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**UNIVERSITY OF WESTERN CAPE
Faculty of Community and Health Sciences
RESEARCH PROJECT**

Title: A Systematic Review: Instruments that measure Emotional and Social Competency as a domain of School Readiness of Preschool Children in South Africa

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ABSTRACT

Given the lack of standardised and locally developed school readiness assessment tools in South Africa, as well as the under-emphasis on emotional and social competency in favour of cognitive domains in assessment of school readiness, many South African children enter mainstream schooling with their emotional wellbeing significantly compromised. Therefore, emphasis on children's emotional and social competency as a domain of school readiness is essential. The study aims to identify and summarise aspects of the instruments that measure emotional and social competency as a domain of school readiness in preschoolers and their psychometric properties. All ethical considerations in terms of the systematic review process were adhered to. Permission to conduct the study (HS19/6/7) was obtained from the Humanities and Social Science Research Ethics Committee of the University of the Western Cape (HSSREC). This research study used a systematic review. The filtration process took place on four levels which include identification, screening, eligibility (quality appraisal), and summation. Articles were identified from good quality research published between 2008 and 2018. Databases with a focus on psychology and education were selected and included search engines such as Academic Search Complete, EBSCOhost, PsycARTICLES, PsycINFO, and SocINDEX. Published research was also retrieved through reference mining. The title search yielded a search result of 3 872 peer-reviewed articles. From these, only four final instruments with consistently "excellent" psychometric properties were included in this study. The summation of selected articles was done using thematic meta-synthesis. These instruments include the Emotional Social Screening Tool for School Readiness (E3SR), the School Readiness Screening Instrument for Grade 00 (Pre-grade R), the Competence for Screening for Preschoolers (SCE) and Social Competency for Preschoolers (SCS) assessment tool, and the Preschool Behavioural and Emotional Rating Scale (PreBERS). Two of the four instruments are contextually appropriate assessment measures for the South African population. All four instruments included in this study are available in English and are rated as "excellent" for the size and diversity of the norming sample. Likert scales are used in all four of the instruments as the scoring system, and the length of administration ranges from 10–20 minutes. All four instruments provided coverage across multiple subdomains of emotional social competency. There were

similarities in the definitions provided by three different authors, with the most comprehensive theoretical and operational definitions provided in the E3SR.



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DECLARATION

I hereby confirm that the present Systematic Review: *Instruments that measure Emotional and Social Competency as a domain of School Readiness of Preschool Children in South Africa* is my own work. It has not been submitted before for any degree or examination in any university. The thesis has been submitted via Turnitin. If any text passages or diagrams from books, papers, the internet or other sources have been copied or in any other way used, all references – including those found in electronic media – have been acknowledged and fully cited in the American Psychological Association (APA) 7th edition referencing style. A professional editor was involved in a detailed review of this thesis to ensure that it is compliant to APA 7 conventions and to the University of the Western Cape Guidelines.



Cebokazi Ngcakani Mtati
May 2020

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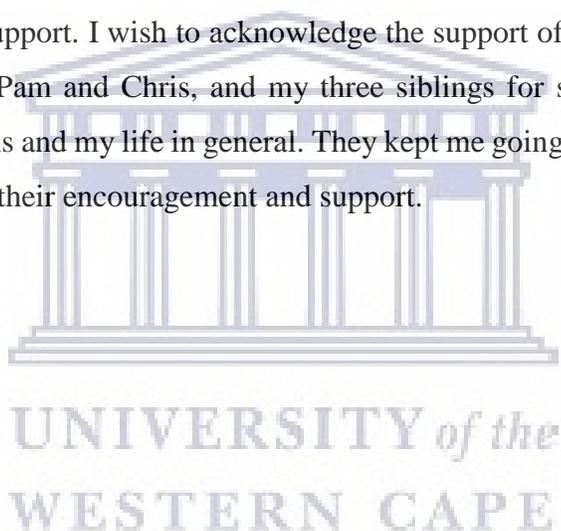


TABLE OF CONTENTS

ABSTRACT	ii
DECLARATION	iv
ACKNOWLEDGEMENTS	v
LIST OF FIGURES	ix
LIST OF TABLES	x
CHAPTER 1 INTRODUCTION	1
1.1 Background.....	1
1.2 School readiness in the South African context	2
1.3 Rationale for the review	3
1.4 Problem statement.....	3
1.5 Review questions	4
1.6 Structure of the Thesis	4
CHAPTER 2 LITERATURE REVIEW	6
2.1 Introduction.....	6
2.2 Preschool in the South African Context.....	6
2.3 Definition of School Readiness.....	7
2.4 Theoretical Conceptualisations of School Readiness	8
2.5 Domains of School Readiness.....	9
2.6 School Readiness Assessment in the South African Context	10
2.7 Importance of Emotional and Social Competency in school readiness	12
2.8 Summary	13
CHAPTER 3 METHODOLOGY	15
3.1 Research Design.....	15
3.2 Inclusion Criteria	15
3.3 Exclusion Criteria	16
3.4 Search Strategy	16
3.6 Retrieval strategy	17
3.5 Review Process	17
3.5.1 Identification.....	17

3.5.2 Keyword Identification	18
3.5.3 Screening.....	19
3.5.4 Eligibility	19
3.5.5 Summation	20
3.5.6 Reviewers.....	20
3.6 Data Extraction	21
3.7 Data Analysis.....	21
3.8 Ranking.....	22
3.9 Ethical Considerations	22
CHAPTER 4 RESULTS AND DISCUSSION.....	23
4.1 Process Results.....	23
4.1.1 Step 1: Identification.....	24
4.1.2 Step 2: Screening	24
4.1.3 Step 3: Eligibility	25
4.2 Ranking.....	29
4.3 Descriptive Meta-synthesis.....	31
4.4 Data Extraction	32
4.4.1 The Emotional Social Screening Tool for School Readiness (E3SR)	35
4.4.2 School readiness screening instrument for Gr. 00 (Pre-grade R) Learners.....	39
4.4.3 Emotional Competency Screening for Preschoolers (SCE) and Social Competency Screening for Preschoolers (SCS)	44
4.4.4 The Preschool Behavioural and Emotional Rating Scale (PreBERS).....	49
4.5 Theoretical Definitions of Emotional and Social Competency.....	50
4.5.1 Definitions of Emotional and Social Competency (Munnik).....	53
4.5.2 Definitions of Emotional and Social Competency (Mohamed).....	54
4.5.3 Definitions of Emotional and Social Competency (Ştefan et al.)	54
4.5.4 Definitions of Emotional and Social Competency (Epstein et al.)	55
4.6 Summary	55
CHAPTER 5 CONCLUSION.....	60
5.1 Introduction.....	60
5.2 Executive summary.....	60
5.3 Limitations of the study	63

5.4 Significance of the study..... 64

5.5 Recommendation for future research..... 64

REFERENCES..... 65

APPENDIX A: ETHICAL CLEARANCE..... 74

APPENDIX B: TITLE SEARCH 75

APPENDIX C: ABSTRACT SEARCH 80

APPENDIX D: SFS QUALITY APPRAISAL TOOL (VERSION D) 85



LIST OF FIGURES

Figure 4.1: Completed levels of review 23



LIST OF TABLES

Table 4.1 <i>SFS Critical Appraisal tool scores</i>	26
Table 4.2 <i>Ranking of articles</i>	29
Table 4.3 <i>Final selected articles</i>	31
Table 4.4 <i>Instruments that assess emotional and social competencies</i>	32
Table 4.5 <i>The Emotional Social Screening Tool for School Readiness (E3SR)</i>	33
Table 4.6 <i>School Readiness Screening Instrument for Grade 00 (Pre-grade R)</i>	37
Table 4.7 <i>Emotional Competency Screening for Preschoolers (SCE) and Social Competency Screening for Preschoolers (SCS)</i>	41
Table 4.8 <i>The Preschool Behavioural and Emotional Rating Scale (PreBERS)</i>	47
Table 4.9 <i>Summary of definitions of social and emotional competency</i>	51



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CHAPTER 1

INTRODUCTION

1.1 Background

According to the South African Schools Act (Republic of South Africa, 1996), schooling in South Africa is compulsory for children between the ages of 7 and 15 and the goal is that children enter school ready to succeed (The United Nations Children's Fund [UNICEF], 2012). Grade R is a recommended year and is now included in the Foundation Phase of education as preparation for formal schooling for all children five years of age to prepare them for Grade 1 entry (Department of Education (DoE), 2001a). Research by Hojnoski and Missall (2006) suggests that school readiness at Grade R has effects on Grade 1 schooling outcomes and that preschool children's social and learning experiences in preschools may affect their academic and social adjustments in their future learning paths (Hojnoski & Missall, 2006). Similarly, UNICEF (2012) emphasises that school readiness is positively linked to school success and performance. Preschoolers' school readiness to succeed academically and behaviourally has been a focus of developmental and educational research internationally for many decades (Welsh et al., 2010). Locally, in South Africa, school readiness has been under-researched and remains a focus of further attention, clinically and empirically (Amod & Heafield, 2013).

Powell (2010) explains that school readiness implies that by the time children enter mainstream education, the expectation is that they should be physically, cognitively, affectively (emotional and social), normatively, socio-culturally, and linguistically ready to fully adapt to the challenges of formal schooling. UNICEF (2012) indicates that effective preparation for children to enter mainstream education is essential to foster academic, emotional, and social skills. Preschool children's social and learning experiences in preschools may affect their academic and social adjustments in their future learning paths. Mohamed (2013) indicates that the development of emotional and social competencies are of fundamental importance during the preschool years and occur at the same time as motor, cognitive and language skills (Thompson, 2001), but despite this knowledge, emotional development has been underrated as a core capacity in the early childhood years.

Teachers' observations and school readiness assessments are the primary methods used to assess children's readiness for school entry (Laher & Cockcroft, 2013), as well as to identify those who may benefit from additional intervention programmes. It has been noted that most existing screening instruments measure cognitive abilities with the assumption that cognitive abilities are the best predictors of academic performance (Snow, 2006). However, it has been shown that cognitive abilities are not the sole predictor of academic success and that both emotional and social competencies have been linked as mediators between cognitive abilities and academic performance (Trentacosta & Izard, 2007). Ştefan et al. (2009) report that research has shown that children with well-developed emotional and social competencies are more likely to perform well in academic tasks. Various screening tools are available for assessing school readiness in preschool children. However, there are some shortcomings of existing screening instruments, such as a lack of appropriate psychometric properties (Ştefan et al., 2009), including the use of outdated norms.

1.2 School readiness in the South African context

Because a child's development is influenced by the social and cultural context in which they exist (Swim, 2007), it is important to highlight that children from disadvantaged backgrounds may find school adjustment and learning challenging and would struggle to adjust to the demands of mainstream schooling (Puckett & Black, 2002). The majority of South African children are exposed to crime, violence, absentee parents, HIV/AIDs, poverty, and low income (Ward et al., 2012). These factors inevitably affect children's academic, emotional, and social wellbeing negatively and may cause vulnerabilities in all domains of functioning before entry into mainstream education. Rhoades et al. (2010) state that inadequate emotional and social development in children is associated with limitations in the child's ability to learn and may ultimately lead to risks associated with poor school achievement, as well as, in some cases, delinquency. The majority of the instruments developed for school readiness in the South African context do not focus on emotional and social development (Mohamed, 2013). It is therefore imperative that there be a focus on contextually relevant instruments to measure emotional social readiness in preschool children in South Africa. Therefore, Sharma (2011) suggests that school readiness assessment should not only measure development but should assess the child as a whole within the context of the environment in which they exist. Amod and Heafield (2013) emphasised

that there is a lack of standardised culturally appropriate instruments to measure and assess school readiness in South Africa. They also state that the focus in school readiness assessment practices is mainly on cognitive and motor skills and that the emotional and social domain is often overlooked or neglected. According to Ştefan et al. (2009), a lack of emotional competencies has been linked to poor academic skills, such as difficulties in focusing and shifting focus and attention, which impacts academic performance and success.

1.3 Rationale for the review

Given that many South African children enter mainstream schooling with their emotional, social, physical, and intellectual wellbeing compromised due to the diverse socio-economic backgrounds from which they come (Laher & Cockcroft, 2013), it is of utmost importance that emphasis is placed on children's emotional and social competency as a domain of readiness for schooling. Denham et al. (2014) state that the development of emotional and social skills in children plays a vital role in the child's school readiness as well as adjustment to school. Moreover, Amod and Heafield (2013) indicate that there is a lack of standardised locally developed school readiness assessment tools in South Africa, which results in assessment practitioners being limited to making use of internationally developed tests that have not been approved and registered by the Health Professions Council of South Africa (HPCSA). Amod and Heafield (2013) further indicate that some of the South African locally developed instruments for measuring school readiness are based on outdated norms. Furthermore, these norms do not fully account for the diverse South African population and there is a need for cost-effective and relevant testing and screening which is cost- and time-effective for our population.

1.4 Problem statement

Currently, the research on school readiness and specific instruments that measure readiness is well-documented in Western research but is not covered in African literature. This systematic review provides information in the form of good quality articles on available instruments that assess emotional and social competency as a domain for school readiness. Thus, the purpose of this review was to identify and summarise aspects of the instruments that measure school readiness in preschoolers and their psychometric properties. This study consolidated the most recent literature

(2008-2018) on instruments that measure emotional and social competency as a domain for school readiness in South Africa and reported on their psychometric properties.

1.5 Review questions

The objective of this systematic review was to systematically consolidate literature on the instruments for measuring emotional and social competency as a domain for school readiness and included questions such as:

- a) What instruments are currently available to measure emotional and social competency as a domain of school readiness in South Africa?
- b) What is the methodological quality of the studies related to instruments that measure emotional and social competency as a domain of school readiness?
- c) How is school readiness operationalised? What domains are identified and measured in the instruments?
- d) How is emotional and social competency defined?
- e) What are the psychometric properties of the instruments reportedly measuring emotional and social competency in school-ready children?

1.6 Structure of the Thesis

The thesis is presented in five chapters.

Chapter 1: The first chapter presents the background, rationale, and problem statement for the present study.

Chapter 2: This chapter gives a brief review of related literature, focusing on school readiness, highlighting the importance of emotional and social competency as a domain for school readiness, as well as the school readiness assessment tools that are available within the South African context. Finally, the chapter concludes with a summary of the gaps that remain in the literature.

Chapter 3: This chapter outlines the review questions, design, and methodology of the study. This chapter also reports on the ethical considerations for the study.

Chapter 4: This chapter reports on the instruments that measure emotional and social competency as a domain of school readiness of Preschool Children (Grade R) as well as the

definitions of emotional and social competency identified from good quality research published between 2008 and 2018.

Chapter 5: The study concludes with a summary, discussion, and recommendations.

This thesis uses the American Psychology Association (APA) 7th edition style as a general guideline, within the framework of University of the Western Cape (UWC) requirements for the layout of this mini-master's thesis.



CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

This chapter aims to provide a brief overview of the literature relating to emotional and social school readiness. The review aims to conceptualise school readiness, the preschool system within the South African context, and highlight the importance of emotional and social competency as a domain of school readiness. It also reports on school readiness assessment instruments that are used to measure emotional and social competency as a domain of readiness internationally and locally.

2.2 Preschool in the South African Context

Entry into mainstream education can be regarded as a significant transition period (Bustin, 2007) for a child, and the child may feel mixed emotions of excitement and anxiety about the start of the formal schooling process. According to the South African Schools Act No. 84 of 1996, schooling in South Africa is compulsory for children between the ages of 7 and 15 years and the goal is that children enter school ready to succeed (UNICEF, 2012). This means that children who have no formalised school experience before Grade R and Grade 1 are unfavourably affected by developmental variations (Bordignon & Lam, 2004). A strong recommendation that children attend Grade R as preparation for formal schooling has been initiated and supported by the combined efforts of the Department of Basic Education (DBE) and the Department of Social Development (Excell, 2016). Grade R programmes offer children the opportunities to develop skills in cognition (reading, writing, and mathematics), language, creative arts, self-help, and emotional and social skills (Brown, 2016).

Richter and Samuels (2018) reported that 89% of the primary schools in South Africa offered preschool as part of their curriculum in 2011. This has allowed for children aged 5-6 years to be able to formally enter the school through three systems (Richter & Samuels, 2018), namely: the public school system, which is provincially regulated and is funded by the government; the private independent school system, as well as the community-based early development centre (ECD) system. All three preschool systems consist of pre-Grade R and Grade R programmes. Pre-

Grade R programmes are intended for children between birth and four years old, and Grade R (Reception Year) programmes are aimed at five- to six-year-old children. Richter and Samuels (2018) explain that, in 2014, the South African Government implemented the preschool year as part of the formal education system following a proposal submitted in 1992 in recognition of childhood care and education as part of the transformation of the South African Society.

2.3 Definition of School Readiness

According to Powell (2010), school readiness implies that by the time children enter mainstream education, the expectation is that they should be physically, cognitively, affectively, normatively, socio-culturally and linguistically ready to fully adapt to the challenges of formal schooling. Pekdoğan and Akgül (2016) define school readiness as the child's ease of learning, as well as the skills that a child learns and uses for an effective adaptation process, which includes the developmental manifestation in specific skills (Kleeck & Schuele, 2010). These include: (i) the physical domain which relates to motor development, such as coordination and balance, being able to run, climb and jump, and ride a two-wheel bicycle (Brown, 2016; Gallahue & Donnelly, 2007); (ii) cognitive abilities such as memory capacity, attention span, the ability for mental manipulation of information (Kaplan & Sadock, 2014) and to take another person's point of view or infer what another person is thinking, spontaneously and independently (Mohamed, 2013), including the ability to distinguish fantasy from reality, to be able to describe similarities between two objects, and greater impulse control (Brown, 2016; Whitebread & Bingham, 2011); (iii) language and speech, which is the ability to use language to communicate their needs (Brown, 2016; Carr, 2015), and to interact socially with peers and adults to express wishes and needs (Ştefan et al., 2009); and (iv) emotional and social and normative development skills (Van Zyl, 2011) which are skills that preschoolers use in class and in their interaction with others (Kleeck & Schuele, 2010). The literature on emotional and social skills and competencies indicate that the ability to self-regulate is crucial for children as they adjust and transition to school, which impacts on academic achievement and the development of emotional and social competency (Blair & Peters, 2003; Schultz et al., 2001). According to Carr (2015), children begin to develop in the emotional and social sphere during the preschool years and become increasingly aware of their feelings and those of others (Denham et al., 2012), and a more prominent focus on peers emerges. Additionally, the

child begins to acquire the social skills needed to play and work with other children (Kaplan & Sadock, 2014), can engage in play that requires them to follow rules (Ştefan et al., 2009) and becomes better able to cooperate with a larger number of peers (Mohamed, 2013). There seem to be inconsistencies and little consensus on the definition of emotional and social competencies, and how best to measure this domain as part of school readiness, as well as to what extent it is included as a domain in theoretical and operational definitions of school readiness (Munnik, 2018). At its basic level, emotional and social competency is the ability to learn what is culturally and socially appropriate, and the ability to behave in a manner that allows the development of strong relationships with others to take place and be able to handle emotions in positive ways (UNESCO, 2017). Denham et al. (2014) extend this definition to define emotional and social competency as the appropriate expression and regulation of feelings and emotions and being able to show empathy towards others, as well as social problem-solving skills. Similarly, Kılıça (2015) indicates that the concept of emotional competency is related to the skills and behaviours of children and includes emotions such as the expression, awareness, labelling and understanding of emotion from emotional facial expressions and contextual clues.

2.4 Theoretical Conceptualisations of School Readiness

Four major conceptualisations of school readiness have been a focus of education and child development literature, namely, the Idealist/Nativist view, the Empiricist/Environmental view, the Social Constructivist view, and the Interactionist view.

The Idealist/Nativist view suggests that children are ready for school when they have matured to the level of having self-control, peer relations, and the ability to follow directions. According to this perspective, this process is endogenously determined and the environment does not play a major role, therefore, there is not much that can be done to accelerate this process (Dockett & Perry, 2002). In contrast, the Empiricist/Environmentalist view of school readiness views school readiness as a stage when young children have the ability and skills to appropriately respond to the school and classroom environment, such as following rules and regulations, and instructions (High, 2008). This view of school readiness is determined by the child's knowledge and how they behave and can be understood as the direct result of what the child has been taught (Noel, 2010).

The third viewpoint on school readiness is the Social Constructivist model, which views school readiness in social and cultural terms and focuses on the community, its values, and expectations, rather than on the child (Dockett & Perry, 2002). The final perspective of school readiness is an Interactional Relational model in which the focus is on the child and the environment and the ongoing interaction between them. This theory focuses on helping children learn, and it suggests that educational success depends on the reciprocal relationship between the school and the child, particularly on the mentorship of the teacher (High, 2008).

