted from Haney and Evans (1999), Lidz (1992). and Molano (2007).	The purpose of this question was to determine what the educational psychologists saw as the disadvantages of dynamic assessment.	No.

		• Requires the practitioner to do additional planning to perform curriculum-based interventions. • Practitioners need to be well trained. • Does not give a standard score or compare the child to other children the same age. • Its validity and reliability are often questioned. • Other, please specify.	The researcher added more disadvantages of dynamic assessment by doing a thorough literature review and combining it with the existing surveys.		
23	Have you (and/or someone you supervised) used dynamic assessment in the past six months?	• Yes. • No.	Yes, adapted from Molano (2007).	The purpose of this question was to determine whether the educational psychologists used dynamic assessment.	Yes • If the respondent answered "no", he/she was taken to Question 25 to determine possible reasons for not using dynamic assessment. • If the respondent answered "yes", he/she was taken to Question 24 to continue with the survey.
24	How often in the past six months have you used dynamic assessment?	• At least once a week. • At least once every three months. • At least once every six months.	Yes, adapted from Haney and Evans (1999), Lidz (1992). and Molano (2007). The researcher decided that the response "not at all" should not be an option as the respondents had already answered that they had used dynamic assessment in the past six months.	The purpose of this question was to determine how often the educational psychologists used dynamic assessment in a six-month period.	No.
25	If you are familiar with dynamic assessment but do not use it every six months, it is due to –	• Approaches used in dynamic assessment are lengthy in terms of the mediation of learning processes.	Yes, adapted from Haney and Evans (1999),	The purpose of this question was to investigate why the educational psychologists did	Yes, after answering this question, the respondent exited the survey with a "thank you

	➢ Respondents could select more than one option in this question	• Requires practitioners to do additional planning to perform curriculum-based interventions. • Practitioners need to be well trained. • Does not give a standard score or compare the child to other children the same age. • Validity and reliability of dynamic assessment are often questioned. • Other, please specify.	Lidz (1992), and Molano (2007). The researcher added more additional reasons by doing a thorough literature review and combining it with the existing surveys.	not use dynamic assessment if they had indicated that they had not used dynamic assessment in the past six months.	message" to thank him/her for his/her responses.
26	Which of the following dynamic assessment instruments/techniques do you use when using dynamic assessment? ➢ Respondents could select more than one option in this question	• Learning Potential Assessment Device. • Graduated Prompts Approach. • Cognitive Modifiability Battery. • Swanson-Cognitive Processing Test. • Testing the Limits. • Learning Potential Computerized Adaptive Test (LPCAT). • Butterfly Dynamic Assessment Battery. • Non-standardised Curriculum-based Dynamic Assessment. • None of the above • Other, please specify.	Yes, adapted from Molano (2007). The researcher customised the options regarding what dynamic assessment instruments were available in South Africa.	The purpose of this question was to investigate the dynamic assessment instruments that the educational psychologists used when using dynamic assessment. The data yielded by this question could be useful for future studies on dynamic assessment.	No.
27	In which one of the following instances are you most likely to use dynamic assessment? ➢ Respondents could select more than one option in this question	• Children who present with an emotional disturbance, personality disorder, or learning impairment. • Children who come from a different cultural or linguistic background to the language of the assessment.	Yes, adapted from Haney and Evans (1999), Lidz (1992) and Molano (2007)., The researcher added more instances by doing a thorough literature review and	The purpose of this question was to investigate in what instances the educational psychologists were more likely to use dynamic assessment. The data yielded by this question could be useful for future studies on dynamic assessment.	No.

		• Children affected by inequalities caused by a lower socio-economic status. • When discrepancies seem to exist between the children's aptitude and performance. • Where standardised assessments yield low or borderline scores when assessing cognitive functioning. • Other, please specify.	combining it with the existing surveys.		
28	How likely are you (and/or someone you supervise) to continue including dynamic assessment instruments in your psychological assessment?	• Very likely. • Likely. • Somewhat likely. • Not likely. • Highly unlikely. • Other, please specify.	Yes, Molano (2007).	The purpose of this question was to determine the future use of dynamic assessment.	No.
29	How likely are you (and/or someone you supervise) to administer (or continue to administer) dynamic assessment with children from a different cultural background, socio-economic status, language, and learning difficulties?	• Very likely. • Likely. • Somewhat likely. • Not likely. • Highly unlikely. • Other, please specify.	Yes, adapted from Molano (2007). The researcher adapted the question to suit the South African context.	The purpose of this question was to determine the future use of dynamic assessment with diverse children.	No.

3.5.2 CUSTOMISATION

Customised or branching questions, also referred to as piping (Fink, 2017) or skip logic (Peytchev, Couper, McCabe, & Crawford, 2006), occur when researchers adapt surveys in order to take respondents to the next question based on their answers to the previous question (Fink, 2017; Peytchev et al., 2006). Peytchev et al. (2006) state that electronic customisation questions fulfil an important role as they prevent respondents from skipping applicable questions ('errors of omission') and also from answering questions that are not applicable to them ('errors of commission'). Customisation questions thus ensure that respondents are focused in terms of what questions they have to answer. Such questions are therefore considered effective when researchers implement them in online surveys (Fink, 2017).

The researcher in the present study decided that customisation questions should form part of the survey. This strategy of customising the survey was simple in that it allowed the respondents who reported that they were not familiar with dynamic assessment to exit the survey after Question 10. The customisation process was used also to distinguish between those respondents who were familiar with dynamic assessment but not competent in it from those who were familiar and competent. The respondents who were familiar but not competent exited the survey after Question 16. The final customisation process was used to distinguish between those respondents who had used dynamic assessment in the past six months and those who had not. The respondents who had not used dynamic assessment in the past six months exited the survey after Question 23. The customisation process, although it benefited the respondents, had some limitations, which are discussed in more detail in Chapter 5.

The figure below shows the branching questions used in the survey. The questions after which some of the respondents exited the survey are marked in orange. The numbers of the questions correspond with the question numbers in Table 3.1.

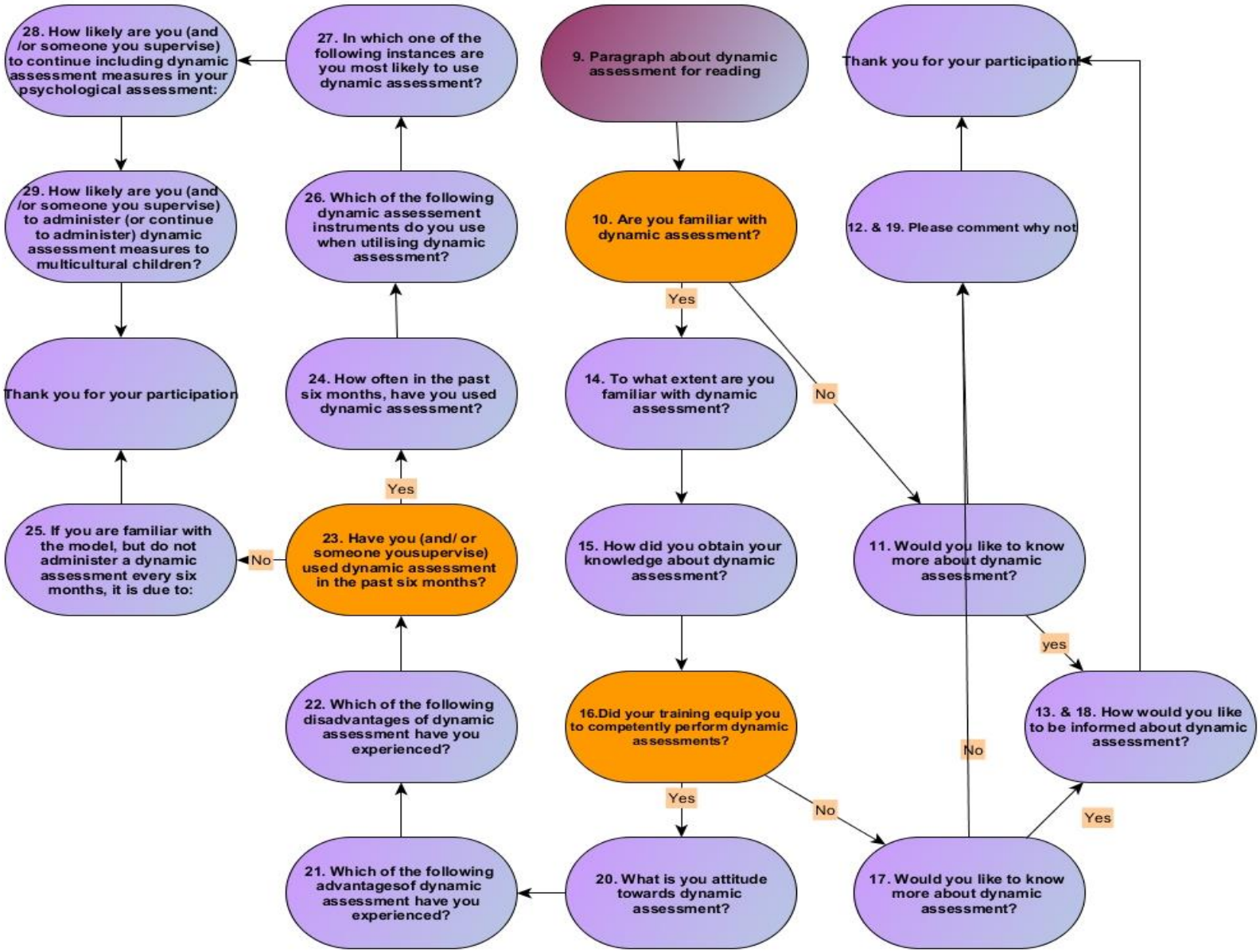

Figure 3.2: Survey questions

3.5.3 PILOTING THE SURVEY

Piloting or a pilot test is the process of making changes based on feedback after the initial survey has been compiled and sent to a sample group similar to that expected to complete the survey (Creswell, 2012; Driscoll, 2011; Fink, 2017). The purpose of the pilot test in the present study was to determine whether the questions were easily understandable and to obtain feedback on the time it took to complete and on the overall presentation of the survey (Creswell, 2012; Driscoll, 2011). A pilot test generally also increases the reliability of a survey (Fink, 2017). In this study, the sample for the pilot test consisted of five intern educational psychologists and the researcher's supervisor. The sample members to whom the survey was sent were asked questions relating to the clarity and conciseness of the questions, whether they understood the questions, and how time consuming the test was. Convenience sampling was used as the five educational psychologists interns worked with the researcher. They were the ideal piloting sample as they did not form part of the population but had the knowledge to assist the researcher. The survey items were adjusted and refined according to the feedback obtained from peers. This was done to enhance the capacity to obtain accurate data.

3.5.4 DISTRIBUTING THE SURVEY

The 1200 respondents were contacted via email on 6 September 2015. The email included an invitation to respond, the informed consent form, and a link to the survey (see Appendix F). The respondents were directed to the link in the email and asked to click on the link if they were prepared to respond. They were then directed to the informed consent page. The respondents who had stated that they were not familiar with dynamic assessment were then asked whether they wanted to know more about it and how they would like to learn more if they wanted to learn more, and they were then directed to the 'thank you' page. An email reminder about the closing date was sent to all the respondents 16 days after the initial email had been sent, that is, on 22 September 2015 (see Appendix G).

To promote a higher response rate, the two-phase administration (adapted from the four-phase administration) of Salant and Dillman (as cited in Creswell, 2014) was implemented. The first phase was the email with an invitation/information letter, which was sent to each educational psychologist together with the electronic survey. The letter provided the psychologists with information about the study and invited them to participate. Phase 2 consisted of a reminder email about 16 days after sending the survey to remind them of the closing date.

3.5.5 CAPTURING OF DATA

The data obtained were captured on an Excel spreadsheet to determine the mean, mode, median, and standard deviation. SurveyPlanet made the data readily available to the researcher in a Comma Separated Value File (.csv) format. The researcher then captured the data on a Microsoft Excel Worksheet (.xlsx) on which the analysis could be done.

3.6 DATA ANALYSIS

The researcher used descriptive statistics to make sense of the data. Statistics was a suitable data analysis method as the researcher wanted to quantify the educational psychologists' use of dynamic assessment. Descriptive statistics helped the researcher investigate the research question by providing the data numerically (Chambliss & Schutt, 2013; Nightingale, 2012). With the help of descriptive statistics, one can analyse data by looking at the central trends, which are summarised in terms of mode, median, mean (Chambliss & Schutt, 2013), standard deviation and range, and how scores relate to one another in terms of percentile ranks (Creswell, 2014). In addition, it describes trends in the data to a question or variable either dependent or independent (Creswell, 2014).

The data were analysed using the Statistical Package for the Social Sciences (SPSS) by looking at the frequencies, means, and percentages. SurveyPlanet automatically captured the data obtained from the respondents on an Excel spreadsheet, and the data were then imported into the SPSS to calculate the statistics. The data in the studies by Molano (2007), Lidz (1992), and Haney and Evans (1999) were analysed in the same way. Lidz (1992) reported that frequencies and percentiles were used as they seemed to be the most appropriate statistics.

There are four different types of measurement: nominal data, ratio data, ordinal data, and interval data (Chambliss & Schutt, 2013). In this study, two types of measurement were used, namely nominal data that were collected in the biographical section and ordinal data that were collected using the multiple-choice questions in the survey.

The survey formed part of a mini-dissertation where the researcher was required to display knowledge of novice research skills. In the study, the researcher did not use advanced statistics but, rather, simple descriptive statistics to make sense of the data.

3.7 QUALITY CRITERIA

In positivistic research, an instrument (in this case a descriptive survey) is valid when it measures what it is supposed to measure. Reliability can be seen when the same instrument (in this case a descriptive survey) provides the same results if is administered to the same person more than once (Maree & Pietersen, 2010).

