Exploring the utility of use of an isiXhosa version of the Spence Children’s Anxiety Scale and the Self-Efficacy Questionnaire for Children in a group of 6–10-year-old isiXhosa-speaking learners in the Western Cape; A mixed method study

by

Jeanine Botha

Thesis presented in fulfilment of the requirements for the degree of Master of Arts (Psychology) in the Faculty of Arts and Social Science at Stellenbosch University

Supervisor: Dr. A. M. Lesch

April 2019
DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the authorship owner thereof (unless to the extent explicitly otherwise stated) and that I have not previously in its entirety or in part submitted it for obtaining any qualification.
ABSTRACT

Various studies have found the incidence of anxiety symptomology amongst South African children to be especially high. Research suggests that symptoms of anxiety may be minimised by increasing an individual’s level of self-efficacy, and various studies illustrate the efficacy of intervention programmes aimed at minimising the symptoms of anxiety through increasing self-efficacy. Timely intervention requires the availability of reliable and valid screening tools. However, many anxiety and self-efficacy measures currently used in the South African context are not adapted for use within our diverse, multicultural context.

Considering the lack of standardised anxiety and self-efficacy measures in South Africa, this study aimed to explore whether the Spence Children’s Anxiety Scale (SCAS) and the Self-Efficacy Questionnaire for Children (SEQ-C) can serve as reliable screening measures in a sample of 189 6–10-year-old isiXhosa-speaking South African children residing in the Western Cape.

Quantitative data analysis was used to investigate the psychometric properties (i.e., reliability and factor structure) of the translated versions of the SCAS and SEQ-C, to determine if a significant negative correlation exists between self-efficacy and anxiety, to determine if significant correlations exist between anxiety and age and self-efficacy and age and to determine whether there are significant differences in SEQ-C and SCAS scores by gender. Qualitative focus group interviews were conducted to explore how participants understood the translated versions of the questionnaires, and whether cultural and/or linguistic differences influenced how participants understood and therefore answered the questions.

Quantitative results indicated acceptable reliability for both scales. However, the expected factor structure was not obtained for either scale in this sample. While all the expected statistical results were not obtained, some of the psychometric properties of the SCAS and SEQ-C are promising. This provides limited support for the reliability of their use within this sample. Results from the qualitative focus groups indicated that cultural and linguistic
differences appear to influence learners’ understanding and interpretation of the questionnaires and may therefore have an impact on the reliability of both the SCAS and SEQ-C.

This study has drawn attention to how linguistic nuances and cultural practices influence children’s understanding of questions on psychological measures, which in turn influences how they answer the questions. This underscores the fact that measures developed in Western countries cannot necessarily be used reliably amongst all population groups in South Africa and stresses the need for the development of culturally appropriate tests.
OPSOMMING

Verskeie navorsingsstudies het gevind dat die insidensie van angssimptomologie besonders hoog is onder Suid-Afrikaanse kinders. Navorsing dui aan dat angssimptome verminder kan word deur ’n individu se self-effektiwiteit te verhoog, en verskeie studies illustreer die effektiwiteit van intervensieprogramme wat daarop gemis is om angssimptome te verminder deur self-effektiwiteit te verhoog. Vroegetydige intervensie vereis egter die beskikbaarheid van betroubare meetinstrumete; die meeste toetse wat in Suid Afrika gebruik word om ang en self-effektiwiteit te meet is egter nie aangepas vir gebruik in ons diverse, multikulturele konteks nie.

In ag genome die gebrek aan gestandardiseerde angs- en self-effektiwiteitmaatinstrumente in Suid Afrika was hierdie studie gemik daarop om ondersoek in te stel of die Spence Kinderangsskaal (Spence Children’s Anxiety Scale; SCAS) en die Self-effektiwiteits Vraelys vir Kinders (Self-efficacy Questionnaire for Children (SEQ-C) kan dien as betroubare meetinstrumente in ‘n steekproef van 189 6–10-jarige isiXhosa-sprekende kinders wat in die Wes-Kaap woonagtig is.

Kwanitatiewe data analise was gebruik om die psigometriese eienskappe van die vertaalde meetinstrumente te ondersoek, asook om vas te stel of ‘n beduidende korrelasie tussen angs en self-effektiwiteit, angs en ouderdom en self-effektiwiteit en ouderdom bestaan en om te bepaal of daar beduidende verskille in tellings op die SCAS en SEQ-C tussen geslagte is. Kwalitiatiewe fokusgroeponderhoude was gevoer om te ondersoek hoe deelnemers die vertaalde vraelyste verstaan het en of kulturele en/of linguistiese verskille ‘n invloed gehad het op hoe deelnemers die vrae verstaan het.

Kwantitatiewe resultate het gedui op aanvaarbare betroubaarheid vir albei meetinstruments. Faktoranalise het egter nie die verwagte faktorstruktuur vir een van die instrumente opgelever nie. Alhoewel al die verwagte statistiese resultate nie verkry is nie, is van die psigometriese eienskappe vir die SCAS en SEQ-C in hierdie steekproef belowend, wat
dui op beperkte ondersteuning vir die betroubaarheid van hierdie instrumente binne hierdie steekproef. Resultate van die fokusgroepe het aangedui dat kulturele en linguistiese faktore deelnemers se verstaan en interpretagie van die vraelyste beïnvloed het, wat die betroubaarheid van die SCAS en SEQ-C mag beïnvloed.

Hierdie studie het aandag gevestig op hoe kulturele praktise en linguistiese nuanse kinders se verstaan van vrae op sielkundige meetinstrumente kan beïnvloed, wat dan ‘n invloed uitoefen op hoe hulle die vrae antwoord. Hierdie bevinding onderstreep die feit dat vraelyste wat in Westerse lande ontwikkel is nie noodwendig betroubaar gebruik kan word in alle bevolkingsgroepe in Suid Afrika nie en beklemttoon die belangrikheid om toetse te ontwikkel wat kultureel toepaslik is.
I would like to express my gratitude and appreciation to the following people:

- All the learners who so eagerly and diligently answered every question presented to them. Without you, this research would not have been possible!

- The principal and staff at the school where the research was conducted, who so graciously accommodated my request to collect data. Your willingness to let me use your facilities is greatly appreciated.

- Dr Anthea Lesch, my supervisor.

- My research assistants, Nwabisa and Mama Bhelakazi. Without your linguistic skills, data collection would not have been possible.

- My parents, for their never-ending encouragement and support through every endeavour I take on. A mere thank you will never be enough.
DEDICATION

Aan my man, Jaco

Vir jou liefde, ondersteuning, moed inpraat, eindelose koppies koffie en luister na elke eksistensiële krisis. Jy is my gunsteling familie.
FINANCIAL ACKNOWLEDGEMENT

The financial assistance of the Mandela Rhodes Foundation, the Ithemba Foundation and the Stellenbosch University merit bursary towards this research is hereby acknowledged. Opinions expressed and conclusions arrived at are those of the author and are not necessarily to be attributed to the Mandela Rhodes Foundation, the Ithemba Foundation or Stellenbosch University.
TABLE OF CONTENTS

DECLARATION ....................................................................................................................... i

ABSTRACT ........................................................................................................................... ii

OPSOMMING ......................................................................................................................... iv

ACKNOWLEDGMENTS ...................................................................................................... vi

DEDICATION ........................................................................................................................ vii

FINANCIAL ACKNOWLEDGEMENT ........................................................................... viii

TABLE OF CONTENTS ....................................................................................................... ix

LIST OF TABLES ............................................................................................................... xiii

CHAPTER 1: INTRODUCTION, RESEARCH PROBLEM AND MOTIVATION FOR
THE STUDY ............................................................................................................................ 1

1.1 Introduction and statement of the research problem ....................... 1

1.2 Thesis outline ................................................................................................ 9

CHAPTER 2: KEY TERMS AND THEORETICAL FRAMEWORK ...................... 10

2.1 Definitions of key constructs ................................................................. 10

2.1.1 Anxiety ..................................................................................................... 10

2.1.2 Self-efficacy ............................................................................................. 10

2.1.3 Middle childhood in the South African context ....................................... 11

2.2 Theoretical framework .............................................................................. 12

CHAPTER 3: LITERATURE REVIEW ................................................................. 21

3.1 Review of the relevant literature on childhood anxiety ............... 21

3.1.1 Overview and prevalence of childhood anxiety ................................. 21

3.1.2 Risk factors for the development of anxiety in childhood ............... 24
3.1.3 Effects of childhood anxiety ................................................................. 25
3.1.4 Gender differences in prevalence rates of childhood anxiety ............... 26
3.1.5 Age differences in prevalence rates of childhood anxiety ..................... 28
3.1.6 Classification of childhood anxiety ......................................................... 29
3.1.7 Assessment of anxiety in children .......................................................... 30

3.2 Review of the relevant literature on self-efficacy .................................... 32
3.2.1 Overview of self-efficacy ........................................................................ 32
3.2.2 Gender differences in self-efficacy levels ............................................... 32
3.2.3 The relationship between self-efficacy and anxiety in children .............. 33
3.2.4 Assessment of self-efficacy in children ................................................... 35

3.3 Culture and mental health ........................................................................ 36
3.3.1 Cultural variations in the presentation of psychological distress.......... 36
3.3.2 Cross-cultural considerations in test adaptation and interpretation ....... 41

CHAPTER 4: METHODOLOGY ........................................................................ 45
4.1 Research questions, aims and hypotheses ................................................ 45
4.2 Research design .......................................................................................... 48
4.3 Sampling method ....................................................................................... 49
4.4 Participants ................................................................................................. 50
4.5 Measuring instruments ............................................................................... 52
4.5.1 Permission for use and translation ........................................................... 52
4.5.2 Spence Children's Anxiety Scale (SCAS; Spence, 1997) ....................... 52
4.5.3 Self-Efficacy Questionnaire for Children (SEQ-C; Muris, 2001) .......... 54
4.5.4 Demographic questionnaire ................................................................. 55
4.5.5 Focus group interview schedule ............................................................. 55
4.6 Research procedure ................................................................................... 56
4.7 Data analyses .............................................................................................. 58
4.7.1 Quantitative analysis ................................................................. 58
4.7.2 Qualitative analysis ................................................................. 58
4.7.3 Trustworthiness in qualitative research .............................. 59

4.8 Ethical considerations .................................................................. 60

CHAPTER 5: RESULTS AND DISCUSSION ............................................. 64

5.1 Normality of data ........................................................................ 64

5.2 Descriptive statistics ................................................................. 64
5.2.1 Anxiety scores on the SCAS .................................................... 65
5.2.2 Gender effects for the SCAS .................................................... 74
5.2.3 Age effects for the SCAS ....................................................... 75
5.2.4 Self-efficacy scores on the SEQ-C ......................................... 77
5.2.5 Gender effects for the SEQ-C ................................................ 78
5.2.6 Age effects for the SEQ-C ..................................................... 79

5.3 Psychometric properties of the SCAS and SEQ-C ............... 79
5.3.1 Internal consistency of the Spence Children’s Anxiety Scale .... 79
5.3.2 Factor analysis for the SCAS .................................................... 80
5.3.3 Internal consistency of the SEQ-C ........................................ 90
5.3.4 Factor analysis for the SEQ-C .............................................. 90
5.3.5 Correlation between anxiety and self-efficacy ...................... 97

5.4 Overview of findings ................................................................... 98

CHAPTER 6: SUMMARY OF FINDINGS, LIMITATIONS, RECOMMENDATIONS
AND CONCLUSION ............................................................................. 102

6.1 Summary of findings ................................................................. 102

6.2 Limitations .................................................................................. 104
6.2.1 Language and translation issues ............................................ 104
6.2.2 Age of participants ............................................................... 104
LIST OF TABLES

Table 4.1 .................................................................................................................................. 51
Table 4.2 .................................................................................................................................. 51
Table 5.1 .................................................................................................................................. 66
Table 5.2 .................................................................................................................................. 67
Table 5.3 .................................................................................................................................. 82
Table 5.4 .................................................................................................................................. 85
Table 5.5 .................................................................................................................................. 87
Table 5.6 .................................................................................................................................. 92
Table 5.7 .................................................................................................................................. 93
Table 5.8 .................................................................................................................................. 95
Table 5.9 .................................................................................................................................. 97
CHAPTER 1: INTRODUCTION, RESEARCH PROBLEM AND MOTIVATION FOR THE STUDY

Chapter 1 consists of a general introduction to the research study and the context within which it is situated and the statement of the research problem, and concludes with an outline of the thesis.

1.1 Introduction and statement of the research problem

Anxiety disorders are amongst the most common psychiatric disorders worldwide, in adults as well as children and adolescents (Cartwright-Hatton, McNicol, & Doubleday, 2006; Mash & Wolfe, 2016), and have high rates of comorbidity with other psychiatric disorders (American Psychiatric Association, 2013). In their 2017 Global Health Estimates report, the World Health Organization approximated the worldwide anxiety prevalence at 264 million people, or 3.6% of the world’s population (World Health Organization, 2017). Prevalence rates of childhood anxiety vary between countries, depending on the age group of the children and the assessment instrument used (Sadock, Sadock, & Ruiz, 2015). Statistics are mostly derived from research conducted in developed countries, with only 3–5% of published mental health research addressing issues in or originating from low- and middle-income countries (Yatham, Sivathasan, Yoon, da Silva, & Ravindran, 2017). A recent meta-analytic study conducted by Yatham et al. (2017) that reviewed the published data on the prevalence of anxiety and depression amongst youths (classified as ranging from 5–24 years old for the purposes of Yatham et al.’s study) from low- and middle-income countries in Africa, Europe, and Asia, found the prevalence of anxiety to vary from 8–27%. These rates are comparable to the prevalence estimates of anxiety symptomology in high-income countries such as the United States of America and Australia (Kessler et al., 2012; Lawrence et al., 2015; Merikangas et. al., 2010; Yatham et al., 2017).
Various studies have found the incidence of anxiety symptomology amongst South African children to be high, specifically in children from African and Coloured\textsuperscript{1} communities, which, amongst other South African groups, are largely marginalised (Akande, 2010; Burkhardt, Loxton, & Muris, 2003; Cortina et al., 2013; Hartley, 2008; Howard, Muris, Loxton, & Wege, 2016; Mostert, 2007; Muris et al., 2006; Muris, Schmidt, Engelbrecht, & Perold, 2002). Children from these communities also display consistently higher levels of anxiety than children from higher socio-economic communities (Muris et al., 2006). The elevated levels of anxiety that African and Coloured children experience could be attributed to the influence of poverty, unfavourable living conditions, general experiences of marginalisation, childrearing practices and cultural values (Akande, 2010; Donovan & Spence, 2000; Muris, Schmidt et al., 2002).

Growing awareness of the severity of childhood anxiety (Cartwright-Hatton et al., 2006), coupled with evidence of high prevalence rates of anxiety symptoms amongst South African youth, highlight the need to identify clinically anxious children at an early stage in order to provide timely and appropriate treatment. To do so, however, requires the availability of reliable, valid and culturally appropriate screening tools (Foxcroft, Paterson, Le Roux, & Herbst, 2004). Many methods, such as structured diagnostic interviews, are time consuming and require that interviewers are well-trained in using the instrument (Essau & Barrett, 2001). These instruments are thus not viable in resource-limited contexts. Here, it is important to

\textsuperscript{1}Although the terms “Black” and “Coloured” remain widely used in research (to refer to distinct population groups that formed part of the Apartheid-era racial classification), in the post-Apartheid South Africa, these terms have come to denote new meanings. For example, the term “Black” is used as a generic referent to describe the peoples of South African from the African, Coloured and Indian communities collectively (Republic of South Africa, 2003). The terms “African” (referring to South Africans that are natives of sub-Saharan Africa; Black African, n.d.), and “Coloured” (referring to South Africans of mixed racial descent) (Coloured, n.d.) will be used throughout this study to refer to these distinct South African population groups.
consider the disparity in access to services such as education and health care in South Africa. While classified as a developing country (United Nations, 2016), South Africa is somewhat of an anomaly amongst developing nations, with one of the highest global GINI-coefficients, a statistical measure of income inequality in a population (Statistics South Africa, 2014; World Bank, 2013). Its well-developed infrastructure, access to world-class health and education systems and highly skilled professionals are contrasted with high levels of unemployment, poverty, under-resourced state-funded health and education and vast socio-economic problems (Mayosi & Benatar, 2014; Roets, 2016; Statistics South Africa, 2014). These disparities, which run largely along racial lines and are amplified in rural areas, can be attributed to the racial and socio-economic oppression and inequality propagated by apartheid, the effects of which are still apparent today (Jack et al., 2014). The richest 10% of South Africans earn 58% of the total annual national income, with the bottom 70% earning a meagre 17% of the total annual national income (Leibrandt & Woolard, 2010). Eighty-four percent of the population, amounting to more than 40 million people, rely on the public health sector as their sole provider of health care. However, only around 30% of South African health care professionals work in the public sector, leaving this sector grossly under-staffed (Mayosi & Benatar, 2014). The problem of access to care, specifically for mental health, is compounded by the fact that specialised mental health care is generally limited to urban psychiatric facilities (Rural Mental Health Campaign Committee, 2015), leaving the almost 40% of the population who live in rural areas virtually unable to access mental health services (World Health Organization, 2016). The situation regarding access to mental health care for children and adolescents in South Africa is even more dire than for adults. According to Kleintjes, Lund, and Flisher (2010), only 1% of beds in psychiatric hospitals across the country are reserved for children and adolescents. Of all outpatient facilities providing mental health care, including community clinics, outpatient facilities at hospitals and non-government organisations providing mental health care, only 1.4% offer services to children and adolescents.
The first – and only, to date – large-scale population-based study of common mental disorders in South Africa, the South African Stress and Health (SASH) study, conducted between 2002 and 2004, indicated that the lifetime prevalence rate for any mental disorder amongst South Africans is 30.3% (Herman et al., 2009). However, it is estimated that only 25% of South Africans with a mental health disorder will receive treatment (Jha, Kickbusch, Taylor, & Abbasi, 2016). As far as the literature review for this research could establish, no large-scale prevalence studies of common mental disorders amongst South African children and adolescents have been conducted. To address this lack of availability of prevalence rates, Kleintjes et al. (2006) developed a set of prevalence estimates for common mental disorders amongst children and adolescents in the Western Cape, based on the review of relevant international, African and South African epidemiological studies. According to Kleintjes et al. (2006), the 12-month prevalence rate for any disorder amongst Western Cape children and adolescents (the age range for this group was not defined in the study) was 17%. The 12-month prevalence rate for separation anxiety was 4%, simple phobia 3%, social phobia 5% and generalised anxiety disorder 11%.

Early detection of mental illness in children and adults can significantly reduce the negative impact thereof on the lives of those affected, and lighten the burden on the under-resourced health care system, in South Africa and across the world. However, the lack of mental health specialists in under-resourced areas, like many parts of South Africa, remains a barrier to timely intervention (Sweetland, Belkin, & Verdeli, 2014). Research shows that effective screening by trained non-professionals can detect mental disorders (Kagee, Tsai, Lund, & Tomlinson, 2013), leaving professionals free to focus on providing specialised care. Considering the limited public mental health resources in a developing country like South Africa (Janse van Rensburg, 2015; World Health Organization, 2007), self-report questionnaires can be of great value as they are easy to administer, can often be administered by non-professionals and require minimum time to complete (Muris, 2007).
Many anxiety measures currently used in the South African context are not adapted for use within our diverse, multicultural context (Foxcroft et al., 2004). In a survey conducted by Foxcroft et al. (2004), collecting data regarding test usage of registered psychologists in South Africa (working in private practice, universities and in the public sector, at schools, hospitals and clinics and other government departments), the 881 participants listed the Reynold’s Children’s Manifest Anxiety Scale, the Revised Children’s Manifest Anxiety Scale (RCMAS) and the Anxiety Questionnaire for Pupils (AFS) as the most commonly used measures for screening childhood anxiety. Despite using these tests, the practitioners indicated that there is a paucity of suitable tests developed and standardised for the South African context that assess childhood anxiety (Foxcroft et al., 2004).

Research suggests that symptoms of anxiety may be minimised by increasing an individual’s level of self-efficacy, and various studies illustrate the value of intervention programmes aimed at minimising the symptoms of anxiety through increasing self-efficacy (Kennedy, Rapee, & Edwards, 2009; Muris, 2002). A child’s perceived efficacy to exercise control over possible physical or emotional threats plays a fundamental role in emotional arousal (Bandura, 1988). Perceived self-efficacy thus makes a unique contribution to the aetiology of anxiety (Bandura, 1997). According to Bandura, Taylor, Williams, Mefford, and Barchas (1985), “self-efficacy is a cognitive mediator of the anxiety reaction” (p. 411). Studies on the relationship between self-efficacy and anxiety consistently illustrate that low levels of self-efficacy are accompanied by high levels of anxiety in children and adults (Matsuo & Arai, 1998; Muris, 2002; Nevid, Rathus, & Greene, 2014). Conversely, raising self-efficacy in a specific situation lowers anxiety (Bandura, 1997). Self-efficacy, which is developed during childhood, can thus serve as either a risk or protective factor in the development of anxiety disorders in childhood (Mostert, 2007). Investigating the relationship between anxiety and self-efficacy in South African children can thus be of great value to inform the development of anxiety intervention programmes.
While research indicates the usefulness of measuring both self-efficacy and anxiety levels with the goal of anxiety prevention (Kennedy et al., 2009; Muris, 2002), the clinical utility of the tests within the population they are to be used in must be determined in order for valid conclusions to be drawn. The issue of fair and ethical test usage within the multicultural and multilingual South African population is a particularly sensitive one considering the effect of former apartheid policies on psychological test development (Foxcroft, 1997). Under the apartheid regime, where society was divided by race, psychological tests were also developed along cultural divides as there was “little specific need for common tests because the various (cultural) groups did not compete with each other” (Owen, 1991, p. 112). Considering the superior position of White South Africans during this time, more attention was given to developing psychological tests for the White population. The lack of measures available for other cultural groups gave rise to the practice of using these tests, normed for a White, Westernised population for other cultural groups and “applying the norms with caution” (Foxcroft, 1997, p. 229). To this day, culturally relevant tests remain scarce (Swanepoel & Krüger, 2011). In order to improve the ethical and fair use of tests, urgent consideration needs to be given to adapting and norming tests for the various population groups in the South African context.