2.5 Domains of School Readiness

Van Zyl (2011) indicates that, in assessing the child for school readiness, there are important domains to consider, and children are easily able to adapt in new environments (Pekdoğan & Akgül, 2016) and can commence subsequent levels of education if they can successfully establish developmental areas (Pekdoğan & Akgül, 2016). Mohamed (2013) indicates that the domains that are related to school readiness can be categorised into two streams, those directly related to school readiness, and constructs that are indirectly related to school readiness. According to Mohamed (2013), the constructs that are related to the direct measures of school readiness include the cognitive domain (Van Zyl, 2011), which focuses on cognitive ability and approaches to learning; the speech and language domain, which measures language and speech; as well as the perceptual domain (Van Zyl, 2011), which focuses on body awareness and spatial development. Mohamed (2013) further indicates that these direct domains of school readiness are essential in developing skills of reading and writing and mathematics: without these skills, it is impossible for the child to progress. The indirect domains of school readiness according to Mohamed (2013) include the emotional domain, which focuses on the dimensions of empathy, emotional regulation, and behavioural inhibition/self-confidence; the social domain, which focuses on interpersonal competencies, social graces and play, situational readiness, cultural readiness as well as self-regulating skills. Lastly, the neurological domain considers the dimensions of gross and fine motor skills development and low tone, as well as the developmental domain, which incorporates the dimensions of attention, as well as sensory modalities of vision and hearing, which with touch are key to learning.

2.6 School Readiness Assessment in the South African Context

According to the National Institute of Child Health and Human Development (2005), readiness in the preschool year serves as an important indicator of optimal child development. However, due to the historical misuse of psychological assessment instruments in South Africa (Foxcroft & Roodt, 2013), school readiness testing in South Africa was seen as exclusionary and as discriminatory, and this resulted in school readiness assessment instruments being banned in various provinces in South Africa. After the 1994 first democratic elections in South Africa, it was decided that each of the nine provinces in South Africa should manage its departmental preschools in its own way (Janse van Rensburg, 2015), which resulted in the use of non-standardised assessments as well as assessment practitioners in each province being limited to making use of internationally developed tests that had not been approved by the HPCSA (Amod & Heafield, 2013).

According to Mohamed (2013), school readiness is increasingly being recognised as essential in education due to the consequences it holds for the child's educational success and later life. However, to date, no consensus has been reached on the definition of school readiness (La Paro & Pianta, 2000; Mohamed, 2013; Rimm-Kaufmann & Sandilos, 2017). Amod and Heafield (2013) state that school readiness has been under-researched and remains a focus for further attention, clinically and empirically. Likewise, Munnik (2018) indicated that the definition of school readiness varies globally and is informed by a range of theoretical perspectives. Munnik (2018) further indicates that various definitions exist in the South African context which inevitably complicates assessment and intervention practices.

To establish school readiness in preschoolers, school readiness assessment instruments, observations, interviews as well as collateral information is used as a standardised method to gather data to establish if children are school-ready or not (Laher & Cockcroft, 2013). In South Africa, school readiness assessments are highly inaccessible to the majority of children from the low socio-economic areas due to cost and time. These assessments are usually administered by health professionals such as psychologists, social workers, and occupational therapists mainly in the private sector (Laher & Cockcroft, 2013). Munnik (2018) further explains that school readiness assessments in South Africa are conducted in two main streams: by educational practitioners such as Grade R teachers and by health professionals such as psychologists and occupational therapists.

As part of establishing Grade R learners' readiness, in South Africa, teachers conduct continuous assessments primarily through observation both formal and summative assessments in Grade R as prescribed by the DBE (2014). This means that teachers have the opportunity to observe the children in the classroom and playground settings and can observe and identify a wide range of behavioural, emotional, and learning-related problems in the context of comparisons between children (Mohamed, 2013). Some of the instruments that are commonly used for school readiness are internationally developed instruments that are not yet subjected to validation studies to determine their validity and reliability for use in the South African context. Some of the South African-based school readiness assessments used by practitioners to establish school readiness include the Junior South African Individual Scales (JSAIS), which measure the child's cognitive abilities (Madge et al., 1985); the School-Entry Group Screening Measure (SGSM) (Foxcroft, 1994); the School Readiness Test of the University of Pretoria (Van Rooyen & Engelbrecht, 1997); the Aptitude Test for School Beginners (ASB), which evaluates the cognitive aspects of school readiness (Human Sciences Research Council of South Africa [HSRC], 1974) and the School Readiness Evaluation by Trained Testers (SETT), which measures language and general (or intellectual) development, physical and motor development, and emotional and social development (HSRC, 1984) (Lessing & De Witt, 2005); the Nursery School Questionnaire (NQES) (Joubert, 1984), and the Herbst Instrument for Measuring Cognitive and Motor Development (Buys, 1993). However, these instruments were developed in the period between 1974 and 1994 and are still being used and recommended for use in assessment practices (HPCSA, 2010).

Most of these tests are not standardised for the South African population and lack evidence that psychometric properties have been established. It needs to be noted that these tests were standardised more than 20 years ago and are thus not optimal to use in a multicultural post-apartheid South African context (Munnik, 2018). Furthermore, these instruments measure a range of skills from visual, auditory, and spatial perception, verbal comprehension, development and reasoning, numerical reasoning, motor skills, and coordination, to memory skills. Notably, the importance of emotional and social competency is downplayed and overlooked, with an over-emphasis on intellectual maturity (Amod & Heafield, 2013), and none of the instruments offer an optimal assessment of children's emotional and social development.

Munnik (2018) indicates that the clarification of the components that constitute school readiness remains an area of concern within which emotional and social competency has received even less attention. Munnik (2018) further states that school readiness assessment batteries usually include tests that focus on the assessment of scholastic aptitude, cognition or intellectual functioning and developmental abilities. Similarly, Van Zyl (2004) indicates that in South Africa, school readiness is primarily an educational matter and assessments are therefore biased towards intellectual functioning, cognitive abilities, and academic skills. In a review conducted by Bustin (2007), it was indicated that the above-mentioned instruments had an exclusive or strong emphasis on motor development and cognitive competencies. Therefore, these instruments have been reported to lack a focus on emotional and social domains or that these domains had not been comprehensively included. According to Mohamed (2015), there is only one screening test available to assess emotional and social school readiness for the Grade R level in South Africa (developed by Bustin, 2007). According to Denham et al. (2009), the accurate assessment of emotional and social competency and skills in children has implications which are crucial for public health, because of the associations of emotional and social competency or skills with mental health, academic performance, and other key outcomes.

2.7 Importance of Emotional and Social Competency in school readiness

There is an emphasis on the importance of school readiness and preparing children for literacy. Pre-existing skills that are related to and certainly contribute to school readiness are based on a foundation of well-developed emotional and social skills. Kleeck and Schuele (2010) explain that early childhood development is an important period for social, emotional, and cognitive development, and this is a time during which children enter preschool, and where their development manifests in specific skills that they use in class and their interaction with others. The development of emotional and social skills in children, therefore, plays a vital role in the child's school readiness as well as adjustment to school, which the lack thereof may delay school entry (Mohamed, 2013). However, Wildy and Styles (2008) indicate that a number of children enter school with inadequate emotional and social competencies which are deemed important for the child to succeed in school. It therefore entails that school readiness assessments that are designed to measure only the cognitive and intellectual domains in a child's development are pertinent to

schooling; however, emotion regulation, as well as social skills, are as important. Denham et al. (2014) state that the development of emotional and social skills in children plays a vital role in the child's school readiness as well as adjustment to school. Denham et al. (2014) further indicate that children who struggle with emotional regulation, specifically in dealing with negative emotions, may struggle to focus on learning, whereas those who have acquired adequate emotional regulation skills are more able to easily engage in classroom activities, thereby making learning easy for them. Furthermore, Schultz et al. (2010) indicate that emotional regulation skills in preschoolers, in turn, helps them to be able to facilitate social problem-solving as well as to have the ability to engage in prosocial behaviour instead of engaging in aggressive behaviour. Similarly, Coy et al. (2001) indicate that children who lack social competency have difficulty accessing competent solutions in the face of challenging situations and tasks and tend to turn to aggressive and inept ways of problem-solving in comparison to children who have established these skills. It is evident that social skills are vital for preschool children, especially when it comes to play and interaction with others, and, according to Denham et al. (2014), this is an important aspect of school adjustment, and has been found to significantly predict academic success in the first grade (Welsh et al., 2010). Moreover, Pekdoğan and Akgül (2016) state that children are easily able to adapt to new environments and can commence subsequent levels of education if they can successfully establish developmental areas.

Emotional and social competency is, therefore, an important aspect of school adjustment, and has been found to significantly predict academic success in the first grade (Welsh et al., 2010) and has become important in early childhood assessments (Denham et al., 2014). There is, therefore, a significant need in South Africa for relevant, reliable, and valid tests, especially in the field of education.

2.8 Summary

This brief literature review identified that to date, no consensus has been reached on the definition of school readiness, although the evidence for the substantial influence of school readiness on a child's success in school and ultimately their general success in life has been established (Van Zyl, 2011). Research in early child development has contributed to evolving perspectives of school readiness. There are four theoretical perspectives underpinning definitions of school readiness: the

Idealist/Nativist view, the Empiricist/Environmental view, the Social Constructivist view, and the Interactionist view, each with different conceptions of school readiness. The perspectives of school readiness have shifted from a child's attributes to the dynamic relationships between the environment and the child's development (Rimm-Kaufman et al., 2000). Similarly, there is a lack of consensus over what constitutes emotional and social competency and to what extent it is included in theoretical and operational definitions of school readiness as a domain (Munnik, 2018).

It became apparent that authors not only emphasised the lack of appropriate instruments to assess emotional and social competency in young children but stressed that existing instruments lacked appropriate psychometric properties and are not methodologically sound (Epstein et al., 2009; Ştefan et al., 2009). According to the literature, the majority of the instruments were developed more than 20 years ago and are therefore outdated and not appropriate for cross-cultural use in a post-apartheid South African context. Assessment practices place more emphasis on cognitive and scholastic functions and aptitude than on emotional/ social competency as a domain of school readiness. Most of the instruments that have been developed and are available to assess motor development and broader cognitive abilities and competencies exclude the assessment of the emotional and social aspects of the child. Therefore, the present study aimed to integrate and consolidate the most recent good quality literature (2008–2018) on instruments that measure emotional and social competency as a domain for school readiness in South Africa and reported on their psychometric properties.

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CHAPTER 3

METHODOLOGY

The researcher utilised a systematic review design methodology with the aim of providing information in the form of good quality articles on available instruments that assess emotional and social competency as a domain for school readiness, identified and summarised aspects of the instruments that measure school readiness in preschoolers and the psychometric properties of these instruments.

This section describes the research design, review questions, inclusion and exclusion criteria, the search strategy, the review process, data extraction and data analysis, and lastly, the ethical considerations.

3.1 Research Design

This study used a systematic review methodology. A systematic review is a rigorous and systematic way of performing a literature review which involves identifying, selecting, evaluating and synthesising appropriate research from published studies in an attempt to answer a specific research question (Ham-baloyi & Jordan, 2015). A systematic review is considered to be the highest form of evidence (Teing, 2007), and the unambiguous, clear, and reproducible methods employed produce a clear statement of objectives, materials, and methods (Teing, 2007). A systematic review was suitable for this study as it delivered a thorough synthesis of available research related to school readiness instruments that measure the emotional and social competency of preschool children in South Africa. This study expanded on the systematic review project done by Munnik et al. (2015) and included the most recent research from the past 10 years as limited research has been done in the past five years. Although similar methods have been used in the retrieval of data, new Boolean phrases were added to identify relevant articles.

3.2 Inclusion Criteria

Target Group. The systematic review considered studies that have included school readiness assessment instruments that focused on emotional and social competency as a domain of school readiness in preschool children between the ages of four and six years.

Period of review. Literature from 2008 to 2018 was considered as this period reflected the most recent literature on assessment instruments.

Types of studies. Peer-reviewed, full-text studies that used a quantitative design were included. The review question was focused on identifying instruments that measure emotional and social school readiness that dictated quantitative methodologies. This systematic review looked at empirical studies; more specifically, primary data studies, as it was interested in the type of studies that contained the highest level of evidence, and the type of school readiness instrument used with the statistical results being kept intact.

Text selection. The study included peer-reviewed full-text articles that have been published in English. The databases were accessed using the University of the Western Cape library ensuring that articles were accessed free of cost.

3.3 Exclusion Criteria

The review excluded articles that did not have a quantitative design, and those with a pure focus on intervention. Articles published in any other language other than English, as well as articles published in the years before 2008 were excluded.

3.4 Search Strategy

A well-constructed search strategy is essential for a systematic review, and, according to Aromataris and Riitano (2014), a clearly defined review question and inclusion criteria provide the foundation for the search strategy. The search strategy included the retrieval strategy and the keyword identification process and retrieved accurate results of most of the articles that were assessed for eligibility and inclusion.

The databases contained in the University of the Western Cape Online library were used for identifying appropriate titles. The disciplines of Health, Social Sciences, and Education were selected as the database sources for the review. The databases are catalogued by discipline on the website (lib.uwc.ac.za) and each discipline is comprised of a list of databases that are considered primary or secondary for that discipline. Peer-reviewed articles from the databases of UWC were selected for the search. Additional records were identified from the reference lists of all articles that were included, a process known as reference mining. Reference mining assists in reducing the

publication bias introduced by the search strategy and inclusion criteria (Bronson & Davis, 2011). It was also decided to include grey literature in the form of unpublished South African doctoral theses. One of the theses was located in google scholar, and one was located via a preliminary search in Google. It was decided that if insufficient South African-based articles were found in the databases, then reference mining and Google search would be used to establish if any additional relevant articles that fulfilled the basic inclusion criteria were available.

3.6 Retrieval strategy

Literature was retrieved from two core sources: database search and reference mining. The following databases were searched: Academic Search Complete, EBSCOhost including, PsycARTICLES, PsycINFO, Sage Online, SocINDEX, PubMed, Sabinet and ERIC and Google Scholar. These databases were selected based on their focus on psychology and education.

3.5 Review Process

The present study adopted the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) model cited in Liberati et al. (2009). PRISMA recommends that systematic reviews include four levels of review: identification, screening, eligibility (quality appraisal), and summation.

3.5.1 Identification

The identification of records through the title search which involved identifying journal articles based on the journal article's index keywords and the content of the title with specific keywords and combination of these keywords in identified databases as well as the identification of additional records through other sources. Two reviewers were involved in this process. Potential records were identified via EBSCOhost which was accessed via the University of the Western Cape Library. After identification of the relevant articles, the process results were tabularised on the title search document under Author, Date published, Date obtained, Title and source, Database, and Location stored (Appendix B).

3.5.2 Keyword Identification

This study made use of Boolean phrases linking several keywords together with Boolean operators such as ‘AND’ and ‘OR’ which has been reported to add power to the search and enormously increase its efficiency (Terre Blanche et al., 2006). The Boolean phrases were adjusted and retested repeatedly until the researcher and reviewers were satisfied with the results, at which point the phrases were finalised. The phrases were tested in an initial limited search on EBSCOhost via the University of the Western Cape online library to identify the related terms and test the efficacy of keywords for subsequent searches. This was discussed in a meeting between the two reviewers, and a decision was made on the final list of keywords. Combinations of several keywords were utilised to search the domains. A trial was done by the primary researcher and her supervisor independently to identify relevant keywords and phrases.

The following search terms were used in this review: “Emotional Social Competency”, “Assessment”, “Emotional Competency”, “Social Competency”, “School Readiness Instrument”, “Preschool”, “Emotional Social Intelligence”, “Emotional Social Readiness” and “Screening Instrument”.

The final keywords were combined into 11 Boolean phrases that were used in the identification stage namely,

1. Emotional and social skills AND school readiness AND assessment OR assessment tools
2. Emotional skills AND school readiness AND assessment tools
3. Social skills AND school readiness AND assessment tools
4. Emotional social competency AND school readiness AND assessment tool AND preschool
5. Emotional social competency AND school readiness instrument AND screen instrument
6. Emotional social competency AND school readiness screening instrument AND preschool
7. Emotional social intelligence OR Emotional social readiness AND assessment AND preschool

8. Emotional social readiness OR Emotional social school readiness AND screening instrument AND preschool
9. Emotional social skills AND school readiness screening instrument AND preschool
10. Social and emotional skills AND school readiness AND assessment tool OR kindergarten OR preschool
11. School readiness AND screening instrument

The keyword combinations mentioned above were used in a comprehensive search of library databases and published research reports available at the University of the Western Cape library.

3.5.3 Screening

The screening phase included filtering of the identified articles by abstract to remove any clearly irrelevant literature. The abstract search involved the selected journal articles which passed the first step and being carried out using the pre-specified inclusion and exclusion criteria. The abstract search process results were tabularised on the abstract search document under Author and title, Type of design, Study Population, Method of Data Analysis, and Outcomes (Appendix C).

3.5.4 Eligibility

Eligibility entailed assessing the quality of the articles with a quality appraisal tool to ensure methodological rigour and relevance to the research topic. The Smith Franciscus Swartbooi (SFS) Quality Appraisal Tool developed by Smith et al. (2015) was used to evaluate and appraise selected journal articles after permission for its use was obtained from the developers (Appendix D).

The SFS Quality Appraisal Tool consists of twenty-nine questions spread over three sections. Each section assesses specific aspects and qualities of the included articles. Subsection A is based on the Purpose of the Measure, made up of 18 points and includes nine questions based on the target group, theoretical framework, theoretical definitions, and attributions (i.e. was the construct(s) theoretically/ and operationally defined?). Subsection B, which focuses on Methodological Rigour is made up of 37 points and includes 15 questions based on design, aims, sampling, data collection, data analyses and results (i.e. did the researcher report on how they selected specific items?; Did the researcher pilot the test?). Lastly, the section on General

Considerations is made up of nine points and includes four questions which focus on the quality of the information contained in the article, such as how long ago the test was developed, and if there is a mention of the unique multicultural context of South Africa, including the relevant legislation related to psychological assessment practices in South Africa. An article could score a maximum of 64 points, which would make up 100%. Each article had the potential to obtain a total score based on the overall quality of the article categorised as weak (0–25%), moderate (26–50%), strong (51–75%), or excellent (76–100%). To be included, it was decided that the article needed to obtain a threshold score of 80% or above, as the researcher was looking for good quality articles, and the critical appraisal tool was designed to be quite comprehensive.

3.5.5 Summation

Articles satisfying the threshold score were then included in the summation. The summation was done using thematic meta-synthesis discussed in point 3.8.

3.5.6 Reviewers

The review process involved two reviewers, the primary reviewer (Reviewer 1) and her supervisor (Reviewer 2). Both reviewers were involved in the title search and abstract search process, and in order to promote and maintain methodological rigour, each reviewer worked independently. Once each reviewer had completed the process, they met to discuss their findings. Reviewer 2 for this particular research project was identified as the secondary reviewer due to her knowledge of assessment, research methodology and design of systematic reviews. A third reviewer (Reviewer 3) was identified and worked independently on the SFS scoring system and documented her findings independently. Reviewer 1 and Reviewer 3 met at the end of the scoring, the scores were compared, and the decision was made on which articles would be included and excluded. There were minor discrepancies noted between the scores of the two reviewers (Reviewer 1 and Reviewer 3) initially. They met and discussed the discrepancies article by article. Most of the discrepancies were due to differences in scoring for methodological rigour. Both reviewers (1 & 3) read through the sections of articles related to methodological rigour to note the reason for discrepancies. This was resolved through discussions to reach an agreement, which contributed to increased rigour in the execution of the study. Finally, once the discrepancies were dealt with, only articles with a score of above the 80% threshold were accepted. One article scored over the 80% threshold by

Reviewer 3 but was disqualified and excluded due to not meeting the inclusion criteria as it focused on 3-year-old children. This was discussed and the decision was made by both Reviewers 1 and Reviewer 3. Reviewer 2 would have been involved should there have been any disagreement between the Reviewer 1 and 3 to assist in determining and resolving any differences.

All three reviewers in this review familiarised themselves with the research methodology and design and the levels of review. Their contribution ensured the quality of the review by providing recommendations and comments and interrogating any methodological issues by attending regular meetings to discuss progress and some of the challenges that came up in the review (Moher et al., 2015). Data extraction sheets (Appendices B & C) provided a guide to the reviewers in ensuring that the articles met the inclusion criteria. Reviewer 1 took into account any comments and suggestions arising from Reviewer 2 and made any required and necessary adjustments or revisions.

3.6 Data Extraction

Data extraction forms (Appendices B & C) were used by the reviewer to review and compare the data. The flow chart below (Figure 3.1) reflects the levels of review and the operational steps included at each level. The flow chart was adapted from the PRISMA reference for preferred ways of reporting systematic review processes (Moher et al., 2009).