3.7.1 VALIDITY

There are various types of validity: content validity, construct validity, face validity, and external validity (Creswell, 2014). There is content validity when the items in a survey measure what they are supposed to measure whereas construct validity is about whether the items measure concepts dealt with in a study (Creswell, 2014). Face validity refers to the appearance of the instrument (Babbie, 2012), and external validity refers to whether the results will be generalisable to the larger population (Babbie, 2012). In the present study, only content validity, face validity, and external validity were relevant.

Content validity was ensured by making sure that the survey covered all relevant areas of dynamic assessment and measured what it was supposed to measure. This was determined by the researcher and the supervisor on the basis of the pilot study. Validity was increased due to the fact that existing surveys were used in the study. These surveys were: the National Survey of School Psychology Trainers (Lidz, 1992), the National Dynamic Assessment Survey (Haney & Evans, 1999), and the dynamic approach – decreasing cultural bias in the cognitive abilities assessment of Latino children (Molano, 2007). Even though these existing surveys were used to conduct research in the United States, the theory of dynamic assessment cuts across all cultures. These surveys had already undergone a rigorous research process to ensure their reliability and validity, and therefore their use in the present study increased its content validity. In addition to the use of existing surveys, the present survey was also submitted to five peers as well as the researcher's supervisor for review and feedback. Face validity was ensured by using an online web-based survey platform that made the survey user-friendly by using fonts that were easy to read and by keeping the questions short and to the point.

The validity of a web-based survey platform depends on the research methodology as well as the survey questions (Evans et al., 2009). The methodology in this study was well planned, and the majority of the questions were from existing surveys. This means that the validity of the platform was sufficient for this particular study.

3.7.2 RELIABILITY

The reliability of a survey is measured by Cronbach's alpha (Aron, Aron, & Coups, 2014). Measures used in studies in the social and behavioural disciplines require a reliability of at least 0.7 (ideally, closer to 0.9) to be considered meaningful (Aron, Aron, & Coups, 2014). According to Aron, Aron, and Coups (2014), studies measuring the attitudes of people require a reliability of at least 0.6-0.7; scales measuring proficiency in a certain area require a reliability of 0.8; and scales used for selection purposes require a reliability of at least 0.9 to be considered reliable.

Reliability in this study was, however, ensured in that existing surveys were used that had already been through a rigorous research process. Changes to the survey were presented to four peers and a qualified educational psychologist for review before it was sent to the respondents.

Cronbach's alpha could not be calculated for three reasons: the sample size, the limited indicators per construct, and the goal of the study. Although 173 respondents began the survey, only 36 answered the questions on the use of dynamic assessment. Graziano and Raulin (2013) state that the smaller the sample size, the more difficult it is to calculate a reliability score. This does not mean that the survey was not meaningful in providing valuable information but rather affected by the low sample size. A limitation was therefore that only 36 respondents answered the majority of the questions.

The second reason was the limited indicators per construct. Before Cronbach's alpha on a construct can be calculated, more than one question has to be asked to ensure that the construct is sufficiently covered (Graziano & Raulin, 2013). For instance, regarding the familiarity construct, only two questions were asked

on the respondents' familiarity with dynamic assessment. The one question had a 'yes' and 'no' answer, and the other question had answers such as 'barely familiar', 'somewhat familiar' and 'quite familiar'. Cronbach's alpha could not be calculated because the sets of answers were different.

The third reason for not being able to calculate Cronbach's alpha was the goal of the survey. As stated earlier, when a standardised measurement is developed to measure certain attitudes, placement, or make selections, the instrument is required to have a Cronbach's alpha closer to 0.9 (Aron, Aron, & Coups, 2014). This survey was, however, not developed to be standardised but merely to describe the extent to which educational psychologists in South Africa are familiar with and use dynamic assessment.

3.8 ETHICAL CONSIDERATIONS

The ethical guidelines of the University of Pretoria and the Health Professions Council of South Africa were adhered to. The principle of not doing harm to any individual is the foundation of ethical conduct and was upheld throughout the research process. This principle was upheld also by being open and honest with the respondents, answering their questions, keeping their information anonymous and confidential, and informing them about the research process and expectations. In the next section, ethical principles are discussed followed by how the researcher applied them.

3.8.1 ANONYMITY AND CONFIDENTIALITY

Anonymity and confidentiality means respondents remain anonymous and unidentified and all information is kept confidential (Elias & Theron, 2012). In this study, the respondents did not have to provide the researcher with any identifying information, and the researcher also did not have access to any personal information on the respondents other than the email addresses to which the survey was sent. The responses from the respondents were automatically entered into a spreadsheet containing no identifying information about them. The researcher assured the respondents that all answers provided by them would remain confidential and anonymous.

Anonymity and confidentiality can be problematical in online surveys in particular. SurveyPlanet, however, make use of SSL security when completing a survey through their platform. SSL refers to a secure sockets layer, which means that data sent through the internet are encrypted to ensure that the information stays private (Beal, 2015). SurveyPlanet also offers the option of having a survey done completely anonymously, in other words, no IP address is captured. This, together with the fact that the researcher did not request any confidential and identifying information, means this online survey was confidential and anonymous.

Data obtained in the survey were captured by SurveyPlanet and stored in their repository. If the data were to be breached, only the data on the use of dynamic assessment would be available as no identifying information was required or captured. Such a breach could possibly only increase other people's knowledge about dynamic assessment and assessment practices in South Africa.

3.8.2 INFORMED CONSENT

Informed consent means the researcher provides respondents with all the necessary information about the study and what is expected of them before they decide whether to participate or not (Elias & Theron, 2012). In this study, the respondents were given sight of and signed a detailed consent letter and introductory statement before they began the online survey. The informed consent letter contained the following information: the purpose of the study; the invitation to respond; how long it would take to complete the study; assurance that the survey would be completely anonymous and that the responses would be confidential; possible risks; remuneration; assurance that participation was entirely voluntary; the closing date; the procedure for providing consent; contact details of the researcher and the supervisor. See Appendix B for the informed consent letter.

3.8.3 INTEGRITY

Integrity means the researcher aims to be honest and truthful with the research respondents throughout a study. In the present study, the researcher was honest and open with the respondents throughout the research process (Chambliss & Schutt, 2013). The researcher informed them frankly what the study was about and what would happen with the results.

3.9 CONCLUSION

This chapter described in detail the research paradigm, the methodological paradigm, the research design, and the research methodology. The advantages and disadvantages of each were also discussed and the reasons given for the different choices that were made. The chapter also outlined the procedures on which the study was based and how these procedures were applied.

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Chapter 4
Research Results and Findings

4.1 OVERVIEW OF THIS CHAPTER

This chapter covers the results of the survey, which are divided into four sections. The sections are aligned with the customisation process of the survey as discussed in Chapter 3. Table 4.1 below provides an overview of the four sections.

Table 4.1: Overview of the survey structure

	Question number	Question	Number of respondents who answered this question (n)	Continued with survey or exited survey
Section 1	1-10	• Bibliographical questions • Paragraph on dynamic assessment • Are you familiar with dynamic assessment?	173	173 started out with survey
	11	Would you like to know more about dynamic assessment?	52	52 exited survey
	12	Please comment why not	6	
	13	How would you like to be informed about dynamic assessment?	46	
Section 2	14 -16	• To what extent are you familiar with dynamic assessment? • How did you obtain your knowledge about dynamic assessment? • Did your training equip you to perform dynamic assessment competently?	121	121 continued with survey
	17	Would you like to know more about dynamic assessment?	69	69 exited survey
	18	How would you like to be informed about dynamic assessment?	60	
	19	Please comment why not	9	
Section 3	20 – 23	• What is your attitude towards dynamic assessment? • Which of the following advantages of dynamic assessment have you experienced? • Which of the following disadvantages of dynamic assessment have you experienced? • Have you (and or someone you supervised) used dynamic assessment in the past six months?	52	52 continued with survey
	25	If you are familiar with dynamic assessment, but do not administer a dynamic assessment every six months, it is due to the following reasons:	16	16 exited survey
Section 4	24 & 26-29	• How often in the past six months have you used dynamic assessment? • Which of the following dynamic assessment instruments/techniques do you use when using dynamic assessment?	36	36 continued with survey

Section 4		• In which one of the following instances are you most likely to use dynamic assessment? • How likely are you (and/or someone you supervise) to continue including dynamic assessment instruments in your psychological assessment? • How likely are you (and/or someone you supervise) to administer (or continue to administer) dynamic assessment to children from a different cultural background, socio-economic status, and language and with learning difficulties?		

As stated in Chapter 3, the survey was initially distributed to 1200 potential respondents. As many as 165 emails returned with a failure message. The remaining 1035 addresses appeared to be correct. Of them, 12 respondents replied that they were not going to respond because they were not currently practising as educational psychologists, they did not assess children, and so on. An additional 51 respondents were added to the sample after snowball sampling, and the survey was then distributed to 1086 possible respondents of whom 177 responded to the survey. Four survey respondents had to be excluded due to invalid answers, bringing the total number of respondents to 173. Figure 4.1 below illustrates the responses to the survey graphically.

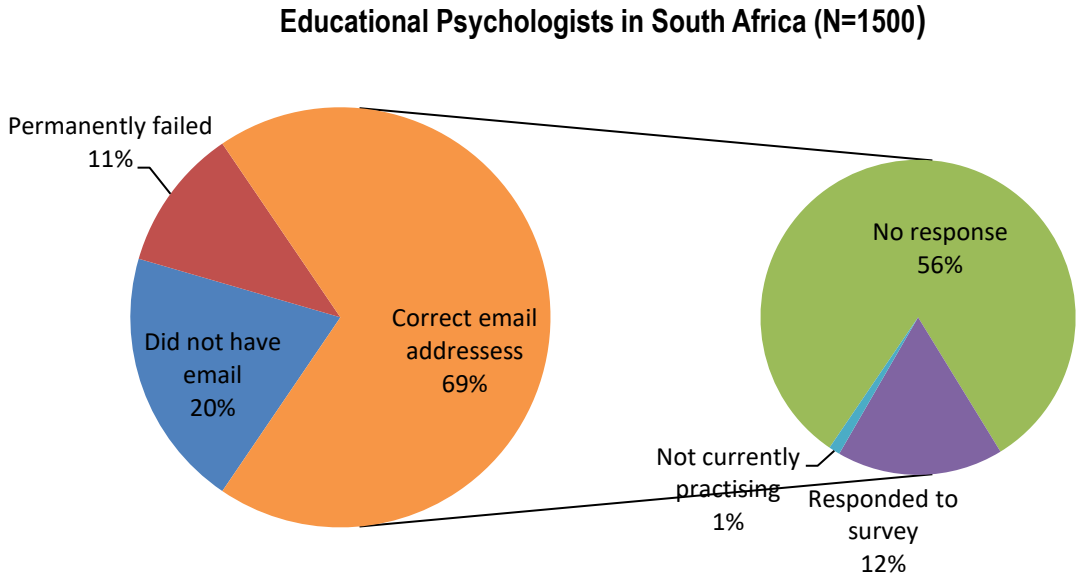

Figure 4.1: Graphic representation of responses to the survey

4.2 RESULTS

The results are discussed below under four different sections.

4.2.1 RESULTS FOR SECTION 1 – BIOGRAPHICAL INFORMATION AND FAMILIARITY WITH DYNAMIC ASSESSMENT

Biographical information that was requested from the respondents included age, gender, highest qualification obtained, years practising as an educational psychologist, setting they were practising in at

the time of the survey, province they were practising in, number of psychological assessments they performed, and what cognitive assessment measures they used when assessing clients.

The ages of the respondents ranged between 26 to 79 years (mean: 46,80; standard deviation (SD) = 12,47). A total of 87,30% (151/173 respondents) were women and 12,70% (22/173 respondents) were men. A total of 79,80% (138/173 respondents) had a Master's degree, and 20,20% (35/173 respondents) had a doctoral degree. A total of 27,20% (47/173 respondents) indicated that they had been practising for 16 years or longer; 22% (38/173 respondents) indicated that they had been practising for three or fewer years; 21,40% (37/173 respondents) indicated that they had been practising between four and seven years; 17,30% (30/173 respondents) indicated that they had been practising between eight and 11 years; and 12,10% (21/173 respondents) indicated that they had been practising between 12 and 15 years. A total of 41% of the respondents indicated that they were in private practice only, followed by 33,50% who reported that they were currently working in an outpatient/medical psychiatric clinic. A total of 32,90% (57/173 respondents) indicated that they had performed more than 50 psychological assessments in the past 12 months, followed by 16,80% who had performed between 1 and 10 assessments in the past 12 months. A total of 101 of the 173 respondents (58,40%) were from Gauteng, followed by 29 (16,80%) who were from the Western Cape. A summary of the biographical information with frequency scores is shown in Table 4.2 below.