The Spence Children’s Anxiety Scale (SCAS) (Spence, 1997) is an easy-to-administer self-rating questionnaire that could serve as a valuable anxiety screening instrument in the public health sector in South Africa as it is cost-effective and can be administered by a trained non-professional (Spence, 1997). The SCAS assesses the severity of various anxiety disorder symptoms in terms of nosologic constructs set out in the DSM-IV² (Muris, 2007) and has been

² I have taken notice of the fact that the SCAS is based on assessing the domains of anxiety as set out in the earlier edition of the DSM, the DSM-IV (APA, 2000), and that the DSM-5 has reclassified some of the disorders previously grouped under anxiety disorders into new disorders – notably, the obsessive-compulsive disorder now
proven useful in providing an indication of current anxiety levels, as well as for identifying children at risk of developing an anxiety disorder in the future (Spence, Barret, & Turner, 2003). Many of the studies that investigated anxiety amongst South African children used the SCAS (Spence, 1997) as a diagnostic measure (Hartley, 2008; Mostert, 2007; Muris et al., 2006; Muris, Schmidt et al., 2002). While the SCAS displayed acceptable reliability levels, as far as I could ascertain, the SCAS has not been standardised for use within a South African sample, which could have implications for the validity of the conclusions reached in the above-mentioned studies. The use of an unstandardised measure firstly assumes that South African children experience anxiety identically to the children in the samples for which the SCAS has been standardised, despite cultural and socio-economic differences. Secondly, it assumes that the severity of anxiety symptoms experienced amongst South African children can be determined accurately using cut-off scores identified for the populations in which the measure was developed. The use of unstandardised tests leads to questionable results, which in turn can influence diagnosis and resultant decisions regarding treatment and intervention (Foxcroft et al., 2004).

Taking into account the relationship between anxiety and self-efficacy, the present study aimed to investigate both self-efficacy and anxiety levels in a sample of isiXhosa children. It was thus deemed appropriate to use the Self-Efficacy Questionnaire for Children (SEQ-C) (Muris, 2001), as the domains of self-efficacy measured by the SEQ-C seem to be relevant for the study of affective disorders, such as anxiety (Muris, 2001). Furthermore, the SEQ-C is child-friendly and quick to administer (Muris, 2001). While the SEQ-C displayed grouped under the Obsessive-Compulsive and Related Disorders, and both post-traumatic stress disorder and acute stress disorder under the Trauma- and Stressor-Related Disorders (APA, 2013). However, to date, the SCAS has not yet been updated to match the new classification of various disorders as set out in the DSM-5.
high reliability in a sample of 12-year-old South African children from high, middle and low socioeconomic communities (Mostert, 2007), it has also not been standardised for use in the South African population.

Considering the lack of standardised anxiety and self-efficacy measures in South Africa, this study aimed to explore whether the SCAS (Spence, 1997) and the SEQ-C (Muris, 2001) can serve as reliable screening measures in a sample of isiXhosa-speaking South African children, or whether further attention must be paid to cross-cultural adaptation, translation and standardisation of norms before being used in this population. This study also aimed to investigate whether cultural and/or linguistic differences influenced learners’ understanding and interpretation of the translated questionnaires. In order to narrow down the research population, it was decided to focus specifically on isiXhosa-speaking learners, as isiXhosa is the most commonly spoken African language in the Western Cape (Statistics South Africa, 2012a), where the research will be conducted.

In 2010, the United States National Institute of Mental Health launched the Grand Challenges in Global Mental Health initiative, with the aim of identifying research priorities that, if realised within the next ten years, could lead to marked improvements in the lives of people living with mental illnesses across the globe (Collins et al., 2011). Twenty-five priority areas were identified, one of which was to increase the detection of mental illness in primary health care settings (Collins et al., 2011). The dearth of mental health specialists in under-resourced areas, like many parts of South Africa, remains a barrier to detection (Sweetland et al., 2014). However, as mentioned previously, mounting evidence indicates that trained lay persons can effectively administer brief screening questionnaires. Brief screening instruments can thus serve as essential tools in the increased effort to detect mental illness in primary care settings. To effectively do so, however, instruments used must be both valid and reliable within the context in which they are used (Sweetland et al., 2014). The development of valid and reliable screening instruments, standardised for populations other than White South Africans,
can thus contribute to better assessment and detection of anxiety symptomology amongst children. This, in turn, can lead to timely intervention, and triage to specialised care, if need be, preventing the development of full-blown anxiety disorders.

To my knowledge, no anxiety or self-efficacy scales have been adapted for use within the population of isiXhosa-speaking children in South Africa. This study thus contributed to this paucity of research by investigating how a sample of isiXhosa-speaking South African children understood and interpreted the translated versions of the SCAS and SEQ-C and examining whether cultural and/or linguistic differences influenced the reliability and validity of the translated questionnaires. The results from this study can then be used to inform the future adaptation of the SCAS or SEQ-C for use within the isiXhosa-speaking population of South African children.

1.2 Thesis outline

The present chapter (Chapter 1) provided the introduction to the research problem. The key terms that will be used throughout this study and the theoretical framework are discussed in Chapter 2. This is followed by an overview of the relevant literature pertaining to anxiety, self-efficacy and the cross-cultural adaptation of psychological measures in Chapter 3. In Chapter 4, the research methodology used to conduct the study is described. This includes a discussion of the research aims and hypotheses, the research design, participants’ biographical information, measures used as well as data collection and analyses and ethical considerations. The results and discussion of this study are integrated in Chapter 5. Chapter 6 provides a conclusion of the results, as well as the limitations of this study and recommendations for future research.
CHAPTER 2: KEY TERMS AND THEORETICAL FRAMEWORK

In this chapter, key terms relevant to the study are defined for the purpose of clarity, and the theoretical framework, which provides the context within which to consider the various factors that influence the development of childhood anxiety, is presented.

2.1 Definitions of key constructs

2.1.1 Anxiety

Anxiety is a mood state identified by strong negative emotions and physical symptoms of tension brought about by feelings of apprehension towards future danger or adversity (Barlow, 2002; Mash & Wolfe, 2016).

For the purpose of this study, a distinction will be made between anxiety/anxiety symptoms and anxiety disorders. Anxiety and anxiety symptoms will be used interchangeably to refer to the construct being measured using a children’s anxiety rating scale, the Spence Children’s Anxiety Scale (SCAS) (Spence, 1997), and denotes the psychological, cognitive and physiological manifestation of anxiety (Mash & Wolfe, 2016). Anxiety disorders will refer to the excessive experience of anxiety symptoms which are developmentally inappropriate and cause clinically significant impairment in the child’s daily functioning (Mash & Wolfe, 2016) and, therefore, warrant a clinical diagnosis of an anxiety disorder according to the Diagnostic and Statistical Manual of Mental Disorders (APA, 2013).

2.1.2 Self-efficacy

Self-efficacy is an individual’s perception of his or her ability to produce a desired action or behaviour to achieve environmental expectations (Bandura, 1997). For the purpose of this study, self-efficacy will be measured using a children’s self-efficacy rating scale, the Self-Efficacy Questionnaire for Children (SEQ-C) (Muris, 2001) and will refer to a child’s personal evaluation of his or her social, academic and emotional efficacy.
2.1.3 Middle childhood in the South African context

From a developmental psychology perspective, middle childhood is generally conceptualised as the period from six to 12 years of age (De Witt, 2011). As the sample group of this study constitutes Grade 1–3 learners (normally age 6–9 years), all participants fall in the category of middle childhood.

The middle childhood period forms an extremely important phase of a child’s physical, cognitive, social and emotional development (De Witt, 2011). This stage is marked by the development of a more realistic self-concept, more pro-social behaviour and a greater need for friendships, greater independence, physical development and cognitive advances (De Witt, 2011). During middle childhood, feelings of competence and personal ability play an important role in children’s self-concept (De Witt, 2011). Children who feel incompetent to master the new social and academic skills required of them during this stage may develop what Erikson (1968) termed “a sense of inferiority”, which can result in long-standing emotional and psychological difficulties.

Participants in the present study were selected from schools in the Stellenbosch region, a peri-urban area in the Western Cape. The most commonly spoken languages in the region are Afrikaans (67.7%), isiXhosa (20.8%) and English (7.2%) (Statistics South Africa, 2012a). The area is economically diverse and can be divided into different income categories, largely along racial lines. Of the 43,420 households in the Stellenbosch region, 75.1% live in formal structures and 22.9% live in informal structures (Statistics South Africa, 2012b). According to Statistics South Africa (2011), 45.5% of all South Africans live below the poverty line. More than half of the country’s children (55.7%) live in poverty. Of individuals living in poverty, more than nine out of 10 (94.2%) are from African communities (Statistics South Africa, 2011). The children who participated in this study are isiXhosa-speaking and all reside in an informal settlement in Stellenbosch. It can thus be stated that the participants are from a low-income community. With regard to the social context of the participants in this study, their environment
is largely characterised by poverty and the many adverse manifestations thereof, such as undesirable living conditions, malnutrition and poor education (Donald, Lazarus, & Lolwana, 2006; Prinsloo, 2011). These factors hinder children’s cognitive and psychosocial development (Prinsloo, 2011), impact negatively on their self-concept (De la Rey, Duncan, Shefer, & Van Niekerk, 1997) and lead to heightened levels of anxiety (Biersteker & Robinson, 2000).

2.2 Theoretical framework

As the development of childhood anxiety disorders involves a complex interaction between environmental, cultural, biological, and psychological variables and cannot be explained by a single element or theoretical perspective (Donovan & Spence, 2000; Mash & Wolfe, 2016), it is important to consider all the factors that could have an influence on the developing child. Taking into account the various factors that contribute to the onset of anxiety in childhood, Muris (2007) proposes a dynamic multifactorial model of childhood anxiety based on the premise that anxiety lies on a continuum, with normal fear and anxiety on one end and pathological anxiety on the other end. According to this model, a child’s anxiety at any point in time is determined by the interaction between protective and vulnerability factors. These factors are often interrelated and interact with and reinforce one another at various levels (Muris, 2007).

Considering Muris’ (2007) proposition of a multifactorial model, I use Bronfenbrenner’s (2001) bio-ecological systems theory as a meta-theory to provide a broad framework within which to consider the various factors that influence child development, and which may impact on self-efficacy and anxiety in middle childhood. Developed by Jurie Bronfenbrenner, the bio-ecological systems theory postulates that “human development takes place through progressively more complex reciprocal interaction between an active, evolving biopsychological human organism and the persons, objects and symbols in its immediate environment” (Bronfenbrenner, 1979, p. 38).
Components of three developmental theories, namely self-efficacy theory, as part of Bandura’s larger social learning theory, Erikson’s psychosocial theory and Vygotsky’s sociocultural theory of cognitive development, are integrated into the framework provided by the bio-ecological systems theory, as they can provide a more detailed explanation of the different factors that influence the development of anxiety and self-efficacy in childhood.

In order to understand human development in context, three interacting dimensions need to be considered, namely proximal processes, person characteristics, and systems/context (Bronfenbrenner, 1994).

**Proximal processes.** Proximal processes refer to enduring forms of person-environment interaction. For these interactions to be effectual, they must occur regularly and over extended periods of time (Bronfenbrenner, 1986; Swart & Pettipher, 2011). Examples of proximal processes are parent-child and peer-peer activities, group play, and developing new skills. According to the bio-ecological perspective, proximal processes only lead to effective development and functioning when mediated by the characteristics of the child and his or her context (Swart & Pettipher, 2011).

**Person characteristics.** This dimension acknowledges the influence of a child’s biological and genetic characteristics on his or her development. These characteristics can influence the direction and power of proximal processes and are therefore instrumental in shaping the course of development (Bronfenbrenner, 1986; Swart & Pettipher, 2011). A child’s temperament is a person characteristic that can serve as a predisposing factor for the development of an anxiety disorder. Behaviourally inhibited children, i.e., children with a low threshold for becoming overexcited and a tendency to be anxious and unusually shy and withdrawn, are at a greater risk of developing anxiety symptoms than their uninhibited peers (Mash & Wolfe, 2016). However, not all behaviourally inhibited children will develop an anxiety disorder; the development of an anxiety disorder is mediated by the parent-child relationship as well as environmental risk factors (Degnan & Fox, 2007).
Self-efficacy is another person characteristic that may affect the development of anxiety in children. A person’s self-efficacy, defined as “people’s judgements of their capabilities to organize and execute courses of action required to attain designated types of performances” (Bandura, 1995, p. 2) strongly influences how he or she will react in a specific situation (Meyer, Moore, & Viljoen, 2008). A child’s perceived efficacy to exercise control over possible threats plays a fundamental role in emotional arousal (Bandura, 1988). Bandura, Pastorelli, Barbaranelli, and Caprara (1999) postulate that there are three pathways along which low self-efficacy can mediate affective states. Firstly, when individuals feel they are unable to achieve highly valued standards, their sense of ineffectiveness may lead to feelings of anxiety or depression. This is particularly true in situations where personal standards of merit are set high above an individual’s perceived efficacy to attain them. Secondly, a low sense of efficacy in developing social relationships, which provide satisfaction and aid in stress management, may lead to feelings of depression. In addition, a lack of social self-efficacy makes individuals believe that they are unable to meet the evaluative standards of others, which is likely to enhance anxiety in social situations. Thirdly, as self-efficacy influences how well an individual is able to regulate negative thoughts or emotions when they arise and manage his or her emotional states through an effective course of action, low self-efficacy regarding the ability to control negative thoughts and emotions may increase feelings of anxiety.

**Systems/context.** Bronfenbrenner (1994) described the ecological environment surrounding the individual as a set of five nested systems, namely the micro-, meso-, exo-, macro- and chronosystem. These systems function bi-directionally, meaning that they have an impact both towards and away from the individual located at the centre of the system (Bronfenbrenner, 1994). Within the systems/context dimension, vulnerability factors such as negative parental rearing behaviours, behavioural inhibition, and negative life events increase or sustain feelings of fear and anxiety; conversely, protective factors such as self-esteem, self-efficacy, and social support serve to lessen or protect against experiences of fear and anxiety.
Consistently high vulnerability and low protective factors increase the likelihood that a child will display pathological anxiety symptoms which may, over time, lead to an anxiety disorder (Muris, 2007).

The microsystem refers to a child’s immediate surroundings, and is therefore the system which the child is most closely involved in and where proximal processes are the strongest (Bronfenbrenner, 1979; Swart & Pettipher, 2011). At this level, bi-directional influences are also the strongest and, therefore, have the biggest impact on the child. Examples of factors in the microsystem are family environment, parenting styles, school environment and peer groups (Bronfenbrenner, 1979). Socio-economic factors greatly influence various aspects of the microsystems of many South African children, including the family and school environment. Muris et al. (2006) found that high rates of parental unemployment and environmental adversity have a negative effect on parenting styles. Ineffective parenting styles, such as overprotective and anxious rearing or rejection by parents could, in turn, lead to increased anxiety in children (Muris et al., 2006). Socio-economic factors also influence learners’ schooling environment as, even 20 years into democracy, schools that were historically delineated for Black learners remain under-resourced and over-crowded (Sedibe, 2011). These factors may have a negative effect on learners’ academic performance, which affects their feelings of competence and personal ability, and may lead to feelings of inferiority and heightened anxiety (Howard, 2015). This could possibly contribute to an explanation as to why African and Coloured children report higher levels of anxiety in comparison to White children.

Erikson’s (1968) psychosocial theory posits that human development progresses through stages, from birth to adulthood. Erikson identified eight stages, each characterised by a specific developmental crisis resulting from the interaction between epigenetic and social influences. The successful resolution of each crisis leads to the development of ego strength, which can be regarded as the positive personality traits that humanity as a species can develop.
(Erikson, 1968). The unsuccessful resolution of a crisis at any stage leads to difficulty in managing subsequent crises (Meyer et al., 2008) and can result in anxiety (Loxton, 2004).

As this study focuses on children in middle childhood, emphasis is placed on the developmental crisis experienced during this stage, namely industry versus inferiority (Erikson, 1968). As mentioned previously, the middle childhood period forms an extremely important phase of a child’s physical, cognitive, social and emotional development (De Witt, 2011). During this time, feelings of social and academic competence and personal ability in these areas play an important role in children’s self-esteem (De Witt, 2011; Harter, 1998). Children develop a sense of their competencies and what they feel unable to do from social evaluations from parents, teachers and peers as well as from personal judgements of abilities (Newman & Newman, 2003).

The school environment is one in which many new skills are taught, and school thus plays an important role in experiences of industry and inferiority (Newman & Newman, 2003). The development of self-esteem is facilitated – or hindered – by experiences within the schooling system and interactions with teachers and peers (Ntshangase, 2011). Self-esteem, which is an individual’s judgement of their worth (Ntshangase, 2011), is closely related to the broader self-descriptive construct of self-efficacy (Marsh & Shavelson, 1985). Successful outcomes to the challenges children encounter at school lead to a valuing of personal achievements and a sense of industry or competency. Negative outcomes, on the other hand, lead to a sense of failure and feelings of inferiority (Ntshangase, 2011).

With specific reference to academic aptitude, children who regard themselves as less competent than their peers report higher levels of depression, social isolation and aggression and are more likely to drop out before completing school (Alivernini & Lucidi, 2011; Bandura et al., 1999; Caprara et al., 2008). Children’s inability to cope with the demands placed on them can also result in increased anxiety, as Wait (2005) explains: “This stage, with its increased demands socially and educationally, can create anxiety for children who cannot cope with these
demands. Anxiety, in turn, can impact negatively on children’s personality development” (p. 129).

The next system, the mesosystem, represents the interaction between the different microsystems (Bronfenbrenner, 1994). At this level, family, peer and school systems interact with one another and modify each other in the process. Experiences in one micro-system, such as parent-child interactions at home, can influence interactions in other microsystems, for example activities at school or with peers (Swart & Pettipher, 2011). Interactions in the mesosystem can influence the acquisition of childhood anxieties, such as school phobia (Shand, 1994) as well as the development of a child’s perceived efficacy (Loxton, 2004).

The exosystem involves linkages between social settings in which the child is not directly involved, but in which events that directly influence the child take place (Bronfenbrenner, 1994). Examples of exosystemic factors are parents’ place of work, family networks, community context, the education system and the media (Swart & Pettipher, 2011). Research has indicated that three exosystems, namely the parents’ workplace, family networks and community context are especially likely to influence child development through their indirect influence on the family, peer groups and school environment (Bronfenbrenner, 1994).

Macrosystems are culture-specific and consist of the overarching pattern of values, attitudes and beliefs within a specific society or social group at any given time (Swart & Pettipher, 2011). The macrosystems surrounding a child have an impact on the quality of interactions in all other levels and ultimately affect the social and psychological processes that occur in the microsystem. Belief systems, bodies of knowledge, resources, customs and political and economic systems and policies all form part of the macrosystem (Bronfenbrenner, 1994).

Lev Vygotsky’s (1978) sociocultural theory of cognitive development emphasises the role of social interaction in the development of cognition and the manner in which cultural practices, beliefs and skills are conveyed to children within different societies. Vygotsky
believed that, as the fundamental goal of all societies is to transfer cultural values and skills to their youth, every aspect of childhood development must be viewed against this cultural backdrop (Louw & Louw, 2007). Vygotsky viewed human beings as equal regarding physical characteristics and physiological processes, but believed that exposure to different cultural symbol systems led to differences in thinking and behaviour (Newman & Newman, 2003). Children and culture are intricately interwoven through ongoing interaction within historical, cultural and social contexts, and these interactions influence a child’s higher mental processes, such as meaning making and language. Through continuous interaction with more knowledgeable others, such as parents and teachers, within a specific cultural context, a child advances his or her level of understanding and learns to master cultural tools – both technical and symbolic – which shapes the way a child views and interacts with the world around him-or herself (Newman & Newman, 2003).

Considering Vygotsky’s emphasis on the cultural transmission of values and skills from one generation to another, his theory could be helpful in explaining how fears and anxieties are transmitted from one generation to the next. Burkhardt (2007) postulates that Vygotsky’s theory could also be helpful when trying to explain cultural differences in the expression of fear and anxiety. Within the South African context, the emphasis on social inhibition, self-control and obedience to social norms amongst the African community could contribute to the development of anxiety and fear in children, which may provide some explanation regarding the high levels of anxiety amongst African children in our country (Perold, 2001).

Vygotsky’s theory can help to explain the development of self-efficacy in children, as well as the differences in how self-efficacy is expressed across different populations. An individual’s proximal context (i.e., its institutions such as the family, school and community) is affected by cultural values and practices. As these systems are important sources of efficacy appraisal, the societal values and patterns reflected by these institutions influence an individual’s concept of self-efficacy, the value they place on it and the factors that influence
the development of self-efficacy. Individuals from collectivist communities may, therefore, place more value on group achievement, whereas individuals from individualistic cultures emphasise personal efficacy and goal attainment (Oettingen & Zosuls, 2005).

Poverty and high levels of crime colour the macrosystems of many South African children and present great challenges to the children who must contend with these adverse circumstances (Dawes, Long, Alexander, & Ward, 2006). Research indicates that poverty, economic stress, lack of social support and high neighbourhood stress contribute to the development of anxiety disorders in youths (Roberts, Roberts, & Chan, 2009). South African studies on fears and anxiety in middle childhood (Burkhardt et al., 2003; Muris, Du Plessis, & Loxton, 2008; Muris et al., 2006) indicate that African and Coloured youths display higher levels of anxiety than their White peers. A possible explanation for this difference is the unfavourable socio-economic circumstances and high levels of crime and violence to which African and Coloured children are more likely to be exposed (Biersteker & Robinson, 2000; Loxton, 2004).

The chronosystem encompasses the dimension of time and demonstrates the effects of consistency and change both in the characteristics of the child and the environment in which he or she lives (Bronfenbrenner, 1994). The chronosystem includes external factors such as changes in family structure, employment status and historical events and internal factors like the physiological changes that take place within a growing child (Bronfenbrenner, 1994). It is important to take into account the developmental changes that play an important role in the origins, manifestation, and continuation of anxiety problems in children and adolescents. Research focused on childhood anxiety indicates that specific anxieties and number of anxiety symptoms experienced generally decrease with age (Costello, Mustillo, Erkanli, Keller, & Angold, 2003; Mash & Wolfe, 2016). However, while specific anxieties tend to decrease with age, general anxiety symptoms often do not decline with age in the same manner. These symptoms may reflect a stable trait that predisposes children to the development of excessive
age-related fears (Hale, Raaijmakers, Muris, Van Hoof, & Meeus, 2008; Mash & Wolfe, 2016). The disposition to be anxious may thus remain stable over time, even though the objects of anxiety change (Mash & Wolfe, 2016).

Seen as a whole, the framework provided by the bio-ecological systems theory, combined with the three developmental theories discussed above, considers both the intra- and interindividual differences that influence the development of pathological anxiety and fear. It hypothesizes that normal anxiety and fear can escalate into an anxiety disorder in children or adolescents as a result of the complex interaction between multiple factors in which vulnerability outweighs protection. It also acknowledges that interacting factors vary from child to child and that the relationship between protective and vulnerability factors change continuously due to both environmental changes and individual development (Muris, 2007).
CHAPTER 3: LITERATURE REVIEW

This chapter presents an overview of the relevant literature pertaining to the constructs anxiety and self-efficacy. First, I will discuss childhood anxiety, with specific reference to prevalence rates, risk factors, the effects of anxiety on children, gender and age differences in anxiety prevalence rates and the classification and assessment of anxiety in children. Thereafter, I will define self-efficacy and discuss the influence of gender on self-efficacy as well as the assessment of self-efficacy in children. An overview of the relationship between self-efficacy and anxiety will follow. Lastly, this chapter will examine cross-cultural differences in anxiety symptom presentation and manifestation as well as considerations for the cross-cultural adaptation and translation of psychological tests.