3.7 Data Analysis

The method of data analysis for this study was a meta-synthesis. A meta-synthesis is a qualitative method of conducting a systematic review that involves investigating what is currently understood about a phenomenon to attain a better, more comprehensive understanding of that phenomenon (Darvishpour et al., 2014). According to Shuval et al. (2011), meta-synthesis has been accepted as an appropriate method of analysis to integrate findings from across a range of qualitative studies to produce a conceptually more robust account of the meaning and significance of a phenomenon than would have been possible based on a single qualitative study.

There are various approaches to conducting a meta-synthesis (Walsh & Downe, 2005). Sandelowski et al. (1997) identified three contemporary types of meta-synthesis used for systematic review: (i) Theory Building, which is an approach that involves building either a formal

theory using “Grounded formal theory” or creating new theoretical interpretation using “meta-study” method based on findings found from the qualitative studies included in the process (Finfgeld, 2003); (ii) Theory Explication that involves a process of deconstruction and reconstruction and finally a synthesis of the findings into a single concept (Finfgeld, 2003); and (iii) Descriptive Meta-Synthesis which involves the synthesis of qualitative findings and results in a comprehensive analysis of phenomena (Schreiber et al., 1997), and aims at providing a broad description of the research phenomenon.

3.8 Ranking

The process of synthesis began with reviewing the literature by ranking studies based on the range of information related to school readiness instruments that measure the emotional and social competency of preschool children. Furthermore, the classification of studies was ranked according to the methodological rigour measured by the SFS appraisal tool. The research questions acted as guidelines to synthesise the information across the articles.

3.9 Ethical Considerations

Permission to conduct the study (HS19/6/7) was obtained from the Humanities and Social Science Research Ethics Committee of the University of the Western Cape (HSSREC) (Appendix A). Ethical guidelines to conduct a systematic review included using systematic, explicit, unbiased, transparent, rigorous and reproducible methods to synthesise and integrate evidence. To ensure that reliable and valid sources of data were used in the systematic review, search databases endorsed by the University of the Western Cape were used. Ethical considerations were upheld in terms of the systematic review process itself which include ensuring that strict, methodological, rigorous, accurate, and thorough research procedures are engaged in when including and excluding articles.

CHAPTER 4

RESULTS AND DISCUSSION

This chapter focuses on the results and discussion of findings. The chapter has been organised into two sections namely, process results, and descriptive meta-synthesis.

4.1 Process Results

An adaptation of the PRISMA flow chart was used to graphically represent the overall flow of the review process. Figure 4.1 presents a summary of the results of each level of the review process.

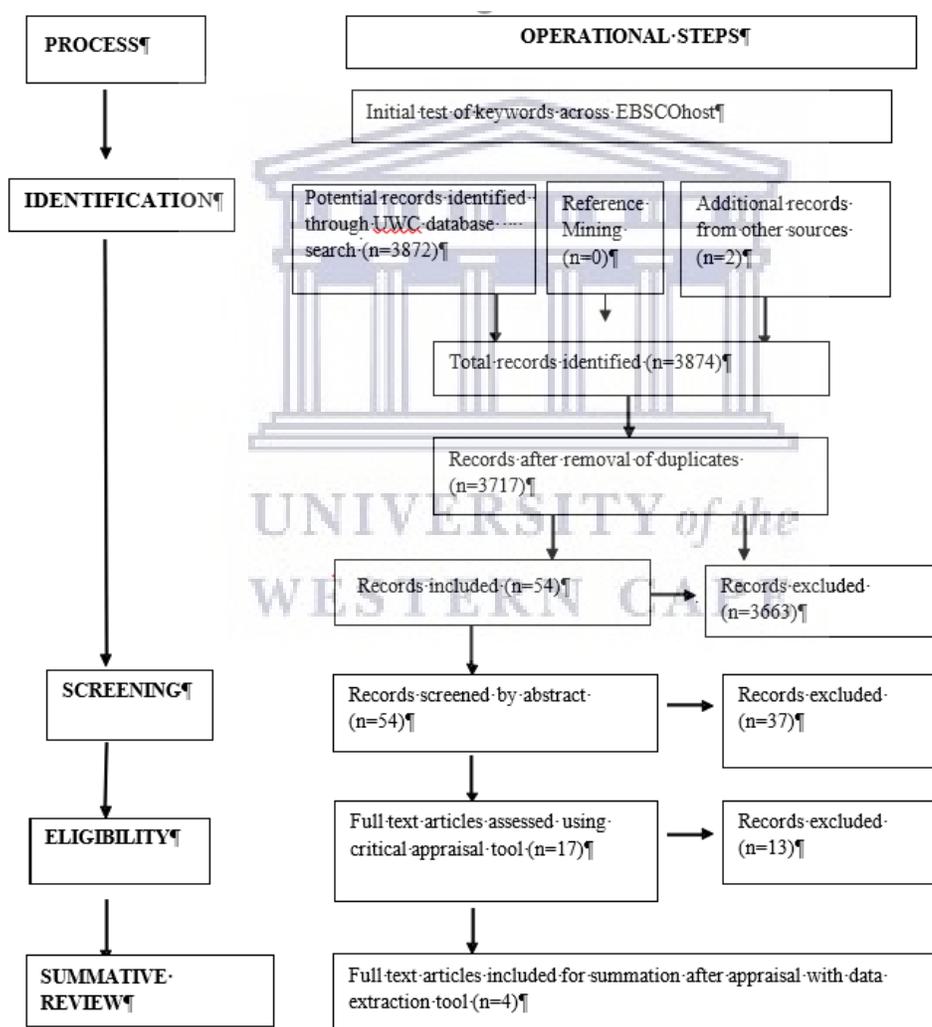


Figure 4.1: Completed levels of review

Source: Adapted from Moher et al. (2009)

The review process took place on three levels, namely, 1. Identification (Title Search), 2. Abstract Search and 3. Critical Appraisal of articles.

4.1.1 Step 1: Identification

Articles that were identified in the various databases (Academic Search Complete, ERIC, PsycARTICLES, SocINDEX, and Google Scholar) using the keyword combinations amounted to 3 872 articles. Two additional unpublished doctoral theses were identified via Google Scholar, which resulted in a total of 3 874 ($3872 + 2 = 3874$) articles. A total of 3 663 article titles were not deemed appropriate at face value and were excluded from the review. The main reasons for exclusion included that titles were purely focused on a) prevention and interventions and the evaluation of these programmes and strategies; b) the parent-child relationship as well as the teacher-child relationships and other relationships as a predictor of academic performance and adjustment at school; and c) associations between school readiness in relation to various factors. Furthermore, other articles were qualitative in nature, whereas the topic under research lends itself to articles of quantitative design, as stipulated in the inclusion and exclusion criteria.

During the title search phase, 107 duplicates (articles appearing in more than one database) were identified and removed. Duplications were found between Academic Search Complete and ERIC and PsycARTICLES and SocINDEX. After the 54 relevant articles were identified, the process results were tabularised on the title search document under Author, Date published, Date obtained, Title and source, Database, and Location stored (Appendix B).

4.1.2 Step 2: Screening

Fifty-four (54) journal articles were screened based on the inclusion criteria. Thirty-seven (37) abstracts were excluded due to their focus on intervention as well as the age of the participants not meeting the requirements of 5–7 years old as stipulated in the inclusion criteria. Furthermore, policy reports, reviews, and correlation studies were excluded, as well as articles that purely focused on cognitive abilities.

At the end of the screening stage, seventeen articles (17) were retained for Quality Appraisal. The abstract search process results were tabularised on the abstract search document under Author and title, Type of design, Study Population, Method of Data Analysis, and Outcomes (Appendix C). Articles for which information from the abstract search did not provide adequate

evidence to apply the inclusion/exclusion criteria at this stage were still retained until further evidence was available to enable a decision on inclusion. For example, one article, Xie et al. (2019), did not mention the population age group in the abstract and was still included for the eligibility evaluation. This article was then excluded based on not meeting the specified population age group as well as not meeting the 80% quality appraisal threshold benchmark.

4.1.3 Step 3: Eligibility

The seventeen (17) articles were evaluated and scored according to the specific criteria for Eligibility using the SFS Critical Appraisal Tool (Smith et al., 2015). Each article was scored based on the overall quality according to the criteria in the SFS Critical Appraisal tool scoring system. For this review, full-text articles had to obtain a pre-determined threshold score of $\geq 80\%$ to be included in the review. All full-text articles that achieved the 80% threshold score proceeded to the data extraction process. Out of the seventeen (17) articles that were evaluated, only four (4) articles were included in the study, and thirteen (13) articles were excluded. This is because twelve (12) articles did not achieve the specified 80% threshold for inclusion in this study. Some of these articles lacked detail in methodological rigour and did not report on item selection and the assembling of the items, development of administration instructions as well as cultural, linguistic, and gender appropriateness. Furthermore, one article did not meet the inclusion criteria based on the specified population age group. The scores obtained for each of the four articles were captured on a rating form.

The scores of the 17 articles that were appraised are presented in Table 4.1 below. They were ranked in order from highest to lowest threshold score obtained based on the total scores acquired from the purpose, methodological rigor, and general considerations sections. The range of scores on the appraisals varied between 95% and 61% (in the strong to excellent category), which suggests good quality articles with a strong emphasis on methodological rigour.

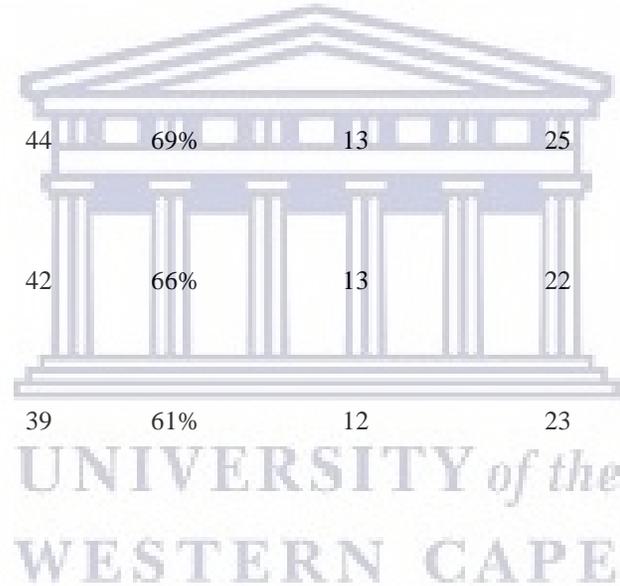
Table 4.1

SFS Critical Appraisal tool scores

Author	Title	Total Score	% Obtained	Purpose (Max score= 18)	Methodological Rigour (Max Score = 37)	General Considerations (Max Score =9)	Category	Included
Munnik (2018)	The development of a screening tool for assessing emotional and social competency in pre-schoolers as a domain of school readiness.	61	95%	18	34	9	Excellent	Included
Mohamed (2013)	The development of a school readiness screening instrument for Grade 00 (pre-Grade R) learners.	56	87.5%	17	31	8	Excellent	Included
Ştefan et al. (2009)	Preschool screening for social and emotional competencies – development and psychometric properties.	56	87.5%	18	32	6	Excellent	Included
Epstein & Synhorst (2008)	Preschool Behavioural and Emotional Rating Scale (PreBERS): Test-retest reliability and inter-rater reliability.	55	86%	16	33	6	Excellent	Excluded
Raikes et al. (2019)	Examination of school readiness constructs in Tanzania: Psychometric	50	78%	11	28	6	Excellent	Excluded

Author	Title	Total Score	% Obtained	Purpose (Max score= 18)	Methodological Rigour (Max Score = 37)	General Considerations (Max Score =9)	Category	Included
Lambert et al. (2015)	evaluation of the MELQO scales. Psychometrics of the preschool behavioural and emotional rating scale with children from early childhood special education settings.	50	78%	15	29	6	Excellent	Excluded
Gouley et al. (2008)	Construct validation of the social competency scale in preschool-age children.	50	78%	15	26	5	Excellent	Excluded
McKown et al. (2013)	Direct assessment of children's socio-emotional comprehension.	49	76%	16	27	6	Excellent	Excluded
Sette et al. (2015)	Structure and validity of Affect Knowledge Test (AKT) in a sample of Italian preschoolers.	48	75%	16	27	5	Excellent	Excluded
Xie & Li (2019)	Development and validation of the Chinese preschool readiness scale.	48	75%	14	27	7	Excellent	Excluded
Janus et al. (2011)	Validity and psychometric properties of the Early Development Instrument in Canada, Australia,	46	72%	13	27	6	Strong	Excluded

Author	Title	Total Score	% Obtained	Purpose (Max score= 18)	Methodological Rigour (Max Score = 37)	General Considerations (Max Score =9)	Category	Included
Hagquist & Hellström (2014)	United States, and Jamaica. The psychometric properties of the early development instrument: A Rasch analysis based on Swedish pilot data.	44	69%	14	26	4	Strong	Excluded
Quirk et al. (2016)	Dimensionality and measurement invariance of a school readiness screener by ethnicity and home language.	44	69%	13	25	6	Strong	Excluded
Quirk et al. (2018)	Universal school readiness screening at kindergarten entry	42	66%	13	22	7	Strong	Excluded
Hymel et al. (2011)	The Early Development Instrument: An examination of convergent and discriminant validity.	39	61%	12	23	4	Strong	Excluded



4.2 Ranking

This process entailed the ranking of studies and the tabularisation of extracted data, and the scores for each of the four identified articles were captured on a rating form.

Five articles obtained the threshold score of above 80%; however, only four were included. One article that met the 80% threshold was excluded because it was a reliability study of an instrument that is already included in this study. This would, therefore, result in duplication of the same instrument. The remaining four articles were included in this study. The four articles deemed eligible for inclusion in the final summation were ranked based on their scores obtained on the critical appraisal tool. The scores of the four articles fell in the range between 86% and 95% (in the excellent category), which suggests good quality articles with a strong emphasis on methodological rigour. Table 4.2 presents the ranking of the four articles based on methodological rigour, the total scores as well as scores obtained in the subsections.

Table 4.1

Ranking of articles

Reference	Rank	Total Score	% Obtained	Purpose (maximum score= 18)	Methodological Rigour (Maximum Score = 37)	General Considerations (Maximum Score =9)	Quality
Munnik (2018)	1	61	95%	18	34	9	Excellent
Mohamed (2013)	2	56	87.5%	17	31	8	Excellent
Ştefan et al. (2009)	2	56	87.5%	18	32	6	Excellent
Epstein et al. (2009)	2	56	87.5%	17	33	6	Excellent

Table 4.2 depicts the four articles that obtained a score over the 80% cut-off on the SFS Critical Appraisal Tool. As seen in Table 4.2, the dissertation by Munnik (2018) was ranked first (1st) out of the four articles with a rating of 95%. The dissertation scored the highest across the three subsections. Mohamed (2013), Epstein et al. (2009), and Ştefan et al. (2009) were ranked jointly in second place with a rating of 87.5%.

The dissertation by Munnik (2018) scored 18/18 for Purpose of the Instrument Subsection (Subsection A). A score of 34/37 was obtained for methodological rigour (Subsection B). This is because the sample was specified as a probability sample that scores lower than a non-probability sample on the SFS scoring system. The article scored 9/9 in the general considerations (Subsection C), which means that the article considered the unique multicultural context of South Africa in terms of test bias, and made reference to the relevant legislation related to psychological assessment practices in South Africa. Munnik (2018) ranked first on the three subsections which is indicative that all aspects of methodological rigour and coherence were reported on.

The dissertation by Mohamed (2013) scored 17/18 for Purpose of the Instrument Subsection (Subsection A). This was due to the absence of reference to whether the instrument was a normative or criterion-referenced measure. A score of 31/37 was obtained for Methodological Rigour (Subsection B) because the author did not comment on the development of administration instructions and feedback on standardisation of administration procedures. Furthermore, there was no mention of items being reviewed by means of experts for content validation. The article scored 8/9 for General Considerations (Subsection C), as the article did not comment on the unique multicultural context of South Africa and issues of test bias.

The article by Ştefan et al. (2009) scored 18/18 for Purpose of the Instrument Subsection (Section A), a score of 32/37 was obtained for Methodological Rigour (Subsection B) as the author did not comment on the development of administration instructions and feedback on standardisation of administration procedures. Furthermore, the author did not consider other factors besides cultural, linguistic, and gender considerations in the construction phase of the instrument. The article scored 6/9 for General Considerations (Subsection C). The article did not comment on the unique multicultural context of South Africa and issues of test bias, and there was no reference to the relevant legislation related to psychological assessment practices in South Africa. It needs to be mentioned that the article focused on research abroad and the relevance of questions pertaining to South Africa needed to be questioned.

Lastly, the article by Epstein et al. (2009) scored 17/18 in subsection A for Purpose of the Instrument, as it did not state whether the measure was to be used for screening purposes or in-depth diagnostic assessment. The article scored 33/37 for Methodological Rigour (Subsection B). The authors did not report on how they selected specific items or on the assembling of the items.

Furthermore, there was no mention of the development of administration instructions, as well as feedback on the standardisation of administration procedures. The article scored 6/9 for General Considerations (Subsection C). The article did not make reference to the relevant legislation related to psychological assessment practices in South Africa. Similarly, this article focused on research abroad and the relevance of questions pertaining to South Africa needed to be kept in mind. Table 4.3 below presents the final selected articles that report on instruments that assess emotional and social competency by Author, Title, Publication Date and Source of the article.

Table 4.2

Final selected articles

Author(s)	Title	Publication Date	Source of Article
Munnik	The development of a screening tool for assessing emotional and social competency in preschoolers as a domain of school readiness.	2018	Google Scholar
Mohamed	The development of a School Readiness Screening Instrument for Grade 00 (pre-Grade R) learners.	2013	Google
Ştefan et al.	Preschool screening for social and emotional competencies – development and psychometric properties	2009	Ebscohost
Epstein et al.	Development and standardisation of a test to measure the emotional and behavioural strengths of preschool children	2009	Ebscohost

The final four articles screened for eligibility and included in this review include two unpublished doctoral theses, the first by Munnik (2018), and the second by Mohamed (2013) on The Emotional Social Screening Tool for School Readiness (E3SR) and The School Readiness Screening Instrument for Gr. 00 (Pre-grade R) Learners. The selection also included one article by Ştefan et al. (2009) on Preschool Screening for Social and Emotional Competencies – Development and Psychometric Properties, and one by Epstein et al. (2009) on Development and Standardization of a Test to Measure the Emotional and Behavioural Strengths of Preschool Children.

4.3 Descriptive Meta-synthesis

The four full-text articles that satisfied the threshold score of 80% proceeded to the data extraction process. Descriptive meta-synthesis was conducted to: i) identify and describe the instruments

used to assess emotional and social competency as a domain of school readiness; ii) report on their psychometric properties; and iii) report on the instrument's theoretical and operational definitions. Table 4.4 presents the instruments identified from the included articles to assess emotional and social competency.

Table 4.3

Instruments that assess emotional and social competencies

Author(s)	Instrument	Abbreviation
Munnik (2018)	The Emotional Social Screening Tool for School Readiness	E3SR
Mohamed (2013)	School readiness screening instrument for Gr. 00 (Pre-grade R) Learners	
	Emotional Competence Screening for Preschoolers	SCE - E
	Emotional Competence Screening for Preschoolers	SCE - P
Ştefan, et al. (2009)	Social Competence Screening for Preschoolers	SCS - E
	Social Competence Screening for Preschoolers	SCS - P
Epstein, et al. (2009)	The Preschool Behavioural and Emotional Rating Scale	PreBERS

4.4 Data Extraction

The four articles which satisfied the threshold score went through the data extraction process. The data extraction tool consisted of two parts, the first four tables (Table 4.5–4.8) of each instrument (each article) includes a summation of the type of instrument, aim, and target group, definitions of the constructs (theoretical and operational), structure, domains, items, administration and scoring methods and psychometric properties. The second table (Table 4.9 of the instrument) includes a summation of the theoretical and operational definitions that were used to underpin behaviours in each of the instruments.

Table 4.5 overleaf provides a summary of the E3SR with reference to the instrument category, purpose, age group, research setting, definitions of the constructs (theoretical and operational), structure, domains, items, administration and scoring methods, and psychometric properties.