Table 4.2: Frequency counts for selected variables (n=173)

Variable	Response	Raw data	Percent (%)
Age[4]	20-30 years	16	9,30
	31-40 years	50	28,90
	41-50 years	45	26,00
	51-60 years	39	22.50
	60 years and above	23	13.30
Gender	Male	22	12,70
	Female	151	87,30
Level of education	Master's degree	138	79,80
	Doctoral degree	35	20,20
Years practising as a psychologist	Less than 3 years	38	22,00
	4-7 years	37	21,40
	8-11 years	30	17,30
	12-15 years	21	12,10
	16 years or more	47	27,20
Setting currently practising in	Private practice	71	41,00
	School setting	25	14,50
	Hospital setting	1	0,60
	Community mental health setting	1	0,60

[4] Age: M: 46,18, SD: 12,47

Variable	Response	Raw data	Percent (%)
	Outpatient/Medical psychiatric clinic	0	0
	Selected two or more options[5]	58	33,50
	Other:	17	9,80
	Government		
	Retired		
	University		
	NPO/NGO		
	Multi-disciplinary team		
	Education district office		
	Medico-legal setting		
	Sibanye Gold mining industry		
	Nursery school		
	SAPS/Department of Justice		
Practising in province	Gauteng	101	58,40
	Mpumalanga	7	4,00
	North West	3	1,70
	Limpopo	4	2,30
	Western Cape	29	16,80
	Eastern Cape	11	6,40
	Free State	1	0.60
	KwaZulu-Natal	17	9,80
	Northern Cape	0	0,00
Number of psychological assessments conducted in the past 12 months	0	2	1,20
	1-10	29	16,80
	11-20	21	12,10
	21-30	24	13,90
	31-40	17	9,80
	41-50	23	13,30
	More than 50	57	32,90

The biographical questions were followed by a paragraph on dynamic assessment and ended with the question on how familiar the respondents were with dynamic assessment. The paragraph was included to ensure that all the respondents understood what dynamic assessment was and to facilitate their decision making on whether or not they had sufficient knowledge of dynamic assessment to complete the survey. The purpose of the paragraph was thus to eliminate any misconceptions about what dynamic assessment was and to avoid an inaccurate survey. The respondents had to read the paragraph and subsequently indicate that they had read and understood it. The respondents then had to indicate if they were familiar

[5] The respondents were given the opportunity to select more than one option. If more than one option was selected, the response was recorded under the particular category.

with dynamic assessment or not. The results of the question on familiarity with dynamic assessment are summarised below in Table 4.3.

Table 4.3: Frequency counts relating to familiarity with dynamic assessment

Variable	Response	Raw data	Percent (%)
Familiar with dynamic assessment (n=173)	No	52	30,10
	Yes	121	69,90

A total of 69,90% (121/173 respondents) indicated that they were familiar with dynamic assessment, and 30,10% (52/173 respondents) reported that they were not. If the respondents indicated that they were not familiar with dynamic assessment, they were then asked a further two questions regarding whether they wanted to know more about dynamic assessment, and then, if they responded 'yes', they were requested to indicate their preferences regarding the mode of training instruction. If they answered 'no', they were asked to give the reason(s) for not wanting to learn more about dynamic assessment. A total of 52 respondents completed the two questions and exited the survey at this point. The information on the mode of training instruction was given to those respondents who had indicated that they were not familiar with dynamic assessment. The question on preferred mode of training instruction was included in the survey because the responses could inform future training programmes. A summary with frequency scores of the respondents who were not familiar with dynamic assessment but wanted to learn more about it appears in Table 4.4 below.

Table 4.4: Frequency counts relating to the percentage of respondents who were not familiar with dynamic assessment and their future training needs

Variable	Response	Raw data	Percent (%)
Interested in learning about dynamic assessment (not familiar with dynamic assessment) (n=52)	No	6	11,50
	Yes	46	88,50

A total of 88,50% (46/52 respondents) indicated that they would like to know more about dynamic assessment, and 11,50% (6/52 respondents) indicated that they did not want to know more about dynamic assessment. The 88,50% (46/52 respondents) who indicated that they wanted to know more about dynamic assessment could select several possible options for learning more about dynamic assessment: 39,10% of the respondents selected the combination of the CPD[6] (Continued Professional Development) and an online training option. This was followed by the CPD only option, which 26,10% of the respondents selected. A summary of the ways this group of respondents wanted to find out more about dynamic assessment with frequency scores appears in Table 4.5 below.

[6] Continued professional development (CPD) refers to the process through which healthcare practitioners can update their knowledge and skills frequently in order to keep abreast of the latest research, knowledge, and skills (HPCSA, 2008).

Table 4.5: Ways to find out more about dynamic assessment

Variable	Response	Raw data	Percent (%)
Ways to find out more about dynamic assessment (n=46)	CPD courses	12	26,10
	Online courses	4	8,70
	Universities	0	0,00
	Private training	1	2,20
	University and CPD courses	2	4,40
	CPD courses and online training	18	39,10
	CPD courses, online training, and private training	3	6,50
	University, CPD courses, and online training	6	13,00

The six respondents who indicated that they did not want to know more about dynamic assessment were asked to explain why they did not want to. Their answers are shown below[7].

- "*I plan to no longer be involved with assessments of this kind.*"
- *"Because I don't do assessments."*
- *"Time constraints of my practice make it hard to take time off to learn new ways of assessing."*
- *"I like what I have read, but the interviews that I currently conduct do not have anything to do with learning/cognitive assessment per se. I am very much more involved with the effects of early secure/insecure attachment patterns on brain development."*
- *"I do not work mainly with cognitive assessment but career assessment."*
- *"Might stop practising.*"

4.2.2 RESULTS FOR SECTION 2 – EXTENT OF KNOWLEDGE ON DYNAMIC ASSESSMENT

A total of 121 respondents continued with Section 2 as they had indicated that they were familiar with dynamic assessment. This group represented 69,90% of the total sample that responded to the survey. Questions in Section 2 included questions on the extent of the respondents' knowledge of dynamic assessment, how they obtained their knowledge, and whether their training equipped them to perform dynamic assessment competently. Frequency scores relating to the extent of the respondents' knowledge of dynamic assessment are shown in Table 4.6.

[7] The responses of the respondents are verbatim with only very light editing in order to preserve the authenticity of the responses.

Table 4.6: Frequency counts relating to the extent of the respondents' knowledge of dynamic assessment

Variable	Response	Raw data	Percent (%)
Extent of familiarity with dynamic assessment (n=121)	Barely familiar	14	11,60
	Somewhat familiar	63	52,00
	Quite familiar	44	36,40

A total of 36,40% (44/121 respondents) indicated that they were quite familiar with dynamic assessment; 52,00% (63/121 respondents) were somewhat familiar; and 11,60% (14/121 respondents) were barely familiar. Figure 4.2 is a graphic representation of the extent of the respondents' knowledge of dynamic assessment.

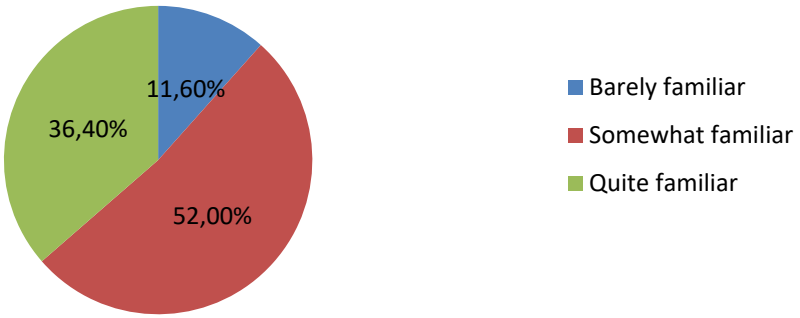

Figure 4.2: Extent of the respondents' knowledge of dynamic assessment

However, when the responses of this group of respondents are extrapolated to the sample that responded, to the question relating to their extent of knowledge it appears that only 25,40% of the 173 respondents were quite familiar with dynamic assessment, 36,40% were somewhat familiar, and 8,10% were barely familiar. Figure 4.3 is a graphic representation of the extrapolated data.

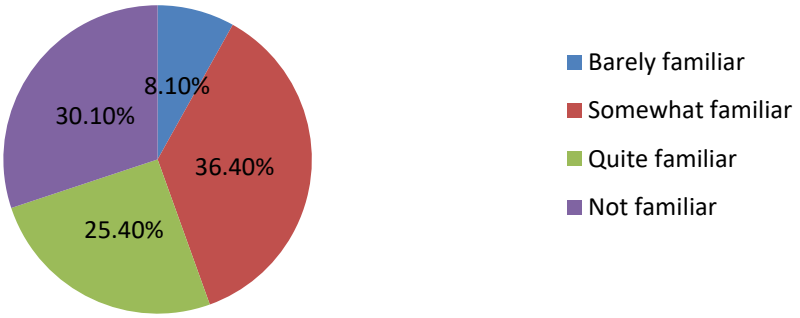

Figure 4.3: Extent of the respondents' knowledge of dynamic assessment extrapolated to the total sample of respondents

Following the question on the extent of the respondents' knowledge of dynamic assessment, the respondents were asked how they became familiar with dynamic assessment. They were given the opportunity to mark more than one option. The researcher made use of the following formula to calculate the contribution that each option made to the total number of responses:

($\frac{number\ of\ respondents\ that\ selected\ an\ option}{total\ number\ of\ responses\ (283)}\ x\ 100 = \%$). The results were as follows; 27% reported that they had obtained their knowledge through academic training, and 26% reported that they had obtained their knowledge through reading. Figure 4.4 illustrates the respondents' responses. The contribution of each option can be seen in Figure 4.4.

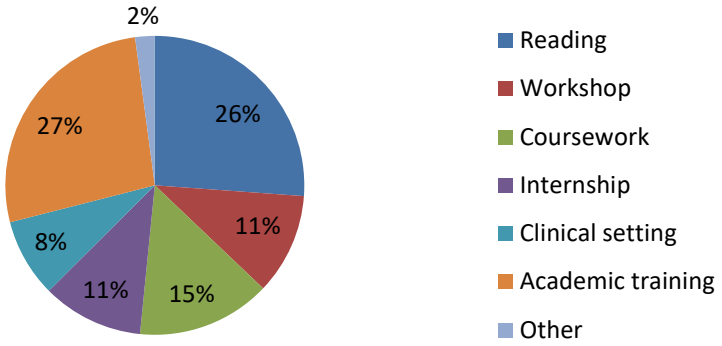

Figure 4.4: How knowledge of dynamic assessment was obtained

The last question in Section 2 was about whether the respondents' training equipped them to perform dynamic assessment competently.[8] A total of 43,00% (52/121 respondents) indicated that their training had been adequate whereas 57,00% (69/121 respondents) indicated that it had not been adequate for them to perform dynamic assessment competently. However, when the responses of this group of respondents are extrapolated to the sample that responded, to the question relating to whether their training equipped them to perform dynamic assessment competently it appears that only 30,10% of the 173 respondents experienced their training as having adequately equipped them to perform dynamic assessment. The respondents who indicated that they did not perceive their training to be adequate were taken to the exit questions after which they exited the survey. The researcher worked on the assumption that if they indicated that they were not competent they would not be able to answer the questions on the advantages, disadvantages, and use of dynamic assessment accurately. Table 4.7 summarises the frequency scores relating to the percentage of respondents who were interested in being trained in dynamic assessment.

Table 4.7: Frequency counts relating to the percentage of the respondents who wanted training in dynamic assessment

Variable	Response	Raw data	Percent (%)
Interested in being trained in dynamic assessment (n=69)	No	9	13,00
	Yes	60	87,00

[8] The definition of competent in this study is that an individual has skill and/or knowledge in a specific area (Hornby, 2010). The researcher worked from the assumption that in order for psychologists to use a specific method competently, they have to be properly trained, have sufficient knowledge, have adequate experience, and be acquainted with the ethical standards relating to the method (Allan, 2011; Foxcroft, Roodt, & Abrahams, 2009; HPCSA, 2006).

The 87,00% (60/69 respondents) who indicated that they would like to know more about dynamic assessment could select several possible training options. A total of 26,70% (16/60 respondents) selected the CPD only option, and 23,30% (14/60 respondents) selected the combination of the CPD and an online training option. A summary with frequency scores of the training options and how the respondents wanted to learn about dynamic assessment is shown in Table 4.8 below.

Table 4.8: Training options for learning about dynamic assessment

Variable	Response	Raw data	Percent (%)
Ways of finding out more about dynamic assessment (n=60)	CPD courses	16	26,70
	Online courses	6	10,00
	Universities	0	0,00
	Private training	1	1,70
	Other	1	1,70
	University, CPD courses and online training	4	6,70
	CPD courses and online training	14	23,30
	CPD courses, online training, and private training	4	6,70
	University, CPD courses and online training, private training	7	11,70
	University and CPD courses		
	Online and private training	4	6,70
	CPD courses and private training	1	1,70
		2	3,30

The nine respondents who indicated that they did not want to know more about dynamic assessment were asked to give their reasons[9]:

- "*I have observed it being used and have noticed that it was very time consuming and did not provide a very thorough assessment.*"
- "*It is not appropriate to use in my context of assessment. I do not assess in a 'therapeutic' capacity. I assess with the purpose of objectively establishing the clients' manner of thinking. I may ask questions such as 'why do you think so?' or 'how do you solve this problem?' or 'what are you thinking?' but I do not give any guidance or change the person's way of behaving/thinking during the assessment.*"
- "*I think I know enough for what is needed*."
- "*I specialise in the field of neurodevelopmental causes of learning difficulties. Very successful so I don't feel the need for other assessment formats*."

[9] The responses of the respondents are verbatim with only very light editing in order to preserve the authenticity of the responses.

- "*The great trouble is the volumes of tests that give a good comprehensive assessment and all these tests are already time consuming and cognitively draining on the child. Practical implications such as clients' limited medical aid, time constraints in the practice, and the child's ability to concentrate for even longer if there is a teaching and a retesting that takes place*."
- "*I have adequate knowledge with regards to it*."
- "*It can be time consuming and thus expensive. However, agree with the idea in principle, i.e. if it provides therapists with a greater repertoire of skills re assessments and interventions.*"
- "*My area of focus is different. More interested in therapy and presenting workshops than assessments.*"
- "*Not objective*."

A total of 69 of the 121 respondents exited the survey at this stage, and 52 respondents continued to the next section of the survey.

The respondents who indicated that they were not familiar with dynamic assessment and those who indicated that they did not perceive their training as having adequately equipped them to perform dynamic assessment were asked whether they wanted to learn more about dynamic assessment. See Table 4.9 below for a breakdown of these responses.