3.1 Review of the relevant literature on childhood anxiety

3.1.1 Overview and prevalence of childhood anxiety

Experiences of fear and anxiety form a normal part of growing up (Mash & Wolfe, 2016). Research indicates that most childhood fears and anxieties are temporary, have an adaptive function, follow a predictive course and reflect children’s daily living experiences (Gullone, 2000; Mash & Wolfe, 2016). Although the terms “fear” and “anxiety” are often used synonymously in literature, there are key differences between these concepts and it is therefore important to distinguish between them (Barlow, 2002; Mash & Wolfe, 2016; Muris, 2007). Fear is a present-oriented emotional reaction to a current danger or life-threatening emergency (Barlow, 2002). Anxiety, in contrast, is a future-oriented reaction identified by strong negative emotions and physical symptoms of tension brought about by feelings of apprehension towards future danger or adversity (Barlow, 2002; Mash & Wolfe, 2016). While both fear and anxiety warn of distress or danger, anxiety is felt even when no danger is present (Barlow, 2002).
Anxiety disorders are among the most common psychiatric disorders of childhood and adolescence (Cartwright-Hatton et al., 2006) and have high rates of comorbidity with other psychiatric disorders (APA, 2013). While the prevalence of anxiety disorders vary with the age group of children and the assessment instrument used, Sadock et al. (2015) report that anxiety disorders affect around 10–20% of children and adolescents globally. The results of a longitudinal study by Costello et al. (2003) assessing the prevalence of psychiatric disorders in 1,420 children aged nine to 16 years, from North Carolina in the United States, predicted that 9.9% of the children would receive an anxiety disorder diagnosis by the age of 16. Young Minds Matter, a mental health and wellbeing survey of Australian children and adolescents surveyed 6,310 families with children aged 4–17 years. Results indicated that the 12-month prevalence of any anxiety disorder was 6.9% (Lawrence et al., 2015). Ford, Goodman, and Meltzer (2003) found the prevalence for any anxiety disorder in groups of 5–7- and 8–10-year-old British children to be 3.19% and 3.05% respectively.

Research indicates that the prevalence of anxiety disorders amongst South African children is relatively high, specifically in children from African and Coloured communities. These communities are largely marginalised in the South African context (Akande, 2010; Cortina et al., 2013; Muris, Schmidt et al., 2002; Muris et al., 2006). Using the SCAS as a diagnostic measure, Perold (2001) found that 22% of a community sample of 7–13-year-old learners in the Western Cape reported serious anxiety symptoms. Coloured learners made up 44% of the sample, White learners 34%, and African learners 22%. Mean scores on the SCAS for learners from middle and low socio-economic status, which were majority Coloured and African learners, were significantly higher than the mean score recorded by learners classified as from high socio-economic status. The most common disorders in this sample were, in order of prevalence, obsessive-compulsive disorder, generalised anxiety disorder, social phobia and separation anxiety disorder (Perold, 2001).
Cluver, Gardner, and Operario (2007) assessed 1,025 children and adolescents, aged 10–19 years, living in deprived urban settlements around Cape Town, to investigate the psychological distress amongst orphaned children in urban South Africa. Ten percent of children orphaned as a result of AIDS, 8% of children orphaned by other reasons and 8% of non-orphans were identified as experiencing clinically significant levels of anxiety. Although high, proportions of children identified in the clinical range in the above-mentioned study are comparable to international norms (Cluver et al., 2007).

Muris, Schmidt et al. (2002) found that the anxiety levels of a sample of 9–13-year-old South African children were high in comparison to those of a sample of Dutch children used in the same study, as well as to British and Australian children used in previous research studies that utilised the SCAS (Reynolds, Brewin, & Saxon, 2000; Spence, 1997). In this study, the content of the anxiety symptoms of South African children also differed significantly from that of Western children (Muris, Schmidt et al., 2002). Symptoms referring to physical separation from parents or caregivers and compulsive behaviours were of much greater prevalence amongst South African children. While Muris, Schmidt and colleagues (2002) did not provide an explanation for these differences, the violent environment in which many South African children grow up could explain the high levels of separation anxiety found in this sample. Community violence in South Africa rates amongst the highest in the world, and domestic abuse and interpersonal violence is often aimed at or witnessed by children (Liang, Flisher, & Lombard, 2007). As children are very aware of the danger of their surroundings, they perhaps feel more susceptible to harm when separated from a caregiver.

In a sample of 200 14–18-year-old isiXhosa-speaking learners attending school in a major South African city, Akande (2010) found that participants largely endorsed fears reflective of their living environment. Safety was participants’ greatest fear, with 19.9% fearing murderers, 7.9% thieves or armed robbers and 3.9% fearing gangsters. Fear for personal safety is thus a very real experience for many South African children, and fearing separation from
parents or caregivers could be indicative of their desire to be kept safe, rather than an indication of a clinical anxiety disorder.

Zwemstra and Loxton (2011) also suggest that children’s anxiety and fears are reflective of the environment in which they live. In a sample of 39 South African children affected by HIV/AIDS (age range 7–13 years), real people, physical harm, death, medical fears, social fears, and injury to others were the most prominent fears found by this study.

3.1.2 Risk factors for the development of anxiety in childhood

The development of childhood anxiety disorders involves a complex interaction between environmental, biological, and psychological variables and cannot be explained by a single factor (Donovan & Spence, 2000). Risk factors for the development of childhood anxiety include a behaviourally-inhibited temperament, low sense of mastery, overanxious parenting, anxious-resistant parental attachment, poor family support, and genetic factors (Donovan & Spence, 2000; Mash & Wolfe, 2016; Roberts et al., 2009). Adverse socio-economic circumstances and the effects thereof can also contribute to the development of anxiety disorders (Roberts et al., 2009; Shanahan, Copeland, Costello, & Angold, 2008). For example, in a sample of 3,134 American youths aged 11–17 years, Roberts et al. (2009) found that poverty, economic stress, lack of social support and high neighbourhood stress contributed to the development of anxiety disorders in adolescents. In a representative sample of 4,500 9-, 11-, and 13-year-olds resident in North Carolina, Shanahan et al. (2008) also found that socio-economic disadvantage and unsafe neighbourhoods served as risk factors for the development of anxiety disorders in childhood and adolescence. Investigating the anxiety of a sample of 263 children aged 8–12 years from Bogota in Colombia, Crane and Campbell (2010) found that Colombian children scored significantly higher on the SCAS than a sample of 253 Australian children of the same age. While this difference was partly ascribed to how Latino children express distress (in Latino culture, the expression of psychological distress or negative emotions is seen as a weakness of character and leads to social shaming, resulting in higher
levels of internalising disorders such as anxiety amongst Latino children (Varela, Weems, Berman, & Rodriguez, 2007)), the violent environment in which Colombian children live also plays a role in aggravating anxiety levels (Crane & Campbell, 2010).

Ward, Flisher, Zissis, Muller, and Lombard (2001) investigated the relationship between violence and psychopathology in a sample of 104 17-year-old learners attending school in Cape Town. Findings indicated that there was a significant positive relationship between anxiety and witnessing or being victim to any form of violence perpetrated by someone known to the individual.

The Global Peace Index Report (Institute for Economics and Peace, 2015) ranked South Africa in the bottom 15 out of 167 countries based on societal safety and security. According to this report, South Africa ranks amongst the countries with the highest rates of homicide and violent crime in the world (Institute for Economics and Peace, 2015). The fact that the majority of South African children have been directly exposed to some form of violence – and many live in communities where violence forms part of their daily lives – could partly explain why South African children’s anxiety levels are significantly higher in comparison to those of children in Western studies (Department of Social Development, Department of Women, Children and People with Disabilities & UNICEF, 2012).

3.1.3 Effects of childhood anxiety

Childhood fears and anxieties are generally harmless and temporary. However, when symptoms become severe enough to hinder development or interfere with a child’s ability to attend school, make friends and complete academic tasks, they are cause for concern (Mash & Wolfe, 2016). The findings of various studies illustrate how troubling the symptoms of childhood anxiety can be, and, if experiences of severe anxiety are left untreated, they have the potential to develop into anxiety disorders in later childhood, adolescence or adulthood (APA, 2013; Cartwright-Hatton et al., 2006). Anxious children show significant impairments in peer relationships, attention, school performance, social behaviour and self-esteem compared to
their non-anxious peers and are at greater risk of depression, suicide, and substance abuse (Kaplow, Curran, Angold, & Costello, 2001; Leyfer, Gallo, Cooper-Vince, & Pincus, 2013; Mash & Wolfe, 2016). Muris and Meesters (2002), for example, studied a sample of 317 Dutch primary school children to examine the relationship between children’s self-reported anxiety symptoms and teacher ratings of the children’s school functioning. Findings indicated that higher levels of anxiety symptoms were associated with lower levels of self-esteem and poorer school performance. Utilising data from the Oregon Adolescent Depression Project, Essau, Lewinsohn, Olaya, and Seeley (2014) investigated anxiety disorders in adolescents and psychosocial outcomes at age 30. In this study, anxiety originating in adolescence predicted poor total adjustment, poor family relationships, problems with the family unit, poor coping skills, poor adjustment at work, less life satisfaction, and more chronic stress, as well as increased risk of substance abuse in adulthood.

### 3.1.4 Gender differences in prevalence rates of childhood anxiety

Studies across cultures and ethnicities have found that anxiety disorders are more prevalent in girls than in boys during childhood and adolescence (APA, 2013; Anderson & Mayes, 2009; Ollendick, King & Muris, 2002). Early childhood appears to be a period of particular vulnerability for the development of an anxiety disorder amongst girls, and by the age of six girls are twice as likely to have an anxiety disorder than boys (McLean & Anderson, 2009). In the abovementioned study by Costello et al. (2003), who assessed the prevalence and development of psychiatric disorders in a community sample of 9–16-year-old children, results indicated that by the age of 16, 12.1% of girls had suffered from an anxiety disorder versus only 7.7% of boys. Girls report more specific phobias, higher rates of separation anxiety, social anxiety disorder and generalised anxiety disorder and are more prone to panic attacks than boys (Essau, Conradt, & Petermann, 2000; Knappe, Beesdo-Baum, & Wittchen, 2010; Mash & Wolfe, 2016).
Examining etiological factors that contribute to the development of anxiety can provide some explanation for females’ predisposition towards anxiety (McLean & Anderson, 2009). Psychosocial factors such as perceived social competence, emotional reliance, and stressful life events account for some, but not all, the difference in anxiety prevalence rates between males and females. This suggests that neurobiological differences, genetic influences, and different social experiences and gender role expectations may also affect female vulnerability to anxiety (Mash & Wolfe, 2016).

Girls are more concerned with social competence than boys, and therefore attach greater value to interpersonal relationships and how they are appraised by peers (Inderbitzen-Nolan & Walters, 2000). Guyer, McClure-Tone, Shiffrin, Pine, and Nelson (2009) suggest that an innate biological sensitivity towards peer evaluations may increase girls’ vulnerability to developing social anxiety disorder. As girls are more attuned to social cues, they are also more sensitive to other’s expression of fear, making them prone to vicarious fear conditioning (McLean & Anderson, 2009).

While the number of traumas men experience are higher, women are at greater risk of experiencing extreme traumas, such as domestic violence and rape (McLean & Anderson, 2009). The experience of stressful or traumatic events that are associated with a high probability of post-traumatic stress or other anxiety disorders (Breslau & Anthony, 2007) may also explain why females display higher levels of anxiety than men.

Research evidence suggests that a differential genetic predisposition to anxiety in females may account for gender differences in anxiety prevalence. For example, Lake, Eaves, Maes, Heath, and Martin (2000) found that, in a sample of 45,850 members of extended twin relations (including twins, their spouses and first-degree relatives) from the United States and Australia, the overall contribution of genetic factors to the variability of neuroticism, which is linked to genes that underlie anxiety and depression, was greater in women than in men. In other words, genetic factors make a greater contribution to the expression of neurotic traits in
women than in men. Research with children has indicated higher heritability estimates for phobias and fears amongst girls than boys, meaning girls are likely to have a greater genetic disposition towards being anxious than boys (Eley, 2001).

Social experiences and gender role expectations may also affect gender differences in anxiety, as research has shown that gender roles are significantly correlated with fear and anxiety (Ollendick et al., 2002). In children, self-reported masculinity is related to lower levels of fearfulness and fewer specific fears while higher levels of femininity are correlated with reports of greater fearfulness (Ginsburg & Silverman, 2000; Muris, Meesters, & Knoops, 2005). Cultural values significantly influence social norms, and, therefore, also gender role expectations, which can contribute to distress and greater vulnerability to mental illness. Gender effects are particularly prominent in low-and middle-income countries, like Africa and Asia, as these cultures endorse strict gender norms that value emotional restraint, obedience and self-control in women. This can contribute to emotional distress and increased susceptibility to anxiety or other mental health disorders (Kieling et al., 2011). Subscription to strict gender norms also makes women more susceptible to gender-based abuse and domestic violence, which in turn affects mental health (Song & Shaheen, 2013; Ward et al., 2001).

Corresponding to the aforementioned findings, Muris, Schmidt et al. (2002) administered the SCAS to a South African study sample of 9–13-year-olds and found that girls displayed higher levels of anxiety than boys. Using the Revised Children’s Manifest Anxiety Scale in a sample of 1,250 children and adolescents aged 10–19 years from poor urban communities in Cape Town, Boyes and Cluver (2013) also found that girls reported significantly higher levels of anxiety than boys. Possible reasons for these differences were not discussed in either study.

3.1.5 Age differences in prevalence rates of childhood anxiety

Research focused on childhood anxiety indicates that specific anxieties and number of anxiety symptoms experienced generally decrease with age (Costello et al., 2003; Mash &
Younger children tend to experience more anxiety symptoms than older children, mostly related to separation from parents or caregivers (Mash & Wolfe, 2016). However, while specific anxieties tend to decrease with age, general anxiety symptoms often do not decline with age in the same manner. These symptoms may reflect a stable trait that predisposes children to the development of excessive age-related fears (Hale et al., 2008; Mash & Wolfe, 2016). The disposition to be anxious may thus remain stable over time, even though the objects of anxiety change (Mash & Wolfe, 2016).

Using the SCAS, Essau, Sakano, Ishikawa, and Sasagawa's (2004) findings on the anxiety symptoms of a sample of German and Japanese children aged 8–12 years also demonstrated age differences in the number of anxiety symptoms experienced. The number of panic/agoraphobia and separation anxiety symptoms experienced decreased with age, but generalised anxiety increased as children became older. In a cross-cultural study comparing the number of self-reported anxiety symptoms and their severity in children from Colombia and Australia aged 8–12 years, utilising the SCAS as well, age was also negatively correlated with anxiety symptoms, i.e., older children reported less anxiety symptoms (Crane & Campbell, 2010). In a sample of 9–13 year old South African children, a small but significant negative relationship emerged between age and anxiety, indicating that anxiety symptoms also decreased with age in this sample (Muris, Schmidt et al., 2002).

### 3.1.6 Classification of childhood anxiety

Abnormal anxiety and fear in children and adolescents are typically described in terms of the phobic and anxiety disorders as defined in the Diagnostic and Statistical Manual, which uses a categorical diagnostic approach (Muris, 2007). The underlying assumption for using a categorical approach to diagnosing disorders is that disordered individuals differ qualitatively from persons who do not have a condition (Fonseca & Perrin, 2001). A categorical approach thus makes it possible to reliably distinguish between children who have an anxiety disorder and those who do not (Fonseca & Perrin, 2001; Spence, 1997).
The two latest editions of the DSM (DSM-IV-TR and DSM-5) employ largely the same diagnostic criteria for diagnosing anxiety disorders in children and adolescents as in adults, essentially viewing childhood anxiety disorders as downward extensions of adult anxiety disorders (APA, 2013; Schniering, Hudson, & Rapee, 2000). In the DSM-IV, separation anxiety is the only exception, as it is subsumed under the chapter “Disorders usually first diagnosed in infancy, childhood, or adolescence” (APA, 2000). The remaining anxiety disorders are listed in the adult section of the DSM, in the chapter titled “Anxiety Disorders”, but may be applied to youths as appropriate (Schniering et al., 2000). In the DSM-5, separation anxiety is listed in the same chapter as anxiety disorders typically diagnosed in adulthood, titled “Anxiety Disorders” (APA, 2013).

3.1.7 Assessment of anxiety in children

A wide range of psychological measures are available to assess childhood fear and anxiety, for example self-report questionnaires, diagnostic interviews, direct observation and third-party reports, such as teacher and parent reports (Fonseca & Perrin, 2001; Muris, 2007). In clinical settings, a thorough initial assessment is vital to document the symptoms experienced and to assist in the development of an appropriate treatment plan (Perwien & Bernstein, 2004).

Unstructured interviews with the parent/s and child are one of the most frequently used methods of assessing anxiety in children (Fonseca & Perrin, 2001). As unstructured interviews are flexible, they allow for a wide range of issues to be assessed. The flexibility of an unstructured interview also allows for the development of a trusting relationship between the clinician and the parent and child (Fonseca & Perrin, 2001). The limitation of this method, however, is that it is very time-consuming and the rate of agreement between individuals interviewed is generally low, which does not provide an accurate picture of the anxiety experienced by the child in question (Fonseca & Perrin, 2001; Nauta et al., 2004).
Other commonly used measures in the assessment of childhood anxiety are checklists and questionnaires completed by teachers, parents or other significant adults. The grounds for using third-party rating scales is that adults, like teachers and parents, are in a good position to give account of children’s problems, as they observe them across various settings over an extended period of time (Fonseca & Perrin, 2001). However, as these measures rely on an adult’s rating of the child’s anxiety, there is a strong possibility of bias. For example, parents’ view of their child’s difficulties can be influenced by their own anxiety or depression (Fonseca & Perrin, 2001).

Direct observations are also used to assess anxiety symptoms in children and have numerous advantages over third-party reports of childhood anxiety symptoms (Fonseca & Perrin, 2001). Direct observation is more objective and flexible, generally has good inter-rater reliability and focuses on specific behaviours for intervention (Ferrell, Beidel, & Turner, 2004; Fonseca & Perrin, 2001). However, observational methods are very costly, do not provide any valuable data about anxiety symptoms that do not occur regularly and can be seen as intrusive by the children or their families (Fonseca & Perrin, 2001).

It is currently most common to use standardised self-report measures such as rating scales or questionnaires in the assessment of childhood disorders, especially in research settings (Fonseca & Perrin, 2001; Muris, 2007). As anxiety is an internalising disorder, symptoms are frequently less observable and may pass undetected by other people, even those close to the child (Muris, 2007). Self-report questionnaires are therefore of great value, as they capture information about anxiety symptoms from the child’s perspective. Furthermore, self-report measures are easy to administer and require minimal time to complete (Muris, 2007).

Considering resource and time constraints, the use of a self-report questionnaire was deemed most appropriate for the current study. When choosing a self-report questionnaire, it is important to take the purpose of the assessment into account (Muris, 2007). The SCAS, a modern, multidimensional self-rating scale that taps a variety of anxiety symptoms (Muris,
2007), was deemed an appropriate measure to use for this study. The SCAS is child-friendly, quick to administer, and assesses the severity of various anxiety disorder symptoms in terms of nosologic constructs set out in the DSM-IV (Muris, 2007). Furthermore, the SCAS has displayed sound psychometric properties in samples from numerous countries, including South Africa, (Mostert, 2007; Muris, Schmidt et al., 2002), Australia (Spence, 1997), Colombia (Crane & Campbell, 2010) and the Netherlands (Muris & Meesters, 2002).

3.2 Review of the relevant literature on self-efficacy

3.2.1 Overview of self-efficacy

Bandura (1986) states that self-efficacy beliefs are “people’s judgments of their capabilities to organize and execute courses of action required to attain designated types of performances” (p. 391). Self-efficacy does thus not refer to whether an individual actually possesses certain skills, but rather to their sense of competence in using certain skills to perform a specific action (Bandura, 1997). The construct of self-efficacy is of particular value to this study considering the unique contribution a person’s sense of self-efficacy has to the aetiology of anxiety (Bandura, 1997). Studies on the relationship between self-efficacy and anxiety consistently illustrate that low levels of self-efficacy are accompanied by high levels of anxiety in children and adults (Matsuo & Arai, 1998; Muris, 2002; Nevid et al., 2014). Conversely, raising self-efficacy in a specific situation lowers anxiety (Bandura, 1997). Self-efficacy, which is developed during childhood, can thus serve as either a risk or protective factor in the development of anxiety disorders in childhood (Mostert, 2007).

3.2.2 Gender differences in self-efficacy levels

As with anxiety, research has revealed significant gender differences for self-efficacy (Lackaye, Margalit, Ziv, & Ziman, 2006; Muris, 2002). Using the SEQ-C, Muris (2002) found that, in a sample of Belgian adolescents, girls displayed lower total self-efficacy than boys, and also lower emotional self-efficacy. Girls, however, reported slightly higher academic and social efficacy. In a study by Lackaye et al. (2006), using the SEQ-C as well, girls were also found to
have higher perceived academic and social efficacy than boys. In a sample of 282 Italian children, Bandura et al. (1999) also found that girls had higher social and academic efficacy than boys.

As far as I could ascertain, no studies provided explanations for the differences in self-efficacy levels between girls and boys. In light of the relationship between self-efficacy and anxiety, possible explanations for the differences observed can be inferred. Research studies have consistently found that anxiety disorders are more prevalent in girls than in boys (APA, 2013; Anderson & Mayes, 2009; Ollendick et al., 2002). Considering that anxiety is negatively correlated with self-efficacy, it makes sense that girls, who are generally more anxious than boys, report lower overall self-efficacy. Furthermore, girls display greater emotional sensitivity than boys, and are more attuned towards peer evaluations and social cues (McLean & Anderson, 2009). Greater awareness of emotional dynamics may result in girls feeling inadequate to deal with intra- and interpersonal emotional demands, resulting in lower perceived emotional efficacy.

3.2.3 The relationship between self-efficacy and anxiety in children

According to Bandura et al. (1985), “self-efficacy is a cognitive mediator of the anxiety reaction” (p. 411). Four sources of information contribute to self-efficacy judgements and as a result affect emotional arousal (Bandura, 1997). The relative influence of each source of self-efficacy is influenced by a variety of contextual factors, such as culture, ethnicity, and gender (Schunk & Usher, 2012; Usher & Pajares, 2008). The first source is enactive attainments or prior experiences of mastery. While successful experiences in a specific task increases perceived self-efficacy, experiences of failure may result in children developing doubts about their abilities, which could prevent them from persevering with the task at hand (Newman & Newman, 2003). The second source is vicarious experiences. When a child sees a person similar to him- or herself successfully performing a task, it may raise his or her self-efficacy and vice versa (Newman & Newman, 2003). Verbal persuasion is the third source of
information that contributes to self-efficacy judgements. Through verbal encouragement, children can be convinced to attempt a new task, thereby increasing self-efficacy. The last source is physical state. Children who are excited and interested in a task are more likely to experience feelings of self-efficacy and have confidence in their abilities. Conversely, children who feel tense or anxious are more likely to expect failure (Newman & Newman, 2003).