Table 4.4

The Emotional Social Screening Tool for School Readiness (E3SR)

Instrument category	Screening Tool assessing emotional social readiness as a domain of school readiness.
Purpose	To establish if preschool learners are deemed ready on an emotional and social level to enter Grade 1 (mainstream education). To identify specific strengths and weaknesses in learners' emotional social skills with the overall aim to develop a profile of the learners' emotional and social competency (strengths and weaknesses) in specific domains that might inform intervention strategies.
Age group	5–7-year-olds.
Research setting	Local sample in Western Cape, Cape Town region.
Theoretical definitions of constructs	Social Competency: Having a more interpersonal or relational focus. The focus is on the relationship with the external world/ environment, and thus focuses on the interactional skills including relationships with people and cooperative endeavours such as play. Emotional competencies are directed by the child's internal sense of self and are mostly focused inward. Emotional competencies include the subdomains of emotional maturity, emotional management, and positive sense of self, mental wellbeing, and alertness, which would enable the child to cope with age-appropriate challenges in emotion-eliciting situations across contexts.
Operational definition	At an operational level, emotional and social competency comprises of respective subdomains that include:
Emotional Competency	Emotional maturity: The ability to be self-reflective about choices and actions and how it might impact self and others. Emotional management: The ability to become aware of own and others' emotions, to identify emotions, to understand these emotions in context, and to regulate these emotions appropriately. Independence: The ability to initiate behaviour and take responsibility for actions in a developmentally appropriate way. Sense of Self: The ability to hold onto a coherent and constructive sense of self that is not subject to situational outcomes. Mental wellbeing and alertness: <ul style="list-style-type: none"> • Mental Wellbeing: The presence of a general sense of wellbeing and the absence of significant symptoms that are not age-appropriate and do not fit the specific situation. • Alertness: The ability to be attentive and to answer age-appropriate questions.
Social Competency	At an operational level, Social competency was comprised of four subdomains that included the following: <ul style="list-style-type: none"> • Social skills/ confidence: The ability to interact with others in a developmentally appropriate way. • Prosocial behaviour: Behaviour and actions that are to the benefit of others. • Compliance with rules: The ability to comply with and to follow rules in specific settings. • Communication skills: The ability to use language and non-verbal expression clearly and effectively in the service of expressing thoughts, feelings, and needs.
No. of Items	There are 56 items across the domains of Emotional and Social Competency 31 items in the Emotional Competency domain 25 items in the Social Competency domain

DOMAIN: EMOTIONAL COMPETENCY

Emotional maturity:
Emotional Management:
Independence: Positive sense of self:

Mental wellbeing:

DOMAIN: SOCIAL COMPETENCY

Social Skills:
Prosocial Behaviour:
Compliance with Rules:

Communication:
Time of administration:
Scaling:

Scoring:

Language of administration
Forms

PSYCHOMETRIC PROPERTIES

Face/ Content validity established by means of a Delphi study

Construct validity: Exploratory and Confirmatory Factor analysis

The Cronbach's α analysis indicated good to excellent reliability in the identified domains and subdomains of the E3SR.

Internal consistency suggested that items are homogeneous/ correlated to one another.

Confirmatory Factor Analysis confirmed the proposed nine-domain structure of the E3SR.

Exploratory Factor Analysis ((Principal Component Analysis) identified nine components of which eight were retained. Four components/ domains (Emotional Maturity, Emotional Management, Sense of Self, and Communication) were retained based on their factor loadings while three components (Independence, Mental Wellbeing, and Alertness and Compliance with Rules) obtained lower factor loadings and were recommended for revision.

Item difficulty and analyses

Discussed and explained in the item selection process – Delphi study assisted with item selection
 Item analyses: reported on and discussed internal consistency and reliability

Piloting sample size and demographics:

Stratified random sampling was selected as the preferred sampling technique.

Five hundred and thirteen profiles (N=513) were completed by 26 Grade RR and Gr. R teachers working across ten chosen preschool settings in urban settings in Cape Town, South Africa. The pilot included protocols from four preschool settings, namely, alternative preschools (n=17), private preschools (n=110), government preschools (n=304) and community-based preschools (n=82).

Inter-rater reliability: Not done in this study, this study included ratings by teachers alone.

Source: Munnik (2018)

Examples of items in domains

Accept correction/ discipline
 Is aware of emotions
 Separate from caregiver without signs of discomfort
 Stand up for him/herself
 Attentive in class/ at home

31 Items

12
 11
 11
 16
 11

Examples of items in domains

Have a friend or friends that he/ she plays with and give preference to (other than family members).
 Can participate in group tasks (e.g. sit still and listen to a story)
 Follow basic rules (i.e. wash your hands before dinner).

24 Items

10
 14
 10
 10

Speak clear and audibly without whispering or shouting
 15- 20 minutes

5-point Likert scale ranging from “never true for the child” to “almost always true for the child”.

Each item in a subdomain receives a score from one to five.

Each subdomain derives a subdomain score that is a composite score computed across items in the subdomain.

The subdomain score reflects whether the child has achieved competency in that subdomain.

The total scores are classified into one of three categories defined as definitely ready; ready; not ready

English

Teacher/ parent self-administered form

4.4.1 The Emotional Social Screening Tool for School Readiness (E3SR)

According to Munnik (2018), the Emotional Social Screening Tool for School Readiness (E3SR) is a self-administered screening tool with the main aim of establishing if preschool learners are deemed ready on an emotional and social level to enter Grade 1 (mainstream education). It also identifies specific strengths and weaknesses in learners' emotional and social skill sets with the overall aim of developing a profile of the learners' emotional and social competency (strengths and weaknesses) in specific domains. The identification of the strengths and weaknesses could be used to inform intervention strategies. The E3SR takes 1–20 minutes to administer. It has been conceptualised to be administered at an individual level rather than a group level (Munnik, 2018).

The E3SR consists of two subscales, the emotional competency and social competency scales with their respective subdomains. There are 56 items in total, 31 items in the emotional competency domain, and 25 items in the social competency domain. The emotional competency subscale consists of five subdomains: (i) Emotional Maturity, which refers to the ability to be self-reflective about choices and actions and how they might impact self and others; (ii) Emotional Management, which refers to the ability to become aware of own and others' emotions, to identify emotions, to understand these emotions in context and regulate these emotions appropriately; (iii) Positive Sense of Self, which refers to the ability to hold onto a coherent and constructive sense of self that is not subject to situational outcomes; (iv) Independence, which is the ability to initiate behaviour and take responsibility for actions in a developmentally appropriate way; and (v) Mental Wellbeing and Alertness: mental wellbeing refers to the presence of a general sense of wellbeing and the absence of significant symptoms that are not age-appropriate and do not fit the specific situation, whereas alertness refers to the ability to be attentive and to answer age-appropriate questions (Munnik, 2018). The subdomains in each domain of emotional and social competency include personal attributes, which are mentioned later in this chapter.

The social competency subscale consists of four subdomains: (i) Social Skills/Confidence, which is the ability to interact with others in a developmentally appropriate way; (ii) Prosocial Behaviour, which refers to behaviour and actions that are to the benefit of other; (iii) Compliance with rules, which is the ability to comply with and to follow rules in specific settings; and (iv) Communication, which refers to the ability to use language and non-verbal expression clearly and effectively in the service of expressing thoughts, feelings and needs (Munnik, 2018).

The E3SR consists of a demographic questionnaire and a 56-item questionnaire that is completed by the teacher by stating for example, if the child is able to “take responsibility for actions and emotions“. The respondent will then choose to rate the question on a five-point Likert scale (from Never, Rarely, Some of the Time, Most of the Time, and Almost Always).

The test construction process was sufficiently explained and piloted. Stratified random sampling was selected as the preferred sampling technique. Five hundred and thirteen profiles (N=513) were completed by 26 Grade RR and Grade R teachers working across 10 chosen preschools in urban settings. The pilot included protocols from four preschool settings, namely, alternative preschools (n=17), private preschools (n=110), government preschools (n=304) and community-based preschools (n=82). The majority of the protocols (60%) were completed in government preschools, followed by private preschools (21%), community-based centres (16%), and alternative centres (3%). The majority of children (74%) were in Grade R. The Grade RR group was a smaller group (26%). The sample consisted of an equal distribution of male and female learners with the following demographic distribution amongst participants: 59% were boys and 41% were girls. English was the most spoken first language (59%), followed by Afrikaans (33%), and Xhosa (6%). Other primary languages that were specified as mother tongues included Congolese, French, and other South African languages Zulu / Sepedi (2%) (Munnik, 2018).

The Cronbach's α analysis indicated good to excellent reliability in the identified domains and subdomains of the E3SR. The reported internal consistency suggested that items are homogeneous / correlated to one another. The results of the Confirmatory Factor Analysis confirmed the proposed nine-domain structure of the E3SR. The results of the Exploratory Factor Analysis identified nine components of which eight were retained with a total of 41 items. Four components / domains (Emotional Maturity, Emotional Management, Sense of Self, and Communication) were retained based on their factor loadings while three components (Independence, Mental Wellbeing, and Alertness and Compliance with Rules) obtained lower factor loadings and were recommended for revision (Munnik, 2018).

Table 4.6 overleaf provides a summary of the School Readiness Screening Instrument for Grade 00 (Pre-grade R) test (Mohamed, 2013) with reference to the instrument category, purpose, age group, research setting, definitions of the constructs (theoretical and operational), structure, domains, items, administration and scoring methods and psychometric properties.

Table 4.5

School Readiness Screening Instrument for Grade 00 (Pre-grade R)

Instrument category	Screening instrument to screen for school readiness in South African Grade R children	
Purpose	To identify developmental risk factors in the Grade 00 year for further diagnostic assessment and subsequent intervention, and to determine the predictor variables linked to academic achievement in Grade 1.	
Age group	Between ages 4 and 5 ½ at the Grade 00 level	
Research setting	Durban schools, South Africa	
Theoretical definitions of constructs	Emotional Competency: The ability for emotional expression, regulation, and understanding which involve perception and expression of emotion analysis and understanding of emotion, and the ability to regulate emotion in self and others.	
Operational definition	Social competency: The three components of thinking, feeling and behaviour to achieve social tasks. At an operational level, Mohamed (2013) describes emotional and social competency as inclusive of 8 domains: Emotional domain: includes Empathy, Emotional Regulation, and Self-confidence Empathy: a social and moral emotion which involves an interaction of cognitions and affect in response to another's emotional state	
Emotional Competency	Emotional Regulation: processes that are used to manage and change one's emotional state and emotion-related motivational and physiological states and how emotions are expressed behaviourally. Self Confidence: No definition provided	
Social Competency	Social domain: includes interpersonal competencies, Social regulation behaviour, and Social graces Interpersonal competencies: No definition provided Social regulation behaviour: No definition provided Social graces: basic manners or the skills of elementary interaction, such as saying "please" and "thank you", "sorry", and greeting appropriately	
No. of Items	There are 42 items across the domains of emotional and social competency 31 items in the emotional competency domain 25 items in the social competency domain	
<u>DOMAINS</u>	Examples of items in domains	42 Items
Cognitive:	Show initiative in trying out new things.	4 items
Perceptual:	Orientate an object in relation to another by following the instructions- "under," "behind", "above" "in front of" or "next to".	6 items
Neurological:	Begin to cut around curved lines.	6 items
Speech:	Have sufficient vocabulary to give details about him/herself, family / environment.	4 items
Emotional:	Show empathy e.g. when someone is hurt.	6 items

Social:	Play imaginatively with playmates.	8 items
Developmental:	Get easily distracted.	4 items
Independence:	Unpack / pack bag by him / herself	4 items
Administration:	The screening instrument is in a questionnaire format. A total ranging from 19 to 29 behaviours, competencies, and/or items were selected for each domain, with a total of 46 items constructed for the general section, including medical, birth, and developmental history dimensions.	
Scaling:	The Grade 00 school readiness instrument uses a forced-choice ('Yes/No', as well as a Likert scale rating) and a performance-based format.	
Scoring:	Section 1 of the questionnaire, elicits information on medical and physical development and is structured on the 'Yes/No' response format. The remainder of the questionnaire is rated on a 5-point Likert scale that appears alongside the item measured. The weighting for the ratings on the Grade 00 school readiness questionnaire is from 1 to 5: qualified by the descriptions 1= "Never", 2= "Seldom", 3= "Sometimes", 4= "Almost Always", 5= "Always".	
Language of administration	English	
Forms	Teacher-administered – questionnaire format with comprehensive and short version format	

PSYCHOMETRIC PROPERTIES

Reliability

Cronbach's α coefficients yielded high values (>0.7) indicating sound reliabilities for the 19 dimensions and 8 domains.

Construct validity: Exploratory factor analyses reduced the total pool of 214 items to 100 on the comprehensive version of the test.

A shortened version of the screening instrument was also compiled, using 42 items.

The results indicated that the domains of cognitive, perceptual, speech, and language displayed acceptable validity to predict academic achievement of Grade 1 learners.

Results of stepwise regression analyses showed that the combined value of four predictor variables (cognitive ability, social regulation, sensory, and speech) contributes to about 17% of the variance in academic achievement of Grade 1 learners.

Concurrent validity: not done in this study

Predictive validity: The screening instrument's direct variables displayed an acceptable predictive validity to predict a Grade 1 learner's academic achievement.

Piloting sample size and demographics:

The pilot included a sample of 1 471 preschool children with and without disabilities in 26 states and Washington, DC. Those with disabilities represented 13% of the sample, while 87% of the sample was represented by those without disabilities. The sample consisted of both male (52%) and female (48%) children; 80% of the sample were white children, 13% black, and 7% were unidentified. 86% were English speaking and 14% Spanish.

Inter-rater reliability: Could not be established as test returns from parents were incomplete (Noted as a limitation)

Source: Mohamed (2013)

**Original references for definitions used can be found in the extracted articles if needed*

4.4.2 School readiness screening instrument for Gr. 00 (Pre-grade R) Learners

The main aim of the screening instrument constructed by Mohamed (2013) is to screen South African school children between ages 4 and 5 at the Grade 00 level, to identify developmental risk factors in the Grade 00 year for further diagnostic assessment and subsequent intervention, and to determine the predictor variables linked to academic achievement in Grade 1.

The eight major domains that were selected for inclusion in the preliminary screening instrument include the following domains: (i) the cognitive domain consisting of four items, which looks at ability and approaches to learning; (ii) the perceptual domain consisting of six items that focus on body awareness, auditory and spatial ability; (iii) the speech domain consisting of four items that focus on speech and language; (iv) the social domain consisting of eight items, focusing on interpersonal competencies, social regulation behaviour, social graces and play; (v) the emotional domain consisting of six items that measure empathy, emotional regulation, self-confidence; (vi) the neurological domain consisting of six items that focuses on fine motor, gross motor skills, and low tone; (vii) the developmental domain consisting of four items which assess concentration and sensory aspects; and (viii) the independence domain consisting of four items that focus on the child's ability to carry out tasks independently. The screening instrument is in the format of a questionnaire. A total ranging from 19 to 29 behaviours, competencies, and/or items were selected for each domain, with a total of 46 items constructed for the general section, including medical, birth, and developmental history dimensions. The screening instrument focuses on the broader domains of school readiness and includes a focus on the social-emotional domain. A shortened version of the instrument was compiled after the screening instrument was finalised to increase the usage value of the instrument. The shortened version consists only of domains and does not include dimensions.

The Grade 00 school readiness instrument uses a forced-choice ('Yes/No', as well as a Likert-scale rating) and a performance-based format. Section 1 of the questionnaire elicits information on medical and physical development, and is structured in the 'Yes/No' response format. The remainder of the questionnaire is rated on a 5-point Likert-scale rating that appears alongside the item being measured. The weighting for the ratings on the Grade 00 school readiness

questionnaire range on a five-point Likert scale (from Never, Seldom, Sometimes, Almost Always, and Always).

The test was piloted with 512 Grade 00 learners drawn from English medium schools in Durban schools in the age cohort of 48–66 months of age, and who were eligible for school entry in 2012. A wide range of demographic factors was considered, such as geographical location (schools central to and South, North, and West of Durban), and a wide range of socio-economic status that included advantaged and disadvantaged schools, ranging from private, ex-model C and less affluent government and private schools. The sample was made up of 252 (49.4%) males, and 258 (50.6%) females. Two participants did not indicate their gender. The mean age of the participants was 4.55 years (\pm 54 months), with a standard deviation of 0.51 years (\pm 6 months). The majority of the participants were Indian (46.3%), followed by White (29.2%), Black (18.8%) and Coloured (3.3%) learners.

Factor analyses reduced the total pool of 214 items to 100 on the comprehensive version of the test. A shortened version of the screening instrument was also compiled, using 42 items. Cronbach's α coefficients yielded high values (>0.7) indicating sound reliabilities for the 19 dimensions and eight domains. The results indicated that the domains of cognitive, perceptual, speech, and language displayed acceptable validity to predict academic achievement of Grade 1 learners. Results of stepwise regression analyses showed that the combined value of four predictor variables (cognitive ability, social regulation, sensory, and speech) contributed to about 17% of the variance in academic achievement of Grade 1 learners. Test construction was sufficiently explained, and item difficulty and analyses were reported on.

Table 4.7 overleaf provides a summary of the SCE and SCS with reference to the instrument category, purpose, age group, research setting, definitions of the constructs (theoretical and operational), structure, domains, items, administration and scoring methods, and psychometric properties.

Table 4.7

Emotional Competency Screening for Preschoolers (SCE) and Social Competency Screening for Preschoolers (SCS)

Instrument category	Screening scales for emotional competency and social competency	
Purpose	Identification of preschool children at risk for academic failure and mental health problems.	
Age group	Preschool children: three age groups: 2.5–4 years, 4–5 years, and 5–7.5 years	
Research setting	Romania	
Theoretical definitions of constructs	<p>Social competency is defined as the ability to manifest socially acceptable behaviours with positive outcomes, which allow people to achieve their goals. It refers to the evaluative component of social behaviours and includes social skills/specific behaviours enacted in order to adapt to a specific social context</p> <p>Emotional competency is defined as the ability to be self-efficient in dealing with emotion eliciting situations in order to ensure adaptation to the social context.</p>	
Operational definition	<p>At an operational level, emotional and social competency comprises of respective subdomains that include:</p> <p>At an operational level, emotional competency comprises of three subdomains that include:</p>	
Emotional Competency	<ul style="list-style-type: none"> • Emotion understanding: the receptive and expressive understanding of emotions. • Emotional expressiveness: the ability to convey emotional messages in a socially acceptable way and being able to manage emotions. • Emotion regulation: the ability to evaluate, monitor, and modify emotional reactions. <p>At an operational level, social competency was comprised of three subdomains that include:</p>	
Social Competency	<ul style="list-style-type: none"> • Compliance with rules: the ability to act in accordance with rules and follow directions. • Interpersonal skills: the ability to interact with other children and adults. • Prosocial behaviours: a wide range of voluntary actions, directed at the benefit of benefit. 	
No. of Items	There are 42 items across the domains of emotional and social competency 31 items in the emotional competency domain; 25 items in the social competency domain	
DOMAIN: EMOTIONAL COMPETENCY		
Form: Parent Form (SCE-P)		
<u>Age: 2.5 – 4.0 years</u>	Examples of items in Emotional domains:	Number of Items
Emotion understanding:	The child says about others that they are happy or angry.	11 items
Emotion expression:	The child is sad when something bad happens to a family member.	
Emotional regulation:	The child plays with another toy when he/she does not have access to a particular toy.	
<u>Age: 4-0 – 5.0 years</u>		
Emotion understanding:	The child expresses context appropriate emotions.	14 items
Emotion expression:	The child imitates cartoon or story characters.	
Emotional regulation:	The child is able to stay calm even in situations when he/she does not know how to solve the problem.	
<u>Age: 5-0 – 7.5 years</u>		
Emotion understanding:	The child observes the emotional expressions of others and behaves adequately.	17 items
Emotional expression:	When scolded or praised, the child expresses adequate emotion.	
Emotional regulation:	The child asks for help from adults to deal with his/her emotions.	

Form: Teacher form (SCE-E)Age: 2.5 – 4.0 years**Emotional understanding:****Emotional expression:****Emotional regulation:**Age: 4-0 – 5.0 years**Emotional understanding:****Emotional expression:****Emotional regulation:**Age: 5-0 – 7.5 years**Emotional understanding:****Emotional expression:****Emotional regulation:****DOMAIN: SOCIAL COMPETENCY****Form: Parent form (SCS-P)**Age: 2.5 – 4.0 years**Compliance with rules:****Interpersonal skills:****Prosocial behaviour:**Age: 4-0 – 5.0 years**Compliance with rules:****Interpersonal skills:****Prosocial behaviour:**Age: 5-0 – 7.5 years**Compliance with rules:****Interpersonal skills:****Prosocial behaviour:****Form: Teacher form (SCS-E)**Age: 2.5 – 4.0 years**Compliance with rules:****Interpersonal skills:****Prosocial behaviour:**Age: 4-0 – 5.0 years**Compliance with rules:****Interpersonal skills:****Prosocial behaviour:**Age: 5-0 – 7.5 years**Compliance with rule:****Interpersonal skills:****Prosocial behaviour:****Administration time:****Scaling:**

The child says about others that they feel happy or angry.

The child imitates cartoon or story characters.

The child can sit and wait for a story to be finished.

18 items

The child expresses context appropriate emotions.

The child laughs when playing with other children.

The child is able to stay calm even in situations he/she does not know how to solve.

10 items

The child says about others that they are happy, angry, sad, or afraid.

The child verbally encourages classmates.

The child waits for his/her turn without being told.

10 items

Examples of items in Social domains

The child answers adequately to your requests.

The child invites other children to play.

The child asks for help when he does not know how to do something.

10 items

The child is compliant to game rules.

The child invites other children to play together.

The child offers to help others if you tell him/her.