Table 4.9: Training and learning about dynamic assessment

	Number of respondents	Number of respondents ÷ total sample (n) = %
Wanted to know more about dynamic assessment	106	61,30%
Do not want to know more about dynamic assessment	15	8,70%

4.2.3 RESULTS FOR SECTION 3 – ATTITUDES, ADVANTAGES, DISADVANTAGES, AND USE OF DYNAMIC ASSESSMENT

In Section 3, the 52 remaining respondents continued with the survey. This group represented 30,10% of the total number of respondents who responded to the survey. Questions in Section 3 included questions on the respondents' attitudes towards dynamic assessment, perceived advantages and disadvantages of dynamic assessment, and whether they had used dynamic assessment in the past six months.

The first question in Section 3 was on their attitude towards dynamic assessment. The majority of the respondents, 63,50% (33/52 respondents), reported that they were very positive towards dynamic assessment; 30,80% (16/52 respondents) reported that they were somewhat positive towards dynamic assessment, and 5,80% (3/52 respondents) reported that they were not very positive. Figure 4.5 illustrates the respondents' attitudes towards dynamic assessment.

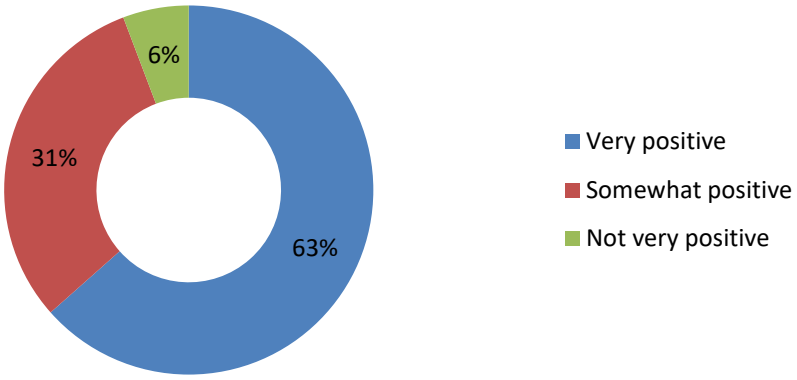

Figure 4.5: Attitudes towards dynamic assessment

The next question was on the perceived advantages of dynamic assessment. A total of 52 respondents responded to this particular question – here it is important to note that the respondents were given the option to select more than one advantage. The researcher made use of the following formula to calculate the contribution that each option made to the total number of responses: $(\frac{respondents\ that\ selected\ advantages}{total\ number\ of\ responses\ (355)}\ x\ 100 = \%)$

The question on the perceived advantages was answered by the respondents who indicated that they were familiar with dynamic assessment and considered themselves competent in it. Table 4.10 below summarises the responses in terms of the advantages.

Table 4.10: Perceived advantages of dynamic assessment

Variable	Perceived advantage	Percent (%)
Perceived advantage (n=52)	It considers the child's potential as well as existing problem-solving skills	12,40
	It is a positive assessment experience for the child	9,80
	It informs intervention	11,50
	It identifies how the child learns	11,20
	It identifies teaching strategies that will work best for the child	11,50
	It implies change	6,50
	It makes provision for the effect of educational and social disadvantage	7,60
	It indicates how the removal of learning barriers can change a child's performance	9,00

	It focuses on the child's ability but also on how the child approaches tasks and which thought processes are involved	11,80
	It decreases cultural bias in assessment	8,70

The perceived disadvantages of dynamic assessment as perceived by the respondents were also investigated. The researcher made use of the following formula to calculate the contribution that each option made to the total number of responses: ($\frac{respondents\ that\ selected\ disadvantages}{total\ number\ of\ responses\ (142)}\ x\ 100 = \%$)

Table 4.11 summarises the perceived disadvantages as indicated by the respondents. The most perceived disadvantage was, "The approaches used in dynamic assessment are lengthy in terms of the mediation of learning processes" (22,50%).

Table 4.11: Perceived disadvantages of dynamic assessment

Variable	Perceived disadvantage	Percent (%)
Perceived disadvantage (n=52)	The approaches used in dynamic assessment are lengthy in terms of the mediation of learning processes	22,50
	It requires the practitioner to do additional planning to perform curriculum-based interventions	16,20
	The practitioner needs to be well trained	18,30
	It does not give a standard score or compare the child to other children his or her age	18,30
	The validity and reliability of dynamic assessment is often questioned	21,10

A total of five respondents (3,50%) selected 'Other' as perceived disadvantages and commented as follows[10]:

- *"It's expensive."*
- *"The school experience does not change easily for the learner as usually the teachers do not follow recommendations."*
- *"I hardly view any of them as disadvantages, purely because dynamic assessment in itself requires an approach that is completely different from the 'norm' and stems from a viewpoint/belief that all persons (especially those who do not fit the 'norm') are unique and that their true potential will not necessarily be measured by a standardised test."*
- *"It requires the teacher's engagement in order for change to take place."*
- *"Why use one or the other. Use the one and use the other to inform."*

Section 3 ended with the question on whether the respondents had used dynamic assessment in the past six months. As shown in Table 4.11, 69,20% (36/52 respondents) answered that they had used it in the

[10] The 'Other' disadvantages mentioned by the respondents were also lightly edited.

last six months, and 30,80% (16/52 respondents) answered that they had not. In terms of the total number of respondents in the study (n=173), 36 respondents (20,80%) indicated that they had used dynamic assessment in the past six months.

Table 4.12: Frequency counts relating to the use of dynamic assessment

Variable	Response	Raw data	%
Had they used dynamic assessment in the past six months? (n=52)	Yes	36	69,20
	No	16	30,80

The 30,80% (16/52 respondents) who reported that they had not used dynamic assessment in the past six months were asked to indicate why they had not used it. This was their last question as they exited the survey after answering it. The respondents were allowed to select more than one option. Of these respondents, 22,90% said that dynamic assessment was a lengthy, time-consuming process. Figure 4.6 shows graphically the reasons for not using dynamic assessment in the past six months.

Other reasons given by 18,80% (3/16 respondents) for not using dynamic assessment in the past six months were:

- *"Was not required in the past 6 months."*
- *"I am currently engaged with work in the private/corporate sector and I don't often have the time to focus on assessments."*
- *"Expenses involved in purchasing tests."*

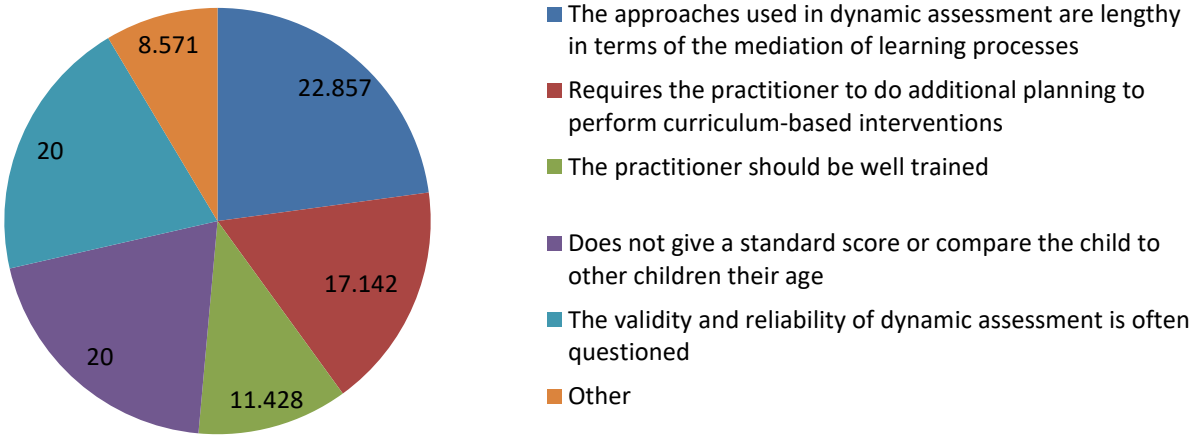

Figure 4.6: Reasons for not using dynamic assessment in the past six months

At the end of Section 3, the 16 respondents who indicated that they had not used dynamic assessment in the past six months exited the survey.

4.2.4 RESULTS FOR SECTION 4 – PRESENT USE OF DYNAMIC ASSESSMENT AND FUTURE USE

Section 4 was about the present and future use of dynamic assessment by the respondents. A total of 36 respondents answered the questions in this section. The questions were about how often they used dynamic assessment, the measures they used when assessing clients, in what instances they were more likely to use dynamic assessment, and the likelihood of using dynamic assessment in the future.

The first question in Section 4 was about how often the 36 respondents used dynamic assessment. Table 4.13 shows that 47,20% (17/36 respondents) reported that they had used dynamic assessment at least once every three months, followed by 38,90% (14/36 respondents) who indicated that they had used dynamic assessment at least every week, and 13,90% (5/36 respondents) who reported that they had used dynamic assessment once every six months. Of the total number (n=173) of psychologists who responded in the study, 8,10% (14/173 respondents) indicated that they had used dynamic assessment at least once a week.

Table 4.13: Frequency counts relating to how often dynamic assessment was used

Variable	Response	Raw data	Percent (%)
How often dynamic assessment was used (n=36)	At least once a week	14	38,90
	At least once every three months	17	47,20
	At least once every six months	5	13,90

The next question in the survey was about which dynamic assessment measures/techniques the respondents used when they reported that they had used dynamic assessment in the past six months. The respondents could again select more than one option. A total of 40% of the responses indicated non-standardised curriculum-based dynamic assessment. This was followed by the testing the limits approach (12%), the learning potential assessment device (10%), the cognitive modifiability battery (10%), and the Other option (10%). The respondents who indicated the Other option commented as follows[11]:

- "*My own CBA tool*."
- "*Complete figure drawing, 16 word memory tests*."
- "*Open-ended questioning in intakes and during assessments*."
- "*Rey complex figure. I use the CAS dynamically and paper and pencil games or logic games*."

[11] The responses of the respondents are verbatim with only very light editing in order to preserve the authenticity of the responses.

The Learning Potential Computerised Adaptive Test (LPCAT) and butterfly dynamic assessment battery were both used the least (2%). A total of 9% of the respondents indicated that they did not use any of the listed assessment techniques/measures. Figure 4.7 shows the different assessment measures and their contributions to the results.

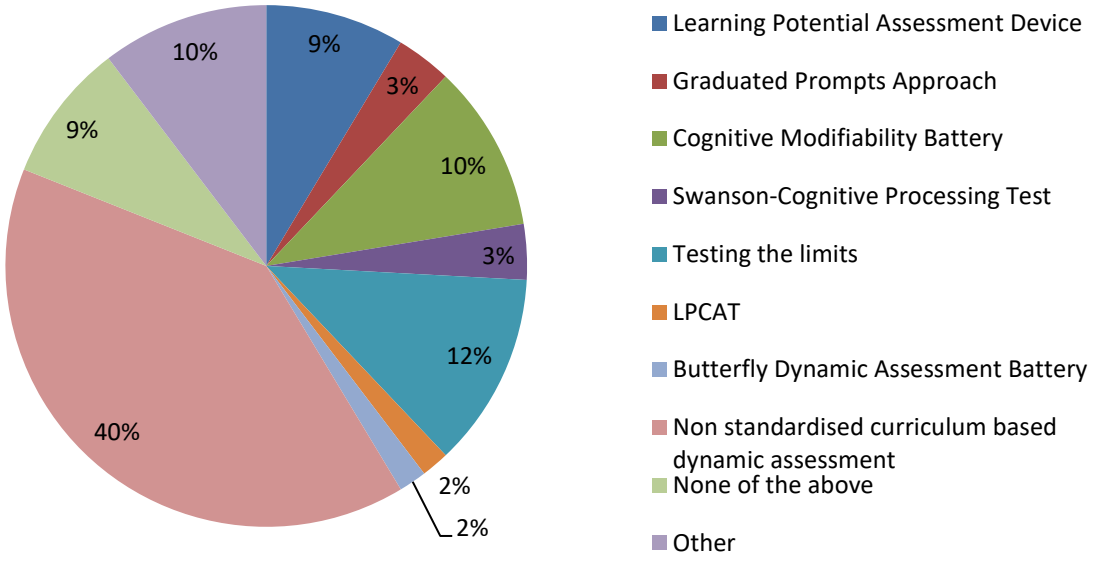

Figure 4.7: Dynamic assessment techniques/measures

In the third question in Section 4, 36 respondents answered the question. A total of 24% indicated that they would be more likely to use dynamic assessment with children with a cultural or linguistic background that differed from the language used in the assessment. The instances or cases in which the respondents were more likely to use dynamic assessment are shown in Figure 4.8. A total of 2,00% of the respondents indicated the Other option and commented as follows[12]:

- "*The options above are always done in conjunction with the assessment*."
- "*Personality disorders manifest after 18. Even with the above, the SSAIS-R for example has socially deprived norms. Surely as psychologists we should know what assessments would be culturally unfair to use and at the same time, we should have the ability to gauge the level of functioning of an individual."*
- *"When I want insight into actual processing versus manifest scores in order to give the teacher more insight into how to teach this child.*

[12] The responses of the respondents are verbatim with only very light editing in order to preserve the authenticity of the responses.