Muris (2002) posits that there are three domains of self-efficacy that are involved in the regulation of negative affect in youths, namely social self-efficacy, academic self-efficacy, and emotional self-efficacy. Research indicates that low self-efficacy in each of these domains is strongly linked to anxiety. In a sample of 596 Belgian children aged 12–19 years, Muris (2002) found that self-efficacy was negatively correlated with symptoms of anxiety and depression. Furthermore, a low sense of emotional self-efficacy showed a strong negative correlation with general anxiety levels, and academic efficacy was significantly negatively correlated with school phobia (Muris, 2002).

There is a paucity of research on self-efficacy and anxiety in South African children, but studies conducted with adolescents and adults illustrate the regulating effect of self-efficacy on psychosocial distress (Melato, Van Eeden, Rothmann, & Bothma, 2017; Redelinghuys, 2010; Van Wyk, Wissing, & Temane, 2010). In a sample of 794 African South Africans (aged between 18 and 30 years), coping self-efficacy significantly and positively predicted psychosocial wellbeing, which was associated with of a lower risk for symptoms of anxiety, stress and depression. A sample of 1,050 Setswana-speaking adults (aged 31–87) living in the North-West Province of South Africa took part in a study investigating whether general self-efficacy moderates the relationship between stress and positive mental health. Redelinghuys (2010) concluded that self-efficacy significantly moderated the negative influence of the experience of stress, as manifested in somatic symptoms and anxiety, on the emotional wellbeing of participants. In a sample of 2,214 South Africans age 16 years and older, Van
Wyk et al. (2010) found similar results: High coping self-efficacy was correlated with lowered mental distress such as stress, anxiety, depression and somatic symptoms in this sample.

In contrast to theoretical expectations, in a study conducted by Mostert (2007) with a sample of 66 12-year-old-children residing in Stellenbosch, participants reported high self-efficacy even though they reported high anxiety as well. Mostert (2007) postulated that learners “faked good” when completing the self-efficacy questionnaire, and gave answers that they believed were socially desirable, rather than what they believed true. The true self-efficacy of this group was thus perhaps not as high as they reported and skewed the expected negative correlation between self-efficacy and anxiety.

3.2.4 Assessment of self-efficacy in children

Bandura (2006) states that “there is no all-purpose measure of perceived self-efficacy” (p. 307). As self-efficacy beliefs are not a global characteristic but a differentiated set of self-beliefs linked to specific areas of functioning, self-efficacy scales must be customised to the particular domain of functioning that is of interest (Bandura, 2006).

Self-report questionnaires using Likert-type scales are most often used to measure self-efficacy beliefs. In some instances, self-report questionnaires are used in combination with concrete activities or tasks (Webb-Williams, 2006). Self-efficacy in children and adolescents is generally assessed using adult scales that have been adapted for use with youths or using measures that assess self-efficacy in very specific areas, such as mathematics or peer relationships (Muris, 2001).

Bandura et al. (1999) developed a measure to specifically assess children’s general self-efficacy. The scale relates to three main areas of self-efficacy: social self-efficacy, academic self-efficacy and self-regulatory efficacy. Using the social and academic subscales of this scale, Bandura et al. (1999) investigated the relationship between self-efficacy and depression over time in a sample of 282 Italian children. Results indicated that low levels of both social and
academic self-efficacy were negatively correlated with depression scores (Bandura et al., 1999).

To further investigate the relationship between self-efficacy and psychopathology in children, Muris (2001) developed the Self-Efficacy Questionnaire for Children (SEQ-C). According to Muris (2002), there are three domains of self-efficacy that are involved in the regulation of negative affect in youths, namely social self-efficacy, academic self-efficacy, and emotional self-efficacy. Taking into consideration the three pathways along which a low sense of self-efficacy develops, namely inefficacy to meet highly valued standards, inefficacy to develop positive social relationships, and inefficacy to cope with negative feelings and thoughts, this scale assesses children’s sense of self-efficacy in three domains, i.e., academic, social, and emotional (Muris, 2002).

Considering the aim of this study is to investigate the self-efficacy and anxiety of a sample of isiXhosa children, it was deemed appropriate to use the SEQ-C, as the domains of self-efficacy measured by the SEQ-C seem to be relevant for the study of affective disorders (Muris, 2001). Furthermore, the SEQ-C is child-friendly, quick to administer and has displayed sound psychometric properties in both Western and South African samples (Mostert, 2007; Muris, 2001, 2002).

3.3 Culture and mental health

3.3.1 Cultural variations in the presentation of psychological distress

The concept of mental health is both socially constructed and defined (Amuyunzu-Nyamongo, 2013), which implies that cultural and ethnic differences will influence the conceptualisation of the causes and nature of mental illness, the determination of what is “healthy” and “unhealthy” and the symptom presentation and interpretation (Amuyunzu-Nyamongo, 2013; Eshun & Gurung, 2009).

Sam and Moreira (2012) argue that culture and mental illness are intertwined and that understanding the impact of culture on mental health is thus central to correctly interpreting,
diagnosing and treating mental disorders within different societies (Eshun & Gurung, 2009). For example, several studies have found that non-Western societies are more likely to endorse somatic symptoms as an expression of anxiety or depression (Eshun & Gurung, 2009; Lewis-Fernández et al., 2010; Tomlinson, Swartz, Kruger, & Gureje, 2007). Patel, Abas, Broadhead, Todd, and Reeler (2001) found that, in Zimbabwe, the term “depression” refers to a condition with very few emotional symptoms and various somatic complaints, such as fatigue and headaches. In a comparative study of generalised anxiety disorder symptoms, involving American and Nepalese patients, Hoge et al. (2006) found that while the two groups’ total scores were the same, the Nepalese group scored higher on the somatic subscale.

According to Comino, Silove, Manicavasagar, Harris, and Harris (2001), cultural norms not only dictate how psychological distress is expressed, but may even encourage the somatic presentation thereof. Iwamasa (2003) suggests that in collectivist cultures, which largely encourage avoidance coping, individuals will present with physical rather than emotional complaints, as the expression of emotional difficulties is frowned upon. Within the multi-cultural South African context, the notion of individualism versus collectivism is important for understanding possible differences in the expression and prevalence of affective disorders. Research indicates that collectivist cultures display higher levels of anxiety than individualist cultures. This may be ascribed to socialisation practices that stress filial piety, obedience to authority and social norms, and high levels of emotional restraint and self-control (Baxter, Scott, Vos, & Whiteford, 2013; Delvecchio, Li, Liberska, Lis, & Mazzeschi, 2017; Delvecchio, Mabilia, Di Riso, Miconi, & Li, 2015; Hudson & Rapee, 2009). African countries, like East Asia and Latin America (Schreier et al., 2010) are generally seen to be collectivist, which entails a “preference for the group, a need to fit into the group, and increased concern for harmony within the group” (Eshun & Gurung, 2009, p. 10). Western societies, on the other hand, are more individualist, and focused on competition, independence and self-reliance (Eshun & Gurung, 2009). As collectivist societies value group harmony, social rules are highly
valued and comparatively strict (Hoffmann & Hinton, 2014). The suppression of inter- and intrapersonal conflict is thus valued in order to maintain social harmony (Wellenkamp, 1995). Furthermore, collectivist societies often view psychological distress not as a mental health problem, but as a moral or social problem. The stigmatisation surrounding mental illness possibly contributes to the tendency for many non-Western societies to minimise affective distress in favour of the more socially acceptable expressions of somatic symptoms (Tomlinson et al., 2007). In some instances, somatic symptoms may be linked to cultural idioms of distress, which intensifies the emotional prominence of those symptoms (Hinton, Lewis-Fernandez, & Pollack, 2009; Kirmayer, 2001). An example of a disorder which serves as a cultural idiom is “the nerves”, a condition characterised by somatic symptoms, such as heart palpitations and breathlessness, and occasionally by a loss of control, which leads to screaming, bursting into tears or throwing objects (Hinton, 2012; Rego, 2009). In a baseline health status study conducted in a low socio-economic community in South Africa, 2.92% of the sample of 5,000 participants reported receiving treatment for “nerves” no more than 12 months prior to the study. The term “nerves” was selected for inclusion in the health questionnaire as a socially acceptable replacement for “mental illness” (Hoffman, Yach, Katzenellenbogen, Pick, & Klopper, 1988). In another study conducted in South Africa, in a sample of 101 Sesotho speakers diagnosed with an anxiety disorder, Mosotho, Louw, and Calitz (2011) found that “having nerves” was a culture-specific expression of anxiety and referred to general experiences of mental disturbance. The condition of nerves has also been described in Ireland (Sluka, 1989), North America (Camino, 1989) and Latin America (Finerman, 1989; Low, 1989). The condition has been likened to depression (Swartz, 1998), panic disorder (Rego, 2009) or non-specific anxiety (Kirmayer, 2001; Mosotho et al., 2011).

Tomlinson et al. (2007) suggest that availability of mental health care options may also influence the symptom presentation of affective disorders in specific contexts. In South Africa – as in most of sub-Saharan Africa – mental health care services are not always readily
available, especially in rural areas, leaving large parts of the population unable to access mental health services. The somatic presentation of symptoms may thus be a feasible option for individuals hoping to obtain some sort of care from the health system.

While cross-cultural research into childhood anxiety disorders is limited, the experience of anxiety is pervasive across cultures (Essau et al., 2004; Mash & Wolfe, 2016). Specific fears in children have been documented in many cultures, and developmental fears, such as separation anxiety, occur in children at approximately the same age, regardless of culture. The number of fears children have, as well as gender differences in presentation and prevalence, are also similar across cultures. Nevertheless, differences in beliefs, traditions and child-rearing practices across cultures do have an effect on the occurrence of anxiety, how it is experienced by the child and how it is perceived by others (Mash & Wolfe, 2016).

Various recent studies have investigated cross-cultural differences in anxiety amongst children using the SCAS. Comparing anxiety levels in community-based samples of Chinese (mean age = 14.78 years) and Italian (mean age = 14.59 years) adolescents, Delvecchio et al. (2015) found that Chinese adolescents displayed significantly higher levels of anxiety than their Italian counterparts. Delvecchio et al. (2015) ascribe this differences to the collectivist versus individualist orientation of the two countries. China is a highly collectivist country, and socialisation practices emphasise self-control, respect for parents and elders, valuing of others’ opinions and academic achievement, which may lead to increased stress and anxiety in Chinese youth. Essau et al. (2004) found that while there was no difference in the anxiety levels of German and Japanese children, the two groups displayed significant differences in the types of anxiety. In this sample of 862 children from Germany and 975 children from Japan, aged 8–12 years, German children displayed significantly higher scores on obsessive compulsive disorder, generalised anxiety disorder, separation anxiety, and social phobia. As Japan is also a collectivist culture, the hypothesis was that Japanese children would be significantly more anxious than their German peers. Essau et al. (2004) attribute the unexpected lower levels of
obsessive compulsive disorder, generalised anxiety disorder, separation anxiety, and social phobia by Japanese children to child-rearing practices. Japanese children are raised with a strong sense of personal and group identity, which appear to be associated with lower levels of anxiety in certain domains.

While it is clear that culture has an influence on how anxiety is expressed and experienced, it is important to also consider the relationship between culture and socio-economic status, and how socio-economic factors can serve as mediating variables on level of anxiety. In many countries across the globe, culture and socio-economic status are closely related, making it difficult to separate the effects of cultural practices from the effects of socio-economic factors like poverty, unemployment and hostile and violent living environments.

For example, data from the 2015 United States Census indicates that, across the United States, the highest poverty rate is found among African-Americans (24.1%), followed by Hispanics (21.4%) (U.S. Census Bureau, 2015). Research conducted in the United States consistently indicates that anxiety is more prevalent in ethnic minority groups, like African-American and Hispanic groups (Mash & Wolfe, 2016). The same correlation is evident in New Zealand: poverty rates for Pacific and Māori children are consistently higher than for European New Zealand children. On average, over 2015 and 2016, 26% of Pacific children and 28% of Māori children lived in low-income households, compared to only 14% of European children (Ministry of Social Development, 2017). As expected, the prevalence rate of mental disorders amongst Pacific and Māori youth are higher than amongst European youth (Ministry of Health, 2006). In South Africa, poverty is highest amongst African and Coloured communities (Statistics South Africa, 2011). Children from these communities also experience higher levels of anxiety compared to White children (Burkhardt et al., 2003; Hartley, 2008; Howard et al., 2016; Mostert, 2007; Muris et al., 2006). Poverty is often associated with economic stress, lack of social support and living in violent and unsafe communities, which exacerbate experiences of anxiety, and which may explain why individuals from cultures or ethnic groups that fall into
middle to low socio-economic status are typically more anxious than individuals from cultures or ethnic groups that typically fall into the a higher socio-economic status category.

While there are clearly differences in the individual experience and symptom presentation of affective disorders across cultures, it is important to note that there are also overlaps with how disorders such as anxiety and depression present in different cultures (Tomlinson et al., 2007). Sam and Moreira (2012) argue that to truly understand mental health, one cannot discard the universal component of mental illness to only focus on differences in symptomology, but that both the universal component and the influence of culture and accompanying influences must be considered.

3.3.2 Cross-cultural considerations in test adaptation and interpretation

To accurately assess affective disorders across cultures and allow for valid test results and interpretation, the influence of culture on symptom presentation must be considered. Doing so will ensure that tests are appropriate for the cultural setting in which it is to be used (Green, 2009). Unfortunately, most diagnostic measures are developed in Western societies, and are not always relevant or applicable to non-Western societies without appropriate adaptation, something which is not always carried out adequately (Swanepoel & Krüger, 2011; Van Widenfelt, Treffers, De Beurs, Siebelink, & Koudijs, 2005).

Psychometrics, a field of study which involves the measurement of psychological phenomenon, developed from the philosophical belief that an “absolute truth” exists (Green, 2009). This absolusionistic perspectives holds that culture is not critical, as an absolute truth would be seen across cultures, independent of local norms and customs. This view of cultural neutrality is aligned with the etic perspective, which applies theories and perspectives across cultures. Etic analysis results in logical, precise and comprehensive information that is free from observer biases, and thus lends itself to formal assessment and measurement. However, while certain behaviours or disorders, like anxiety or depression, exist across societies, the expression thereof is not always identical (Green, 2009). To date, the etic assumption – that
culture only minimally affects psychological constructs – has been favoured by mental health researchers. However, ignoring culture can lead to literal translations of instruments that do not consider the applicability of certain concepts or constructs in other cultures (Swanepoel & Krüger, 2011). The etic perspective alone is thus not sufficient to measure, explain and understand psychological phenomena. An integration of the emic approach, which believes that people are shaped by their cultures, with the etic approach, can provide a more holistic view of psychological phenomena.

In order to design a valid and reliable measure, one must understand the construct being measured, be knowledgeable about the population and recognise how culture influences the construct that is to be measured (Green, 2009). However, these points are not only valid when designing a new measure, but also when translating an existing measure. Simply translating a psychological test will not assure a valid, culturally equivalent measure. For example, in a cross-cultural and developmental analysis of self-esteem in Chinese and Western children, Wang and Ollendick (2001) discovered that there is no Chinese equivalent for the term “self-esteem” as defined in Western cultures. The Chinese value the self in relation to others, and not independently. In such an instance, simply translating a term to define a Western construct would be ineffective. Rather, items should be adapted, added or taken out to fully capture the meaning of the term, ensuring equivalence and that the intended construct will still be measured.

Canino and Guarnaccia (1997) provide five points to consider when translating measure in order to ensure the validity thereof. Firstly, the semantic aspect of the measure must remain equivalent across languages. Secondly, the method of assessment should be culturally appropriate. The measure must also be validated in each population in which it is to be used. Furthermore, as normal/abnormal classifications differ between cultures, the cut-off point where an individual passes from “normal” to “abnormal” must be appropriate for the population in which the measure is used. Factors such as age, education, race and language
should be considered during this norming process (Foxcroft et al., 2004). Lastly, it is vital to ensure that the scale measures the construct it was intended for.

Interpretation of test scores should also be interpreted within a cultural context (Green, 2009). Canino and Guarnaccia (1997) state that this is of particular importance for children, as they can be influenced more strongly by their culture than adults. Culture particularly influences response bias, where responses may reflect an aspect of culture rather than an individual’s personal beliefs (Green, 2009). Chen, Lee, and Stephenson (1995) found that test takers from collectivist societies were more likely to respond using the midpoint option on Likert scales, and test takers from individualist societies were more likely to answer using extreme options such as “always” or “never”. The reference group effect, where individuals select people from their own culture when asked to compare themselves to others, may also occur when using Likert scales (Green, 2009). Being aware of these possible response biases that can occur within different cultures can assist researchers or clinicians when interpreting test results.

The multicultural South African context, with 11 official languages, diverse cultural and religious beliefs, rampant socio-economic hardships, large rural populations and disparities in educational levels, makes it an especially challenging environment for the development and adaptation of psychological tests. In order to ensure psychological measures are valid for our context, it is vital to pay attention to psychometric principles as well as the influence of culture and its interaction with mental health (Swanepoel & Krüger, 2011).

Taking into account the unique South African context sketched above, and the lack of standardised anxiety and self-efficacy measures in South Africa, this study aimed to explore whether the SCAS (Spence, 1997) and the SEQ-C (Muris, 2001) can serve as reliable screening measures in a sample of isiXhosa-speaking South African children or whether further attention must be paid to cross-cultural adaptation, translation and standardisation of norms before being used in this population.
CHAPTER 4: METHODOLOGY

Chapter 4 will first outline the research questions, aims and hypotheses of this study. Thereafter, the research methodology used for this study will be described with reference to the research design, sampling procedures, participant demographics, measuring instruments, data collection procedure and data analyses. The chapter will conclude with an explanation of how the ethical issues pertinent to the research were addressed.

4.1 Research questions, aims and hypotheses

As discussed in the literature review (Chapter 2), the anxiety levels of South African children from marginalised communities are relatively high (Muris, Schmidt et al., 2002; Muris et al., 2006). The heightened level of anxiety experienced by these children is partly attributable to the influence of poverty, unfavourable living conditions and general experiences of marginalisation (Donovan & Spence, 2000; Muris, Schmidt et al., 2002). These findings highlight the need to identify clinically anxious children at an early stage in order to provide appropriate treatment. However, to do so requires the availability of reliable and valid screening tools. Many methods, such as structured diagnostic interviews, are time-consuming and require that interviewers are well-trained in using the instrument (Essau & Barrett, 2001). Such methods are, therefore, not viable in resource-limited countries. Considering the limited mental health care resources in a developing country like South Africa, self-report questionnaires are of great value, as they are easy to administer and require minimum time to complete (Muris, 2007). The SCAS (Spence, 1997) is both child-friendly and quick to administer, which makes it a useful screening tool in resource-scarce contexts. Considering that English is not the first language of the majority of South African children, for screening tools to be effective, they would have to be translated into the language of the participant population. However, as far as I could ascertain, the SCAS – or any other child-friendly anxiety measure – has not been translated into any African language spoken in South Africa, including isiXhosa, which is the most commonly spoken African language in the Western Cape, where
this study was conducted. As the SCAS has not been translated into isiXhosa, it follows that research has also not evaluated the psychometric properties of a translated version of the scale, nor explored how language and cultural differences may impact isiXhosa learners’ understanding of the SCAS.

Considering the well-documented relationship between anxiety and self-efficacy, and the proven usefulness of intervention programmes aimed at minimising the symptoms of anxiety through increasing self-efficacy, I decided to also explore the relationship between self-efficacy and anxiety amongst isiXhosa learners in order to determine whether a relationship between self-efficacy and anxiety exists in this sample. In order to explore this relationship, it was necessary to evaluate psychometric properties of the translated version of the SEQ-C (Muris, 2001). As far as I could ascertain, the SEQ-C has not been translated into any African language spoken in South Africa, including isiXhosa.

In light of this paucity of research, the following research question was formulated: Can the isiXhosa versions of the SCAS and SEQ-C serve as reliable measuring instruments in a sample of 6–10-year-old isiXhosa learners in the Western Cape?

Five objectives were formulated for this study:

- To investigate the psychometric properties (i.e., reliability and factor structure) of the translated versions of the SCAS and SEQ-C.
- To determine if a significant negative correlation exists between self-efficacy and anxiety.
- To determine if significant correlations exist between anxiety and age and self-efficacy and age.
- To determine whether there are significant differences in SEQ-C and SCAS scores by gender.
• To explore how participants’ interpreted the translated versions of the questionnaires, and whether cultural and/or linguistic differences influenced how participants understood and therefore answered the questions.

From the research aims, the following seven research hypotheses were postulated for this sample of 6–10-year-old isiXhosa-speaking learners:

**Hypothesis 1:**

$H_0$: The SCAS and SEQ-C will not display acceptable reliability.

$H_1$: The SCAS and SEQ-C will display acceptable reliability ($\alpha > .7$) (Field, 2009).

**Hypothesis 2:**

$H_0$: The SCAS and SEQ-C will not yield the expected factor structures.

$H_1$: The SCAS and SEQ-C will yield the expected 6- and 3-factor solutions respectively.

**Hypothesis 3:**

$H_0$: There will be no correlation between self-efficacy and anxiety.

$H_1$: There will be a significant negative correlation between self-efficacy and anxiety.

**Hypothesis 4:**

$H_0$: There will be no correlation between self-efficacy and age.

$H_1$: There will be a significant positive correlation between self-efficacy and age.

**Hypothesis 5:**

$H_0$: There will be no correlation between anxiety and age.

$H_1$: There will be a significant negative correlation between anxiety and age.

**Hypothesis 6:**

$H_0$: There will be no difference in self-efficacy scores between girls and boys.

$H_1$: Girls will display significantly lower levels of self-efficacy than boys.

**Hypothesis 7:**

$H_0$: There will be no difference in anxiety scores between girls and boys.
$H_1$: Girls will display significantly higher levels of anxiety than boys.

4.2 Research design

An explanatory sequential mixed-method research design was employed for this study. This research design consists of two phases, a quantitative phase where data are collected and analysed, and a qualitative phase, which utilises the results from the quantitative phase to inform the questions to be asked. The rationale behind this research design is that the quantitative data provides a general understanding of the research problem, whereas the qualitative data subsequently aids in explaining the statistical results in more detail by exploring participants’ views or understandings in depth (Creswell, 2014). As mixed method studies utilise two methods, i.e., quantitative and qualitative, to investigate the same research problem, they employ methodological triangulation. This method of triangulation has been found to provide more comprehensive data, enhance understanding of phenomena being studied, provide confirmation of findings and increase the validity and dependability of quantitative results. As the qualitative phase followed the quantitative phase, sequential methodological triangulation was employed, meaning that results of the quantitative phase were used to plan the qualitative data collection phase (Morse, 1991).