12 items

The child understands the consequences of not following rules.

The child speaks about his/her friends from preschool.

The child takes care of other children's toys.

22 items

Examples of items in Social domains

The child answers adequately on request.

The child imagines during play that he/she is somebody else.

The child asks for your help to end fights with other children.

24 items

The child follows your rules during tasks.

The child plays with more than three children at once.

The child takes care of other children's toys.

15 items

The child understands the consequences of not following rules.

The child remains engaged in group activities for at least fifteen minutes.

The child takes care of other children's toys.

14 items

10 minutes to complete

5-point Likert scale where 1 = (almost/) never and 5 almost always

Scoring:

The total score is the summation of items of the scale.

Language of administration

English, Romanian

Forms

Teacher and Parent Forms

PSYCHOMETRIC PROPERTIES**Reliability:**

Test-retest reliability: The test-retest coefficients measured for both teacher and parent forms of the SCE and SCS for the 5–7.5 age group at a 3-month interval indicated values in the .72–.83 range.

Face and Content Validity: Item collection based on age-appropriate milestones. Subjected to evaluation by a group of eight experts, 32 preschool teachers, and 32 parents.

On three versions of the screening completed by 123 teachers and parents. 5 items from SCE and four items from SCS were dropped after factor analyses.

Internal consistency: (Cronbach's α) was high with values over 0.80. The α values ranged between .80 and .93 for the SCE-P and SCE-E, and between .89 and .95 for the SCS-P and SCS-E.

Validity:

Exploratory factor analysis: Factor structure – Item analysis was performed on the three versions of the screening completed by 123 preschool teachers and 123 parents. A number of five items from the emotional competency screening and four items from the social competency screening were dropped after this analysis.

All scales had high internal consistency, Parents and teacher versions of the SCE and SCS measure similar constructs as other instruments.

Convergent validity – validated against SSRS (self-controlled scale form). Pearson product-moment correlations for SCE-P and SCE-E were in the medium range.

SCS from SSRS parent and teacher correlated positively with SCS-P and SCS-E in the medium to high range.

Concurrent validity: Pearson correlations between SCS-P and SCS-E and the Behaviour Problem scale from the SSRS Parents and Teachers versions were medium negative correlations.

Predictive validity: results indicated that screening for emotional and social competencies is a good predictor for a child's performance on school tasks and that children's success can be predicted by emotional and social competencies in preschool.

Piloting sample size and demographics:

824 Romanian children. 57.2% urban, 42.8% rural. Ages between 2.5 and 7.5 years, with almost equal distribution between age groups 2.5–4 years (n=258) and 4–5 years (n=256) and 5–7.5 (n=310), and equal distribution of boys and girls. Children were selected from a medium to high socio-economic grouping as parents all had a high school or higher education qualification.

Inter-rater reliability:

All correlation coefficients were significant at $p < .05$, and they were in the range of low agreement for both SCE and SCS.

Age: 2.5–4 years SCE: -.15; SCS: -.14

4–5 years SCE: -.36; SCS: -.32

5–7.5 years SCE: -.14; SCS: -.31

Inter-rater reliability coefficients were low, showing that competencies were evaluated in different settings (home and school), where parent and teacher rating measures mirror different aspects of child behaviour.

Source: adapted from Munnik (2018)

**Original references for definitions used can be found in the extracted articles if needed*

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4.4.3 Emotional Competency Screening for Preschoolers (SCE) and Social Competency Screening for Preschoolers (SCS)

Ştefan et al. (2009) developed two age-appropriate screening scales for Emotional Competency for Preschoolers (SCE) and Social Competency for Preschoolers (SCS) for three age groups: 2.5–4 years, 4–5 years, and 5–7.5 years. The items on these scales target specific behavioural milestones in order to be sensitive to age-related differences. The instrument aims to identify preschool children at risk for academic failure and mental health problems. Two respondent groups were targeted with a form created for parents and a form for teachers in order to obtain information from a multi-method, multi-informant perspective. On both scales (SCE and SCS), items were developed in accordance to developmental milestones in order to accurately measure children's abilities longitudinally. The screening instruments are user-friendly and take ten minutes to complete.

Emotional competency screening for preschoolers (SCE)

The SCE (Ştefan et al., 2009) is a strength-based Emotion Competence Screening for Preschoolers developed in Romania that identifies preschool children at risk for academic failure and mental health problems. The screening scale was developed with age-appropriate items for three age groups (2.5–4 years; 4–5 years and 5–7.5 years) and consists of the Parent form (SCE-P), as well as a Teacher form (SCE-E). The screening scale measures Emotion Understanding (e.g. “The child says about himself/herself that he/she is happy or angry”, “The child says about others that they are happy or angry”, “The child recognises that others feel happy, angry, sad, or afraid”), Emotion Expression (e.g. “The child is sad when something bad happens to a family member”, “When scolded or praised, the child expresses the adequate emotion”), and Emotion Regulation (e.g. “The child plays with another toy when he/she does not have access to a particular toy”, “The child can stay calm even in situations he/she does not know how to solve the problem”).

SCE-P (Parent Form)

The SCE-P for ages 2.5–4 years consists of 11 items, the SCE-P for ages 4–5 contains 14 items, and the SCE-P ages 5–7.5 is made up of 17 items. Responses on each item are coded on a 5-point Likert scale (1 = “almost never” and 5 = “almost always”). All items are scored directly, and the total score on this scale is obtained by summing the scores for each item of the scale.

SCE-E (Teacher Form)

The SCE-E for ages 2.5–4 years consists of 18 items, the SCE-E for ages 4–5 contains 10 items, and the SCE-E for ages 5–7.5 is made up of 10 items. Responses on each item are coded on a 5-point Likert scale (1 = *almost never* and 5 = *almost always*), however, for the 4–5-year-old age group, responses are coded as 1 = *never* and 5 = *always*. All items on the SCE-E are scored directly, and the total score on each scale is obtained by summing the scores for each item of the scale.

Social competency screening for preschoolers (SCS)

The SCS (Ştefan et al., 2009) is a strength-based screening scale for Social Competency, developed in Romania that identifies preschool children at risk of academic failure and mental health problems. The screening scale was developed with age-appropriate items for three age groups (2.5–4 years; 4–5 years and 5–7.5 years) and consists of the Parent form (SCS-P), as well as a Teacher form (SCS-E). The SCS reports on the child's Social Competency in three subdomains namely, compliance with rules (e.g., “The child stops an activity on request”; “The child answers adequately to your requests); interpersonal skills (e.g. “The child acts friendly with unfamiliar children”; “The child invites other children to play”) and prosocial behaviour (e.g., “The child shares his/her toys with other children when told”; “The child asks for help when he does not know how to do something”).

SCS-P (Parent Form)

The SCS-P scale, Ages 2.5–4.0 contains ten items. The SCS-P, Ages 4.0–5.0 consists of 12 items, and the SCS-P, Ages 5.0–7.5 consists of 22 items. Responses on each item of each scale are coded on a 5-point Likert scale (1 = *almost never* and 5 = *almost always*). All items are scored directly, and the total score on this scale is obtained by summing the scores for each item of the scale.

SCS-E (Teacher Form)

The SCS-E scale (Teacher form) for ages 2.5–4 consists of 14 items, the SCS-E, Ages 4–5 is made up of 15 items, and the SCS-E, Ages 5–7.5 consists of 24 items. Responses for each item on each of the SCS-E scales are coded on a 5-point Likert scale, (1 = *almost never* and 5 = *almost always*). All items are scored directly, and the total score on each scale is obtained by summing the scores for each item of the scale.

The Emotional Competency Screening for Preschoolers (SCE) and Social Competency Screening for Preschoolers (SCS) were piloted on 824 preschool children, which consisted of 258 participants in the 2.5–4 years age group and 45.7% boys and 54.3% girls with 6.7% of their

parents having an 8th grade educational level, 43.3% having high school education, and 49.3% of the parents having a higher education qualification. The 4–5 years age group was made up of 256 preschoolers, where 43.8% were boys and 56.2% were girls, the parental level of education was 4.8% of the parents with up to Grade 8, 42.1% of the parents had high school education and 50.1% had a higher education qualification. Lastly, the preschoolers in the 5–7.5 age group were made up of 310 participants, 50.3% being boys and 49.7% being girls. The level of education of parents in this age group was identified as follows: 4.6% had up to a Grade 8 level of education, 41.6% had high school education and 52.4% had a higher education qualification. The sample was recruited taking into consideration the geographical areas in Romania, and had a representative urban (57.2%) and rural (42.8%) population.

The statistical analysis showed that the internal consistency (Cronbach's α) was high with values over 0.80. The internal consistency of the two scales consistency was computed using Cronbach's α . The α -values ranged between .80 and .93 for the SCE-P and SCE-E, and between .89 and .95 for the SCS-P and SCS-E. Likewise, the test-retest coefficients measured for both teacher and parent forms of the SCE and SCS for the 5–7.5 age group at a 3-month interval indicated values in the .72–.83 range.

With regard to inter-rater reliability, all correlation coefficients were significant at $p < .05$, and they were in the range of low agreement for both SCE and SCS. Exploratory factor analysis was performed on the three versions of the screening completed by 123 preschool teachers and 123 parents. Five items from the emotional competency screening and four items from the social competency screening were dropped after this analysis. Factor structure and convergent validity were established, and Pearson product-moment correlations for SCE-P and SCE-E were in the medium range. SCS from SSRS parent and teacher correlated positively with SCS-P and SCS-E in the medium to high range. Concurrent validity was obtained for both screening scales, Pearson correlations between SCS-P and SCS-E, and the Behaviour Problem scale from the SSRS parent and teacher versions were medium negative correlations. For the assessment of content validity, the authors correlated the screening scores with the Social Skills Rating System (SSRS) and found that both parent and teacher versions of the SCE and SCS measured similar constructs to other similar instruments.

Table 4.8 overleaf provides a summary of The Preschool Behavioural and Emotional Rating Scale (PreBERS) with reference to the instrument category, purpose, age group, research setting, definitions of the constructs (theoretical and operational), structure, domains, items, administration and scoring methods and psychometric properties.

Table 4.8

The Preschool Behavioural and Emotional Rating Scale (PreBERS)

Instrument category	Diagnostic, norm-referenced, strength-based test.
Purpose	Designed to assess the emotional and behavioural strengths of children in preschool settings.
Age group	3–5-year-old preschool children.
Research setting	26 states in Washington DC.
Theoretical definitions of constructs	No definitions are provided in this article. The authors refer to BERS (Behavioural and Emotional Rating Scale) for theoretical definitions.
Operational definition	At an operational level, the authors described emotional and social competency as inclusive of four subdomains: Emotional Regulation, School Readiness, Social Confidence, and Family Involvement. Emotional regulation domain refers to the child's ability to regulate or manage his or her behaviour in social situations with peers or adults.
Emotional and Social Competency	School readiness domain refers to the child's language, preliteracy, and attention-to task skills. Social confidence domain refers to the child's ability to socially engage and interact with peers. Family involvement domain is related to a child's participation and relationship with his or her family
No. of Items	There are 42 items across the domains of emotional and social competency
<u>EMOTIONAL AND SOCIAL DOMAINS</u>	Examples of items in domains <u>42 Items</u>
Emotional regulation:	Takes turns in play situations 13 items
School Readiness:	Follows multi-step directions 13 items
Social Confidence:	Identifies own feelings 9 items
Family Involvement:	Participates in family activities 7 items
Administration time:	The PreBERS is designed to be completed in approximately 10 minutes by teachers or other school staff who rate each item based on the given characteristic representative of the child.
Scaling:	The items are rated on a Likert-type scale of 0 (not at all like the child), 1 (not much like the child), 2 (like the child), and 3 (very much like the child) by the rater.
Scoring:	A raw score is calculated for each subscale and then converted to a standard score (M = 10) and a standard deviation (SD=3). A Total Strength index score (M=100, SD=15) also calculated.
Language of administration	English
Forms	Teacher-administered
PSYCHOMETRIC PROPERTIES	
Reliability:	The average alpha coefficients for the subscale and total scores were highly acceptable. .836-.980 Content analysis of several strength-based measures, including factor analysis were reported in a previous study by Epstein, Synhorst, Cress, and Allen (2009). Reliability studies have demonstrated internal consistency (subscale range =.84-.98; Epstein et al., 2009).
Criterion validity:	T-test results showed significant differences between children with and without disabilities (p<.001). Hedges effect sizes: moderate to large.

Exploratory factor analysis: An exploratory factor analysis identified four factors: Emotional Regulation, School Readiness, Social Confidence, and Family Involvement. The subscales and total instrument appear remarkably stable and consistent (.838 to .983).

Convergent validity – not established in this study. Mentioned as a limitation and focus for future research.

Concurrent validity – not established in this study. Mentioned as a limitation and focus for future research.

Predictive validity - not established in this study. Mentioned as a limitation and focus for future research.

Piloting sample size and demographics:

The pilot included a sample of 1471 preschool children with and without disabilities in 26 states in Washington, DC. Those with disabilities represented 13% of the sample, while 87% of the sample was represented by those without disabilities. The sample consisted of both male (52%) and female (48%) children; 80% of the sample were white children, 13% black, and 7% were unidentified. 86% were English speaking and 14 % Spanish.

Test-retest reliability (subscale range = .80–.89).

Inter-rater reliability of the PreBERS (subscale range = .71–.85).

**Original references for definitions used can be found in the extracted articles if needed*



4.4.4 The Preschool Behavioural and Emotional Rating Scale (PreBERS)

The PreBERS is a standardised, norm-referenced, strength-based diagnostic test designed to assess the emotional and behavioural strengths of 3–5-year-old preschool children in preschool settings. The test has 42 items that are completed by school teachers and staff and other adults who are knowledgeable about the child’s behavioural patterns and traits. The PreBERS is designed to be completed in 10 minutes by teachers or other school staff who rate each item based on the given characteristic representative of the child.

The PreBERS assess four domains, namely, emotional regulation, which includes 13 items, and measures a child’s ability to regulate or manage his or her behaviour in social situations with peers or adults (e.g., 13 items, “takes turns in play situations”); the school readiness domain consists of 13 items assesses a child’s language, preliteracy, and attention-to task skills e.g., 13 items “follows multi-step directions”); the social confidence domain consists of nine items and measures the child’s ability to socially engage and interact with peers (9 items; e.g., “identifies own feelings”); lastly, the family involvement domain consists of seven items and assesses a child’s participation and relationship with his or her family (7 items; e.g., “participates in family activities”).

The items are rated on a four-point Likert-type scale (from 0 – *not at all like the child*, 1 – *not much like the child*, 2 – *like the child*, and 3 – *very much like the child*) by the respondent. A raw score is calculated for each subscale and then converted to a standard score ($M = 10$) and a standard deviation ($SD = 3$). A Total Strength Index Score ($M = 100$, $SD = 15$) also is calculated.

The pilot included a sample of 1 471 preschool children with and without disabilities in 26 states in Washington, DC. Those with disabilities represented 13% of the sample, while 87% of the sample was represented by those without disabilities. The sample consisted of both male (52%) and female (48%) children; 80% of the sample were white children, 13% black, and 7% were unidentified; 86% were English-speaking and 14 % Spanish.

An exploratory factor analysis identified four factors: Emotional Regulation, School Readiness, Social Confidence, and Family Involvement. The subscales and total instrument appear remarkably stable and consistent (.838 to .983). Reliability studies have demonstrated the internal consistency (subscale range = .84–.98), test-retest reliability (subscale range = .80–.89), and inter-

rater reliability of the PreBERS (subscale range =.71–.85). Convergent validity was established with deficit-oriented tests with moderate to large correlations from parent (i.e.,-.37 and -.78) and teacher raters (-.61 and-.84).

4.5 Theoretical Definitions of Emotional and Social Competency

The four articles included in the summation of the instruments that measure Emotional and Social Competency are presented in Table 4.9 overleaf. The table includes a summary of the definitions of emotional and social competency and their attributes, as defined by the different authors.



Table 4.6

Summary of definitions of Emotional and Social Competency

Munnik (2018)

Key points

Emotional competencies are directed by the child's internal sense of self and are mostly focused inward. Emotional competencies include the subdomains of emotional maturity, emotional management, and positive sense of self, mental wellbeing, and alertness, which would enable the child to cope with age-appropriate challenges in emotional eliciting situations across contexts.

Emotional Maturity – Personal Attributes: How well a child is able to:

- take responsibility for actions and emotions
- learn from experiences
- adjust to changes in a positive/ functional way
- deal with their emotions in an age-appropriate way

Emotional management – Personal Attributes: How well a child is able to:

- become aware of their own and others' emotions
- to identify emotions
- to understand these emotions in context
- regulate these emotions appropriately.

Independence – Personal Attributes: How well a child is able to:

- self-direct behaviour and thoughts
- take responsibility for their thoughts, feelings, and actions whether alone or in a group.

Sense of self – Personal Attributes: How well a child is able to:

- show confidence in themselves
- can see benefits in required tasks or requests
- show willingness to engage with challenges
- show a willingness to persevere
- can accept negative feedback and see it as separate from the self.

Mental wellbeing – Personal Attributes: How well a child is able to:

- function in a societal context and meet the demands of everyday life.
- identify own strengths and can build on them
- focus on own assets and abilities rather than on problems or weaknesses.
- demonstrate an absence of physical, emotional or psychological symptoms

Alertness – Personal Attributes: How well a child is able to demonstrate:

- general knowledge
- awareness of surroundings
- general reasoning

Social competency focuses on relationships with the external environment and on interactional relationships with people and cooperative activities such as play. Munnik (2018) further conceptualised social competency as consisting of four subdomains, with their respective personal attributes namely:

Munnik (2018)**Key points**

Social skills/confidence – Personal Attributes: How well a child is able to:

- establish warm and empathic relationships
- maintain productive and constructive interpersonal relationships
- assert him or herself in social contexts in a socially acceptable manner
- successfully achieve social tasks by being aware of thoughts and feelings of others
- direct actions appropriately to achieve goals.

Prosocial behaviour – Personal Attributes: How well a child is able to:

- cooperate with others
- act in the interest of others
- show respect towards others
- show thoughtfulness towards others

Compliance with rules – Personal Attributes: How well a child is able to:

- understand social rules
- adhere to ground rules stipulated in specific contexts
- follow instructions
- cope with discipline and reprimand
- be responsive to feedback about behaviour in relation to compliance with rules

Communication Skills – Personal Attributes: How well a child is able to:

- articulate his or her needs effectively, confidently and clearly
- be aware of the need to pay attention to the expressed thoughts, feelings and needs of others
- listen to and understand the expressed thoughts, feelings, and needs of others
- read and accurately

Mohamed (2013)
School readiness screening
instrument for Gr. 00
(Pre-grade R) Learners

Mohamed (2013) defines **social competency** as including the three components of thinking, feeling and behaviour to achieve social tasks; and defines **emotional competency** as the ability for emotional expression, regulation, and understanding which involve perception and expression of emotion analysis and understanding of emotion, and the ability to regulate emotion in self and others. Mohamed (2013) identified four facets of Emotional Competency, namely, emotion knowledge, expressed emotions, emotion regulation, and social competencies.

Epstein et al. (2009)
PreBERS

Epstein et al. (2009) did not include theoretical/ conceptual and operational definitions of emotional and social Competency in the article. The authors identified four domains of emotional and social competency as inclusive of Emotional Regulation, School Readiness, Social Confidence, and Family Involvement.

Stefan et al. (2009)
SCE and SCS

Stefan et al. (2009) defines **emotional competency** as the ability for the child to be independent in dealing with emotion-provoking situations in order to ensure adaptation to the social context, and included three subdomains: Emotion understanding, Emotional expressiveness, and emotion regulation.

Social competency is defined as the ability to manifest socially acceptable behaviours with positive outcomes, which allow people to achieve their goals. It refers to the evaluative component of social behaviours, and includes social skills/ specific behaviours skills required in order to adapt to a specific social context. Social competency includes three domains, namely; compliance with rules, interpersonal skills, and prosocial behaviours.

4.5.1 Definitions of Emotional and Social Competency (Munnik)

Munnik (2018) conceptualised emotional competency and social competency as interrelated domains, which further consist of subdomains. Munnik (2018) defined emotional competency as inward-focused behaviour that is driven by the child's internal sense of self and includes a skill set that enables the child to cope with age-appropriate challenges in formal and informal settings. Munnik (2018) further broke down the concept of emotional competency into five domains, with their respective personal attributes: (i) Emotional Maturity, which is "the ability to be self-reflective about choices and actions and how it might impact the self and others". Some of the personal attributes for the Emotional Maturity subdomain are how well the child is able to "take responsibility for actions and emotions"; (ii) Emotional management, which refers to the "ability to become aware of one's own and others' emotions, including the ability to identify and understand emotions in context and the ability to appropriately regulate these emotions. Some of the personal attributes for the emotional management subdomain are how well the child is "able to identify emotions and to understand these emotions in context"; (iii) Independence, which is "the ability to initiate behaviour and take responsibility for actions in a developmentally appropriate way". Some of the personal attributes for the independence subdomain are how well the child is able to "take responsibility for his/ her thoughts, feelings and actions whether alone or in a group"; (iv) Sense of self which refers to the "ability to hold onto a coherent and constructive sense of self that is not subject to situational outcomes". Some of the personal attributes for sense of self are how well the child is able to "show confidence in themselves and can see benefits in required tasks or requests"; and (v) Mental wellbeing and alertness which is the "presence of a general sense of wellbeing and the absence of significant symptoms that are not age-appropriate and do not fit the specific situation". Some of the personal attributes for mental wellbeing are how well the child is able to "function in a societal context and meet the demands of everyday life". The attributes for alertness include how well the child is able to "demonstrate general knowledge and an awareness of surroundings".