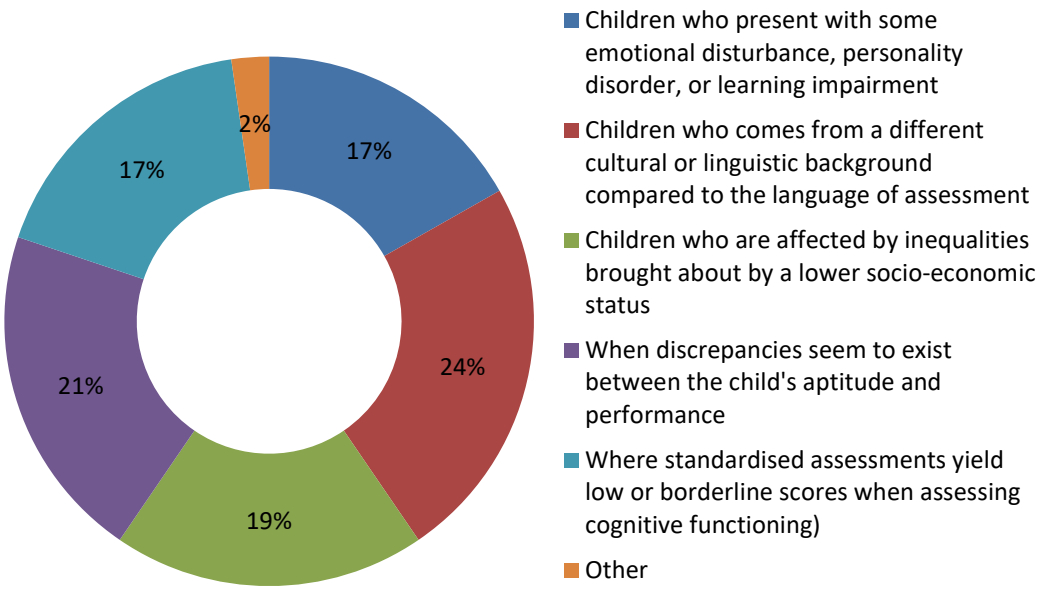

Figure 4.8: Instances or cases in which dynamic assessment was used

The fourth question in Section 4 was about the future use of dynamic assessment. The respondents were asked how likely they were to continue to include dynamic assessment in their psychological assessment. The responses were as follows: 52,80% (19/36 respondents) indicated that they were very likely to do so; 30,60% (11/36 respondents) indicated that they were likely, 13,90% (5/36 respondents) indicated that they were somewhat likely, and 1 (2,80%) of the 36 respondents indicated that she was highly unlikely to do so.

The survey ended with Question 5 in Section 4 on the likelihood of the respondents using dynamic assessment when assessing children with diverse needs. This likelihood is shown in Table 4.14.

Table 4.14: Frequency counts relating to the likelihood of using dynamic assessment with children with diverse needs

Variable	Response	Raw data	%
Likelihood of the use of dynamic assessment with diverse children (n=36)	Very likely	27	75,00
	Likely	4	11,10
	Somewhat likely	3	8,30
	Not likely	0	0,00
	Highly unlikely	1	2,80
	Other	1	2.80

A total of 75,00% (27/36 respondents) indicated that they were very likely to use dynamic assessment in future when assessing children with different cultural backgrounds, socio-economic status, languages, and learning difficulties. A total of 11,10% (4/36 respondents) indicated that they were likely to use dynamic assessment; 8,30% (3/36 respondents) indicated that they were somewhat likely; and 2,80% (1/36)

indicated that she was highly unlikely to use dynamic assessment when assessing multicultural children. This respondent, who selected the Other option, commented as follows:

- "*Again this depends. Children from different backgrounds may have spent 5 years in an English language medium school and feel more comfortable in such an environment. Testing should be based on the need and the level of the learner and their potential not necessarily there current level of functioning.*"

4.3 FINDINGS

In the next section, the research findings will be discussed in the light of four themes, namely familiarity with dynamic assessment, use of dynamic assessment, knowledge of dynamic assessment, and learning about and training in dynamic assessment. The research findings from previous studies will be included in each discussion.

4.3.1 FAMILIARITY WITH DYNAMIC ASSESSMENT

Questions on familiarity with dynamic assessment produced the following results. A total of 69,90% (121/173 respondents) were familiar with dynamic assessment. Of the 69,90% who indicated that they were familiar with dynamic assessment, 36,40% (44/121 respondents) reported that they were quite familiar with dynamic assessment. However, when these data are extrapolated to the total number of respondents (n=173), this group represented only 25,40% of the sample. This indicates that although the psychologists reported familiarity with dynamic assessment, the extent to which they were familiar was low. This finding correlates with data obtained in international surveys (Haney & Evans, 1999; Lidz, 1992; Molano, 2007). These results were also confirmed to the same extent by a study done in New Zealand where it was found that only 2,7% of the respondents reported that they were very familiar with dynamic assessment (Hodges, 2013).

A total of 26% of the respondents in the present study reported that they became familiar with dynamic assessment through academic training. This was followed by 24,00% who indicated that they became familiar through reading. In Smit's (2010) study, the educational psychologists reported that their first exposure was mainly through universities. Their training in dynamic assessment was, however, described as brief and superficial and left for self-study or exposure to specific assessment tools only (Smit, 2010). Smit (2010) concluded that dynamic assessment appeared to be regarded as more of a theory that was learned than an assessment approach. He went on to say that educational psychologists' knowledge was based on major theorists, the tools, instruments, and applications rather than on an understanding of what dynamic assessment was and how to use it in practice. The results in the present study, relating to the method of becoming familiar with dynamic assessment, differed from those found in international studies (Haney & Evans, 1999; Lidz, 1992; Molano, 2007). For example, Haney and Evans (1999), Lidz (1992), and Molano (2007) found that psychologists became familiar by reading about dynamic assessment whereas the results in this study indicated that the respondents become familiar through academic training and reading.

4.3.2 USE OF DYNAMIC ASSESSMENT

The use of dynamic assessment by the respondents is discussed in the following section. When taking into consideration that only 52 (30,10%) of the initial 173 respondents proceeded to this question – on the grounds that their knowledge of dynamic assessment was sufficient – the overall percentage of the respondents who used dynamic assessment was low. Of the 52 respondents who proceeded to the question on the use of dynamic assessment, 36 (69,20%) indicated that they had used dynamic assessment in the past six months. As the survey started out with 173 respondents, only 20,80% of the total sample therefore indicated that they had used dynamic assessment in the past six months. Smit's (2010) study revealed that far fewer educational psychologists used dynamic assessment when assessing clients. This again confirms that dynamic assessment is not used as often as was thought it would be (Deutsch & Reynolds, 2000; Haney & Evans, 1999; Lidz, 1992; Molano, 2007; Murphy & Maree, 2009; Smit, 2010).

A total of 47,20% (17/36 respondents) who answered the question on how often they used dynamic assessment indicated that they used it at least once every three months. This was followed by 38,90% (14/36 respondents) who reported that they used dynamic assessment at least once a week and, lastly, 13,90% (5/36 respondents) who indicated that they used dynamic assessment at least once every six months. However, when these data are extrapolated to the total number of respondents, the following percentages emerge: 9,80% of the 173 respondents used dynamic assessment at least once every three months, 8,10% used dynamic assessment once a week, and 2,90% used dynamic assessment at least once every six months.

Non-standardised curriculum-based dynamic assessment was reported to be the most often-used (39,00%) dynamic assessment instrument when assessing children.

A total of 15,60% of the 173 respondents reported that they were very likely to use or continue to use dynamic assessment when assessing children from diverse backgrounds. Only one respondent (2,80%) stated that she was highly unlikely to use dynamic assessment when assessing a child from a diverse of different background. She added that it depended on the child and the context and whether this was a suitable approach for that specific child. Studies by Molano (2007) mirrored this study's results, namely that the majority of the respondents found dynamic assessment to be useful, especially when assessing children from diverse backgrounds.

The results summarised in Table 4.15 suggest that the respondents who were in practice longer than 16 years were more likely to use dynamic assessment at least once a week. This could be as a result of their experience in practice, the CPD courses they attended, or because dynamic assessment had been included in their curriculum when they completed their Master's and doctoral degrees. The researcher can speculate about this possibility, but Smit (2010) obtained contradictory results indicating that the older psychologists become the more stuck they are in their ways of doing things. This is clearly a topic that requires further research.

Table 4.15: Summary of how often dynamic assessment is used vs. years in practice

	Once every six months	Once every three months	At least once a week
Less than three years	2	6	0
Between 4-7 years	1	6	4
Between 8-11 years	0	2	4
Between 12-15 years	2	0	1
16 years or more	0	2	5

4.3.3 ATTITUDES TOWARDS AND PERCEIVED ADVANTAGES AND DISADVANTAGES OF DYNAMIC ASSESSMENT

The next section covers the attitudes of the respondents towards dynamic assessment as well as the perceived advantages and perceived disadvantages.

4.3.3.1 Attitudes towards dynamic assessment

The next section of the study was about the attitudes of the respondents towards dynamic assessment. A total of 63,50% (33/52 respondents) reported that they were very positive towards dynamic assessment, and 52,80% (19/36 respondents) reported that they would very likely use or continue to use dynamic assessment when assessing children. Although these findings correspond with those of previous studies (Smit, 2010), it should be noted that only 52 respondents answered this question on the grounds that their knowledge of dynamic assessment was sufficient for them to continue to this stage of the survey. The results revealed that the respondents who indicated that they were very positive about dynamic assessment were more likely to use dynamic assessment at least once a week.

The respondents in this study and in other studies (Haney & Evans, 1999; Molano, 2007; Smit, 2010) appeared to be more positive than generally expected towards dynamic assessment. Deutsch and Reynolds (2000) however raised a different perspective looking at the attitudes towards dynamic assessment by local education authorities. Deutsch and Reynolds' (2000) study revealed that psychologists were more likely to use dynamic assessment and to be positive about its use when the local education authorities also supported it. Educational psychologists are often seen by local education authorities as 'score suppliers' (Deutsch & Reynolds, 2000, p.322) rather than as people who assist learners with learning problems through intervention .

4.3.3.2 Advantages and disadvantages of dynamic assessment

The study results on the perceived advantages of using dynamic assessment are discussed next. The following advantages were mentioned the most by the respondents.

- *"It considers the child's potential as well as existing problem-solving skills."*

- *"Focuses on the child's ability but also on how the child approaches tasks and which thought processes are used."*
- *"It informs intervention."*
- *"Identifies how the child learn."*
- *"Identifies teaching strategies that will work best for the child."*

A total of 30,00% of the 173 respondents advanced to the question on the advantages of dynamic assessment. The results as previously discussed in Section 4.2.3 mirror, yet again, the results of previous studies on dynamic assessment (Haney & Evans, 1999; Molano, 2007; Smit, 2010). The respondents in this study generally saw significant value in the use of dynamic assessment. In addition to the advantages mentioned in the present survey, Deutsch and Reynolds (2000) listed several other advantages, namely the flexibility of the dynamic assessment approach and the fact that it also provides teachers with hands-on and practical ideas in the classroom and is seen as an alternative to standardised assessments.

A total of 30,00% of the 173 respondents advanced to the question on the disadvantages of dynamic assessment. Conversely, there were also the perceived disadvantages of dynamic assessment. The findings of previous studies (Haney & Evans, 1999; Lidz, 1992; Molano, 2007; Smit, 2010) were confirmed by this study in that the majority of the respondents indicated that they considered dynamic assessment a lengthy process. Another disadvantage linked to the time disadvantage was that it is an expensive approach as it requires more time to complete. In addition to the above, it was reported that the materials needed to assess clients dynamically might be hard to come by and expensive and that too little research had been done on the long-term effects of dynamic assessment interventions (Deutsch & Reynolds, 2000).

4.3.4 LEARNING AND TRAINING OF DYNAMIC ASSESSMENT

A total of 88,50% (46/52 respondents) who indicated that they were not familiar with dynamic assessment were interested in learning more about it. Of the respondents who indicated that they were familiar with dynamic assessment but did not think that their training was adequate, 87,00% (60/69 respondents) indicated that they were interested in further training through CPD courses and online training. This is confirmed by international and other national studies that found that educational psychologists were interested in learning more about dynamic assessment when they thought that they were not familiar enough with it or that their training was inadequate (Deutsch & Reynolds, 2000; Haney & Evans, 1999; Lidz, 1992; Molano, 2007; Smit, 2010).

4.4 CONCLUSION

In this chapter, the results and findings of the study were given in tables as well as figures. The data relating to each of the questions were presented under the relevant sections. The study results were also compared with those of international and national studies. In Chapter 5, the conclusions, strengths, limitations, and implications of the study will be discussed. Future study recommendations will also be made.

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Chapter 5
Summary, Findings, and Recommendations

5.1 INTRODUCTION

This study set out to describe the extent to which educational psychologists in South Africa are familiar with and use dynamic assessment. The study also covered issues such as the dynamic assessment training that educational psychologists receive as well as their attitudes towards dynamic assessment. As stated in Chapter 1, a review of the literature revealed the following research hiatuses: only international studies to date have investigated quantitatively how dynamic assessment is used by school psychologists. The findings of these studies indicated that dynamic assessment is useful in decreasing cultural bias while at the same time introducing intervention in the assessment process. It was also found that dynamic assessment is not used as often as had been expected.

The findings of international survey studies can, however, not summarily be generalised to the South African context, and, for this reason, it was considered necessary to conduct a similar study in South Africa. Furthermore, the only national study on educational psychologists' use of dynamic assessment was a qualitative study by Smit (2010) that gauged the perceptions of 12 educational psychologists in the Western Cape. The present study's findings could also not be generalised to all educational psychologists in South Africa due to its limited sample size.

The researcher in this study, endeavoured to address the mentioned research hiatuses by conducting a national cross-sectional survey involving all educational psychologists in South Africa. The study sought to answer the following primary research question: "To what extent are South African educational psychologists familiar with and use dynamic assessment?"

In this final chapter, the primary research question will be answered on the basis of the data that emerged from the descriptive questions discussed in Chapter 4. The researcher will also discuss the reliability results in terms of the sample size, the limitations of the study, possible contributions of the study, as well as recommendations for future research and practice.