Mixed-method designs are especially advantageous when unexpected results arise from a quantitative study (Ivankova, Creswell, & Stick, 2006). In the present study, the quantitative results did not yield the expected results and further exploration and explanation into these results were required. For example, preliminary analysis of the SCAS and SEQ-C results revealed that the overall reliability for both scales was good ($> .7$), their subscales’ reliability was very low ($< .5$). This indicated that the original factor structure of these scales did not hold true in this sample. In addition, a positive relationship between anxiety and age was found, while previous research indicated that anxiety tends to decrease with age (Costello et al., 2003; Mash & Wolfe, 2016). A qualitative component was thus of great value to this study, as it shed light on the statistical test results.
When doing mixed-methods research, attention must be given to the priority and integration of the quantitative and qualitative results (Ivankova et al., 2006). Priority refers to whether the qualitative or quantitative aspect of the research is given more weight during the data collection procedure (Creswell, Plano Clark, Gutmann, & Hanson, 2003). In an explanatory sequential research design, priority is typically given to the quantitative approach, as it comes first in the data collection procedure and forms the largest part of the study. This approach was followed in the current study. Integration refers to the phase of the research process where quantitative and qualitative methods are integrated or mixed (Creswell et al., 2003). In an explanatory sequential design, integration typically occurs in the intermediate stage, between quantitative and qualitative data collection, as the results are used to aid the development of qualitative data collection questionnaires and the selection of participants (Creswell et al., 2003). In this study, the above protocol was followed, and the approaches were mixed in the intermediate phase. Results from the quantitative phase were utilised to develop the focus group schedule. Items from the SCAS and SEQ-C that would significantly increase the overall alpha value of the scale if deleted, as well as the questions that I and my research assistant deemed to consistently cause confusion amongst the participants or required additional explanation, were added to the focus group schedule.

4.3 Sampling method

A simple random sampling technique (Lavrakas, 2008) was used to select participants for the quantitative phase of this study. Four classes in Grades 1–3 at the participating school were selected to participate in the research by the departmental head of the foundation phase. All the learners in these classes were given parental consent forms and all learners who returned the consent forms were eligible for participation. Participants for the focus group interviews were purposively sampled (Lavrakas, 2008) from the quantitative group. Learners from Grades 1, 2 and 3 were purposively selected according to their scores on the SCAS and SEQ-C, to ensure that learners who scored low, average and high on these measures were selected to
participate in the group discussions. Three focus group interviews (one per grade) of 4–6 participants were conducted.

4.4 Participants

Five-hundred and fifty-five learners from four of the seven Grade 1–3 classes from the participating primary school were selected to participate and given parental consent forms. The school is located in an informal settlement near Stellenbosch in the Western Cape. The medium of instruction is isiXhosa. The school has been declared a “no-fee school” by the Department of Basic Education (2017). The no-fee policy ranks schools according to the level of poverty in the area surrounding the school, and exempts school fees in the poorest 40% of schools nationally for learners from Grade R to Grade 9 (Education and Training Unit, 2009).

More than 20 years into South Africa’s democracy, schools located in historically Black areas remain under-resourced and over-crowded (Roets, 2016). The school in question accommodates an average of 1,500 learners from Grade R–7, with seven classes of 50–55 learners per grade. This far exceeds the maximum class sizes stipulated by the Department of Basic Education, i.e., 35 learners per class for Grades R–4, 40 for Grades 5–6 and 37 for Grades 7–9 (Department of Basic Education, 2016).

Of the 555 parental consent forms distributed, 210 were returned, indicating a response rate of 37.8%. Due to time constraints, only 198 of the 210 learners who returned consent forms completed the questionnaires. Of the 198 questionnaires completed, 188 were utilised for this study. Ten questionnaires were excluded due to being incomplete or completed incorrectly.

Of the 188 participants, 109 were female (n = 58%) and 79 were male (n = 42%). Their ages ranged between six and 10 years (M = 8.03; SD = 0.88). Thirty-eight learners (n = 20.2%) were in Grade 1, 81 learners (n = 43.1%) were in Grade 2 and 69 learners (n = 36.7%) were in Grade 3 (Table 4.1).

Fifteen learners from the total sample were purposively selected to participate in the focus group interviews. One focus group per grade was conducted. Participants’ ages ranged
between six and nine years (M = 7.67; SD = 0.98). Thirteen learners (n = 86.7%) were female and two learners (n = 13.3% were male). Four learners (n = 26.7%) were in Grade 1, five learners (n = 33.3%) were in Grade two and six learners (n = 40%) were in Grade 3 (Table 4.2).

Table 4.1

Demographic Information of Total Participants (N=188)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>109</td>
<td>58</td>
</tr>
<tr>
<td>Male</td>
<td>79</td>
<td>42</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>5</td>
<td>2.7</td>
</tr>
<tr>
<td>7</td>
<td>47</td>
<td>25.0</td>
</tr>
<tr>
<td>8</td>
<td>82</td>
<td>43.6</td>
</tr>
<tr>
<td>9</td>
<td>46</td>
<td>24.5</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>4.3</td>
</tr>
<tr>
<td>Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>38</td>
<td>20.2</td>
</tr>
<tr>
<td>2</td>
<td>81</td>
<td>43.1</td>
</tr>
<tr>
<td>3</td>
<td>69</td>
<td>36.7</td>
</tr>
</tbody>
</table>

Table 4.2

Demographic Information of Focus Group Participants (N=15)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>13</td>
<td>86.7</td>
</tr>
<tr>
<td>Male</td>
<td>2</td>
<td>13.3</td>
</tr>
</tbody>
</table>
### Measuring instruments

#### Permission for use and translation

Permission for the use of the questionnaires was obtained from the respective authors, Professor Sue Spence and Professor Peter Muris (Appendix A). Permission to adapt the wording of the SEQ-C to ease translation and improve understanding of the scale once translated was obtained as well (Appendix A). A professional translation company was used to translate the SEQ-C (Appendix I) and SCAS (Appendix H) as well as the demographic questionnaire using the Brislin method (Brislin, 1986). This is a method of translation in which the original measure is translated into the target language (isiXhosa), and then translated back into the original language (English) by an independent translator to ensure the validity of the translated questionnaires (De Kock, Kanjee, & Foxcroft, 2013).

#### Spence Children's Anxiety Scale (SCAS) (Spence, 1997)

The SCAS is a 44-item questionnaire designed to assess the severity of anxiety symptoms in children aged eight to 12 years (Spence, 1997). However, the SCAS has also been used successfully in a sample of 7-year-olds (Muris, Schmidt, & Merckelbach, 2000). Thirty-eight items assess anxiety in six domains, as set out in the DSM-IV, namely social phobia, separation anxiety, panic attack/agoraphobia, obsessive-compulsive disorder, generalised anxiety and physical injury fears. Six items are positive filler items incorporated to reduce
negative response bias (Spence, n.d. a). Participants are asked to rate the frequency with which they experience the symptom on a 4-point Likert-type scale ranging from 0 (never) to 3 (always). Besides providing an indication of current anxiety levels, results on the SCAS are also useful for identifying children at risk of developing an anxiety order in the future (Spence et al., 2003). It is important to note, however, that the SCAS was developed to measure anxiety symptoms and is not intended for use as a diagnostic tool in isolation.

In the original study during the development of the measure, in an Australian sample of 2,052 children aged eight to 12, the SCAS displayed acceptable internal consistency with a co-efficient alpha of .92 and a Guttman split half reliability of .90 (Spence, 1998). A six-factor structure was proposed for the SCAS, with each factor relating to a domain of anxiety as set out in the DSM-IV. The internal consistency of the subscales was also found to be acceptable, with coefficient alphas of .73 (generalised anxiety); .70 (separation anxiety); .60 (physical injury fears); .82 (panic/agoraphobia); .70 (social phobia); and .73 (obsessive-compulsive). Six month test-retest reliability with 344 participants indicated a correlation coefficient of .60 for the total score on the SCAS, which indicates reasonably high reliability (Spence, 1998).

The Revised Children's Manifest Anxiety Scale (RCMAS) was used to assess the convergent validity of the SCAS. Spence (1998) found the Pearson product-moment correlation between the RCMAS total score and the SCAS total scores to be .71. Each subscale was also significantly correlated with the RCMAS total score (Spence, 1998). Essau, Muris, and Ederer (2002) found the SCAS total score to be correlated with the Screen for Child Anxiety Related Disorders (SCARED) total score ($r = .85$) as well. The SCAS is also correlated with the total scales of the State-Trait Inventory for Children ($r = .79$) and the Fear Survey Schedule for Children Revised ($r = .76$) (Muris, Merckelbach, Ollendick, King, & Bogie, 2002).

In South Africa, Muris, Schmidt et al. (2002) found that the original SCAS displayed sound psychometric properties when used in a sample of African, Coloured and White 9–12-year-old children ($\alpha = .92$). The internal consistency for the subscales was .65 and higher.
Results from this study, however, do not support the original six-factor structure found by Spence (1998). The final four-factor provided only some evidence that anxiety in South African children clusters into categories as set out by the DSM-IV. Hartley (2008) found the internal consistency of the SCAS to be acceptable ($\alpha = .91$) in a sample of 185 African and Coloured children aged between 10 and 15 years. At .62, .60 and .50 respectively, the internal consistency for the social anxiety, separation anxiety, and physical injury fears subscales were low. Mostert (2007) used a translated version of the SCAS with a group of Afrikaans-speaking 7–11-year-olds and found a Guttman split-half value of .80 for the scale, which attests to good internal consistency. Mostert did not report on the internal consistency for the individual subscales of the SCAS.

4.5.3 Self-Efficacy Questionnaire for Children (SEQ-C; Muris, 2001)

The SEQ-C is a 24-item scale that measures children’s self-efficacy in three domains, namely social self-efficacy, academic self-efficacy and emotional self-efficacy. Participants are asked to score each item on a 5-point Likert-type scale ranging from 1 (not at all) to 5 (very well) (Muris, 2001).

In a sample of 596 adolescents, the internal consistency of the SEQ-C was good. Cronbach’s alpha for the total scale was .90 and .86 for emotional self-efficacy, .82 for social self-efficacy and .84 for academic self-efficacy (Muris, 2002). Studying the relationships between self-efficacy and symptoms of anxiety disorders and depression in the same sample, Muris (2002) found that, as predicted, the total self-efficacy scores on the SEQ-C correlated negatively with measures of trait anxiety/neuroticism, anxiety disorders symptoms and depressive symptoms.

In a South African sample of 7–11-year-olds, the Afrikaans version of the SEQ-C yielded a Cronbach’s alpha value of .83. This attests to good internal consistency and indicates that researchers and clinicians can use the SEQ-C as a reliable measure of self-efficacy amongst Afrikaans-speaking children in the South African context (Mostert, 2007). Le Roux (2013) also
found that the Afrikaans SEQ-C yielded an acceptable alpha value in both a pre- and post-test (.64 and .76) in a sample of 102 7–13-year-olds. However, the reliability of the social and emotional self-efficacy subscales were low in the pre- and posts, at .58 and .45 for the social subscale and .21 and .61 for the emotional subscale respectively.

In the present study, the wording of the SEQ-C was adapted slightly to ease translation and improve understanding of the scale once translated into isiXhosa. The conceptual meaning of the altered items does not differ significantly from the original scale by Muris (2002) and the translated version still measures the same construct the original scale intended to measure, i.e., self-efficacy. Modifications were approved by Professor Peter Muris as well as by a native isiXhosa-speaking clinical psychologist with expertise in the field. All 24 questions on the SEQ-C were originally phrased “How well can you…?”. For the purpose of this study, these questions were changed to a statement reading “I can…” Landon, Ehrenreich, and Pincus (2007) and Le Roux (2013) also changed the questions on the original SEQ-C into statements to make it easier for younger children to understand.

An example of the changes are as follows:

- How well can you get teachers to help you when you get stuck on schoolwork?

  was changed to

- I can get teachers to help me when I get stuck on schoolwork.

4.5.4 Demographic questionnaire

A demographic questionnaire (Appendix G) was used to gather participants’ biographical data pertaining to their age, gender, school grade and community of residence.

4.5.5 Focus group interview schedule

A semi-structured focus group schedule (Appendix J) was used. It included the SCAS and SEQ-C questions to be discussed, and possible prompts to elicit discussion regarding these
questions. However, the sequence of questions was flexible in order to take advantage of topics and insights that arose naturally during the focus group sessions.

Focus groups were conducted in isiXhosa. Transcription and translation of the interviews were completed by a professional translation service.

4.6 Research procedure

As all participants’ home language was isiXhosa, all data collection was conducted in isiXhosa. All data (quantitative and qualitative) were collected by myself, a qualified Foundation Phase teacher, and a research assistant who is fluent in isiXhosa, understands the cultural context of the learners and has experience in working with young children, assisted throughout the data collection phases. Data collection took place in the staffroom at the school.

The first stage of the research procedure entailed obtaining permission from the various stakeholders, which is explained in more detail in section 4.8. Once all the necessary permission was obtained, the first phase of data collection, namely the quantitative phase, commenced. The quantitative phase of this study was cross-sectional in nature as I collected data from all participants at one point in time. The data thus represents the self-efficacy and anxiety levels of the participants as manifested at the time the questionnaires were presented (Graziano & Raulin, 2010). Groups of 6–10 learners were called at a time to complete the questionnaires. The biographical questionnaire and SEQ-C were administered first, whereafter the learners were given a short break. The SCAS was completed after the break. Data collection lasted approximately 90 minutes per group.

The qualitative phase of the study utilised focus group interviews. Fifteen learners from the quantitative sample were purposively selected to participate in the focus groups. Three focus groups (one per grade) of 4–6 participants were conducted and lasted approximately 30–45 minutes. The group size and time limit is in line with the suggestions made by Kennedy, Kools, and Krueger (2001) for designing focus groups with young children. The group interviews were audiotaped and transcribed by an experienced transcriber who is fluent in
isiXhosa and English. The transcriptions were then translated into English by a professional translation company.

Focus groups are particularly useful for capturing children’s insights, perspectives and opinions (Kennedy et al., 2001), which often remain undiscovered when using quantitative methods. Children are generally more relaxed and willing to share thoughts and ideas amongst peers, and rich data is produced through peer interaction which takes place during focus group discussions (Horner, 2000; Horowitz et al., 2003). An added bonus of focus groups is that they can be used effectively with young children, as they are free of the literacy-level limitations of qualitative self-report measures (Kennedy et al., 2001).

When composing groups for interviews, age and gender needs to be considered. A maximum of a two-year age difference is suggested, as cognitive ability and level of comprehension differs greatly between ages, and too large a gap can make group facilitation difficult. With young children, mixed-gender focus groups are effective; however, as children grow older, gender roles may negatively affect the group dynamic (Kennedy et al., 2001). For this study, focus groups were selected according to grade, and therefore participants were of similar age. While I tried to select an equal number of boys and girls to participate in the focus groups, the majority of participants were girls. This is reflective of the composition of the whole sample, of which 58% was female.

Before starting the group discussion, the purpose of the discussion was explained and certain “ground rules” (e.g., put up your hand to talk, do not interrupt, there are no wrong answers) were laid down to ensure everyone knew what to expect. Kennedy et al. (2001) state that this contracting is an important step in facilitating the group process.
4.7 Data analyses

4.7.1 Quantitative analysis

All quantitative data were analysed using Statistical Package for Social Sciences (SPSS) 25.0 software package. Analyses were one tailed and alpha (\( \alpha \)) was set at .05, unless otherwise stated.

Missing data were imputed using linear interpolation. Before commencing with data analysis, the normality distribution for the SCAS and SEQ-C was tested using the Shapiro-Wilk test, as well as by interpreting histograms, P-P and Q-Q plots and values of skewness and kurtosis (Field, 2009). Descriptive statistics were run to determine the means and standard deviations on the SCAS and SEQ-C according to gender, age groups and total sample. Independent samples t-tests were conducted to explore gender differences on the SCAS and SEQ-C. Before interpreting results from the t-tests, homogeneity of variance across groups was confirmed using Levene’s test. Correlational analyses were used to determine whether relationships between anxiety and age, self-efficacy and age and anxiety and self-efficacy existed in this sample. Reliability analyses were run to determine the reliability of the translated versions of the SCAS and SEQ-C. Lastly, exploratory factor analysis (EFA) was conducted on the SCAS and SEQ-C.

4.7.2 Qualitative analysis

The last stage of the research procedure consisted of analysing the qualitative data using thematic analysis, which entails analysing and reporting patterns or themes within data (Braun & Clarke, 2006), to analyse the qualitative results. Five phases of thematic analysis, suggested by Braun and Clark (2006), were utilised for this study, namely (a) becoming familiar with the data; (b) generating initial codes; (c) searching for themes; (d) reviewing themes; and (e) defining and naming themes. As the process of analysis was theory-driven, meaning that codes were developed around specific questions, the data was coded around the questions developed for the focus group interviews (Braun & Clark, 2006).
4.7.3 Trustworthiness in qualitative research

A methodical and rigorous approach to the design and execution of a study, the collection and analysis of data, and the interpretation and reporting of findings is essential to ensure sound research results (Fossey, Harvey, McDermott, & Davidson, 2002). Rigour is fundamental to any study, whether qualitative or quantitative (Barbour, 2001), but, as the trustworthiness of qualitative studies is questioned more often than that of quantitative studies, extra attention should be paid to addressing this aspect in a qualitative study (Shenton, 2004). Lincoln and Guba (1985) propose four criteria to be considered to ensure a trustworthy study, namely, a) credibility, b) transferability, c) dependability, and d) confirmability.

Credibility refers to how congruent the findings of the study are with reality (Shenton, 2004). The credibility of this studied was ensured by the close examination of previous research findings as well as frequent debriefing sessions with my supervisor. Silverman (2000) considers the ability of the researcher to relate his or her findings to an existing body of knowledge a key criterion for ensuring the credibility of qualitative research. Extensive reading of past studies was done to assess whether this study’s results are congruent with those of past studies (Shenton, 2004). I also had regular meetings with my supervisor throughout the research process in order to receive feedback regarding the development of my ideas and arguments. These discussions drew attention to any flaws in my methodology or analysis of the research that could negatively influence the study and as a result jeopardise the credibility thereof (Shenton, 2004).

Transferability refers to the generalisability of the findings to larger populations (Krefting, 1991). While it is seldom possible to demonstrate that the findings and conclusions of a qualitative study are applicable to other situations and populations, it is possible to improve the transferability of a qualitative study through descriptions of the specific research context and the participants (Shenton, 2004), as was done in this study.
Dependability refers to the consistency of the research findings if the study were to be replicated (Krefting, 1991). The dependability of this study was improved by providing an in-depth description of the research design for this study, its implementation and how it was planned and executed. Systematic and consistent collection, recording and analysis of data also contributed to the dependability of this study (Shenton, 2004). Methodological triangulation, i.e., the use of more than one research design in the same study, also contributed to the dependability of this study (Lincoln & Guba, 1985; Morse, 1991). In this present study, a mixed-method design utilising quantitative and qualitative data was employed to investigate the proposed research problem.

Confirmability is based on the premise that the research findings are the result of the participants’ lived experiences and perceptions and not on the characteristics and preferences of the researcher (Shenton, 2004). Reflexivity, described by Parahoo (2006) as the continuous process of reflection by the researcher on his values, preconceptions, behaviour or presence and those of the participants, is vital throughout the research process to ensure that personal biases do not affect the interpretation of participant responses.

4.8 Ethical considerations

Participants’ ethical rights, based on the ethical principles of conducting research with children as set out by The American Psychological Association (American Psychological Association, 2010; Fisher, 2004), were closely adhered to throughout the study.

Ethical clearance was obtained from the Research Ethics Committee (REC): Human Research at Stellenbosch University (SU-HSD-004332) in 2017 (Appendix B3). Permission to

3 Please note that the title of this research thesis changed during the course of this project. The appendices still contain the original title, i.e., Self-efficacy and anxiety in a group of isiXhosa-speaking learners receiving second-language education in Western Cape schools.
conducted research at public schools was obtained from the Western Cape Education Department in 2017 (Appendix C). Permission to conduct research was directed at one school in the Stellenbosch region (Appendix D). After gaining consent for the study from the school, an information letter and informed consent form was sent out to the parents/legal guardians of the children in the identified Grade 1–3 classes, to obtain permission for their children to participate in the research study (Appendix E). These forms were provided to class teachers, who were asked to place the letters in the children’s homework diaries to be sent home for the parents’/legal guardians’ attention. The completed parental consent forms were returned to the school by the learners and collected by the teachers. Before commencing with data collection, all participants (with parental consent to participate) were required to complete assent forms (Appendix F). Participants were informed that participation in this study was voluntary and that they reserved the right to withdraw from the study at any time without any consequences. Participants’ ongoing consent was sought throughout the period in which they completed the questionnaires. A short debriefing was held at the end of the data collection session, to gauge how the participants experienced the process and to assess whether any participants found the process distressing.

Participants selected to participate in the focus group interviews were briefed about voluntary participation again before the interviews started by myself and my research assistant. Interviews were conducted in a private location at the school, to ensure confidentiality was maintained. Although the focus group questions were not of such a nature that they would elicit personal or sensitive information from participants, guidelines regarding confidentiality and my obligation as researcher to report any information disclosed by the child that could potentially be harmful to him or her were consulted (Williamson & Goodenough, 2005). However, no participant disclosed any information that I deemed potentially harmful or anxiety-provoking during the interviews.
Confidentiality and anonymity were upheld throughout the study. Following the completion of data collection, all questionnaires, and consent and assent forms were safely stored in a locked cabinet at the Psychology Department of Stellenbosch University and were only available to myself and my supervisor. Data will be kept for five years after the completion of the study and will then be destroyed. All electronic documents, data and interviews were stored on a password-protected laptop. Codes were used to replace the participant’s names and no identifiable information of individuals who participated in this study was used in the final report. Pseudonyms were used when reporting data from the focus group interviews. In order to protect the school and participants, the name of the primary school where data were collected as well as the names of teachers and principal at this school will remain anonymous.

While no stress, discomfort or physical risk was envisaged in the study, a contingency plan was put in place for referral of participants displaying or reporting acute distress during or following their participation, i.e., learners would be referred to available psychological services at the Welgevallen Community Psychology Clinic at Stellenbosch University. This referral system was also in place for learners who reported high levels of anxiety on the SCAS, i.e., above the cut-off scores provided by Spence (n.d. b). On conclusion of the study, my supervisor and I decided that, in light of the overall high anxiety scores reported by my sample, it would be best to contact the parents of all the participants, thanking them for allowing their child to participate, explaining the results and the high levels of anxiety found in this sample and informing them about the availability of free psychological services for their child, should they have any concerns about their child’s behaviour (Appendix K). To my knowledge, at the date of submitting this thesis, no child who participated in this study was referred for psychological services.

After the completion of this study, a copy of this thesis will be provided to the Western Cape Education Department and the school where the research was conducted. A verbal feedback session with the principal and relevant teachers at the school will also be arranged.
CHAPTER 5: RESULTS AND DISCUSSION

The results and discussion are combined in the current chapter in order to provide a richer account of the data. The results from the qualitative phase of the study are integrated into the quantitative results in order to provide a more holistic and robust picture of the research findings, with the qualitative results helping to explain the results of the statistical tests. Firstly, the descriptive statistics for the SCAS and SEQ-C are presented and the effects of gender and age on the scores are then discussed. The psychometric properties of the measures are discussed next, which include the reliability analysis, the factor structure of the SCAS and SEQ-C, and the results for the correlational analysis between self-efficacy and anxiety.