Munnik (2018) defined social competency as focusing on relationships with the external environment and on interactional relationships with people and cooperative activities such as play. Munnik (2018) further conceptualised social competency as consisting of four subdomains, with

their personal attributes: (i) Social Skills/Confidence which referred to the “ability to interact with others in a developmentally appropriate way”. Some of the personal attributes for the subdomain social skills / confidence are how well the child is able to establish warm and empathic relationships and maintain productive and constructive interpersonal relationships; (ii) Prosocial behaviour which refers to the “ability to comply with a follow rules in specific settings”. Some of the personal attributes for prosocial behaviour are how well the child is able to cooperate with others and act in the interest of others; (iii) Compliance with rules, which refers to the “ability to comply with and to follow rules in specific settings”. Some of the personal attributes for compliance with rules are how well the child is able to understand social rules and adhere to ground rules stipulated in specific contexts; and (iv) Communication skills, which refers to the “ability to use language and non-verbal expression clearly and effectively in the expression of feelings, thoughts, and needs. Some of the personal attributes for the communication skills subdomain are how well the child is able to articulate his or her needs effectively, confidently and clearly, and an awareness of the need to pay attention to the expressed thoughts, feelings, and needs of others.

4.5.2 Definitions of Emotional and Social Competency (Mohamed)

According to Mohamed (2013), emotional and social competency form part of the indirect domains of school readiness. Mohamed (2013) defined social competency as including the three components of thinking, feeling and behaviour to achieve social tasks; and defined emotional competency as the ability for emotional expression, regulation, and understanding which involve perception and expression of emotion analysis and understanding of emotion, and the ability to regulate emotion in self and others. Mohamed (2013) identified four facets of emotional competency, namely, emotion knowledge, expressed emotions, emotion regulation, and social competencies.

4.5.3 Definitions of Emotional and Social Competency (Ştefan et al.)

Ştefan et al. (2009) did not give a clear theoretical or operational definition for emotional and social competency but drew from existing literature in terms of the definitions of emotional and social competency. Ştefan et al. (2009) defined emotional competency and social competency separately. They drew from various previous definitions used by other researchers and defined emotional competency as the ability to be self-efficient in dealing with emotion-provoking

situations in order to ensure adaptation to the social context. Ștefan et al. (2009) identified three dimensions of emotional competency, namely; emotion understanding, which consists of receptive abilities (ability to identify emotions based on their labels) and expressive abilities (the ability to identify and label emotions based on non-verbal cues); emotional expressiveness, which referred to the ability to express emotional messages in a socially accepted manner and being able to manage emotions; and emotion regulation, which is described as the processes involved in evaluating, monitoring and modifying emotional reactions.

Ștefan et al. (2009) defined social competency as the ability to behave in a socially acceptable manner with positive outcomes, which allow people to achieve their goals. Social competency refers to the evaluative component of social behaviours, and includes social skills / specific behaviours skills required in order to adapt to a specific social context. The three dimensions of social competency as defined by the authors include compliance with rules, which refers to the child's ability to comply with rules or follow directions and is considered one of the main developmental tasks of preschool children; interpersonal skills which refer to the child's ability to properly interact with other children and adults; and prosocial behaviours which include behaviours and actions which are directed at the benefit of others.

4.5.4 Definitions of Emotional and Social Competency (Epstein et al.)

Epstein et al. (2009) did not include theoretical / conceptual and operational definitions of emotional and social competency in the article. The authors identified four domains of emotional and social competency as inclusive of emotional regulation, school readiness, social confidence, and family involvement. The emotional regulation domain refers to the child's ability to regulate or manage his or her behaviour in social situations with peers or adults. The school readiness domain refers to the child's language, preliteracy, and attention-to task skills. The social confidence domain is about the child's ability to socially engage and interact with peers and lastly, the family involvement is related to a child's participation and relationship with his or her family.

4.6 Summary

In summary, four articles were ranked and included for summation: the E3SR, The School Readiness Screening Instrument for Grade 00 (Pre-grade R), the SCE and SCS, and the PreBERS. Two of four of these are peer-reviewed articles, and the other two are dissertations. The dissertation

by Munnik (2018) ranked first, with the other three articles ranking second. It can be concluded that the two articles focused on establishing specific psychometric properties, and therefore excluded other psychometric properties and specific components of the instruments. This information might exist but may not be mentioned in the article due to imposed and specific guidelines for the submission of online articles. This could be the reason that the dissertation by Munnik (2018) ranked higher because it reported on a variety of properties and specific components.

It is important to note that while all four instruments met the criteria for excellent psychometric properties, the PreBERS (Epstein et al., 2009) did not establish convergent, concurrent and predictive validity and noted it as a limitation and a focus for future research. In terms of diversity, only two of the four instruments are South African-based and normed for the diverse South African population. E3SR was piloted on a diverse population of South Africa amongst English, Afrikaans, Xhosa, other South African languages (Zulu / Sepedi) and Congolese and French. The School Readiness Screening Instrument for Grade 00 (Pre-grade R) (Mohamed, 2013) was piloted on Indian, White, Black, and Coloured learners. The results are indicative of a diverse population within the South African context, as both instruments were constructed to contribute to contextually appropriate assessment measures for the South African population. On the other hand, the other two instruments are international tools and may not be contextually appropriate for the South African population. For example, the SCE and SCS were piloted in Romania. It should, however, also be noted that both the E3SR (Munnik, 2018) and The School Readiness Screening Instrument for Grade 00 (Pre-grade R) (Mohamed, 2013) used an urban sample, and did not include a rural sample.

In terms of language, all four instruments included in this study are available in English; however, of the four instruments reviewed, only one is available in a language other than English. The SCE and SCS are available in both English and Romanian.

All four articles were rated as “excellent” for the size and diversity of the norming sample. All instruments included boys and girls with the PreBERS being the only instrument that included children with disabilities (13%) in their pilot sample. All four of the instruments were appropriate for use across the preschool age group in terms of measuring emotional and social competency as a domain of school readiness within this age group. However, it can be noted that two of these

instruments focus on the age groups between 3–5 years (PreBERS) and 4–5.5 years (School Readiness Screening Instrument for Grade 00 (pre-grade R)). The other two instruments focus on the age groups between 5–7 (E3SR) and 5–7.5 (SCS and SCE), with the SCS and SCE including three age groups: 2.5–4 years, 4–5 years, and 5–7.5 years, as well as items targeting specific behavioural milestones in order to be sensitive to age-related differences. As the age requirement from Grade 1 is 7 years in South Africa, it can be assumed that the 5–7 age group might be the most appropriate age group in terms of getting an understanding of the child's emotional and social readiness to start Grade 1.

In terms of administration, Likert scales are used in all four of the instruments as the scoring system. There is variability across the instruments concerning the duration of administration, ranging from ten minutes (SCS & SCE) to 15–20 minutes (E3SR). Likewise, the number of items varies across instruments, ranging from 42 items to 56 items. All four of the instruments do not require a trained administrator to administer the assessment; however, the administrator has to be familiar with the child's skills and behavioural traits to complete the questionnaires. The School Readiness Screening Instrument for Grade 00 (Pre-grade R) (Mohamed, 2013) is the only instrument of the four that created a shortened version of the instrument. Out of the four instruments, the SCS and SCE is the only instrument with both parent and teacher report protocols available, with the other three being teacher-administered only.

The degree to which the instruments provided coverage across multiple subdomains was also investigated. All four instruments adequately measured emotional and social competency with multiple subdomains. The items included in the various domains and subdomains of each instrument were closely linked to the theoretical and operational definitions. The most comprehensive coverage is provided by Munnik (2018) which includes five subdomains of Emotional Competency (emotional maturity, emotional management, independence and sense of self, mental wellbeing and alertness) and four subdomains of Social Competency (social skills/confidence, prosocial behaviour, compliance with rules, communication skills). Two of the instruments cover three subdomains per domain of social or emotional competency, with the SCS and SCE covering three subdomains of emotional competency (emotional understanding, emotional expression, emotional regulation), and within the domain of social competency, three subdomains are covered (compliance with rules, interpersonal skills, prosocial behaviour are the

subdomains). Similarly, the School Readiness Screening Instrument for Grade 00 (Pre-grade R) (Mohamed, 2013) covers three subdomains within the emotional domain of school readiness (empathy, emotional regulation, and self-confidence) and covers three subdomains within the social domain (interpersonal competencies, social regulation behaviour, and social graces). Out of the four instruments, the PreBERS is the only measure that combined emotional and social competency as one domain with four subdomains (emotional regulation, school readiness, social confidence, and family involvement).

In their definitions of emotional and social competency, three of the four authors provided a theoretical and operational definition of emotional and social competency. They divided emotional and social competency into two distinct but interrelated domains of social competency and emotional competency respectively. Epstein et al. (2009) did not include theoretical / conceptual and operational definitions of emotional and social competency in their article.

There were similarities in the definitions provided by three authors. Mohamed (2013), Munnik (2018), and Ştefan et al. (2009) viewed emotional competency as inclusive of the way that a child deals with and is able to cope in different contexts. For Munnik (2018), emotional competency is inward-focused behaviour that is driven by the child's internal sense of self that allows the child to cope with age-appropriate challenges. For Mohamed (2013), emotional competency is the ability for emotional expression, regulation and understanding, and the ability to regulate emotion in self and others. For Ştefan et al. (2009), emotional competency is related to the child's independence in dealing with emotion-provoking situations.

In their definitions of social competency, all three authors have similarities in their definitions in terms of social competency being inclusive of interactions and engagement with the social environment to achieve certain goals or tasks. For Munnik (2018), social competency focuses on relationships with the external environment and on interactional relationships with people and cooperative activities such as play. For Mohamed (2013), social competency is about the child's way of thinking, feeling, and behaving to achieve social tasks. For Ştefan et al. (2009), social competency is the ability to manifest socially acceptable behaviours with positive outcomes, which allowed people to achieve their goals. It can, therefore, be said that the authors who operationally and theoretically defined emotional and social competency in their articles have similar conceptions of emotional and social competency.

In reviewing the above-mentioned articles and dissertations, it is noted that Munnik (2018) is the only author to include personal attributes for each subdomain in both emotional and social domains of school readiness. The other three authors only included the domains and subdomains of emotional and social competency without including their respective attributes as done by Munnik (2018). The personal attributes are important and are helpful in terms of identifying how well a child is able to perform a task or attribute, and may, therefore, be helpful in identifying competencies in the various subdomains.



CHAPTER 5

CONCLUSION

5.1 Introduction

The aim of this study, as set out in Chapter 1 is to identify and summarise aspects of the instruments that measure Emotional and Social Competency as a domain of school readiness in preschoolers and their psychometric properties. This study consolidated the most recent literature (2008-2018) on instruments that measure emotional and social competency as a domain of school readiness. This chapter begins with an executive summary, proceeds to draw conclusions with regard to the review as it relates to the aim and objectives and ends by mentioning some of the limitations of the study and directions for the way forward.

5.2 Executive summary

The review established that there is general agreement that school readiness is multi-dimensional and that an adequate definition must refer to five developmental domains (motor development, emotional health, social knowledge, language skills, and general knowledge). The conception of school readiness is also constituted with reference to diverse conceptual perspectives of school readiness. However, given the broad diversity of cultures, including those of the South African population, there is no concise definition of school readiness, let alone one that is regarded as more relevant than others.

The perception that many developed assessment tools are not effective and undervalue the emotional and social competencies as part of school readiness assessment is still the dominant perception. The diverse range of screening and school readiness assessment tools available abroad are not standardised for the South African population and therefore not appropriate for use within the South African context. More effective school readiness screening instruments that assess the emotional and social competency domain are important for the accurate measurement of young children's emotional and social competencies during the preschool years (Munnik, 2018).

The objective of this systematic review was to consolidate literature on the instruments that measure emotional and social competency as a domain of school readiness, as well as to (i) identify instruments that are currently available to measure emotional and social competency as a domain

of school readiness in South Africa; (ii) Explore the methodological quality of the studies related to instruments that measure emotional and social competency as a domain of school readiness; (iii) Explore how school readiness is operationalised and what domains are identified and measured in the instruments; (iv) Explore how emotional and social competency is operationalised; and (v) Explore the psychometric properties of the instruments reportedly measuring emotional and social readiness or competence in school-ready children.

This study used a systematic review methodology and considered peer-reviewed, full-text studies that used a quantitative design, published from 2008 to 2018. The target population was preschool children between the ages of four and six years. The study adopted the PRISMA and included four levels of review, namely, identification, screening, eligibility (quality appraisal), and summation. The method of data analysis for this study was a descriptive meta-synthesis.

Literature was retrieved from two core sources: database search and reference mining. Databases with a focus on psychology and education were searched. Grey literature in the form of unpublished South African doctoral theses was included because insufficient South African-based articles were found. The following search terms were used in this review: “Emotional Social Competency”, “Assessment”, “Emotional Competency”, “Social Competency”, “School Readiness Instrument”, “Preschool”, “Emotional Social Intelligence”, “Emotional Social Readiness” and “Screening Instrument” and were combined into 11 Boolean phrases that were used in the identification.

Seventeen (17) full-text journal articles were evaluated and appraised using the SFS Quality Appraisal tool developed by Smith et al. (2015) and four articles that satisfied the threshold score of 80% were then included in the final summation. Two reviewers were independently involved in the title search and abstract search process with the aim of promoting and maintaining methodological rigour. A third reviewer was identified and worked independently from the researcher on the SFS scoring system and documented their findings independently. Data extraction forms were used by the reviewer to review and compare the data.

The literature points to emotional and social competency as an important factor in children’s adjustment to school (Blair & Peters, 2003). It is clear that age appropriate emotional and social competency is vital for school readiness and academic success for the preschooler. However, it was identified that there is a lack of South African based literature on Emotional and

Social Competency as a domain of school readiness (Laher & Cockcroft, 2013). Moreover, there is a lack of instruments that are currently available to measure emotional and social competency as a domain of school readiness in South Africa (Munnik, 2018). Of the 17 articles that were identified from the abstract search and appraised using the SFS scoring system, only two of them included instruments constructed within South Africa and based on pilot studies done with a South African population.

There are only a few articles focusing on emotional and social competency as a domain of school readiness that are South African-based: most articles that were available between the 2008 and 2018 period were international articles. There is, therefore, a lack of South African peer-reviewed quality articles on emotional and social competency as a domain of school readiness. Of the four final instruments included in this review, two were local dissertations, and the other two were internationally based articles. Some of the articles acquired via the databases are summative documents and tend to omit specific methodological information in comparison to theses or dissertations that are process documents. The four final instruments that were included in this study had consistently “excellent” psychometric properties. These instruments include the E3SR (Munnik, 2018), The School Readiness Screening Instrument for Grade 00 (Pre-grade R) (Mohamed, 2013), the SCE and SCS (Ştefan et al., 2009), and the PreBERS (Epstein et al., 2009). All four of the instruments included in this review were identified as excellent measures, and while each was rated as excellent in terms of its psychometric properties, each had different strengths with respect to ease of administration and adequacy for use with a diverse child population. All four instruments had adequate overall and age-specific sample sizes, including a relatively representative sample. All instruments reported stratification according to ethnicity/race, gender, and geographic region. Two of the instruments, the E3SR (Munnik, 2018) and the School Readiness Screening Instrument for Grade 00 (Pre-grade R) (Mohamed, 2013) used an urban sample. Thus, an inclusion of rural samples might be important for the representation of the diverse and complex South African population and to consider multi-linguistic formats.

Furthermore, only one instrument included a shorter version of the instrument, which, according to the author, increases the usage value of the instrument, and, of the four instruments, the SCS and SCE is the only instrument with both parent and teacher report protocols available, with the other three being teacher-administered. It might be useful to establish forms that include

both the 'home and school' contexts in order to get a broader understanding of the child in more than one context, rather than a focus only in one context. Furthermore, it might be useful to consider shorter versions of the instruments which reduce administration time and may be less time-consuming for teachers and parents.

Instruments also varied in their coverage of the subdomains of Emotional and Social Competency, with the most comprehensive coverage provided by the E3SR (Munnik, 2018) which includes five subdomains of emotional competency and four subdomains of social competency. Furthermore, Munnik (2018) included personal attributes for each subdomain in both emotional and social domains of school readiness, which other authors did not. There were similarities in the definitions provided by three of the four authors. The three authors divided emotional and social competency into two distinct but interrelated domains of social competency and emotional competency respectively. Epstein et al. (2009) did not include theoretical / conceptual and operational definitions of emotional and social competency in their article, and it can be assumed that this was due to regulations imposed for the submission of online articles. They may have included this definition in previous articles or process documents. All three authors (Mohamed, 2013; Munnik, 2018; Ştefan et al, 2009) that provided a theoretical definition viewed emotional competency as inclusive of the way that a child deals (inward-focused behaviour; emotional expression, regulation and understanding) and is able to cope in different contexts (emotion-provoking situations). In their definitions of social competency, all three authors have similarities in their definitions in terms of social competency being inclusive of interactions and engagement (socially acceptable behaviours) with the social environment to achieve certain goals or tasks.

In sum, this review highlighted the need for ongoing engagement in research pertaining to children's emotional and social competencies as a domain of school readiness. The need for culturally appropriate screening instruments is also highlighted as a means to identify learners in need of intervention.

5.3 Limitations of the study

Publication bias limited the sampling frame of articles from which to identify potential titles. Some of the articles acquired via the databases are summative documents and tend to omit specific methodological information in comparison to theses or dissertations that are process documents.

There was, therefore, a limitation in terms of the acquisition of articles that met the criteria in terms of methodological rigour.

5.4 Significance of the study

The primary contribution of this review is that it adds to the South African literature on school readiness, with a specific focus on emotional and social competency. The review expands existing early childhood research by specifying the relations among emotional and social competencies and school readiness, particularly with respect to positive aspects of emotional and social readiness. The literature in this study further highlights the importance of emotional and social competency in child development, school readiness, and academic success. Therefore, this study may potentially contribute to the body of knowledge related to the development of a battery of preschool emotional and social assessment instruments, tapping several constructs fundamental to emotional and social competency theory.

5.5 Recommendation for future research

Future research should include the development of standardised tests and screening instruments that focus on assessing emotional and social competency as a domain of school readiness, and which are easily accessible and available to schools and parents in South Africa.

Another area of future research could explore emotional and social competency and its links to cognitive capacities and school success, keeping in mind the socio-economic environment of the South African population. From the literature review, it has been noted that the lack of emotional and social skills in preschoolers is considered a risk factor, which may contribute to children not being able to progress in school as expected.

REFERENCES

- Amod, Z. & Heafield, D. (2013). *Psychological Assessment in South Africa Research and Applications*. Wits University Test. University of the Witwatersrand.
- Aromataris, E. & Riitano, D. (2014). Systematic reviews: Constructing a search strategy and searching for evidence. *American Journal of Nursing*, 114(5), 49–56.
<https://doi.org/10.1097/01.NAJ.0000446779.99522.f6>
- Blair, C., & Peters, R. (2003). Physiological and neurocognitive correlates of adaptive behaviour in preschool among children in Head Start. *Developmental Neuropsychology*, 24(1), 479-497.
- Bordignon, C. M., & Lam, T. C. M. (2004). The early assessment conundrum: lessons from the past, implications for the future. *Psychology in the Schools*, 41(7), 737-749.
<https://doi.org/10.1002/pits.20019>.
- Bronson, D. E., & Davis, T. S. (2011). *Finding and evaluating evidence: Systematic reviews and evidence-based practice*. Oxford University Press.
- Brown, J. M. (2016). *Developing a parenting skills programme to enhance the school readiness of Grade R learners in resource poor communities*. (Doctoral dissertation, North-West University (South Africa), Potchefstroom Campus).
- Bustin, C. (2007). *The development and validation of a social emotional school readiness scale*. Doctoral dissertation. University of the Free State.
- Buyts C. (1993). *The reliability and validity of the Herbst measuring instrument for the evaluation of toddlers' levels of development*. Unpublished master's dissertation, University of the Orange Free State.
- Carr, A. (2015). *The handbook of child and adolescent clinical psychology: A contextual approach*. Routledge.