5.2 ANSWERING THE PRIMARY RESEARCH QUESTION

The findings of this cross-sectional survey study were that of the 173 respondents who responded to the survey, 69,90% were familiar with dynamic assessment. However, this picture changed dramatically when they were asked to what extent they were familiar with dynamic assessment. Only 25,40% indicated that they were quite familiar with dynamic assessment, 30,00% indicated that they felt competent using this assessment approach, and 39,90% of those who had indicated that they were familiar with dynamic assessment believed that they were not competent to use it.

Of the 30,10% who believed that they were competent to use dynamic assessment, only 20,80% actually used it. Of the 20,80% who indicated that they used dynamic assessment, 8,10% used it once a week, 9,90% used it once every three months, and 2,90% used it once every six months. In conclusion, it appears from this study that only 20,80% of the educational psychologists who responded to this survey used dynamic assessment and that less than 10% (8,10%) used it once a week. It is, however, significant that 61,30% of the respondents indicated that they wanted to learn more about dynamic assessment through further training.

Table 5.1 summarises the data discussed above.

Table 5.1: Overview of data

	Number of respondents	Number of respondents ÷ total sample (n) = %
Familiar with dynamic assessment		
• Yes	121	69,90%
• No	52	30,10%
Extent of familiarity		
• Quite familiar	44	25,40%
• Somewhat familiar	63	36,40%
• Barely familiar	14	8,10%
Training equipped them to perform dynamic assessment competently		
• Yes	52	30,10%
• No	69	39,90%
Use dynamic assessment		
• Yes	36	20,80%
• No	16	9,20%
How often dynamic assessment is used		
• Once every six months	5	2,90%
• Once every three months	17	9,80%
• Once a week	14	8,10%
Interested in learning more about dynamic assessment		
• Yes	106	61,30%
• No	15	8,70%
• The respondents who indicated that they knew what dynamic assessment was and felt adequately trained	52	30%

5.3 RELIABILITY OF RESULTS ACCORDING TO THE SAMPLE SIZE

Reliability refers to obtained scores that are consistent and stable (Creswell, 2012). The calculations below were done to determine whether the results could be considered reliable in terms of the sample size. With the help of a margin error calculator and a sample size calculator (SurveyMonkey, 2015), the researcher was able to calculate how many respondents had to answer the survey before the results could be

considered reliable. Based on the results, 137 respondents were needed for the researcher to consider the findings reliable. Figure 5.1 below shows a screenshot of the margin of error as well as the proposed sample size.

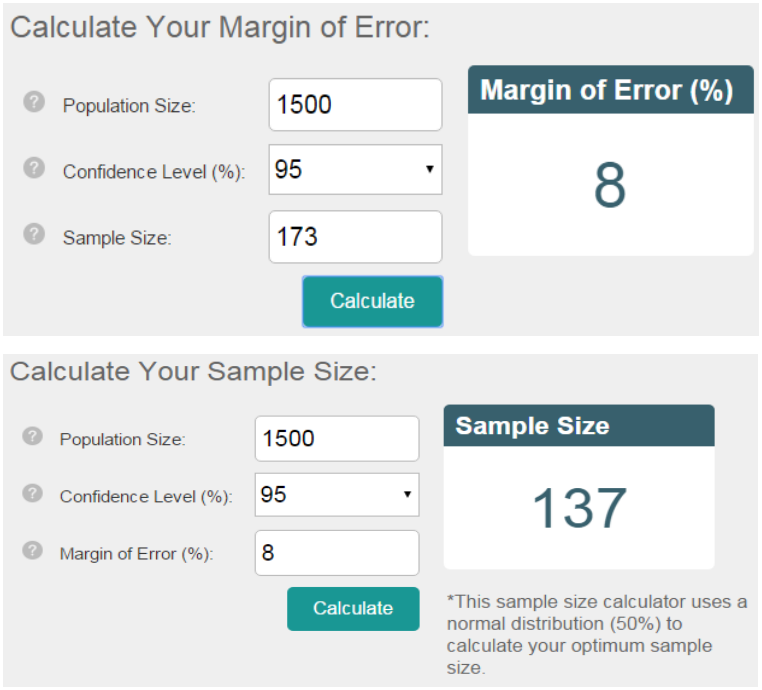

Figure 5.1: Reliability calculation

5.4 LIMITATIONS OF THE STUDY

The limitations that the researcher encountered during the research process and over which the researcher had little control are discussed in the section below. A major limitation of the study, which the researcher could not have predicted, was the limited number of respondents who responded to the survey. Although the sample size met the reliability criteria for the sample size as calculated above the limited number of responses influenced the survey negatively. The sample size became problematic when, in combination with the customisation process, a very small sample of educational psychologists emerged who could respond to the entire survey. On the basis of the customisation process, very few (20,80%, 36/173) respondents completed the questions on the use of dynamic assessment. Although this in itself yielded valuable information on the use of dynamic assessment, in that very little respondents completed the utilisation section, the small sample imposed a major limitation on the study.

Another unanticipated limitation was that some educational psychologists were registered in more than one category, which meant that they could not be reached because their email address information appeared in the data base of the HPCSA under their alternative registration category. The researcher became aware of this after enquiries from some educational psychologists asking the researcher why they had not received the survey. In other words, not all educational psychologists received the invitation to participate in the survey.

Although the results are not generalisable to the larger population of educational psychologists, the results were seen as reliable. The response rate was 13,80% (177 initial responses from the 1280 surveys sent out). According to Van Dessel (2013), a response rate of 20% for an electronic survey is considered good. The response rate percentage could have been higher had the survey been introduced over a four-phase administration process instead of a two-phase administration process as suggested by Salant and Dillman (as cited in Creswell, 2014).

The anonymous nature of the survey also imposed some limits on the study. Had the researcher been able to respond to queries relating to the survey, the response rate might have been better.

5.5 CONTRIBUTIONS OF THE STUDY

This descriptive survey has contributed to research on the topic as it was the first attempt to collect quantitative data on how familiar educational psychologists in South Africa are with dynamic assessment. It has also contributed to our knowledge of how often dynamic assessment is used by educational psychologists in South Africa, what their attitudes are towards dynamic assessment, and what their training needs are. Although the number of respondents was low compared to the entire sample that was included, it is nonetheless clear that dynamic assessment is relatively underused in South Africa. This South African study can now be compared to similar international studies.

This study may contribute to educational psychology practice in that it may raise awareness among practitioners of the value of dynamic assessment as a complementary assessment approach to other forms of assessment. It has also raised awareness of how underused this form of assessment is. Knowledge of the training needs of practitioners may contribute to the development of CPD workshops and to curriculum development in graduate courses for future psychologists. This study has also contributed in terms of the various future research possibilities it has generated, which will be discussed in the next section.

5.6 RECOMMENDATIONS FOR FUTURE RESEARCH

Based on the findings of this study, the following recommendations are made for future research.

- The study narrowed the research scope to only educational psychologists in an attempt to stay within the parameters of a dissertation of limited scope. It may therefore be beneficial to do a survey in future that includes all psychologists in South Africa.
- The study findings could be further explored by means of qualitative studies in order to obtain more in-depth information. This could yield further information about dynamic assessment, training opportunities, and its use by psychologists.
- A mixed-methods study could be useful in exploring non-standardised curriculum-based dynamic assessment, which the respondents in this study indicated as their preferred method of dynamic assessment. Due to the limitations of a survey design, it was not possible to explore what each respondent understood this assessment approach to be. A mixed-methods study

could also be useful in indicating how practitioners go about designing their own dynamic assessment instruments.

- A qualitative study could be useful in determining how training options and their accessibility differ between urban areas and rural areas. Such a study could also explore how psychologists in rural areas obtain knowledge about dynamic assessment.
- A quantitative survey study could be done of universities and training institutions to determine what content is included in their curriculums regarding dynamic assessment.
- A quantitative survey study could be done of psychologists in training to investigate how they perceive their training in dynamic assessment.
- A mixed-methods study could be useful in determining what the effects of dynamic assessment are on learners with diverse needs in South Africa.
- Although it was found that the theory of dynamic assessment cuts across cultures, it might be useful to do research specifically on dynamic assessment in the context of South Africa's cultural diversity.
- Research on the accessibility of standardised dynamic assessment instruments and the needs of psychologists with regard to the instruments they need in their practice could inform the development of South African cost-effective dynamic assessment instruments.

5.7 CONCLUSION

Investigating educational psychologists' familiarity with and use of dynamic assessment was a necessary academic endeavour as previous studies done internationally and nationally revealed a hiatus in the familiarity with and use of dynamic assessment in South Africa. Dynamic assessment has been described as a complementary assessment approach that decreases cultural bias and provides assessors with valuable information on learners' potential for learning. Dynamic assessment has also been described as valuable in the assessment of learners from diverse backgrounds. However, most psychologists, also in South Africa, still use non-dynamic assessment approaches when assessing learners from such backgrounds. This study, too, concluded that although awareness of dynamic assessment exists among most educational psychologists in South Africa, very few of them actually use it regularly and competently. With the necessary training and awareness, the use of this complementary assessment approach could become more of a reality for all educational psychologists, which, in turn, could benefit their clients.

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Reference List

Allan, A. (2011). *Law and Ethics in Psychology.* Somerset West: Inter-Ed Publishers.

Aron, A., Aron, E., & Coups, E. (2014). *Statistics for the Behavioral and Social Sciences: A Brief Course* (5th ed.). Harlow: Pearson Education Limited.

Babbie, E. (2012). *The Basics of Social Research* (6th ed.). Canada: Wadsworth, Cengage Learning.

Beal, V. (2015). *SSL - Secure Sockets Layer*. Retrieved December 5, 2015, from Webopedia: http://www.webopedia.com/TERM/S/SSL.html

Bester, S., & Kühn, L. (2016). Dynamic assessment as an alternative avenue when intervening with children. In R. Ferreira (Ed.), *Psychological Assessment: Thinking innovatively in contexts of diversity* (pp. 117-131). Cape Town: Juta and Company.

Binet, A. (1907). *The Mind and the Brain.* London: Kegan Paul, Trench, Truebner & Co. Ltd.

Birjandi, P., & Sarem, S. N. (2012). Dynamic Assessment (DA): An Evolution of the current trends in Language testing and Assessment. *Theory and Practice in Language studies, 2*(4), 747-753. doi:10.4304/tpls.2.4.747-753

Campione, J. C., & Brown, A. L. (1987). Linking dynamic assessment with school achievement. In C. S. Lidz (Ed.), *Dynamic assessment: an interactional approach to evaluating learning potential.* New York: The Guilford Press.

Chambliss, D. F., & Schutt, R. K. (2013). *Making Sense of the Social World: Methods of Investigation* (4th ed.). California: SAGE Publications, Inc.

Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in Education* (6th ed.). USA: Routledge.

Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Reasearch* (4th ed.). Boston: Pearson.

Creswell, J. W. (2014). *Research design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). California: Sage.

Deutsch, R. M., & Reynolds, Y. (2000). The use of dynamic assessment by educational psychologists in the UK. *Educational Psychology in Practice, 16*(3), 311-331.

Donald, D., Lazarus, S., & Lolwana, P. (2010). *Educational Psychology in Social Context* (4th ed.). Cape Town: Oxford University Press.

dos Santos Silva, I. (1999). *Cancer Epidemiology: Principles and Methods.* France: International Agency for Research on Cancer Press.

Driscoll, D. L. (2011). Introduction to Primary Research: Observations, Surveys, and Interviews. In C. Lowe, & P. Zemliansky (Eds.), *Writing Spaces: Readings on Writing Volume 2* (pp. 153-174). South Carolina: Parlor Press. Retrieved July 29, 2016, from http://www.parlorpress.com/pdf/writing-spaces-readings-on-writing-vol-2.pdf

Elias, M. J., & Theron, L. C. (2012). Linking purpose and ethics in thesis writing: South African illustrations of an international perspective. In J. G. Maree, *Complete your thesis or dissertation successfully: Practical guidelines* (pp. 145-160). Claremont: Juta & Company Ltd.

Evans, R. R., Burnett, D. O., Kendrick, O. W., Macrina, D. M., Snyder, S. W., Roy, J. P., & Stephens, B. C. (2009). Developing Valid and Reliable Online Survey Instruments Using Commercial Software Programs. *Journal of Consumer Health on the Internet, 13*(1), 42-52.

Ferreira, R. (2012). Writing a research proposal. In J. G. Maree (Ed.), *Complete your thesis or dissertation successfully: Practical Guidelines* (pp. 29-39). Claremont: Juta & Company Ltd.

Feuerstein, R. R., Hoffman, M. B., & Miller, R. (1979). *The dynamic assessment of retarded performers: the learning potential assessment device: theory, instruments and techniques.* Baltimore: University Park Press.

Fink, A. (2017). *How to conduct surveys: A step-by-step guide* (6th ed.). Los Angeles: Sage.

Foxcroft, C., Roodt, G., & Abrahams, F. (2009). Psychological assessment: A brief retrospective overview. In C. Foxcroft, & G. Roodt, *Introduction to psychological Assessment in the South African context* (3rd ed., pp. 9-26). Cape Town: Oxford University Press.

Graziano, A., & Raulin, M. (2013). *Research Methods: A Process of Inquiry* (8th ed.). Harlow: Pearson.

Grigorenko, E. L. (2009). Dynamic Assessment and Response to Intervention: Two sides of one coin. *Journal of Learning Disabilities, 42*(2), 111-132. doi:10.1177/0022219408326207

Haney, M. R., & Evans, J. G. (1999). National survey of school psychologists regarding use of dynamic assessment and other nontraditional assessment techniques. *Psychology in the Schools, 36*(4), 295-304.

Haywood, H. C., & Lidz, C. S. (2007). *Dynamic assessment in Practice: Clinical and Educational Applications.* New York: Cambridge University Press.