5.1 Normality of data

Before computing descriptive statistics for the SCAS and SEQ-C, the normality distribution for each scale was tested using the Shapiro-Wilk test, as well as by interpreting histograms, P-P and Q-Q plots and values of skewness and kurtosis (Field, 2009). Two items on the SEQ-C, namely items 10 and 19, displayed significant values of skewness (-2.51 [SE = .177] and -2.56 [SE = .177]) and kurtosis (5.52 [SE = .353] and 6.62 [SE = .353]). However, the Shapiro-Wilk test for both items was not significant. Therefore, as per the criteria suggested by Field (2009), values of skewness and kurtosis were interpreted in conjunction with the Shapiro-Wilk test, histograms, P–P and Q–Q plots. It was then decided to use parametric tests for all subsequent analyses.

All quantitative data were analysed using Statistical Package for Social Sciences (SPSS) 25.0 software package. Analyses were one tailed and alpha (α) was set at .05, unless otherwise stated.

5.2 Descriptive statistics

Table 5.1 provides the mean scores and standard deviations on the SCAS according to gender and age groups. Table 5.2 provides the mean scores and standard deviations on the SEQ-C according to gender and age groups.
5.2.1 Anxiety scores on the SCAS

The total anxiety score for this sample (M = 50.06; SD = 14.71) was higher than the total scores recorded on the SCAS in previous South African studies (Mostert, 2007; Muris, Schmidt et al., 2002), as well as studies conducted in Australia (Crane & Campbell, 2010; Spence, 1998), the Netherlands (Muris et al., 2000), Colombia (Crane & Campbell, 2010), and the United States of America (Whiteside & Brown, 2008).

Viewed separately, the total anxiety score for girls (M = 50.43; SD = 13.27) and boys (M = 49.54; SD = 16.6) in this sample was also higher than the scores reported in previous studies. The norms for the SCAS specify that a total score of 40 and above for boys aged 8 to 11, and 50 and above for girls aged 8 to 11 indicates elevated levels of anxiety (Spence, n.d. b). Total anxiety levels for both girls and boys in this sample are thus in the elevated range.

Looking at the mean subscale scores for the total sample, mean scores were highest for the obsessions/compulsions (M = 1.52; SD = 1.08) and generalised anxiety (M = 1.35; SD = 1.09) subscales. Muris, Schmidt et al. (2002) also found that symptoms referring to compulsive behaviours, as measured using the SCAS, were highly prevalent amongst a sample of 7–13-year-old South African children.

In light of the high levels of anxiety reported by the children in this sample, it is important to take into account the various factors that could contribute to the development of anxiety and the manifestation and expression thereof, as discussed in the meta-theoretical approach to childhood anxiety in Chapter 2. With specific reference to this sample, the possible impact of the environment in which the children live and cultural practices on anxiety must be
Table 5.1

Mean Scores and Standard Deviations of the SCAS by Gender and Age Groups

<table>
<thead>
<tr>
<th></th>
<th>6–7-year-olds</th>
<th>8-year-olds</th>
<th>9–10-year-olds</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>Total SCAS score</td>
<td>F</td>
<td>M</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>(out of 114)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Panic/agoraphobia</td>
<td>M</td>
<td>46.39</td>
<td>45</td>
<td>45.88</td>
</tr>
<tr>
<td>Social phobia</td>
<td>M</td>
<td>9.67</td>
<td>10.11</td>
<td>9.83</td>
</tr>
<tr>
<td>(out of 18)</td>
<td>SD</td>
<td>5.14</td>
<td>5.45</td>
<td>5.21</td>
</tr>
<tr>
<td>Separation anxiety</td>
<td>M</td>
<td>7.27</td>
<td>8.21</td>
<td>7.62</td>
</tr>
<tr>
<td>(out of 18)</td>
<td>SD</td>
<td>3.22</td>
<td>4.04</td>
<td>3.68</td>
</tr>
<tr>
<td>Physical injury fears</td>
<td>M</td>
<td>6.03</td>
<td>5.00</td>
<td>5.65</td>
</tr>
<tr>
<td>(out of 15)</td>
<td>SD</td>
<td>3.42</td>
<td>3.23</td>
<td>3.36</td>
</tr>
<tr>
<td>(out of 18)</td>
<td>SD</td>
<td>3.27</td>
<td>4.11</td>
<td>3.85</td>
</tr>
<tr>
<td>Generalised anxiety</td>
<td>M</td>
<td>7.67</td>
<td>7.79</td>
<td>7.71</td>
</tr>
<tr>
<td>(out of 18)</td>
<td>SD</td>
<td>3.87</td>
<td>3.94</td>
<td>3.86</td>
</tr>
</tbody>
</table>
Table 5.2

Mean Scores and Standard Deviations of the SEQ-C by Gender and Age Groups

<table>
<thead>
<tr>
<th></th>
<th>6–7-year-olds</th>
<th>8-year-olds</th>
<th>9–10-year-olds</th>
<th>Total sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>M</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>Total SEQ-C score</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(out of 120)</td>
<td>F</td>
<td>M</td>
<td>T</td>
<td>F</td>
</tr>
<tr>
<td>Academic self-efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(out of 40)</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social self-efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(out of 40)</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional self-efficacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(out of 40)</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
considered. Various factors in the children’s microsystem, including family environment, parenting styles, school environment and peer groups (Bronfenbrenner, 1979), could impact on their anxiety levels. As discussed in Chapter 2, socio-economic factors greatly influence various aspects of the microsystems of many South African children, including the family and school environment. High rates of parental unemployment and environmental adversity have a negative effect on parenting styles, which could, in turn, lead to increased anxiety in children (Muris et al., 2006). Socio-economic factors also influence learners’ schooling environment, as was evident in this sample, where classrooms were grossly overcrowded, with an average of 55 learners per class, and classroom resources were scarce in comparison to schools located in predominantly White areas. These factors may have a negative effect on learners’ academic performance, which affects their feelings of competence and personal ability, and may lead to feelings of inferiority and heightened anxiety (Howard, 2015).

Macrosystemic factors, such as poverty and high levels of crime, also contribute to anxiety in children. Considering research that indicates that poverty, economic stress, lack of social support and high neighbourhood stress contribute to the development of anxiety disorders in youths (Roberts et al., 2009), it becomes evident that these factors may also provide some explanation as to why learners in this sample displayed such high levels of anxiety.

Focus group interviews provided some insight into how systemic and cultural factors influenced learners’ answers on the SCAS. In light of previous South African research (Muris, Schmidt et al., 2002) and the high score on the obsessions/compulsions subscale in this sample, several questions on the obsessions/compulsions subscale of the SCAS were discussed in the focus groups. It became apparent that the learners’ understanding of these questions did not relate to compulsive ritualistic behaviours, but rather to important daily tasks and activities that they were expected to perform by parents, or other family members, such as cleaning and cooking. When asked about their understanding of the questions I have to keep checking that I have done things right (like the switch is off, or the door is locked), Nelani (F, Grade 3) said it
means “Do you look carefully when you’re doing something”. This question elicited much discussion about the importance of locking doors, which is a lived reality for these children, considering the high rate of crime in the community in which they live. Yamkela (M, Grade 3) said, “I push the door after locking it [because] I just think that skollies (criminals) would come and take everything at home.” Lelethu (F, Grade 3) also voiced her worries about burglars if the door isn’t locked, explaining, “I take the key out, pull the door; make sure that it is locked. I just think of skollies coming and then opening the door, taking everything at home.”

Participants also mentioned checking that light switches and stoves were turned off, as they do not want to waste electricity and leaving appliances on is a fire hazard. Fires, often from paraffin lamps and stoves, are a common occurrence in informal settlements across South Africa. In the period 2000 to 2016, over 120 000 houses in informal settlements were destroyed by fire (Health 24, 2016). Iminathi (F, Grade 2) explained the importance of checking if switches were off, saying, “It [the electricity] gets finished, and the house might burn.” Ncumisa (F, Grade 1) also voiced concern regarding fire, stating, “If I don’t check them [the switches], the house would burn and also we would burn.”

Asked about how they understand the question I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order), participants explained that they have certain chores which they are expected to do at home every day. For example, Emihle (F, Grade 2) said, “It means you wash all the time. You must always do the cleaning. The house must always be clean and you must always be clean.” Nelani (F, Grade 3) said, “I must clean my room after cleaning wash dishes then go and play.” Asked about what would happen if they didn’t do these things “over and over” they mentioned punishment, like Asemahle (F, Grade 3) who said, “I’m going to get punished” and Iminathi (F, Grade 2) who said, “You’d be reprimanded. You’d be beaten.” Several learners also mentioned that their family would be shamed by other people if their house was not clean. Ncumisa (F, Grade 1) said, “There would be ants and [other people] would say stinking, dirty people stay there.”
Athenkosi (M, Grade 1) reiterated this by saying, “It would be stinking. People will say crazy people are staying there.”

The fear of punishment and concern about being shamed if they do not do what is expected of them, such as keeping the house clean, expressed by these participants can be linked to a culturally-determined emphasis on obedience to authority and compliance with social norms, which is highly valued amongst collectivist cultures (Baxter et al., 2013; Delvecchio et al., 2017; Delvecchio et al., 2015; Hudson & Rapee, 2009). It is also important to contextualise children’s household chores and duties in the home within broader cultural norms regarding child-rearing as well as within current socio-economic trends. Using data from the 1999 Survey of Activities of Young People, Clacherty (2003) found that 36% of South African children do seven hours or more of household chores per week. Children from poorer communities generally take on a greater share of household work than children of higher socio-economic status (Bray, 2003). Utilising data from the 2000 Time Use Survey (TUS) and the first wave of the Cape Area Panel Study (CAPS) data, Bray (2003) found that more African children report performing domestic tasks such as cooking, cleaning inside the house, and doing laundry than Coloured, Indian and White children (Bray, 2003). Interestingly, no children or adults that participated in this study described children’s involvement in household chores as unusual or problematic. Children said work in the home was an integral function of being a household member, a way in which to assist their mothers or caregivers, required in order to fulfil the request of their elders and an opportunity to learn new skills (Bray, 2003). Children in Clacherty’s (2003) study also saw the household chores they do as their way of contributing to the family, and also mentioned that they do chores because they want to live in a clean environment. Both Bray (2003) and Clacherty (2003) are of the opinion that participation in household chores can ultimately have a positive impact on children’s self-esteem as it fosters a sense of belonging and feeling valued.
Despite this positive feedback regarding household chores, Bray (2003) acknowledges the importance of considering the context within which children are engaged in household duties. In communities of low socio-economic status, like the one in which this research was conducted, children often take on more responsibilities in the household due to parents working long hours or working away from home, and also take on caring duties of younger siblings and even seek paid employment outside of the home to contribute to family income (Bray, 2003). Long working hours and responsibility for younger family members may have negative physical and psychosocial consequences for children. The present research study did not focus specifically on the effects of children’s working roles on their anxiety, but it is highly likely that excessive domestic responsibilities can negatively impact on their psychological wellbeing.

Erikson’s psychosocial theory may offer some explanation for the effects of children’s working roles on their anxiety levels. According to Erikson (1968), the developmental crisis of industry versus inferiority is experienced during middle childhood. The middle childhood period thus forms an extremely important phase of a child’s physical, cognitive, social and emotional development and during this time, feelings of competence and personal ability in these areas play an important role in children’s self-esteem (De Witt, 2011; Harter, 1998). The responsibility of household chores, coupled with the growing demands of schoolwork may result in children feeling unable to cope with the demands placed on them. Children who feel unable to deal with the demands required of them may develop what Erikson (1968) termed “a sense of inferiority”. This may result in lowered feelings of self-esteem and increased anxiety (Wait, 2005).

Conversely, participation in household chores could have a positive influence on children’s self-efficacy through building their self-esteem, as suggested by Bray (2003) and Clacherty (2003). As children develop a sense of their competencies and what they feel unable to do from social evaluations from parents, teachers and peers as well as from personal
judgements of abilities (Newman & Newman, 2003), being entrusted with significant responsibilities at home may result in children feeling more competent and thus impact positively on their self-esteem and self-efficacy.

While the questions from the obsessions/compulsions subscale discussed in the focus groups intended to measure obsessive or compulsive behaviours, it seems that participants interpreted, and accordingly answered, these questions in a manner that was reflective of the environment and culture within which they live and the expectations placed on them in this milieu. Thus, while the mean score on the obsessions/compulsions subscale for this sample was high, the participants’ interpretation of and answers to the question appear to indicate normative rather than disordered behaviour. It appears that the societal values, belief systems and attitudes of the participants’ macrosystems directly influence their behaviour, and ultimately impacts the social and psychological processes that occur in the microsystem, i.e., the home and school environment. Within the participants’ macrosystem, Lev Vygotsky’s (1978) sociocultural theory of cognitive development, as discussed in Chapter 2, is of particular relevance, as the cultural values and beliefs – in this case the high valuation of obedience to authority and participation in household responsibilities – conveyed to these learners by the society they grow up in clearly shapes their thinking and behaviours.

Besides scoring high on the obsessions/compulsions subscale, participants in this sample scored high on the generalised anxiety subscale of the SCAS. This scale consisted of items such as I worry about things, I feel afraid, When I have a problem, my heart beats really fast and When I have a problem, I feel shaky. This subscale provides a rather global assessment of generalised anxiety and does not elicit details about fears or worries.

The generalised anxiety subscale on the SCAS often refers to physical symptoms that accompany feelings of anxiety. While it was previously discussed that the individual experience and symptom presentation of anxiety disorders differ across cultures, it appears that the physical manifestation of anxiety in this sample is consistent with what has been found in
Western samples (Mash & Wolfe, 2016). Participants reported various physical symptoms when feeling afraid or worried, saying, “My heart throbs”, “I shiver”, and “My tummy feels upset”.

While discussing specific things they were afraid of in the focus groups, most participants voiced fear of physical harm to either themselves or family due to crime. For example, Yamkela (M, Grade 3) mentioned being worried when his mom is late, because “If my mom comes late at home maybe she’s killed by the skollies”. Lelethu (F, Grade 3) affirmed this fear saying, “I am worrying about my mom, when she’ll come home.” Esethu (F, Grade 3) also mentioned being afraid of crime, saying, “I become scared that skollies break in.”

As with the obsessive/compulsions subscale, it appears that the generalised anxiety subscale score for this sample is reflective of real threats in the participants’ environment, and not necessarily of excessive worrying disproportionate to the actual risk. Investigating the anxiety levels of a sample of 263 children aged 8–12 years from Colombia, Crane and Campbell (2010) found that Colombian children scored significantly higher on the SCAS than their Australian counterparts. The authors attributed this to cultural and contextual differences. Colombia is one of the most violent nations in the world, and children grow up accustomed to danger and unrest. The Colombian children’s fears centred around kidnapping, harm to themselves or their parents and guerrilla fighting, which reflects their specific contextual reality, and differs greatly from the lived realities of children growing up in more politically stable countries like Australia (Crane & Campbell, 2010). The findings of Crane and Campbell’s (2010) study may hold true for this sample of South African children as well, as the data from the focus groups indicate that their anxiety and fears are largely formed by the environment in which they live.

Nevertheless, the fact that the total anxiety score for this sample (M = 50.06; SD = 14.71) was higher than the total scores recorded in various previous studies using the SCAS cannot be attributed to only environmental and cultural factors. Translation, adaptation and
norming of the SCAS deserves serious further investigation. However, that being said, it is also important to consider whether the norms of the original SCAS are applicable to a translated version of the measure. Using the same scoring algorithm on a translated measure may not lead to meaningful or comparable scores, as scores that are “numerically identical can have a psychologically different meaning across cultures” (Van de Vijver & Poortinga, 1991, p. 279). Tests that are adapted to a new language or culture, therefore, almost always require renorming before meaningful conclusions can be drawn from the scores (Geisinger, 1994).

### 5.2.2 Gender effects for the SCAS

From Table 5.1 it can be seen that girls scored higher than boys on the total SCAS score, as well as on the separation anxiety, physical injury fears, and obsessions/compulsions subscales. Boys scored higher on the panic/agoraphobia, social phobia and generalised anxiety subscales. However, no significant gender effects were obtained on the total SCAS score, \( t(186) = .407, p = .68 \), or the physical injury fears, \( t(186) = 1.03, p = .30 \), obsessions/compulsions, \( t(186) = .867, p = .39 \), panic/agoraphobia, \( t(186) = -.180, p = .86 \), social phobia, \( t(186) = -.488, p = .63 \), or generalised anxiety, \( t(186) = -1.46, p = .14 \), subscales. Girls scored significantly higher on the separation anxiety subscale than boys, \( t(186) = 2.11 \).

Within the sample of this research study, girls appeared to be more anxious than boys, even though significant gender effects were only found for the separation anxiety subscale. This finding was expected, as the tendency for girls to report higher levels of anxiety than boys is reported in both international (APA, 2013; Anderson & Mayes, 2009; Ollendick et al., 2002) and South African literature (Burkhardt et al., 2003; Muris, Schmidt et al., 2002).

Differences in anxiety scores may be attributed to the impact of cultural factors in the participants’ macrosystem. Here again Lev Vygotsky’s (1978) sociocultural theory of cognitive development emphasises the role of social interaction in the development of cognition and the manner in which cultural practices, beliefs and skills are conveyed to children within different societies, can also be cited. Cultural values significantly influence social
norms, and, therefore, also gender role expectations, which can contribute to distress and greater vulnerability to mental illness. Within the isiXhosa culture, relatively strict gender norms that value emotional restraint, obedience and self-control in women are still endorsed. This can contribute to emotional distress and increased susceptibility to anxiety or other mental health disorders (Kieling et al., 2011). Subscription to strict gender norms also results in women being more susceptible to gender-based abuse and domestic violence, which affects their mental health (Song & Shaheen, 2013; Ward et al., 2001).

The significant difference found in separation anxiety levels between girls and boys in this sample may be explained by the environment in which the participants in this research study live. As mentioned previously, all participants reside in an informal settlement and their environment is largely characterised by poverty and the many adverse manifestations thereof, including violence, abuse and threat of physical harm (Donald et al., 2006; Prinsloo, 2011). Within this environment, women are at greater risk of experiencing trauma, such as domestic violence and rape, than men (McLean & Anderson, 2009). On the SCAS, the separation anxiety subscale indicates fear of being away from a parent or caregiver, such as being home alone or being away from parents. As children’s anxiety and fears are largely reflective of the environment in which they live (Zwemstra & Loxton, 2011), the high level of separation anxiety reported by the girls in this study could be due to their feeling more susceptible to harm within their living environment when separated from a protective figure like a parent or caregiver.

5.2.3 Age effects for the SCAS

The 6–7-year-old group reported the lowest scores on the total scale, as well as on all the subscales, except the social phobia subscale, where the 8-year-old group reported the lowest score. The 9–10-year-old group had the highest total anxiety score, as well as the highest scores on all the subscales, except panic/agoraphobia, where the 8-year-old group reported the highest score. While controlling for gender effects, correlational analysis revealed a significant positive
relationship between age and total SCAS score ($r = .155$), indicating that anxiety increased with age in this sample. Scores on the separation anxiety, $r = .131$, physical injury fears, $r = .215$, $p < 0.01$, and obsessions/compulsions, $r = .209$, $p < 0.01$, subscales were also significantly positively correlated with age.

Research focused on childhood anxiety indicates that specific anxieties and number of anxiety symptoms experienced generally decrease with age (Costello et al., 2003; Mash & Wolfe, 2016). However, in this sample, anxiety increased with age. Although these findings contradict previous research, the increase in anxiety with age could be attributed to older children’s greater awareness and understanding of their circumstances. As children get older, they become more aware of poverty and the environmental dangers and lack of security that accompany economic hardship. As a result, older children are increasingly more likely to feel the psychological effects of poverty (Save the Children, 2016).

In this sample, the greater awareness older children have of the environment in which they live was illustrated when we discussed the question *I feel afraid if I have to use public toilets or bathrooms*. In South Africa, almost 30% of children live in areas, mostly informal settlements, without adequate sanitation, and do not have access to a toilet or ventilated improved pit latrine on the site where they live (Ilifa Labantwana, 2017). The need to travel to outdoor toilet facilities due to inadequate on-site sanitation is a major risk factor for sexual assault and muggings in South Africa (Gonsalves, Kaplan, & Paltiel, 2015), and using public toilets thus holds a very real threat for many children. Older children in this sample are likely more aware of the dangers associated with using communal toilets, and are, therefore, more fearful of doing so. Participants in the Grade 1 focus group adamantly said there was nothing to be afraid of when going to the bathroom. Ncumisa (F, Grade 1) said, “No [I’m not scared], they are for everybody to use.” However, children in the Grade 2 and 3 focus groups expressed greater fear of public bathrooms. Nelani (F, Grade 3) said, “I feel scared and just urinate
quickly.” Siphosethu (F, Grade 2) said, “Yes, at night I’m scared.” Onako (F, Grade 3) said, “I would ask somebody to go with because I’m scared.”

Considering that older children are likely more aware of the dangers of their living environment (Save the Children, 2016), it makes sense that age is positively correlated with separation anxiety and physical injury fears. Greater awareness of the risk of danger in their environment could result in older children feeling more afraid of bodily harm in general, and more susceptible to harm when separated from a protective figure like a parent or caregiver.

5.2.4 Self-efficacy scores on the SEQ-C

In the original study documenting the development of the SEQ-C, Muris (2001) does not provide norms for the scale. However, participants in this study scored higher on the SEQ-C (M = 94.28; SD = 12.96) than the Belgian adolescents that participated in the original study (M = 76.8; SD = 11.2). Scores from this study were comparable with those reported by Mostert (2007) amongst a sample of 12-year-old South African children (M = 91.36; SD = 12.29).

Previous research indicates that young children’s view of themselves and their abilities is positively inflated, and they generally rate themselves well above the midpoint on scales measuring factors like self-esteem. Self-appraisals tend to decline during the transition to adolescence (Robins, Trzesniewski, Tracy, Gosling, & Potter, 2004). As the participants in this study were still in middle childhood, they may have positively inflated views of themselves and their abilities, which could explain the high levels of self-efficacy they reported. The possibility exists that adolescents would report lower levels of self-efficacy.

Hoza et al. (2004) found that, in a sample of 7–9-year-old American children, those with positively biased self-perceptions were less likely to display depressive symptoms than their peers without positive bias. An inflated sense of ability may thus serve as a coping mechanism to deal with adverse circumstances, such as those in which the participants in this study are growing up in. Taylor and Brown (1998) stated that “Positive illusions may be
especially apparent and adaptive under circumstances of adversity, that is, circumstances that might be expected to produce depression or lack of motivation” (p. 201).