- Coy, K., Speltz, M. L., DeKlyen, M., & Jones, K. (2001). Social-cognitive processes in preschool boys with and without oppositional defiant disorder. *Journal of Abnormal Child Psychology*, 29, 107-124.
- Darvishpour, A., Joolae, S., & Cheraghi, M. L. (2014). A meta-synthesis study of literature review and systematic review published in nursing prescribing. *Medical Journal of the Islamic Republic of Iran*, 28, 77.
- Denham, S. A., Bassett, H. H., Thayer, S. K., Mincic, M. S., Sirotkin, Y. S., & Zinsser, K. (2012). Observing preschoolers' social-emotional behavior: Structure, foundations, and prediction of early school success. *The Journal of genetic psychology*, 173(3), 246-278.
- Denham, S. A., Bassett, H. H., Zinsser, K., & Wyatt, T. M. (2014). How preschoolers' social-emotional learning predicts their early school success: Developing theory- promoting, competency- based assessments. *Infant and Child Development*, 23(4), 426-454.
- Department of Education (2001a). Education White Paper 5 on Early Childhood Education: Meeting the Challenge of Early Childhood Development in South Africa. Pretoria: Department of Basic Education.
- Dockett, S., & Perry, B. (2002). Who's ready for what? Young children starting school. *Contemporary Issues in Early Childhood*, 3(1): 67-89.
- Epstein, M. H., Synhorst, L. L., Cress, C. J., & Allen, E. A. (2009). Development and standardization of a test to measure the emotional and behavioural strengths of preschool children. *Journal of Emotional and Behavioural Disorders*, 17(1), 29-37.
- Excell, L. (2016). Interrogating quality in early childhood development: Working towards a South African perspective. *South African Journal of Childhood Education*, 6(1), 1-9. <https://dx.doi.org/10.4102/sajce.v6i1.406>
- Finfgeld, D. L. (2003). Metasynthesis: The state of the art - so far. *Qualitative Health Research*, 13(7), 893-904.

- Foxcroft C. D. (1994). *The development of a group screening measure for South African children*. Unpublished manuscript. University of Port Elizabeth.
- Foxcroft, C., & Roodt, G. (2013). *Introduction to psychological assessment in the South African context* (4th ed.). Oxford University Press.
- Gallahue, D. L., & Donnelly, F. C. (2007). *Developmental physical education for all children*. Human Kinetics.
- Ham-baloyi, W., & Jordan, P. (2015). Systematic review as a research method in postgraduate nursing education. *Health SA Gesondheid*, 21(0), 120–128.
<https://doi.org/10.1016/j.hsag.2015.08.002>
- High, P. (2008). School readiness. *American Academy of Pediatrics*. Retrieved from: [https://doi:10.1542/peds.2008-0079](https://doi.org/10.1542/peds.2008-0079).
- Hojnoski, R. L., & Missall, K. N. (2006). Addressing School Readiness: Expanding School Psychology in Early Education. *School Psychology Review*, 35(4), 602–614.
- Health Professions Council of South Africa. (2010). The professional board for psychology Health Professions Council of South Africa. List of tests classified as being psychological tests. Form 207. Retrieved from www.hpcsa.co.za/Uploads/PSB_2019/List_of_Classified_tests_Board_Notice_155_of_2017.pdf on November 2019.
- Janse van Rensburg, O. (2015). The school readiness performance of a group of Grade R learners in primary schools in the Gauteng Province of South Africa. *South African Journal of Childhood Education*, 5(1), 01–23.
- Joubert, M. (1984). *Nursery-school questionnaire for the evaluation of school readiness (NQES)*. HSRC. Institute for Psychological and Edumetric Research.
- Kaplan, B. J. & Sadock, V.A. Ruiz, P. (2014). *Kaplan & Sadock's Synopsis of psychiatry: Behavioral sciences/ clinical psychiatry*. Philadelphia: Wolters Kluwer.

- Kılıça, C. (2015). Emotional Competency and emotion socialization in preschoolers: The viewpoint of preschool teachers. *Educational Sciences: Theory & Practice*, 15(4).
- Kleeck, A., & Schuele, C. M. (2010). Historical perspectives on literacy in early childhood. *American Journal of Speech-Language Pathology*, 19, 341–355.
[https://doi.org/10.1044/1058-0360\(2010/09-0038\)](https://doi.org/10.1044/1058-0360(2010/09-0038))
- Laher, S. & Cockcroft, K. (2013). *Psychological assessment in South Africa: Research and applications*. Wits University Press.
- La Paro, K., & Pianta, R.C. (2000). Predicting children’s competence in early school years: A Meta-analytic review. *Review of Educational Research*, 70(4), 443-484.
- Lessing, A. C., & De Witt, M. W. (2005). An investigation into the early literacy skills of Grade R second-language (L2) learners in South Africa. *Africa Education Review*, 2(2), 242–257.
- Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P., & Moher, D. (2009). The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. *PLoS Med*, 6(7), e1000100.
- Madge, E. M., Van den Berg, A. R., & Robinson, M. (1985). *Manual for the junior South African individual scales (JSAIS)*. Human Science Research Council.
- Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., & Prisma Group. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *PLoS med*, 6(7), e1000097.
- Moher, D., Shamseer, L., Clarke, M., Ghersi, D., Liberati, A., Petticrew, M., & Stewart, L. A. (2015). Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015 statement. *Systematic reviews*, 4(1), 1.

- Mohamed, S. A. (2013). *The development of a school readiness screening instrument for grade 00 (pre-grade R) learners*. Doctoral dissertation. University of the Free State.
- Munnik, E., Hargey, M., Meyburgh, C., Gaika, M. & Mariens, M. (2015). A systematic review of screening tools for emotional Social Competency as a domain of school readiness. In: Smith, M. (Chair). Symposium on Methodological rigor and coherence: Deconstructing the quality appraisal tool in systematic review methodology. Conducted at the 21st National Conference of the South African Psychological Association of South Africa, Johannesburg.
- Munnik, E. (2018). *The development of a screening tool for assessing emotional Social Competency in preschoolers as a domain of school readiness*. Doctoral thesis. University of the Western Cape.
- National Institute of Child Health and Human Development (NICHD) Early Child Care Research Network (2005). Early child care and children's development in the primary grades: follow-up results from the NICHD study of early child care. *American Educational Research Journal*, 42, 537–570. <https://doi.org/10.2307/3700462>
- Noel, A. M. (2010). Perceptions of school readiness in one Queensland primary school. *Australian Journal of Early Childhood*, 35(2), 28–35.
- Pekdoğan, S., & Akgül, E. (2016). Preschool children's school readiness. *International Education Studies. Canadian Center of Science and Education*, 10(1).
- Puckett, M. B., & Black, J. K. (2002). *The young child: Development from prebirth through eight*. (3rd ed.). Prentice-Hall.
- Powell, J. P. (2010). The messiness of readiness. *Kappan Magazine*, 92(3), 26 –28.
- Richter, L., & Samuels, M. L. (2018). The South African universal preschool year: a case study of policy development and implementation. *Child: care, health and development*, 44(1), 12–18.

- Rimm-Kaufmann, S. E., Pianta, R. C., & Cox, M. J. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly, 15*(2), 147–166.
- Rimm Kaufman, S., & Sandilos, L. (2017). School Transition and School readiness: An outcome of early childhood development. Encyclopedia of Early Childhood Development. University of Virginia.
- Rhoades, B.L., Warren, H.K., Domitrovich, C.E., Greenberg, M.T. (2010). Examining the link between preschool socio-Emotional Competency and first grade academic achievement: the role of attention skills. *Early Childhood Research Quarterly, 26*(2), 182–191. <https://doi.org/10.1016/j.ecresq.2010.07.003>.
- Sandelowski, M., Docherty, S., & Emden, C. (1997). Qualitative meta-synthesis: Issues and techniques. *Research in Nursing and Health, 20*(4) 365–371.
- Schreiber, R., Crooks, D., & Stern, P. N. (1997). Qualitative meta-analysis. In J. M. Morse (Ed.), *Completing a qualitative project: Details and dialogue* (pp. 311–326). SAGE.
- Schultz, D., Ambike, A., Logie, K. S., Bohner, K. E., Stapleton, L. M., VanderWalde, H., Betkowski, J. A. (2010). Assessment of social information processing in early childhood: Development and initial validation of the Schultz Test of Emotion Processing—Preliminary version. *Journal of Abnormal Child Psychology, 38*, 601–613. <https://doi.org/10.1007/s10802-010-9390-5>
- Schultz, D., Izard, C. E., Ackerman, B. P., & Youngstrom, E. A. (2001). Emotion knowledge in economically disadvantaged children: Self-regulatory antecedents and relations to social difficulties and withdrawal. *Development and Psychopathology, 13*, 53–67. <https://doi.org/10.1017/S0954579401001043>
- Sharma, A. (2011). Developmental examination: Birth to 5 years. *Archives of Disease in Childhood: Education & Practice, 96*, 162–175. <https://doi.org/10.1136/adc.2009.175901>.

- Shuval, K., Harker, K., Roudsari, B., Groce, N. E., Mills, B., Siddiqi, Z., & Shachak, A. (2011). Is qualitative research second class science? A quantitative longitudinal examination of qualitative research in medical journals. *PLoS One*, 6:e16937.10.1371/journal.pone.0016937.
- Smith, M.R.; Franciscus, G.; Swartbooi, C.; Jacobs, W. & Munnik, E. (2015, September). Developing a critical appraisal tool: The SFS scoring system. In Smith, M. (Chair). *Symposium on Methodological rigor and coherence: Deconstructing the quality appraisal tool in systematic review methodology*. Conducted at the 21st National Conference of the Psychological Association of South Africa, Strength in Unity. 15–18 September. Johannesburg. PsySSA.
- Snow, K. L. (2006). Measuring school readiness: Conceptual and practical considerations. *Early education and development*, 17(1), 7–41.
- Ștefan, C. A., Bălaj, A., Porumb, M., Albu, M., & Miclea, M. (2009). Preschool screening for social and emotional competencies—development and psychometric properties. *Cognition, Brain, Behaviour. An Interdisciplinary Journal*, 13(2), 121–146.
- Swim, T. J. (2007). *Theories of child development: Building blocks of developmentally appropriate practices*. Retrieved from: http://www.earlychildhoodnews.com/earlychildhood/article_print.aspx?ArticleID=411
- Teing, L. S. (2007). Systematic review made simple for nurses. *Singapore General Hospital Proceedings*, 16(2), 104–110.
- Terre Blanche, M., Durrheim, K. & Painter, D. (2006). *Research in practice. Applied methods for the social sciences*. UCT Press.
- Thompson, R. A. (2001). Development in the first years of life. *The Future of Children*, 11(1), 20-33.

- Trentacosta, C. J., & Izard, C. E. (2007). Kindergarten children's emotion competence as a predictor of their academic competence in first grade. *Emotion*, 7(1), 77–88.
- UNESCO (2017). Overview: Measuring Early Learning Quality and Outcomes – MELQO. University of Nebraska.
- United Nations Children’s Fund (UNICEF). (2012). School readiness: a conceptual framework. Retrieved from:
[http://www.unicef.org/education/files/Chil2Child_ConceptualFramework_FINAL \(1\).pdf](http://www.unicef.org/education/files/Chil2Child_ConceptualFramework_FINAL_(1).pdf)
- Van Rooyen, A. E., & Engelbrecht, P. (1997). Die effektiwiteit van enkele skoolgereedheidstoetse vir die voorspelling van skolastiese prestasie by die skool beginner. (The effectiveness of some school readiness tests for predicting scholastic achievement at school beginner). *South African Journal of Education*, 17(1): 7–10.
- Van Zyl, E. (2011). The relationship between school readiness and school performance in Grade 1 and Grade 4. *South African Journal of Childhood Education*, 1(1):82–94.
- Walsh, D., & Downe, S. (2005). Meta-synthesis method for qualitative research: a literature review. *Journal of Advanced Nursing*, 50(2), 204–211.
- Ward, C.L., Artz, L., Berg, J., Boonzaier, F., Crawford-Browne, S., Dawes, A., Foster, D., Matzopoulos, R., Nicol, A., Seekings, J., Van As, A.B., & Van der Spuy, E. (2012). Violence, violence prevention, and safety: A research agenda for South Africa. *South African Medical Journal*, 102(4), 215–218. <https://doi.org/10.7196/SAMJ.5544>.
- Welsh, J. A., Nix, R. L., Blair, C., Bierman, K. L., & Nelson, K. E. (2010). The development of cognitive skills and gains in academic school readiness for children from low-income families. *Journal of Educational Psychology*, 102, 43–53.
<https://doi.org/10.1037/a0016738>
- Whitebread, D., & Bingham, S. (2011). School readiness: a critical review of perspectives and evidence. *TACTYC occasional Paper*, 2.

Wildy, H., & Styles, I. (2008). Measuring what students entering school know and can do: PIPS Australian, 2006–2007. *Australian Journal of Early Childhood*, 33(4), 43–52.

Xie, S., & Li, H. (2019). Development and validation of the Chinese preschool readiness scale. *Early Education and Development*, 30 (4), 522-539.
<https://doi.org/10.1080/10409289.2019.1596462>



APPENDIX A: ETHICAL CLEARANCE



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26 July 2019

Mrs C Ngrakani-Mtati
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Ethics Reference Number: HS19/6/7

Project Title: A Systematic Review: Instruments that measure Emotional and Social Competence as a domain of School Readiness of Preschool Children in South Africa

Approval Period: 26 July 2019 – 26 July 2020

I hereby certify that the Humanities and Social Science Research Ethics Committee of the University of the Western Cape approved the methodology and ethics of the above mentioned research project.

Any amendments, extension or other modifications to the protocol must be submitted to the Ethics Committee for approval.

Please remember to submit a progress report in good time for annual renewal.

The Committee must be informed of any serious adverse event and/or termination of the study.

Patricia Josias

Ms Patricia Josias
Research Ethics Committee Officer
University of the Western Cape

HSSREC REGISTRATION NUMBER - 130416-049

FROM HOPE TO ACTION THROUGH KNOWLEDGE.

APPENDIX B: TITLE SEARCH

Title search

	Author	Date Published	Date Obtained (2019)	Title and Source	Database	Location stored
1	Abenavoli et al.	2017	1 October	Identification and validation of school readiness profiles among high-risk kindergartners. <i>Early Childhood Research Quarterly</i>	Academic Search Complete	DOI: 10.1016/j.ecresq.2016.09.001
2	Abrahams et al.	April 2019	1 October	Socio-emotional skill assessment in children and adolescents: Advances and challenges in personality, clinical, and educational contexts. <i>Psychological Assessment</i> .	PsycARTICLES	
3	Bassett et al.	Nov/Dec 2012	1 October	Refining the preschool self-regulation assessment for use in preschool classrooms. <i>Infant & Child Development</i> .	Academic Search Complete	DOI: 10.1002/icd.1763
4	Bierman et al.	May 2009	27 September	Behavioural and cognitive readiness for school: Cross-domain associations for children attending head start. <i>Journal of Social Development</i>	Academic Search Complete	DOI: 10.1111/j.1467-9507.2008.00490.x.
5	Binfet et al.	Feb 2016	1 October	Measuring kindness at school: Psychometric properties of a school kindness scale for children and adolescents. <i>Psychology in the Schools</i>	Academic Search Complete	DOI: 10.1002/pits.21889
6	Chen et al.	Sept 2017	1 October	Examining the psychometric properties of the Brazilian Ages & Stages Questionnaires-Socio-emotional: Use in public child daycare centers in Brazil. <i>Journal of Child & Family Studies</i>	Academic Search Complete	DOI: 10.1007/s10826-017-0770-0
7	Clingenpeel et al.	2009	1 October	Preschool assessment: The diagnostic classroom model. <i>Journal of Early Childhood & Infant Psychology</i>	Academic Search Complete	
8	Cress et al.	Sept 2012	1 October	Confirmatory factor analysis of the "Preschool Behavioural and Emotional Rating Scale" (PreBERS) with preschool children with disabilities <i>Assessment for Effective Intervention</i>	ERIC	EJ973739
9	Cress et al.	Aug 2016	1 October	Factor analysis of the Preschool Behavioural and Emotional Rating Scale for children in Head Start programs <i>Journal of Psychoeducational Assessment</i>	ERIC	EJ1106725
10	Denham et al.	2012	27 September	Computerizing socio-emotional assessment for school readiness: First steps toward an assessment battery for early childhood settings	ERIC	EJ1188837

	Author	Date Published	Date Obtained (2019)	Title and Source	Database	Location stored
11	Denham et al.	April 2012	1 October	Social-Emotional Learning Profiles of Preschoolers' Early School Success: A Person-Centered Approach	Academic Search Complete	doi:10.1016/j.lindif.2011.05.001
12	Denham et al.	July/Aug 2014	1 October	How preschoolers' socio-emotional learning predicts their early school success: Developing theory-promoting, competency-based assessments. <i>Infant & Child Development</i>	Academic Search Complete	DOI: 10.1002/icd.1840
13	Dilshad et al.	2016	1 October	Measuring social-emotional adjustment of hearing impaired children. <i>Pakistan Journal of Social Sciences (PJSS)</i>	SocINDEX	
14	Dockett & Perry	March 2009	27 September	Readiness for school: A relational construct. <i>Australasian Journal of Early Childhood</i>	Academic Search Complete	DOI: 10.1177/183693910903400104
15	Dowdy et al.	Dec 2013	1 October	Preschool Screening: An Examination of the Behavioural and Emotional Screening System Preschool Teacher Form (BESS Preschool) <i>Journal of Psychoeducational Assessment</i>	ERIC	EJ1019523
16	Edyburn et al.	2017	1 October	Measurement invariance of a school readiness screener for use in preschool and kindergarten <i>Early Education and Development</i>	ERIC	EJ1153323
17	Epstein & Synhorst	December 2008	1 October	Preschool Behavioural and Emotional Rating Scale (PreBERS): Test-retest reliability and inter-rater reliability. <i>Journal of Child & Family Studies</i>	Academic Search Complete	DOI: 10.1007/s10826-008-9194-1
18	Epstein et al.	March 2009	1 October	Development and standardization of a test to measure the emotional and behavioural strengths of preschool children. <i>Journal of Emotional & Behavioural Disorders</i>	Academic Search Complete	DOI: 10.1177/1063426608319223
19	Finch et al.	2018	1 October	Measuring and understanding socio-emotional behaviours in preschoolers from rural Pakistan. <i>PLoS ONE</i>	Academic Search Complete	DOI: 10.1371/journal.pone.0207807
20	Gary et al.	Sept 2009	1 October	The Child Behaviour Scale (CBS) revisited: A longitudinal evaluation of CBS subscales with children, preadolescents, and adolescents. <i>Psychological Assessment</i>	PsycARTICLES	
21	Giardiello et al.	April 2013	1 October	Observation, assessment and planning practices in a children's centre. <i>Child Care in Practice</i>	Academic Search Complete	DOI: 10.1080/13575279.2012.743871
22	Gouley et al.	May 2008	1 October	Construct validation of the Social Competency scale in preschool-age children.	Academic Search Complete	DOI: 10.1111/j.1467-9507.2007.00430.x

	Author	Date Published	Date Obtained (2019)	Title and Source	Database	Location stored
				<i>Social Development</i>		
23	Graziano et al.	Dec 2015	27 September	Self-regulation assessment among preschoolers with externalizing behaviour problems. <i>American Psychological Association</i>	PsycARTICLES	
24	Griffith et al.	Sept 2010	1 October	Assessing the strengths of young children at risk: Examining use of the preschool behavioural and emotional rating scale with a head start population. <i>Journal of Early Intervention</i>	Academic Search Complete	DOI: 10.1177/1053815110384059
25	Gülay & Hü	Sept – Dec 2011	1 October	Assessment of the prosocial behaviours of young children with regard to social development, social skills, parental acceptance-rejection and peer relationships. <i>Journal of Instructional Psychology</i>	Academic Search Complete	
26	Hagquist & Hellström	May 2014	1 October	The psychometric properties of the early development instrument: A Rasch analysis based on Swedish pilot data. <i>Social Indicators Research</i>	SocINDEX	DOI: 10.1007/s11205-013-0344-5
27	Hughes et al.	Sept 2015	1 October	Measuring the foundations of school readiness: Introducing a new questionnaire for teachers - The Brief Early Skills and Support Index (BESSI).	Academic Search Complete	DOI: 10.1111/bjep.12076
28	Humphries et al.	April 2012	1 October	Teacher and observer ratings of young African American children's social and Emotional Competency. <i>Psychology in the Schools</i>	Academic Search Complete	DOI: 10.1002/pits.21604
29	Hunter et al.	2018	1 October	Assessing noncognitive aspects of school readiness: The predictive validity of brief teacher rating scales of socio-Emotional Competency and approaches to learning <i>Early Education and Development</i>	ERIC	EJ1192990
30	Hymel et al.	Sept 2011	1 October	The Early Development Instrument: An examination of convergent and discriminant validity. <i>Social Indicators Research</i>	SocINDEX	DOI: 10.1007/s11205-011-9845-2
31	Janus et al.	Sep 2011	1 October	Validity and psychometric properties of the early development instrument in Canada, Australia, United States, and Jamaica. <i>Social Indicators Research</i>	SocINDEX	DOI: 10.1007/s11205-011-9846-1
32	Kilgus et al.	March 2017	1 October	Predicting academics via behaviour within an elementary sample: an evaluation of the Social,	Academic Search Complete	DOI: 10.1002/pits.21995.