Haywood, H. C., Brown, A. L., & Wingenfeld, S. (1990). Dynamic approaches to psychoeducational assessment. *School Psychology Review, 19*(4), 411-422. Retrieved from http://psycnet.apa.org/psycinfo/1991-13949-001

Hidden curriculum. (2014, August 26). *The glossary of education reform*. (S. Abbott, Editor) Retrieved April 3, 2016, from http://edglossary.org/hidden-curriculum

Hodges, H. L. (2013). Dynamic Assessment in New Zealand: Knowledge, Application and Utility Amongst Resource Teachers of Learning and Behaviour. New Zealand. Retrieved from http://mro.massey.ac.nz/xmlui/bitstream/handle/10179/5133/02_whole.pdf?sequence=2&isAllowed=y

Hornby, A. S. (Ed.). (2010). *Oxford Advanced Learner's Dictionary of Current English* (7th ed.). New York: Oxford University Press.

HPCSA. (2006, July 7). *Policy & Guidelines.* Retrieved from Health Professions Council of South Africa: http://www.hpcsa.co.za/Uploads/editor/UserFiles/downloads/psych/psycho_policy/form_208.pdf

HPCSA. (2008, May). Continued Professional Development Guidelines for Health Care Professionals - Booklet 4. Pretoria. Retrieved from http://www.saphysio.co.za/media/83652/cpd-hpcsa-cpd-guidelines.pdf

Kanjee, A., & Foxcroft, C. (2009). Cross-cultural test adaption, translation and tests in multiple languages. In C. Foxcroft, & G. Roodt (Eds.), *Introduction to Psychological assessment in the South African context* (3rd ed., pp. 77-89). Cape Town: Oxford University Press.

Kapantzoglou, M., Restrepo, M. A., & Thompson, M. S. (2012). Dynamic assessment of word learning skills: identifying language impairment in bilingual children. *Language, Speech and Hearing Services in Schools , 43*, 81-96.

Landsberg, E., Krüger, D., & Swart, E. (2016). *Addressing barriers to learning: a South African perspective.* Pretoria: Van Schaik Publishers .

Lantolf, J. P., & Poehner, M. E. (2004). Dynamic assessment of L2 development: bringing the past into the future. *Journal of Applied Linguistics, 11*, 49–72.

Lantolf, J. P., & Poehner, M. E. (2013). The unfairness of equal treatment: objectivity in L2 testing and dynamic assessment. *Educational Research and Evaluation, 19*(2-3), 141-157. doi:10.1080/13803611.2013.767616

Lidz, C. S. (1991). *Practitioner's Guide to Dynamic Assessment.* New York: The Guilford Press.

Lidz, C. S. (1992). The extent of incorporation of dynamic assessment into cognitive assessment courses: A national survey of school psychology trainers. *Journal of pecial education, 26*(3), 325-331. doi:10.1177/002246699202600307

Lidz, C. S. (2003). *Early Childhood Assessment.* New Jersey: Wiley & Sons, Inc.

Lidz, C. S., & Pena, E. D. (1996). Dynamic assessment: The Model, its relevance as a nonbaised Approach, and its application to Latino American Preschool children. *Language, Speech an Hearing Services in Schools, 27*, 367-372. doi:10.1044/0161-1461.2704.367

Lin, Z. (2010). Interactive Dynamic Assessment with Children Learning EFL in Kindergarten. *Early Childhood Education Journal, 37*, 279-287. doi:10.1007/s/10643-009-0356-6

Lloyd, F., & Pidgeon, D. A. (1961). An Investigation into the effects of coaching on non-verbal test material with European, Indian and African children. *British Journal of Educational Psychology, 31*(P2), 145–151. doi:10.1111/j.2044-8279.1961.tb02926.x

Losardo, A., & Notari-Syverson, A. (2011). *Alternative Approaches to Assessing Young Children* (2nd ed.). Baltimore: Paul H. Brooks Publishing Co.

Maree, K., & Pietersen, J. (2010). The quantitative research process. In K. Maree (Ed.), *First steps in research* (pp. 144-153). Pretoria: Van Schaik.

Molano, K. (2007, October). The dynamic approach: decreasing cultural bias in the Cognitive abilities assessment of latino children. Retrieved from http://0-search.proquest.com.innopac.up.ac.za/docview/304707163/1411814170178AE9B27/1?accountid=14717

Morgan, B., & Sklar, R. H. (2012). Sampling and research paradigms. In J. G. Maree (Ed.), *Complete your thesis or dissertation successfully: Practical guidelines.* Cape Town: Juta.

Murphy, R. (2002). A Review of South African Research in the field of Dynamic Assessment. Retrieved from http://upetd.up.ac.za/thesis/available/etd-05042002-161239/unrestricted/DissertationMurphy.pdf

Murphy, R. (2008). Dynamic assessment precursors: Soviet ideology, and Vygotsky. *The Irish Journal of Psychology, 29*(3-4), 195-236. doi:10.1080/03033910.2008.10446285

Murphy, R., & Maree, D. J. (2009). Revisiting core issues in dynamic assessment. *South African Journal of Psychology, 39*(4), 420-431. doi:10.1177/008124630903900404

Neill, J. (2007, February 28). *Qualitative versus Quantitative Research: Key points in a classic debate.* Retrieved April 15, 2013, from Wilderdom: www.wilderdom.com/research/QualitativeVersusQuantitativeReseach.html

Neuman, L. W. (2011). *Social Research Methods: Qualitative and Quantitative Approaches.* Pearson.

Nieuwenhuis, J. (2010). Introducing qualitative research. In K. Maree (Ed.), *First steps in research* (pp. 46-68). Pretoria: Van Schaik Publishers.

Nightingale, W. (2012). *Positivist Approach to Research.* Retrieved from Community for Contemporary Psychotherapy: http://www.wider-mind.com/research/wdn-positivism-v2.pdf

Olsen, C., & St. George, D. M. (2004). *Cross-Sectional Study Design and Data Analysis.* Retrieved from College Board: http://www.collegeboard.com/prod_downloads/yes/4297_MODULE_05.pdf

Peytchev, A., Couper, M. P., McCabe, S. E., & Crawford, S. D. (2006). Web Survey Design: Paging versus Scrolling. *The Public Opinion Quarterly, 70*(4), 596-607. Retrieved from http://www.jstor.org/stable/4124212

Piaget, J. (1962). *Play, dreams and imitation in childhood.* New York: Norton.

Poehner, M. E. (2013). Dynamic Assessment: fairness through the prism of mediation. In M. E. Poehner, & P. Rea-Dickins (Eds.), *Addressing Issues of Access and Fairness in Education through Dynamic Assessment* (pp. 5-18). New York: Routledge.

Rowe, S. M., & Wertsch, J. V. (2002). Vygotsky's Model of Cognitive Development. In U. Goswami (Ed.), *Blackwell Handbook of Childhood Cognitive Development* (pp. 538-554). Blackwell Publishers Ltd.

Sadeghi, K., & Khanahmadi, F. (2011). Dynamic assessment of L2 grammar of Iranian EFL. *International Journal of Academic research, 3*(2), 931-936.

Seabi, J. (2012). Research designs and data collection techniques. In J. G. Maree (Ed.), *Complete your thesis or dissertation successfully: Practical guidelines* (pp. 81-95). Cape Town: Juta.

Smit, M. (2010, December). Educational Psychologists' view on the relevance of dynamic assessment for their practice. Stellenbosch University.

Snowman, J., & McCrown, R. (2013). *Ed Psych.* USA: Wadsworth.

SurveyMonkey. (2015). *Sample Size Calculator*. Retrieved November 24, 2015, from SurveyMonkey: https://www.surveymonkey.com/mp/sample-size-calculator/

Tiekstraa, M., Minnaerta, A., & Hessels, M. G. (2014). A review scrutinising the consequential validity of dynamic assessment. *Educational Psychology*, 1-26. doi:10.1080/01443410.2014.915930

Trochim, W. M., & Donnelly, J. P. (2006). *The Research Methods Knowledge Base* (3rd ed.). Cincinnati: Atomic Dog.

Tzuriel, D. (2000). Dynamic Assessment of Young Children: Educational and Intervention Perspectives. *Educational Psychology Review, 12*(4), 385-435.

Tzuriel, D. (2005). Dynamic Assessment of Learning Potential: A New Paradigm. *Transylvanian Journal of Psychology*(Special Issue 1), 7-16.

Tzuriel, D. (2013). Dynamic Assessment of Learning Potential. In M. Mo Ching Mok (Ed.), *Self-directed Learning Oriented Assessments in the Asia-Pacific* (Vol. 18, pp. 235-255). Springer Netherlands. doi:10.1007/978-94-007-4507-0_13

van Dessel, G. (2013, February 13). *How to determine population and survey sample size?* Retrieved November 20, 2015, from Checkmarket: https://www.checkmarket.com/2013/02/how-to-estimate-your-population-and-survey-sample-size/

Van Eeden, R., & De Beer, M. (2009). Assessment of cognitive functioning. In C. Foxcroft, & G. Roodt, *Introduction to Psychological Assessment in the South African context* (3rd ed., pp. 127-147). Cape Town: Oxford University Press.

Van Vuuren, D., & Maree, A. (1999). Survey metdods in market and media research. In M. Terre Blanche, & K. Durrheim (Eds.), *Research in practice: Applied methods for social sciences* (pp. 269-286). Cape Town: University of Cape Town Press.

Vygotsky, L. (1978). *Interaction between learning and development, in Mind and Society.* Cambridge: Harvard University Press.

Walliman, N. (2006). *Social Research Methods.* London: Sage Publications Inc.

Weber, R. (2004, March). The Rhetoric of Positivism Versus Interpretivism: A Personal View. *Management Information Systems Quarterly, 28*(1), iii-xii.

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ADDENDA

Appendix A:
Survey

Appendix B:
Consent letter

Appendix C:
Previous surveys

Appendix D:
Letter sent to authors to request permission to use survey

Appendix E:
Permission from authors to use survey

Appendix F:
Inviting email

Appendix G:
Follow-up email

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Appendix A: Survey

Question number	Question asked	Options that could be selected
1	What is your year of birth?	• Year in which the educational psychologist was born.
2	What is your gender?	• Male. • Female.
3	What is your level of education?	• Master's degree. • Doctoral degree.
4	How many years have you been practising as an educational psychologist?	• Less than 3 years. • 4-7 years. • 8-11 years. • 12-15 years. • 16 or more years. • Other, please specify.
5	In which type of setting are you currently employed? ➢ Respondents could select more than one option in this question	• School setting. • Private practice. • Hospital setting. • Community mental health setting. • Outpatient medical/psychiatric clinic. • Other, please specify.
6	In what province are you currently practising?	• Gauteng. • Western Cape. • Northern Cape. • Free state. • Limpopo. • KwaZulu-Natal. • Mpumalanga. • North West. • Eastern Cape.

7	Please indicate the number of psychological assessments that you (and/or someone you supervise) have conducted in the past 12 months:	• 0. • 1-10. • 11-20. • 21-30. • 31-40. • 41-50. • More than 50. • Other, please specify.
8	Which assessment instruments do you mainly use when measuring the cognitive abilities of children? ➢ Respondents could select more than one option in this question	• Senior South African Individual Scale Revised (SSAIS-R). • Junior South African Individual Scale (JSAIS). • Wechsler Scales. • Kaufman Assessment Battery for Children. • The Learning Potential Assessment Device. • Cognitive Modifiability Battery. • Individual Scale for General Scholastic Aptitude (ISGSA). • Grover Counter Scale (GCS). • Paper and Pencil Games. • Cognitive Assessment System (CAS). • Raven's Progressive Matrices. • Learning Potential Computerized Adaptive Test (LPCAT). • Other, please specify.
9	Please read the following statement and answer the subsequent questions. ➢ Respondents could select both options in this question	• I read the passage • Other, please specify.
10	Are you familiar with dynamic assessment?	• Yes. • No.
11	Would you like to know more about dynamic assessment?	• Yes. • No.
12	Please indicate why not.	Any reason why the educational psychologist does not want to know more about dynamic assessment.

13	How would you like to be informed about dynamic assessment? ➢ Respondents could select more than one option in this question	• Universities. • CPD courses. • Online courses. • Private training. • Other, please specify.
14	To what extent are you familiar with dynamic assessment?	• Barely familiar. • Somewhat familiar. • Quite familiar.
15	How did you obtain your knowledge about dynamic assessment? ➢ Respondents could select more than one option in this question	• Reading. • Workshop. • Coursework. • Internship. • Clinical setting. • Academic training. • Other, please specify.
16	Did your training equip you to perform dynamic assessment competently?	• Yes. • No.
17	Would you like to know more about dynamic assessment?	• Yes. • No.
18	How would you like to be informed about dynamic assessment? ➢ Respondents could select more than one option in this question	• Universities. • CPD courses. • Online courses • Private training • Other, please specify
19	Please comment why not	Any reason why educational psychologists do not want to know more about dynamic assessment.
20	What is your attitude towards dynamic assessment?	• Very positive. • Somewhat positive. • Not very positive. • Other, please specify.