Lastly, it is also important to remember that self-efficacy is a very subjective measurement, as it measures an individual’s sense of competence in using certain skills to perform a specific action and does not refer to whether an individual actually possesses these skills (Bandura, 1997). Bandura (1988) states that a child’s perceived efficacy to exercise control over possible threats plays a fundamental role in emotional arousal. Although the participants in this study report high levels of self-efficacy, they also report high levels of anxiety; it is therefore viable that participants’ reported self-efficacy is higher than their actual efficacy when performing specific actions. Low self-efficacy in certain situations can in turn mediate negative affective states, such as anxiety (Bandura et al., 1999).

5.2.5 Gender effects for the SEQ-C

Table 5.2 indicates that girls scored higher on total self-efficacy, and on each of the three self-efficacy subscales. Girls scored significantly higher than boys on the total SEQ-C, t(186) = 2.26, as well as the academic subscale, t(186) = 2.48. No significant gender effects were found for the social, t(186) = 1.81, p = .07, and emotional self-efficacy, t(186) = 1.29, p = .19, subscales.

Previous research has generally found that girls score lower on total and emotional self-efficacy, but higher on academic and social self-efficacy than boys (Bandura et al., 1999; Lackaye et al., 2006; Muris, 2002). In this sample, however, girls scored higher than boys on all three subscales as well as on the total score, although significant differences were only noted on the total scale and the academic subscale. As girls were more anxious than boys in this sample, it was expected that boys would score higher on total self-efficacy, considering the negative correlation between anxiety and self-efficacy proposed by research (Bandura, 1997; Muris, 2002).
The possibility that girls “faked good” (Dadds, Perrin, & Yule, 1998) should be considered here. Dadds et al. (1998) state that wanting to appear perfect is a characteristic of anxious children. Girls may thus have reported socially desirable answers on the SEQ-C, which could explain why they scored higher on self-efficacy even though they reported being more anxious than boys.

5.2.6 Age effects for the SEQ-C

Based on previous research findings, it was postulated that as anxiety decreases with age (Costello et al., 2003; Mash & Wolfe, 2016), self-efficacy would increase in this sample. The expectation was thus that older children would have significantly higher levels of self-efficacy than younger children.

Contrary to expectations, both anxiety and self-efficacy increased with age in this sample. The 6–7-year-old group reported the lowest scores on the total self-efficacy scale, as well as on the academic and social self-efficacy subscales. The 8-year-old group scored the lowest on the emotional self-efficacy subscale. The 9–10-year-old group had the highest total self-efficacy score as well as the highest scores on all the subscales. While controlling for gender effect, correlational analysis revealed a significant positive relationship between total self-efficacy, \( r = .123 \), academic self-efficacy, \( r = .146 \), and social self-efficacy, \( r = .142 \), and age.

The possibility that participants “faked good” (Dadds et al., 1998) and reported socially desirable answers should be considered here. Conversely, the possibility of participants displaying an inflated sense of ability as a coping mechanism to deal with adverse circumstances should also be considered (Hoza et al., 2004).

5.3 Psychometric properties of the SCAS and SEQ-C

5.3.1 Internal consistency of the Spence Children’s Anxiety Scale

A Cronbach’s alpha of .81 was obtained for the entire scale, which attests to good internal consistency (Field, 2009). However, the alpha value for each of the six subscales was
low at .56 (panic/agoraphobia), .43 (separation anxiety), .50 (social phobia), .50 (physical injury fears), .51 (obsessions/compulsions) and .46 (generalised anxiety). The low alpha values for each of the subscales indicates that, in this specific research sample, the six-factor solution for the SCAS, as proposed by Spence (1998), does not provide a good conceptual fit. EFA was subsequently conducted to determine whether a more suitable factor solution could be found.

In a sample of 185 African and Coloured South African children aged between 10 and 15 years, Hartley (2008) found the reliability for the total scale to be acceptable at .91, but the internal consistency for the social anxiety, separation anxiety, and physical injury fears subscales was low at .62, .60 and .50 respectively. Using the SCAS in a community sample of 7–13-year-old learners in the Western Cape, Perold’s (2001) results indicated that four of the subscales’ reliability fell below the suggested cut-off mark of .7 (Field, 2009). These were separation anxiety (.67), social phobia (.67), obsessions/compulsions (.65) and physical injury fears (.66). The reliability for the overall scale in Perold’s (2001) study was good at .92.

As the reliability of the total scale in the above-mentioned studies, as well as in the present study, is high, the SCAS may be useful to measure overall anxiety in South African children, but subscale results should be interpreted with caution. It is possible that the DSM-IV anxiety classifications proposed by the SCAS are not valid for all population groups in South Africa, which could explain the low subscale reliability in various South African studies.

5.3.2 Factor analysis for the SCAS

In order to determine how many factors with an Eigen value of greater than one emerge, EFA was conducted. Principal component analysis was used, and, as correlated factors were hypothesised, direct oblimin rotation was selected.

Item-by-item descriptive analyses for the SCAS are presented in Table 5.3. The item-total correlation for the majority of the items on the SCAS is below the recommended .3 (Field, 2009), indicating that the items do not correlate well with the overall scale. However, as only 15 of the 44 items displayed acceptable item-total correlation, no items were removed prior to
factor analysis. Furthermore, as the deletion of any item would not significantly increase the Cronbach’s alpha of the scale, all items were retained. EFA yielded a 14-factor structure that explained 62.8% of the variance (Table 5.4). Items 3, 5, 9, 18, 20, 28 and 30 did not load satisfactorily on any factor (below .38) (Stevens, 2002) and were therefore allocated to the factor on which they loaded highest. Factors IV, VII, VIII, X, XII and XIII consist of only one or two items, and factors IX, XI and XIV did not have any items load higher than 0.40. Furthermore, items that loaded onto a single factor are not related to a single theoretical construct and do not appear to be overtly logically connected. The items that did not load satisfactorily on any factor were removed and factor analysis was rerun; this, too, failed to produce a suitable factor structure as other items then failed to load satisfactorily on any factor. This suggests that these factors are not meaningful, and indicates that the 14-factor solution is not suitable.

Various previous research studies with the SCAS, including the original study, found a six-factor model, albeit with slightly different structures, to provide the best conceptual fit (Essau, Leing, Conradt, Cheng, & Wong, 2008; Mellon & Moutavelis, 2007; Spence, 1997; Tortella-Feliu, Balle, Servera, & Garcia de la Banda, 2005). Principal component analysis with direct oblimin rotation specifying a six-factor solution was, therefore, conducted after the open-ended EFA (Table 5.5). This model explained 37.8% of the variance. However, the six-factor model, again, does not provide a suitable factor solution for the data. As with the 14-factor model, several items (3, 4, 5, 18, 19, 20, 22, 28, 36, 37 and 41) loaded below 0.40 on any factor and were then allocated to the factor on which they loaded highest. Only two items loaded onto factor IV. Most items that loaded onto a single factor, again, do not relate to a single theoretical construct and appear not to be overtly logically related. The items that did not load satisfactorily on any factor were removed and factor analysis was rerun; this too failed to produce a suitable factor structure as other items then failed to load satisfactorily on any factor. The six-factor
model thus does also not provide a suitable factor solution for the isiXhosa-version of the SCAS.

While the overall reliability of the SCAS was good, the low subscale reliability and subsequent lack of a suitable factor structure raises questions about the reliability and validity of the SCAS within this research sample. The seven items that did not load satisfactorily onto any factor when open-ended factor analysis was run belonged to the Generalised Anxiety (items 3 and 20), Separation Anxiety (item 5), Social Phobia (item 9), Physical Injury Fears (item 18), and Panic/Agoraphobia (items 28 and 30) subscales on the original SCAS. The 11 items that did not load satisfactorily onto any factor when a six-factor solution was specified belonged to the Generalised Anxiety (items 3, 4, 20 and 22), Separation Anxiety (item 5), Physical Injury Fears (item 18), Obsessions/Compulsions (item 19 and 41) and Panic/Agoraphobia (items 28, 36 and 37) subscales on the original SCAS. As the items that did not fit are spread across all six subscales on the original SCAS, the failure of these items to load onto any factor cannot only be attributed to the possible lack of relevance of the construct being measured by a specific subscale in this sample. In this regard, it is important to consider language in cross-cultural test adaptation, which could provide an explanation as to why the factor structure of the SCAS differs across cultures.

Table 5.3

*Item-by-item descriptive analyses for the SCAS*
<table>
<thead>
<tr>
<th>Item</th>
<th>Item-total (r)</th>
<th>α iid*</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Worry about things (GA)</td>
<td>.183</td>
<td>.812</td>
<td>1.16</td>
<td>1.089</td>
</tr>
<tr>
<td>2 Scared of the dark (PIF)</td>
<td>.232</td>
<td>.810</td>
<td>1.46</td>
<td>1.051</td>
</tr>
<tr>
<td>3 Funny feeling in tummy when I have a problem (GA)</td>
<td>.249</td>
<td>.810</td>
<td>1.45</td>
<td>1.061</td>
</tr>
<tr>
<td>4 Feel afraid (GA)</td>
<td>.264</td>
<td>.809</td>
<td>1.37</td>
<td>1.089</td>
</tr>
<tr>
<td>5 Afraid of being home alone (SA)</td>
<td>.263</td>
<td>.809</td>
<td>1.50</td>
<td>1.121</td>
</tr>
<tr>
<td>6 Scared when taking a test (SP)</td>
<td>.376</td>
<td>.806</td>
<td>1.05</td>
<td>1.066</td>
</tr>
<tr>
<td>7 Afraid to use public bathrooms (SP)</td>
<td>.253</td>
<td>.810</td>
<td>1.34</td>
<td>1.079</td>
</tr>
<tr>
<td>8 Worry about being away from parents (SA)</td>
<td>.154</td>
<td>.813</td>
<td>1.49</td>
<td>1.145</td>
</tr>
<tr>
<td>9 Feel afraid of making a fool in front of others (SP)</td>
<td>.235</td>
<td>.810</td>
<td>1.39</td>
<td>1.111</td>
</tr>
<tr>
<td>10 Worry about doing badly in school (SP)</td>
<td>.377</td>
<td>.806</td>
<td>1.34</td>
<td>1.090</td>
</tr>
<tr>
<td>12 Worry that something will happen to family (SA)</td>
<td>.232</td>
<td>.810</td>
<td>1.35</td>
<td>1.111</td>
</tr>
<tr>
<td>13 Suddenly can’t breathe for no reason (PA)</td>
<td>.340</td>
<td>.807</td>
<td>1.16</td>
<td>1.037</td>
</tr>
<tr>
<td>14 Have to check things are done right (OC)</td>
<td>.221</td>
<td>.811</td>
<td>1.58</td>
<td>1.210</td>
</tr>
<tr>
<td>15 Scared to sleep alone (SA)</td>
<td>.360</td>
<td>.806</td>
<td>1.18</td>
<td>1.117</td>
</tr>
<tr>
<td>16 Trouble going to school (SA)</td>
<td>.347</td>
<td>.807</td>
<td>.86</td>
<td>1.057</td>
</tr>
<tr>
<td>18 Scared of dogs (PIF)</td>
<td>.287</td>
<td>.808</td>
<td>1.34</td>
<td>1.124</td>
</tr>
<tr>
<td>19 Can’t get bad thoughts out of head (OC)</td>
<td>.302</td>
<td>.808</td>
<td>1.13</td>
<td>1.077</td>
</tr>
<tr>
<td>20 Heart beats fast when I have a problem (GA)</td>
<td>.276</td>
<td>.809</td>
<td>1.53</td>
<td>1.047</td>
</tr>
<tr>
<td>21 Tremble or shake for no reason (PA)</td>
<td>.216</td>
<td>.811</td>
<td>.99</td>
<td>1.005</td>
</tr>
<tr>
<td>22 Worry that something bad will happen to me (GA)</td>
<td>.302</td>
<td>.808</td>
<td>1.27</td>
<td>1.121</td>
</tr>
<tr>
<td>23 Scared of doctors and dentists (PIF)</td>
<td>.440</td>
<td>.803</td>
<td>1.27</td>
<td>1.111</td>
</tr>
<tr>
<td>24 Feel shaky when I have a problem (GA)</td>
<td>.378</td>
<td>.806</td>
<td>1.30</td>
<td>1.074</td>
</tr>
<tr>
<td>25 Scared of high places or lifts (PIF)</td>
<td>.440</td>
<td>.803</td>
<td>1.22</td>
<td>1.081</td>
</tr>
<tr>
<td>27 Have to think special thoughts to stop bad things (OC)</td>
<td>.387</td>
<td>.805</td>
<td>1.53</td>
<td>1.021</td>
</tr>
<tr>
<td>28 Scared to travel in a car or bus (PA)</td>
<td>.300</td>
<td>.808</td>
<td>1.16</td>
<td>1.097</td>
</tr>
<tr>
<td>29 Worry what others think (SP)</td>
<td>.327</td>
<td>.807</td>
<td>1.26</td>
<td>1.069</td>
</tr>
<tr>
<td>30 Afraid of crowded spaces (PA)</td>
<td>.282</td>
<td>.809</td>
<td>1.42</td>
<td>1.079</td>
</tr>
<tr>
<td>32 Feel scared for no reason (PA)</td>
<td>.222</td>
<td>.811</td>
<td>1.21</td>
<td>1.058</td>
</tr>
<tr>
<td>33 Scared of insects or spiders (PIF)</td>
<td>.285</td>
<td>.809</td>
<td>1.48</td>
<td>1.087</td>
</tr>
<tr>
<td>34 Become dizzy or faint for no reason (PA)</td>
<td>.360</td>
<td>.806</td>
<td>1.15</td>
<td>1.091</td>
</tr>
<tr>
<td>Item Description</td>
<td>Cronbach’s Alpha (α) if Item Deleted</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>--------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 Afraid of talking in front of class (SP)</td>
<td>.393</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 Heart beats quickly for no reason (PA)</td>
<td>.235</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37 Worry that I will get scared for no reason (PA)</td>
<td>.267</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39 Afraid of small spaces (PA)</td>
<td>.339</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 Have to do things over and over (OC)</td>
<td>.105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41 Bothered by pictures in my mind (OC)</td>
<td>.256</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42 Do things just right to stop bad things (OC)</td>
<td>.221</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44 Scared to stay away from home overnight (SA)</td>
<td>.259</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Cronbach’s alpha (α) if item deleted*
Table 5.4

Principal-Components Analysis using Direct Oblimin Rotation for the Open-Ended Factor Solution

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
<th>VIII</th>
<th>IX</th>
<th>X</th>
<th>XI</th>
<th>XII</th>
<th>XIII</th>
<th>XIV</th>
</tr>
</thead>
<tbody>
<tr>
<td>25 Scared of high places or lifts (PIF)</td>
<td>.532</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23 Scared of doctors and dentists (PIF)</td>
<td>.531</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 Afraid of talking in front of class (SP)</td>
<td>.480</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27 Have to think special thoughts to stop bad things (OC)</td>
<td>.471</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Scared when taking a test (SP)</td>
<td>.462</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 Feel shaky when I have a problem (GA)</td>
<td>.458</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Worry about doing badly in school (SP)</td>
<td>.451</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Scared to sleep alone (SA)</td>
<td>.446</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13 Suddenly can’t breathe for no reason (PA)</td>
<td>.437</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34 Become dizzy or faint for no reason (PA)</td>
<td>.434</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Trouble going to school (SA)</td>
<td>.433</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29 Worry what others think (SP)</td>
<td>.420</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39 Afraid of small spaces (PA)</td>
<td>.415</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28 Scared to travel in a car or bus (PA)</td>
<td>.397</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Afraid of being home alone (SA)</td>
<td>.306</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14 Have to check things are done right (OC)</td>
<td>-.530</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Worry about being away from parents (SA)</td>
<td>.498</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>42 Do things just right to stop bad things (OC)</td>
<td>-.445</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Afraid to use public bathrooms (SP)</td>
<td>.402</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Funny feeling in tummy when I have a problem (GA)</td>
<td>.345</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21 Tremble or shake for no reason (PA)</td>
<td>-.539</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Worry that something will happen to family (SA)</td>
<td>.469</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>44 Scared to stay away from home overnight (SA)</td>
<td>.460</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Scared of dogs (PIF)</td>
<td>.358</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 Can’t get bad thoughts out of head (OC)</td>
<td>.482</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Scared of the dark (PIF)</td>
<td>-.408</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33 Scared of insects or spiders (PIF)</td>
<td>-.551</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32 Feel scared for no reason (PA)</td>
<td>.487</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Feel afraid of making a fool in front of others (SP)</td>
<td>.395</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Worry about things (GA)</td>
<td>-.469</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40 Have to do things over and over (OC)</td>
<td>.405</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Heart beats fast when I have a problem (GA)</td>
<td>-.396</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22 Worry that something bad will happen to me (GA)</td>
<td>-.443</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30 Afraid of crowded spaces (PA)</td>
<td>.422</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37 Worry that I will get scared for no reason (PA)</td>
<td>.378</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36 Heart beats quickly for no reason (PA)</td>
<td>.397</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>41 Bothered by pictures in my mind (OC)</td>
<td>.442</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Feel afraid (GA)</td>
<td>-.620</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Original scale in parentheses*

*Factor membership printed in bold type*
### Table 5.5

*Principal-Components Analysis using Direct Oblimin Rotation for the Six-Factor Solution*

<table>
<thead>
<tr>
<th>Item</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
</tr>
</thead>
<tbody>
<tr>
<td>23 Scared of high places or lifts (PIF)</td>
<td>.532</td>
<td>.532</td>
<td>.532</td>
<td>.532</td>
<td>.532</td>
<td>.532</td>
</tr>
<tr>
<td>23 Scared of doctors and dentists (PIF)</td>
<td>.531</td>
<td>.531</td>
<td>.531</td>
<td>.531</td>
<td>.531</td>
<td>.531</td>
</tr>
<tr>
<td>35 Afraid of talking in front of class (SP)</td>
<td>.480</td>
<td>.480</td>
<td>.480</td>
<td>.480</td>
<td>.480</td>
<td>.480</td>
</tr>
<tr>
<td>27 Have to think special thoughts to stop bad things (OC)</td>
<td>.471</td>
<td>.471</td>
<td>.471</td>
<td>.471</td>
<td>.471</td>
<td>.471</td>
</tr>
<tr>
<td>6 Scared when taking a test (SP)</td>
<td>.462</td>
<td>.462</td>
<td>.462</td>
<td>.462</td>
<td>.462</td>
<td>.462</td>
</tr>
<tr>
<td>24 Feel shaky when I have a problem (GA)</td>
<td>.458</td>
<td>.458</td>
<td>.458</td>
<td>.458</td>
<td>.458</td>
<td>.458</td>
</tr>
<tr>
<td>15 Scared to sleep alone (SA)</td>
<td>.446</td>
<td>.446</td>
<td>.446</td>
<td>.446</td>
<td>.446</td>
<td>.446</td>
</tr>
<tr>
<td>13 Suddenly can’t breathe for no reason (PA)</td>
<td>.437</td>
<td>.437</td>
<td>.437</td>
<td>.437</td>
<td>.437</td>
<td>.437</td>
</tr>
<tr>
<td>34 Become dizzy or faint for no reason (PA)</td>
<td>.434</td>
<td>.434</td>
<td>.434</td>
<td>.434</td>
<td>.434</td>
<td>.434</td>
</tr>
<tr>
<td>16 Trouble going to school (SA)</td>
<td>.433</td>
<td>.433</td>
<td>.433</td>
<td>.433</td>
<td>.433</td>
<td>.433</td>
</tr>
<tr>
<td>29 Worry what others think (SP)</td>
<td>.420</td>
<td>.420</td>
<td>.420</td>
<td>.420</td>
<td>.420</td>
<td>.420</td>
</tr>
<tr>
<td>39 Afraid of small spaces (PA)</td>
<td>.415</td>
<td>.415</td>
<td>.415</td>
<td>.415</td>
<td>.415</td>
<td>-.401</td>
</tr>
<tr>
<td>28 Scared to travel in a car or bus (PA)</td>
<td>.397</td>
<td>.397</td>
<td>.397</td>
<td>.397</td>
<td>.397</td>
<td>.397</td>
</tr>
<tr>
<td>22 Worry that something bad will happen to me (GA)</td>
<td>.378</td>
<td>.378</td>
<td>.378</td>
<td>.378</td>
<td>.378</td>
<td>.378</td>
</tr>
<tr>
<td>41 Bothered by pictures in my mind (OC)</td>
<td>.327</td>
<td>.327</td>
<td>.327</td>
<td>.327</td>
<td>.327</td>
<td>.327</td>
</tr>
<tr>
<td>37 Worry that I will get scared for no reason (PA)</td>
<td>.324</td>
<td>.324</td>
<td>.324</td>
<td>.324</td>
<td>.324</td>
<td>.324</td>
</tr>
<tr>
<td>4 Feel afraid (GA)</td>
<td>.323</td>
<td>.323</td>
<td>.323</td>
<td>.323</td>
<td>.323</td>
<td>.323</td>
</tr>
<tr>
<td>36 Heart beats quickly for no reason (PA)</td>
<td>.308</td>
<td>.308</td>
<td>.308</td>
<td>.308</td>
<td>.308</td>
<td>.308</td>
</tr>
<tr>
<td>5 Afraid of being home alone (SA)</td>
<td>.306</td>
<td>.306</td>
<td>.306</td>
<td>.306</td>
<td>.306</td>
<td>.306</td>
</tr>
<tr>
<td>14 Have to check things are done right (OC)</td>
<td>-.530</td>
<td>-.530</td>
<td>-.530</td>
<td>-.530</td>
<td>-.530</td>
<td>-.530</td>
</tr>
<tr>
<td>8 Worry about being away from parents (SA)</td>
<td>.498</td>
<td>.498</td>
<td>.498</td>
<td>.498</td>
<td>.498</td>
<td>.498</td>
</tr>
<tr>
<td>42 Do things just right to stop bad things (OC)</td>
<td>-.445</td>
<td>-.445</td>
<td>-.445</td>
<td>-.445</td>
<td>-.445</td>
<td>-.445</td>
</tr>
<tr>
<td>7 Afraid to use public bathrooms (SP)</td>
<td>.402</td>
<td>.402</td>
<td>.402</td>
<td>.402</td>
<td>.402</td>
<td>.402</td>
</tr>
<tr>
<td>3 Funny feeling in tummy when I have a problem (GA)</td>
<td>.345</td>
<td>.345</td>
<td>.345</td>
<td>.345</td>
<td>.345</td>
<td>.345</td>
</tr>
<tr>
<td>21 Tremble or shake for no reason (PA)</td>
<td>-.539</td>
<td>-.539</td>
<td>-.539</td>
<td>-.539</td>
<td>-.539</td>
<td>-.539</td>
</tr>
<tr>
<td>12 Worry that something will happen to family (SA)</td>
<td>.469</td>
<td>.469</td>
<td>.469</td>
<td>.469</td>
<td>.469</td>
<td>.469</td>
</tr>
<tr>
<td>44 Scared to stay away from home overnight (SA)</td>
<td>.460</td>
<td>.460</td>
<td>.460</td>
<td>.460</td>
<td>.460</td>
<td>.460</td>
</tr>
<tr>
<td>18 Scared of dogs (PIF)</td>
<td>.358</td>
<td>.358</td>
<td>.358</td>
<td>.358</td>
<td>.358</td>
<td>.358</td>
</tr>
<tr>
<td>19 Can’t get bad thoughts out of head (OC)</td>
<td>.482</td>
<td>.482</td>
<td>.482</td>
<td>.482</td>
<td>.482</td>
<td>.482</td>
</tr>
<tr>
<td>2 Scared of the dark (PIF)</td>
<td>-.408</td>
<td>-.408</td>
<td>-.408</td>
<td>-.408</td>
<td>-.408</td>
<td>-.408</td>
</tr>
<tr>
<td>33 Scared of insects or spiders (PIF)</td>
<td>-.551</td>
<td>-.551</td>
<td>-.551</td>
<td>-.551</td>
<td>-.551</td>
<td>-.551</td>
</tr>
<tr>
<td>32 Feel scared for no reason (PA)</td>
<td>.487</td>
<td>.487</td>
<td>.487</td>
<td>.487</td>
<td>.487</td>
<td>.487</td>
</tr>
<tr>
<td>9 Feel afraid of making a fool in front of others (SP)</td>
<td>.395</td>
<td>.395</td>
<td>.395</td>
<td>.395</td>
<td>.395</td>
<td>.395</td>
</tr>
<tr>
<td>1 Worry about things (GA)</td>
<td>-.469</td>
<td>-.469</td>
<td>-.469</td>
<td>-.469</td>
<td>-.469</td>
<td>-.469</td>
</tr>
<tr>
<td>30 Afraid of crowded spaces (PA)</td>
<td>.422</td>
<td>.422</td>
<td>.422</td>
<td>.422</td>
<td>.422</td>
<td>.422</td>
</tr>
<tr>
<td>40 Have to do things over and over (OC)</td>
<td>.405</td>
<td>.405</td>
<td>.405</td>
<td>.405</td>
<td>.405</td>
<td>.405</td>
</tr>
</tbody>
</table>
20 Heart beats fast when I have a problem (GA)  -0.396

Original scale in parentheses

Factor membership printed in bold type
Geisinger (2003) mentions the question of linguistic equivalence in translated measures, which refers to whether the language used in a translated measure corresponds with the language of the original measure. However, linguistic equivalence does not guarantee that items measure the same underlying construct across cultures, as different cultures may attach different meanings and interpretations to specific constructs (Duarte & Rossier, 2008). For example, during the focus group discussion, it became apparent that the isiXhosa translation of “nervous” (ekuphakuzeleni) held negative connotations for the learners. When asked what they think of when they hear the word “nervous”, Yamkela (M, Grade 3) said, “I don’t like that word, if a person says to me I’m nervous.” Lelethu (F, Grade 3) added, “I feel as if I want to beat that person.” Yamkela (M, Grade 3) continued, saying, “When a person says that to me I feel unhappy. I just go and tell my mom.” Thus, while the translation of “nervous” is linguistically equivalent, the meaning the isiXhosa-speaking learners in this sample attach to it – seeing it as an insult – is clearly different to the intended English meaning of describing a bodily feeling. The meaning attached to a specific word or construct within a particular culture can greatly influence the manner in which questions are interpreted and answered, and duly have an influence on the reliability and validity of the scale. It is highly likely that linguistic nuances coupled with cultural differences have an effect on the interpretation and understanding of items on the SCAS amongst isiXhosa-speaking children in South African.