	Author	Date Published	Date Obtained (2019)	Title and Source	Database	Location stored
				Academic, and Emotional Behaviour Risk Screener (SAEBRS). <i>Psychology in the Schools</i>		
33	Lambert et al.	May/June 2015	1 October	Psychometrics of the preschool behavioural and emotional rating scale with children from early childhood special education settings. <i>Infant Mental Health Journal</i> .	Academic Search Complete	DOI: 10.1002/imhj.21511
34	McKown et al.	Dec 2013	27 September	Direct assessment of children's socio-emotional comprehension. <i>American Psychological Association</i>	PsycARTICLES	
35	McKown & Clark.	2017	1 October	Socio-emotional assessment, performance, and standards.	Academic Search Complete	DOI: 10.1353/foc.2017.0008
36	McTurk et al.	March 2011	27 September	Defining and assessing the school readiness of indigenous Australian children. <i>Australasian Journal of Early Childhood</i> .	Academic Search Complete	DOI: 10.1177/183693911103600112
37	Mohamed	2013	11 October	The Development of a School Readiness Screening Instrument for Grade 00 (pre-Grade R) learners.	Google	
38	Munnik	2018	11 October	The Development of a Screening Tool for Assessing Emotional Social Competency in Preschoolers as a domain of School Readiness.	Google Scholar	
39	Ohle & Harvey	Oct 2019	1 October	Educators' perceptions of school readiness within the context of a kindergarten entry assessment in Alaska. <i>Early Child Development & Care</i>	Academic Search Complete	DOI: 10.1080/03004430.2017.1417855.
40	Ortiz et al.	Feb 2015	27 September	Construct validity evidence for Bracken School Readiness Assessment, third edition, Spanish form scores. <i>Psychology in the Schools</i>	Academic Search Complete	DOI: 10.1002/pits.21816
41	Pekdoğan & Akgül	Aug, 2016	1 October	Preschool Children's School Readiness		DOI:10.5539/ies.v10n1p144
42	Quirk et al.	Aug 2016	1 October	Dimensionality and measurement invariance of a school readiness screener by ethnicity and home language. <i>Psychology in the Schools</i>	Academic Search Complete	DOI: 10.1002/pits.21935
43	Quirk et al.	March 2018	1 October	Universal School Readiness Screening at Kindergarten Entry <i>Journal of Psychoeducational Assessment</i>	ERIC	EJ1167845

	Author	Date Published	Date Obtained (2019)	Title and Source	Database	Location stored
44	Raikes et al.	May 2019	27 September	Examination of school readiness constructs in Tanzania: Psychometric evaluation of the MELQO scales. <i>Journal of Applied Developmental Psychology</i>	Academic Search Complete	DOI: 10.1016/j.appdev.2019.02.003
45	Reid et al.	July 2014	1 October	Reliability and structural validity of the teacher rating scales of early academic competence. <i>Psychology in the Schools.</i>	Academic Search Complete	DOI: 10.1002/pits.21769.
46	Russo et al.	March 2018	27 September	Reliability and validity of a Spanish language assessment of children's socio-emotional learning skills. <i>American Psychological Association</i>	PsycARTICLES	
47	Semrud-Clikeman et al.	Oct 2017	1 October	Selecting measures for the neurodevelopmental assessment of children in low- and middle-income countries. <i>Child Neuropsychology.</i>	Academic Search Complete	DOI: 10.1080/09297049.2016.1216536
48	Sette et al.	Sept/Oct 2015	1 October	Structure and validity of Affect Knowledge Test (AKT) in a sample of Italian Preschoolers. <i>Journal of Genetic Psychology</i>	Academic Search Complete	DOI: 10.1080/00221325.2015.1075466
49	Shujja & Malik	June 2011	1 October	Cultural Perspective on Social Competency in Children: Development and Validation of an Indigenous Scale for Children in Pakistan. <i>Journal of Behavioural Sciences.</i>	Academic Search Complete	
50	Ştefan et al.	June 2009	27 September	Preschool screening for social and emotional competencies - development and psychometric properties.	Academic Search Complete	
51	Stormont et al.	June 2015	27 September	The Kindergarten Academic and Behaviour Readiness Screener: The utility of single-item teacher ratings of kindergarten readiness.	PsycARTICLES	
52	Spiegel et al.	Feb 2017	1 October	Factor structure and utility of the Behaviour Rating Inventory of Executive Function—preschool version.	PsycARTICLES	
53	Wolf et al.	2017	1 October	Measuring school readiness globally: Assessing the construct validity and measurement invariance of the International Development and Early Learning Assessment (IDELA) in Ethiopia. <i>Early Childhood Research Quarterly</i>	Academic Search Complete	DOI: 10.1016/j.ecresq.2017.05.001
54	Xie et al.	2019	1 October	Development and validation of the Chinese preschool readiness scale <i>Early Education and Development</i>	ERIC	EJ1213841

APPENDIX C: ABSTRACT SEARCH

Abstract search

	Author and Title	Type of design e.g. rct, survey	Study population	Methodology mention e.g. data collection, method of data analyses etc.	Outcomes (findings clear)	Include/ exclude (full article extraction for appraisal, yes/no)
1	Cress et al. (2016) Factor analysis of the preschool behavioural and emotional rating scale for children in head start programs	Psychometric Assessment	Preschool children participating in Head Start programmes around the United States	Assessment Confirmatory factor analysis.	The PreBERS items are reliable scores that can be used to identify behavioural strengths in preschool children in Head Start, and support planning of interventions to selectively address component skills to promote child social and academic success.	Uncertain: General Readiness Pool
2	Epstein & Synhorst (2008). Preschool Behavioural and Emotional Rating Scale (PreBERS): Test-retest reliability and inter-rater reliability.	Psychometric Assessment	Preschool Children on two occasions, one month apart: 96 in the first study, 88 in the second study	Direct Assessment Factor Analysis	Based on the data the PreBERS appears to be a psychometrically sound instrument appropriate for use with preschool children.	Include
3	Epstein et al. (2009) Development and Standardization of a Test to Measure the Emotional and Behavioural Strengths of Preschool Children.	Preschool Behavioural and Emotional Rating Scale	(N = 1,471) of preschool children with and without disabilities	Exploratory factor analysis	The subscales and total instrument appear remarkably stable and consistent (.838 to .983). Age differences across 3-, 4-, and 5-year olds were small in magnitude, although girls were rated as possessing significantly more strengths than boys. Preschool children with disabilities were seen as having less emotional and behavioural strength than their peers without disabilities.	Include
4	Gouley et al. (2008) Construct validation of the Social Competency scale in	Social Competency scale (SCS)-parent version	Preschoolers	Confirmatory factor analyses Individual growth model analyses	The total SCS scale was relatively stable over 24 months during the preschool period and was correlated with other measures of	Include

	Author and Title	Type of design e.g. rct, survey	Study population	Methodology mention e.g. data collection, method of data analyses etc.	Outcomes (findings clear)	Include/ exclude (full article extraction for appraisal, yes/no)
	preschool-age children.				Social Competency, parent ratings of emotion regulation, liability and behaviour problems, and tests of child cognitive ability.	
5	Hagquist & Hellström (2014) The psychometric properties of the early development instrument: A Rasch analysis based on Swedish pilot data.	Web based questionnaire	116 5-year-old children	Preschool teachers completed a web based questionnaire for each child Analysis: Unidimensional Rasch model	Tentative analyses of Differential Item Functioning (DIF) showed that some items did not work invariantly across genders, suggesting that the DIF-items should be split into gender specific items. Due to the relatively small sample size the results cannot provide definite answers but tentative indications of the psychometric properties of the EDI-Sweden.	Uncertain: General Readiness Pool
6	Hymel et al. (2011). The early development instrument: An examination of convergent and discriminant validity.	Psychometric Assessment. Standardised measures of school readiness	multicultural sample of 267 kindergarteners	direct, child-based assessments of performance on two standardised measures of school readiness, and measures of phonological awareness and early Social Competency Regression analysis	Results supported the convergent validity of overall EDI scores but not the discriminant validity of EDI domain scores. Moreover, correlations between EDI scores and comparison measures varied widely across teachers, suggesting considerable individual differences in teacher's ability to evaluate school readiness relative to direct, child-based assessments, and confirming that the EDI is more appropriate for deriving inferences	Uncertain: General Readiness Pool
7	Janus et al. (2011). Validity and Psychometric Properties of the Early Development Instrument in Canada, Australia, United States, and Jamaica.	Teacher-completed measure	Teachers in relation to Children at school entry	teacher-completed measure of children's developmental health at school entry Exploratory factor analyses & Confirmatory factor analyses	The results of this paper indicate that the EDI, a measure of children's developmental status at school entry, demonstrates similar psychometric properties in a number of countries, thus building the evidence for the instrument to be added to the limited array of	Uncertain: General Readiness Pool

	Author and Title	Type of design e.g. rct, survey	Study population	Methodology mention e.g. data collection, method of data analyses etc.	Outcomes (findings clear)	Include/ exclude (full article extraction for appraisal, yes/no)
					internationally comparable child social indicators.	
8	Lambert, et al. (2015) Psychometrics of the preschool behavioural and emotional rating scale with children from early childhood special education settings.	Preschool Behavioural and Emotional Rating Scale	children (N = 1,075) with disabilities enrolled in early childhood special education programmes	Classical tests theory, Rasch modeling, and confirmatory factor analysis.	Results confirmed that for the most part, individual items were internally consistent within a four-factor model and showed consistent item difficulty, discrimination, and fit relative to their respective subscale scores.	Uncertain: General Readiness Pool
9	McKown et al. (2013). Direct assessment of children's socio-emotional comprehension.	Psychometric Assessment	General education school sample (n 174) and a clinic sample (n 119)	Direct assessment Confirmatory factor analysis (CFA) and structural equation models.	study provided evidence that (a) individual assessments yield variably reliable scores, (b) composite scores are highly reliable, (c) direct assessments demonstrate a theoretically coherent factor structure and convergent and discriminant validity, and (d) composite scores yield expected age- and diagnostic-group differences.	Include
10	Mohamed (2013) The Development of a School Readiness Screening Instrument for Grade 00 (pre-Grade R) learners	School Readiness Assessment	A convenience sample of 579 grade 00 learners in Durban schools	The results indicated that the domains of Cognitive, Perceptual, Speech and Language displayed acceptable validity to predict academic achievement of grade 1 learners. The remaining domains, viewed as indirect variables, play an integral part in the child's future scholastic achievement. Results of a stepwise regression analyses showed that the combined value of four predictor variables (Cognitive Ability, Social Regulation, Sensory, and	The findings of the study have implications at policy and practice level for early identification and intervention. It is suggested that the screening instrument be used to facilitate curriculum goals at preschool level, that the predictor variables be targeted for intensive intervention at preschool level and later schooling to ensure positive academic trajectories.	Include

	Author and Title	Type of design e.g. rct, survey	Study population	Methodology mention e.g. data collection, method of data analyses etc.	Outcomes (findings clear)	Include/ exclude (full article extraction for appraisal, yes/no)
				Speech) roughly contribute to 17% of the variance in academic achievement of Grade 1 learners.		
11	Munnik (2018) The Development of a Screening Tool for Assessing Emotional Social Competency in Preschoolers as a domain of School Readiness.	School Readiness Screening Instrument	26 Grade R and RR teachers in the Metropole North who completed 493 protocols	Excellent reliability or internal consistency was reported from Cronbach α . Confirmatory factor analyses confirmed the theoretical model and results were in acceptable limits. There were concerns about source variance. Exploratory factor analysis addressed concerns about source variance. Factor structure supported eight subdomains. The final version of the E3SR had good construct validity and reliability	The findings from Phase 1 and 2 informed the construction of a screening tool for emotional / Social Competency in Phase 3.	Include
12	Quirk et al. (2016). Dimensionality and measurement invariance of a school readiness screener by ethnicity and home language.	Rating Scale	9,335 children during the first month of kindergarten in four ethnically diverse, medium-sized school districts in central California	Teachers rated the readiness of 9,335 children Confirmatory factor analyses	Results yielded evidence supporting a two-factor structure encompassing socio-emotional and cognitive dimensions of children's readiness. In addition, results showed the KSEP exhibited measurement invariance across student ethnicities (Latino/White) and home languages (Spanish/English). The results of this study provide psychometric evidence that is particularly important for a universal school readiness screener	Uncertain: General Readiness Pool
13	Quirk et al. (2018) Universal School Readiness Screening at Kindergarten Entry	School readiness screening instrument	kindergarteners (N = 78)	Receiver operating characteristic curve analysis	Results indicated statistically significant associations between both subscales of the KSEP (SE and COG) with all outcome variables. Findings provide	Uncertain: General Readiness Pool

	Author and Title	Type of design e.g. rct, survey	Study population	Methodology mention e.g. data collection, method of data analyses etc.	Outcomes (findings clear)	Include/ exclude (full article extraction for appraisal, yes/no)
					validity evidence in support of the KSEP as an initial gate in the universal screening process to inform educators on the readiness of incoming kindergarteners	
14	Raikes et al. (2019) Examination of school readiness constructs in Tanzania: Psychometric evaluation of the MELQO scales.	Psychometric assessment & Interviews	Children entering grade 1 of primary school averaging 7 years of age: 684 children (51.17% female) selected from 69 schools, and a family member (n=568) who reported on family environments and teacher (n=671) who reported on child development and learning.	Direct Assessment of children. Teacher and Parent Interviews Measurement Analysis and Structural Analysis	Structural analyses indicated that children's attentional/self-regulatory abilities were associated with their direct assessment scores.	Uncertain: General Readiness Pool
15	Sette et al. (2015). Structure and Validity of Affect Knowledge Test (AKT) in a Sample of Italian Preschoolers.	Psychometric Assessment	164 (83 boys, 81 girls) Italian children aged from 2 to 5 years old	Direct assessment Confirmatory factor analysis & analyses of variance (ANOVAs)	Results suggest that the use of the AKT may help the teachers to evaluate children's level on emotional knowledge that in turn might impact on children's positive social relationships within classroom in Italy.	Uncertain: General Readiness Pool
16	Ştefan et al. (2009) Preschool Screening For Social And Emotional Competencies - Development And Psychometric Properties.	Psychometric assessment	2.5-4 years-old, 4-5 years-old, and 5-7.5 years-old N = 824.	Direct assessment Meta-analysis	Data show that these screening scales are relevant for predicting children's mental health problems and school readiness.	Include
17	Xie et al. (2019). Development and validation of the Chinese preschool readiness scale	Rating scales	Study 1, with 29 teachers who rated 288 children. Study 2, with 46 teachers who rated 765 children	confirmatory factor analysis	The results supported further development and use of the CPRS to monitor children's development upon entry at preschool.	Uncertain: General Readiness Pool

APPENDIX D: SFS QUALITY APPRAISAL TOOL (VERSION D)

A. PURPOSE OF THE MEASURE (Maximum score = 18)

- 1) Did they comment on the purpose of the measure?

No	Yes
1	2
- 2) Did they specify what attribute/ characteristic, construct will be measured?

No	Yes
1	2
- 3) Did they state whether the measure is to be used for screening purposes or in-depth diagnostic assessment?

No	Yes
1	2
- 4) Did they explain what type of decisions could be made on the basis of the test scores?

No	Yes
1	2
- 5) Did they specify for which population the measure is intended?

No	Yes
1	2
- 6) Did they state whether it is a normative or criterion-referenced measure?

No	Yes
1	2
- 7) Was the construct(s) theoretically defined?
 (did the researcher undertake a thorough literature study to define the construct)

No	Yes
1	2
- 8) Was the construct operationally defined?
 (how construct will be measured, domains identified for measuring)

No	Yes
1	2
- 9) Did they report on the methodology used to derive an operational definition?
 (focus groups and individual interviews with various role players)

No	Yes
1	2

B: METHODOLOGICAL RIGOUR (Maximum score = 35)

- 1) Is methodology clear and unambiguous?

No	Yes
1	2
- 2) Did the researcher report on how they selected specific items?

No	Yes
----	-----

- | | | |
|-----|--|-----|
| | 1 | 2 |
| 3) | Did the researcher comment on assembling of the items?
(Arranging items, finalising length of test) | |
| | No | Yes |
| | 1 | 2 |
| 4) | Did the researcher comment on development of administration instructions? | |
| | No | Yes |
| | 1 | 2 |
| 5) | Did the researcher pilot the test? | |
| | No | Yes |
| | 1 | 2 |
| 6) | Were results evaluated in terms of item
(difficulty, discriminating power, bias?) | |
| | No | Yes |
| | 1 | 2 |
| 7) | Was there feedback on revision of test and item content? | |
| | No | Yes |
| | 1 | 2 |
| 8) | Was there feedback on standardisation of administration procedures? | |
| | No | Yes |
| | 1 | 2 |
| 9) | Did the reviewers comment on cultural, linguistic and gender appropriateness? | |
| | No | Yes |
| | 2 (one aspect), 3 (2 aspects) — 4 (more than three aspects) | |
| 10) | Were the items reviewed by means of experts for content validation? | |
| | No | Yes |
| | 1 | 2 |
| 11) | Was the construct validity of the instrument tested statistically? | |
| | No | Yes |
| | 1 | 2 |
| 12) | Were the psychometric properties of the final version established? | |
| | Reliability: (internal consistency or test-retest or inter-rater reliability) | |
| | No | Yes |
| | 1 | 2 |
| | Validity: | |
| | No | Yes |
| | 2 (face validity) 3 (construct validity) 4 (criterion validity) | |

- 13) Was a proper guide for interpretation developed?

No	Yes
1	2

- 14) How is the sample defined? Is it a probability or non-probability sample?

Not mentioned	Probability	Non- probability
1	2	3

Hint: If it is non-probability sampling, did they test the sample to see if it fits the criteria. Did they report on it? (Then it qualifies for 2)

- 15) Is the sample size greater than 50? If not, is a formula computed to help with sample size?

No	Yes
1	2

Hint (is a formula computed to help with sample size): If no and $N < 50$, allocate 0. If yes, allocate 2.

C: GENERAL CONSIDERATIONS

Quality of information (Maximum score = 9)

- 1) How long ago was the test developed?

> 20 years ago	< 10 years ago	<5 years ago
1	2	3

- 2) Does it mention the unique multicultural context of South Africa (test bias)?

No	Yes
1	2

- 3) Is it clear that there might be more relevant assessment measures?

No	Yes
1	2

Hint: Does the authors mention that other measures might exist?

- 4) Do the authors refer to the relevant legislation related to psychological assessment practices in South Africa?

No	Yes
1	2

Hint: Child care act (38 of 2005), Bill of Rights (108 of 1996), Health Professionals Act (56 of 1974).

D: OVERALL RATING OF THE PUBLICATION

Based on the answers to all of the above questions, rate the overall quality of the publications as a source of valid and reliable information about the research question (socio-Emotional Competency and the measurement thereof).

Overall: Minimum score of 33

A: Score of at least 50% thus 9/18

B: Score of at least 50% thus 19/37

C: Score of at least 50% thus 5/9

Threshold approach principles:

Acceptable articles: overall research/ analyses seem to be well conducted, samples seem to be well defined and representative, nature of the study well described, outcome variables clear, within the time period defined, and tools seems to meet psychometric criteria (external validity – can the results be generalised to the South African population and reliability – does it measure what it is supposed to measure?).

Non-acceptable articles: poorly conducted studies, small non-representative samples, incomplete and ambiguous methods and tools do not meet psychometric criteria.

Is there a discrepancy between the TWO reviewer ratings?

YES _____ **NO** _____

If yes why:

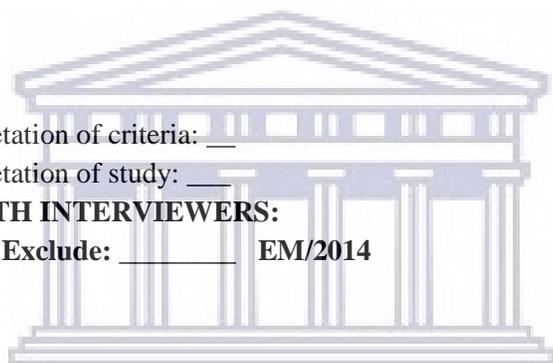
Oversight _____

Differences in interpretation of criteria: _____

Differences in interpretation of study: _____

FINAL DECISION OF BOTH INTERVIEWERS:

Include: _____ **or Exclude:** _____ **EM/2014**



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