21	Which of the following advantages of dynamic assessment have you experienced? ➢ Respondents could select more than one option in this question	• Considers the child's potential as well as existing problem-solving skills. • Positive assessment experience for the child. • Informs intervention. • Identifies how the child learns. • Identifies teaching strategies that will work best for the child. • Implies change. • Makes provision for the effect of educational and social disadvantage. • Indicates how the removal of learning barriers may change a child's performance. • Focuses on the child's ability but also on how the child approaches tasks and which thought processes are used. • Decreases cultural bias in assessment. • Other, please specify.
22	Which of the following disadvantages of dynamic assessment have you experienced? ➢ Respondents could select more than one option in this question	• Approaches used in dynamic assessment are lengthy in terms of the mediation of learning processes. • Requires the practitioner to do additional planning to perform curriculum-based interventions. • Practitioners need to be well trained. • Does not give a standard score or compare the child to other children the same age. • Its validity and reliability are often questioned. • Other, please specify.
23	Have you (and/or someone you supervised) used dynamic assessment in the past six months?	• Yes. • No.
24	How often in the past six months have you used dynamic assessment?	• At least once a week. • At least once every three months. • At least once every six months.
25	If you are familiar with dynamic assessment but do not use it every six months, it is due to – ➢ Respondents could select more than one option in this question	• Approaches used in dynamic assessment are lengthy in terms of the mediation of learning processes. • Requires practitioners to do additional planning to perform curriculum-based interventions. • Practitioners need to be well trained. • Does not give a standard score or compare the child to other children the same age. • Validity and reliability of dynamic assessment are often questioned.

		• Other, please specify.
26	Which of the following dynamic assessment instruments/techniques do you use when using dynamic assessment? ➢ Respondents could select more than one option in this question	• Learning Potential Assessment Device. • Graduated Prompts Approach. • Cognitive Modifiability Battery. • Swanson-Cognitive Processing Test. • Testing the Limits. • Learning Potential Computerized Adaptive Test (LPCAT). • Butterfly Dynamic Assessment Battery. • Non-standardised Curriculum-based Dynamic Assessment. • None of the above • Other, please specify.
27	In which one of the following instances are you most likely to use dynamic assessment? ➢ Respondents could select more than one option in this question	• Children who present with an emotional disturbance, personality disorder, or learning impairment. • Children who come from a different cultural or linguistic background to the language of the assessment. • Children affected by inequalities caused by a lower socio-economic status. • When discrepancies seem to exist between the children's aptitude and performance. • Where standardised assessments yield low or borderline scores when assessing cognitive functioning. • Other, please specify.
28	How likely are you (and/or someone you supervise) to continue including dynamic assessment instruments in your psychological assessment?	• Very likely. • Likely. • Somewhat likely. • Not likely. • Highly unlikely. • Other, please specify.
29	How likely are you (and/or someone you supervise) to administer (or continue to administer) dynamic assessment with children from a different cultural background, socio-economic status, language, and learning difficulties?	• Very likely. • Likely. • Somewhat likely. • Not likely. • Highly unlikely. • Other, please specify.

Appendix B: Consent letter

Dear educational psychologist

Dynamic assessment with children survey

My name is Larise Kühn and I am an educational psychology masters student at the University of Pretoria. I am inviting you to participate in this research study by completing the following survey. The purpose of this research is to investigate how educational psychologists in South Africa utilise dynamic assessment with children. Please read the following information carefully before you decide whether or not you would like to participate.

Requirements: You will be required to complete this electronic questionnaire, which should take 10 minutes of your time.

Confidentiality and Anonymity: You will not be required to provide any identifying information during the survey. Your responses will remain confidential and you will not be identified.

Possibility of harm/risk/discomfort: There are no foreseeable discomforts or dangers to you in this study.

Remuneration: There will be no payment for completing the survey.

Voluntary participation: Your participation in this study is voluntary, and there are no negative consequences for declining to participate.

Closing date: Please complete this survey by no later than 30 September 2015.

If you agree to participate in the study, completion of the questionnaire will be considered as voluntary participation.

If you have any questions about the research please contact the researcher: Larise Kühn (larise.Kühn@gmail.com), under the supervision of Dr. Suzanne Bester (suzanne.bester@up.ac.za). This study has been approved by the University of Pretoria, Faculty of Education Research Ethics Committee: EP 14/03/03.

To participate in the study please click "Begin" at the bottom.

Yours sincerely

Mrs. Larise Kühn

To begin please click "Begin"

Appendix C: Previous surveys

The original formats of the following surveys were not used as they were not available.

A National Survey of School Psychology Trainers

1. Are you familiar with dynamic assessment as an assessment model?
___quite
___some
___barely
___not at all

2. Do you conduct dynamic assessments yourself?
___yes
___no

3. How did you become aware of the model?
___reading
___workshop
___coursework
___other

4. Do you include reference to dynamic assessment in your (cognitive assessment) course?
___yes
___no

5. If you are familiar with the model, but do not include it in the course, please give a brief explanation.
___trainer lacks adequate knowledge base
___Course is already full; no time to add more
___Trainer has reservations about the validity/value of the model
___Trainer does not see model as related to the demands of the field

6 . What do you see as major assets to the model?
___Change of focus of assessment from product to process
___Relatedness to interventions
___Decreased cultural bias
___Increase in depth and comprehensiveness of information
___Difference per se
___More positive attitude
___"Clinical aspects"
___Theory base
___Flexibility
___Technical qualities

7. What do you see as major limitations?
___Technical adequacy/research support
___Time of administration
___Match with demands of the school setting

___Too limited in scope
___Lack of relatedness to intervention
___Time required for training
___Theorybase
___False positive expectations

8 . How would you rate these limitations
___Mild
___Moderate
___Severe

National Dynamic Assessment Survey

1. Are you involved with assessment of children or adolescents
   1. In the school setting
   2. In a private clinical practice
   3. In a hospital setting
   4. Other

2. To what extent are you familiar with dynamic assessment as an assessment model?
   1. Quite familiar
   2. Somewhat familiar
   3. Barely
   4. Not at all

3. Do you conduct dynamic assessments yourself?
   1. Yes, at least one every 6 months
   2. Yes, at least one every 3 months
   3. Yes, at least one yearly
   4. No

4. If you are familiar with the model but do not use it every six months, is it because:
   1. Lack of adequate knowledge base
   2. Reservations about the validity/value of the model
   3. Not related to the demands of the field
   4. Time restraints
   5. Other

5. What population of students are you most likely to use dynamic assessment techniques with?
   1. Children who do not speak English as their primary language or bilingual students
   2. Learning disabled students
   3. Minority children or children from cultural backgrounds significantly different from the majority
   4. Other

6. D o you primarily use dynamic assessment as:
   1. A means of assessing cognitive functioning/intelligence
   2. A means of assessing achievement levels
   3. A means of determining processing strengths and weaknesses
   4. Other

7. How did you become aware of the dynamic assessment model?

1. Reading
2. Coursework
3. Workshop
4. Internship
5. Other

8 . Which assessment techniques have you found to be most useful when working with language or cultural minority children?

1. WISC-III and/or Standford Binet IV
2. Dynamic Assessment
3. Kaufman Assessment Battery for Children
4. Differential abilities scale
5. Curriculum based assessment
6 . Other

9. Years of experience as a school psychologist?

1. <2
2. 2-4
3. 5-7
4. 8 or more

10. Region in which you work:

1. Southeast
2. Northeast
3. North Central
4. West Central
5. Western
6. Other

Appendix D: Letter sent to authors to request permission to use survey

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

21 November 2014

Dr. Karen Molano
Pepperdine University
By email: Kalissette@aol.com

Dear Dr. Karen Molano

I, Larise Kühn, am an Educational Psychology Masters student at the University of Pretoria in South Africa. I am currently working on a mini dissertation entitled Psychologists' utilisation of Dynamic Assessment under the supervision of Dr. S Bester.

I intend to do a cross-sectional survey with South African psychologists' to investigate how they utilise dynamic assessment. My study is similar to your 2007, The Dynamic Approach: Decreasing Cultural Bias in the Cognitive Abilities Assessment of Latino Children. I therefore request your permission to use your existing survey in my study. I will ensure that I acknowledge you as the authors of the original survey.

Your kind consideration of this request is appreciated.

Kind regards.
Larise Kühn

Appendix E: Permission from authors to use survey

Permission from Dr. Karen Molano

Absolutely. You have my permission to use it. Good luck on your dissertation.

Take care!

Karen Molano Valentine

Sent from my iPhone

On Nov 21, 2014, at 4:54 AM, Larise Kühn <larise.Kühn@gmail.com> wrote:

Dear Dr. Karen Molano,

Please refer to the attached letter.

Kind regards,

Larise Kühn
Educational Psychology Masters student
University of Pretoria
South Africa

<Dr Karen Molano.pdf>

Permission from Dr. Michelle Haney

Best of luck with your research.
--
Michelle R. Haney, Ph.D.

Professor of Psychology/Department Chair
Charter School of Education and Human Sciences
Department of Psychology
mhaney@berry.edu
www.Berry.edu
On 8/19/14 4:03 PM, "Larise Kühn" <larise.Kühn@gmail.com> wrote:

Dear Dr. Haney,

Thank you very much for the permission.

I hope that you have a wonderful day.

Kind regards,
Larise Kühn

On 13 Aug 2014, at 14:03, "Haney, Michelle" <mhaney@berry.edu> wrote:

I'm sorry, I don't have his current contact info. I'm the first author and I feel certain that he would be happy to share the survey with a student.

On Aug 13, 2014, at 5:34 AM, "Larise Kühn"
<larise.Kühn@gmail.com<mailto:larise.Kühn@gmail.com>> wrote:

Dear Dr. Haney,

Thank you for the permission. I sincerely appreciate it.

I am however experiencing some difficulties in reaching Dr. Evans (to get his permission), his email address seem to permanently fail. Is there maybe an alternative email address that I can try to reach him on?

Kind regards,
Larise Kühn

On Tue, Aug 12, 2014 at 6:15 PM, Haney, Michelle
<mhaney@berry.edu<mailto:mhaney@berry.edu>> wrote:

Hi Larise,
You have my permission to use the survey for your dissertation research, and to modify it as you see fit, citing our work of course.

Best of luck with your research!
-Michelle
--
Michelle R. Haney, Ph.D.
Professor of Psychology/Department Chair
Charter School of Education and Human Sciences
Department of Psychology
mhaney@berry.edu<mailto:mhaney@berry.edu> www.Berry.edu<http://www.Berry.edu>

From: Larise Kühn <larise.Kühn@gmail.com<mailto:larise.Kühn@gmail.com><mailto:larise.Kühn@gmail.com <mailto:larise.Kühn@gmail.com>>>
Date: Monday, August 11, 2014 2:45 PM
To: Michelle Haney <mhaney@berry.edu<mailto:mhaney@berry.edu><mailto:mhaney@berry.edu<mailto :mhaney@berry.edu>>>, "gevans@brenau.edu<mailto:gevans@brenau.edu><mailto:gevans@brenau.edu<mailto:gevans@brenau.edu>>"
Subject: Permission to use your survey in my dissertation

Dear Dr. Haney and Dr. Evans,
Please refer to the attached letter.

Kind regards,

Larise Kühn
Educational Psychology Masters student
University of Pretoria
South Africa

Permission from Dr. Carol Lidz

Hello Larise,

I am pleased to give you permission to use my scale in your study as per your request. Please send me an abstract of your study when it is completed. Lots of luck.

Carol Lidz
zdilsc@aol.com

-----Original Message-----
From: Larise Kühn <larise.Kühn@gmail.com>
To: zdilsc <zdilsc@aol.com>
Sent: Mon, Aug 11, 2014 11:44 am
Subject: Permission to use your survey in my dissertation
Dear Dr. Carol Lidz,

Please refer to the attached letter.
Kind regards,

Larise Kühn
Educational Psychology Masters student
University of Pretoria
South Africa

Appendix F: Inviting email

Dear educational psychologist,

My name is Larise Kühn and I am an educational psychology masters student at the University of Pretoria. I am inviting you to participate in this research study by completing the following survey. The purpose of this research is to investigate how educational psychologists in South Africa utilise dynamic assessment with children. Please read the following information carefully before you decide whether or not you would like to participate.

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Possibility of harm/risk/discomfort: There are no foreseeable discomforts or dangers to you in this study.

Remuneration: There will be no payment for completing the survey.

Voluntary participation: Your participation in this study is voluntary, and there are no negative consequences for declining to participate.

Closing date: Please complete this survey by no later than 30 September 2015.

If you agree to participate in the study, completion of the survey will be considered as voluntary participation.

If you have any questions about the research please contact the researcher: Larise Kühn (larise.Kühn@gmail.com), under the supervision of Dr. Suzanne Bester (suzanne.bester@up.ac.za). This study has been approved by the University of Pretoria, Faculty of Education Research Ethics Committee: EP 14/03/03.

To participate in the study please click on the link provided below.

https://surveyplanet.com/55e98d302c5105f22fec23ee

Yours sincerely

Mrs. Larise Kühn

Appendix G: Follow-up email

Dear educational psychologist,

Thank you if you have already completed the survey below. If you have not yet had the opportunity to complete the survey you have until 30 September to complete the survey.

Just to remind you: My name is Larise Kühn and I am an educational psychology masters student at the University of Pretoria. I am inviting you to participate in this research study by completing the following survey. The purpose of this research is to investigate how educational psychologists in South Africa utilise dynamic assessment with children. Please read the following information carefully before you decide whether or not you would like to participate.

Requirements: You will be required to complete this electronic survey which should take 10 minutes of your time.

Confidentiality and Anonymity: You will not be required to provide any identifying information during the survey. Your responses will remain confidential and you will not be identified.

Possibility of harm/risk/discomfort: There are no foreseeable discomforts or dangers to you in this study.

Remuneration: There will be no payment for completing the survey.

Voluntary participation: Your participation in this study is voluntary, and there are no negative consequences for declining to participate.

Closing date: Please complete this survey by no later than 30 September 2015.

If you agree to participate in the study, completion of the survey will be considered as voluntary participation.

If you have any questions about the research please contact the researcher: Larise Kühn (larise.Kühn@gmail.com), under the supervision of Dr. Suzanne Bester (suzanne.bester@up.ac.za). This study has been approved by the University of Pretoria, Faculty of Education Research Ethics Committee: EP 14/03/03.

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Yours sincerely

Mrs. Larise Kühn