It is also important to note that previous research with the SCAS in a South African sample did not yield the expected six-factor model (Perold, 2001), and provided only limited evidence that anxiety amongst South African children clustered into the categories proposed by the DSM-IV, on which the SCAS is based.

While it appears that the SCAS can be used to measure overall anxiety, the findings seem to indicate that the DSM-IV anxiety classifications proposed by the SCAS are not valid in this sample. Considering the overall high reliability of the scale, it could be valuable to
further explore the use of the SCAS amongst isiXhosa-speaking children in order to better conceptualise the manifestation and expression of anxiety in this population.

5.3.3 Internal consistency of the SEQ-C

A Cronbach’s alpha of .78 was obtained for the entire scale, which attests to good internal consistency (Field, 2009). However, the alpha value for each of the three subscales was low at .64 (academic self-efficacy), .54 (social self-efficacy) and .54 (emotional self-efficacy). The low alpha values for each of the subscales indicates that, in this specific research sample, the three-factor solution for the SEQ-C, as proposed by Muris (2001), does not provide a good conceptual fit for the data.

An Afrikaans version of the SEQ-C, used by Le Roux (2013) in a sample of 102 7–13-year-old children, also yielded low reliability for the social and emotional self-efficacy subscales in pre- and post-tests, at .58 and .45 for the social subscale and .21 and .61 for the emotional subscale respectively. It may thus be feasible that self-efficacy in South African children does not cluster into the three domains, i.e., academic, social, and emotional, proposed by Muris (2001).

EFA was subsequently conducted to determine whether a more suitable factor solution could be found.

5.3.4 Factor analysis for the SEQ-C

In order to determine how many factors with an Eigen value of greater than one emerge, EFA was conducted. Principal component analysis was used, and, as correlated factors were hypothesised, direct oblimin rotation was selected.

Item-by-item descriptive analyses for the SEQ-C are presented in Table 5.6. The item-total correlation for 10 of the items on the SEQ-C is below the recommended .3 (Field, 2009), indicating that the items do not correlate well with the overall scale. However, as only 14 of the 24 items displayed acceptable item-total correlation, no items were removed prior to factor analysis. Furthermore, as the deletion of any item would not significantly increase the
Cronbach’s alpha of the scale, all items were retained. EFA yielded a seven-factor structure that explained 54% of the variance (Table 5.7). Items 6 and 12 did not load convincingly on any factor (below .38) (Stevens, 2002) and were therefore allocated to the factor on which they loaded highest. Factor IV consisted of two items and Factor VII only one item, suggesting that these are trivial factors. Furthermore, items that loaded onto a factor are not related to a single theoretical construct and do not appear to be overtly logically connected, indicating that the seven-factor model does not provide a suitable solution.

The original study with the SEQ-C, conducted by Muris (2001), suggested a three-factor solution. Principal component analysis with direct oblimin rotation, as used by Muris (2001), specifying a three-factor solution, was therefore conducted after the open-ended EFA (Table 5.8). This model explained 37.8% of the variance. Items 1, 2, 10, 21 and 23 loaded below 0.38 on any factor and were, therefore, allocated to the factor on which they loaded highest. In the original study, items 1 and 23 also did not load satisfactorily onto any factor. The three factors that emerged contained a mix of items from the original three subscales, indicating that the factors that emerged were not pure indicators of the intended construct, i.e., academic, social and emotional self-efficacy. The resulting three-factor model also does not provide a suitable factor solution for the isiXhosa-version of the SEQ-C.

Although the overall reliability of the SEQ-C was good, the low subscale reliability and subsequent lack of a suitable factor structure raises questions about the utility of the SEQ-C within this research sample. While it appears that the SEQ-C can be used to measure overall anxiety, the findings seem to indicate that the self-efficacy subtypes suggested by Muris (2002) are not valid in this sample. However, as the items that did not fit are spread across all three subscales on the SEQ-C, the failure of these items to load onto any factor cannot only be attributed to the possible lack of relevance of the construct being measured by a specific
Table 5.6

*Item-by-item descriptive analyses for the SEQ-C*

<table>
<thead>
<tr>
<th>Item</th>
<th>Item-total (r)</th>
<th>α iid*</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Get teachers to help me when I get stuck on schoolwork (A)</td>
<td>.163</td>
<td>.780</td>
<td>4.31</td>
<td>1.297</td>
</tr>
<tr>
<td>Express my opinions when other classmates disagree with me (S)</td>
<td>.302</td>
<td>.773</td>
<td>3.22</td>
<td>1.563</td>
</tr>
<tr>
<td>Cheer myself up when an unpleasant event has happened (E)</td>
<td>.242</td>
<td>.777</td>
<td>2.92</td>
<td>1.598</td>
</tr>
<tr>
<td>Study when there are other interesting things to do (A)</td>
<td>.278</td>
<td>.774</td>
<td>3.78</td>
<td>1.354</td>
</tr>
<tr>
<td>Become calm again when I am very scared (E)</td>
<td>.199</td>
<td>.779</td>
<td>3.56</td>
<td>1.478</td>
</tr>
<tr>
<td>Become friends with other children (S)</td>
<td>.368</td>
<td>.769</td>
<td>4.25</td>
<td>1.231</td>
</tr>
<tr>
<td>Study a chapter for a test (A)</td>
<td>.250</td>
<td>.775</td>
<td>4.21</td>
<td>1.121</td>
</tr>
<tr>
<td>Have a chat with an unfamiliar person (S)</td>
<td>-.032</td>
<td>.794</td>
<td>2.09</td>
<td>1.549</td>
</tr>
<tr>
<td>Prevent myself becoming nervous (E)</td>
<td>.162</td>
<td>.781</td>
<td>3.85</td>
<td>1.419</td>
</tr>
<tr>
<td>Finishing all my homework every day (A)</td>
<td>.397</td>
<td>.769</td>
<td>4.54</td>
<td>1.026</td>
</tr>
<tr>
<td>Work in harmony with my classmates (S)</td>
<td>.472</td>
<td>.764</td>
<td>4.20</td>
<td>1.233</td>
</tr>
<tr>
<td>Control my feelings (E)</td>
<td>.388</td>
<td>.768</td>
<td>4.06</td>
<td>1.343</td>
</tr>
<tr>
<td>Pay attention during every class (A)</td>
<td>.482</td>
<td>.762</td>
<td>3.95</td>
<td>1.406</td>
</tr>
<tr>
<td>Tell other children that they are doing something that I don’t like (S)</td>
<td>.410</td>
<td>.766</td>
<td>3.66</td>
<td>1.569</td>
</tr>
<tr>
<td>Give myself a pep-talk when I feel low (E)</td>
<td>.285</td>
<td>.774</td>
<td>3.86</td>
<td>1.452</td>
</tr>
<tr>
<td>Understand all subjects in school (A)</td>
<td>.382</td>
<td>.769</td>
<td>4.44</td>
<td>1.100</td>
</tr>
<tr>
<td>Tell a funny event to a group of children (S)</td>
<td>.377</td>
<td>.768</td>
<td>4.16</td>
<td>1.433</td>
</tr>
<tr>
<td>Tell a friend that I don’t feel well (E)</td>
<td>.366</td>
<td>.769</td>
<td>4.13</td>
<td>1.330</td>
</tr>
<tr>
<td>Satisfy my parents with my schoolwork (A)</td>
<td>.502</td>
<td>.767</td>
<td>4.61</td>
<td>.849</td>
</tr>
<tr>
<td>Stay friends with other children (S)</td>
<td>.537</td>
<td>.763</td>
<td>4.40</td>
<td>1.042</td>
</tr>
<tr>
<td>Prevent quarrels with other children (S)</td>
<td>.368</td>
<td>.769</td>
<td>3.74</td>
<td>1.527</td>
</tr>
<tr>
<td>Pass a test (A)</td>
<td>.452</td>
<td>.765</td>
<td>4.24</td>
<td>1.199</td>
</tr>
<tr>
<td>Prevent quarrels with other children (S)</td>
<td>.259</td>
<td>.775</td>
<td>4.27</td>
<td>1.136</td>
</tr>
<tr>
<td>Not worry about things that might happen (E)</td>
<td>.278</td>
<td>.774</td>
<td>3.83</td>
<td>1.349</td>
</tr>
</tbody>
</table>

*Cronbach’s alpha (α) if item deleted*
Table 5.7

*Principal-Components Analysis using Direct Oblimin Rotation for the Open-Ended Factor Solution*

<table>
<thead>
<tr>
<th></th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
<th>V</th>
<th>VI</th>
<th>VII</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 Satisfy my parents with my schoolwork (A)</td>
<td>.771</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16 Understand all subjects in school (A)</td>
<td>.739</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 Stay friends with other children (S)</td>
<td>.662</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11 Work in harmony with my classmates (S)</td>
<td>.615</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10 Finishing all my homework every day (A)</td>
<td>.400</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 Give myself a pep-talk when I feel low (E)</td>
<td></td>
<td>.671</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 Have a chat with an unfamiliar person (S)</td>
<td></td>
<td>.564</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Become calm again when I am very scared (E)</td>
<td></td>
<td>.530</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Cheer myself up when an unpleasant event has happened (E)</td>
<td></td>
<td>.523</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Study a chapter for a test (A)</td>
<td></td>
<td></td>
<td>-.436</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Prevent myself becoming nervous (E)</td>
<td></td>
<td></td>
<td></td>
<td>.744</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18 Tell a friend that I don’t feel well (E)</td>
<td></td>
<td></td>
<td></td>
<td>.489</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 Control my feelings (E)</td>
<td></td>
<td></td>
<td></td>
<td>.364</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6 Become friends with other children (S)</td>
<td></td>
<td></td>
<td></td>
<td>.312</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Study when there are other interesting things to do (A)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.696</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Get teachers to help me when I get stuck on schoolwork (A)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.581</td>
<td></td>
</tr>
<tr>
<td>23 Prevent quarrels with other children (S)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.766</td>
</tr>
<tr>
<td>21 Supress unpleasant thoughts (E)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.619</td>
</tr>
<tr>
<td>13 Pay attention during every class (A)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.448</td>
</tr>
<tr>
<td>2 Express my opinions when other classmates disagree with me (S)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.732</td>
</tr>
<tr>
<td>22 Pass a test (A)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.586</td>
</tr>
<tr>
<td>14 Tell other children that they are doing something that I don’t like</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.579</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------</td>
<td>----</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Tell a funny event to a group of children (S)</td>
<td>-.442</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Not worry about things that might happen (E)</td>
<td>-.660</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Original scale in parentheses*

*Factor membership printed in bold type*
### Table 5.8

**Principal-Components Analysis using Direct Oblimin Rotation for the Three-Factor Solution**

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor I</th>
<th>Factor II</th>
<th>Factor III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understand all subjects in school (A)</td>
<td>.623</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tell a funny event to a group of children (S)</td>
<td>.595</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Work in harmony with my classmates (S)</td>
<td>.578</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfy my parents with my schoolwork (A)</td>
<td>.559</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pass a test (A)</td>
<td>.541</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have a chat with an unfamiliar person (S)</td>
<td>-.519</td>
<td></td>
<td>.407</td>
</tr>
<tr>
<td>Stay friends with other children (S)</td>
<td>.506</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cheer myself up when an unpleasant event has happened (E)</td>
<td>.700</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Become calm again when I am very scared (E)</td>
<td>.601</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give myself a pep-talk when I feel low (E)</td>
<td>.525</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not worry about things that might happen (E)</td>
<td>.427</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pay attention during every class (A)</td>
<td>.422</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Express my opinions when other classmates disagree with me (S)</td>
<td>.295</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tell a friend that I don’t feel well (E)</td>
<td>.710</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevent myself becoming nervous (E)</td>
<td>.580</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Become friends with other children (S)</td>
<td>.516</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Control my feelings (E)</td>
<td>.495</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tell other children that they are doing something that I don’t like (S)</td>
<td>.463</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study a chapter for a test (A)</td>
<td>.408</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Study when there are other interesting things to do (A)</td>
<td>.393</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finishing all my homework every day (A)</td>
<td>.379</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supress unpleasant thoughts (E)</td>
<td>.316</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prevent quarrels with other children (S)</td>
<td>.290</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Get teachers to help me when I get stuck on schoolwork (A)</td>
<td>.252</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Original scale in parentheses*

*Factor membership printed in bold type*
subscales in this sample. The five items that did not load satisfactorily onto any factor when a three-factor solution was specified belonged to the Social Self-efficacy (item 2 and 23), Emotional Self-efficacy (item 21) and Academic Self-Efficacy (items 1 and 10) subscales on the original SEQ-C. Certain words, such as “express” (item 2), “unpleasant” (item 21) and “quarrels” (item 23) could have been too difficult for the participants to understand, considering their age group. As with the SCAS, it is also likely that cultural understandings and interpretations of terms, even if they are linguistically equivalent to the original measure, could impact on how learners answered the questions.

Furthermore, certain answers on the SEQ-C may be influenced more by learners’ contextual reality than their perceived ability to perform a task. For example, when asked about the question *I can have a chat with an unfamiliar person*, learners unanimously said no. When explanation was elicited from the learners, it was clear that they had been taught that talking to strangers was dangerous. Nelani (F, Grade 3) said, “[If I talk to a stranger] that person would kidnap me and cover my mouth.” Asemahle (F, Grade 3) said, “That person would ask me to go with him but he wants to kill me.” “He can abduct you, put you in his car then go off,” Siposethu (F, Grade 2) explained.

Although the overall reliability of the SEQ-C is good in this sample, it is not clear whether the intended construct, i.e., self-efficacy, is being measured in this sample. This raises questions as to how self-efficacy manifests in this sample. The bio-ecological systems theory once again aids understanding of how environmental, cultural, biological, and psychological variables can influence the understanding and expression of a construct, in this case self-efficacy, within different communities. Considering that learners from this sample come from a collectivist community that values group harmony above personal achievement, it is tenable that self-efficacy, which focuses on the individual rather than the group, manifests differently than it does in communities which are more individualistic. Oettinger and Zosuls (2006) state that cultural values affect the development of self-efficacy through their influence on an
individual’s proximal context (i.e., its institutions such as the family, school and community) and sources of efficacy appraisal (i.e., mastery experience, vicarious performance, persuasion and physiological processes). In other words, culture affects the various systems in which an individual is embedded, like family, school, and the wider community. As these systems are important sources of efficacy appraisal, the societal values and patterns reflected by these institutions will indubitably influence an individual’s concept of self-efficacy, the value they place on it and the factors that influence the development of self-efficacy (Oettinger & Zosuls, 2005).

5.3.5 Correlation between anxiety and self-efficacy

In light of previous research, a significant negative relationship between anxiety and self-efficacy was expected. In a sample of 596 Belgian children aged 12–19 years, Muris (2002) found that self-efficacy was negatively correlated with symptoms of anxiety and depression. In a sample of 282 Italian children, Bandura et al. (1999) found that social and academic self-efficacy were negatively correlated with depression scores (Bandura et al., 1999).

In the present study, a small negative correlation was obtained between the total SCAS score and the total SEQ-C score, as well as between scores on each of the three self-efficacy subscales. Nevertheless, none of these correlations were significant (Table 5.9).

Table 5.9

Pearson’s R correlation between Anxiety and Self-efficacy
Both Bandura et al. (1999) and Muris (2001) found that the relationship between affective disorders and self-efficacy was carried by academic and emotional self-efficacy, i.e., the correlation between academic and emotional self-efficacy and depression was stronger than the correlation between social self-efficacy and depression. While results are insignificant, it appears that, in this research sample, academic and emotional self-efficacy is also more strongly correlated with anxiety than social self-efficacy is.

The existence of a negative relationship between anxiety and self-efficacy, albeit insignificant, provides support for the supposition that a theoretically meaningful relationship does exist between anxiety and self-efficacy in this research sample. However, further research with larger sample sizes is required to establish whether anxiety is indeed negatively correlated with self-efficacy amongst isiXhosa children. Understanding this relationship is important, as the results of such an enquiry could help researchers understand whether self-efficacy could act as either a risk or protective factor for mental health outcomes and aid in the development and implementation of appropriate early intervention programmes.

5.4 Overview of findings

This study aimed to investigate whether isiXhosa-versions of the SCAS and SEQ-C could serve as reliable and valid measuring instruments in a sample of 6–10-year-old isiXhosa learners in the Western Cape. Qualitative data analysis was used to investigate the psychometric properties (i.e., reliability and factor structure) of the translated versions of the SCAS and SEQ-C, to determine if a significant negative correlation exists between self-
efficacy and anxiety, to determine if significant correlations exist between anxiety and age and self-efficacy and age and to determine whether there are significant differences in SEQ-C and SCAS scores by gender. Qualitative focus group interviews were conducted to explore how participants interpreted the translated versions of the questionnaires, and whether cultural and/or linguistic differences influenced how participants understood and, therefore, answered the questions.

While all the expected statistical results were not obtained, some of the psychometric properties of the SCAS and SEQ-C are promising, which provides limited support for the reliability of their use within this sample. Nevertheless, results obtained from both scales should be interpreted with caution. Results from the focus groups indicated that cultural and linguistic differences appear to influence learners’ understanding and interpretation of the questionnaires and may therefore have an impact on the reliability of both the SCAS and SEQ-C.

In light of the findings discussed in this chapter, the seven hypotheses postulated for this study can be concluded as follows:

**Hypothesis 1:**

\( H_0: \) The SCAS and SEQ-C will not display acceptable reliability.

\( H_1: \) The SCAS and SEQ-C will display acceptable reliability (\( \alpha > .7 \)) (Field, 2009).

Both the SCAS and SEQ-C displayed acceptable reliability, therefore the null hypothesis can be rejected.

**Hypothesis 2:**

\( H_0: \) The SCAS and SEQ-C will not yield the expected factor structures.

\( H_1: \) The SCAS and SEQ-C will yield the expected 6- and 3-factor solutions respectively.

Neither the SCAS nor the SEQ-C yielded the expected factor structures, therefore the null hypothesis is retained.

**Hypothesis 3:**
H0: There will be no correlation between self-efficacy and anxiety.

H1: There will be a significant negative correlation between self-efficacy and anxiety.

A small negative correlation was obtained between the total SCAS score and the total SEQ-C score. Nevertheless, as the correlation was not significant, the null hypothesis is retained.

**Hypothesis 4:**

H0: There will be no correlation between self-efficacy and age.

H1: There will be a significant positive correlation between self-efficacy and age.

As a significant positive relationship was found between self-efficacy and age, the null hypothesis can be rejected.

**Hypothesis 5:**

H0: There will be no correlation between anxiety and age.

H1: There will be a significant negative correlation between anxiety and age.

A significant positive correlation was found between anxiety and age, therefore the null hypothesis is rejected.

**Hypothesis 6:**

H0: There will be no difference in self-efficacy scores between girls and boys.

H1: Girls will display significantly lower levels of self-efficacy than boys.

Girls scored significantly higher than boys on the total SEQ-C, therefore the null hypothesis is rejected.

**Hypothesis 7:**

H0: There will be no difference in anxiety scores between girls and boys.

H1: Girls will display significantly higher levels of anxiety than boys.

Girls scored significantly higher than boys on three of the SCAS subscales. However, as the effect for the score on the total scale was not significant, the null hypothesis is retained.
Research confirms that a variety of risk factors must be considered when assessing anxiety problems in children (Pahl, Barret, & Gullo, 2012; Van Brakel Muris, Bögels, & Thomassen, 2006). The findings of this study reiterated the importance of considering all the environmental, cultural, biological, and psychological variables that influence the developing child, and which may, in turn, influence the development, expression and manifestation of anxiety in children. It can, therefore, be argued that Bronfenbrenner’s bio-ecological systems theory provides a holistic framework within which to consider the various factors that influence the developing child and which may impact on self-efficacy and anxiety in middle childhood. Integrating developmental theories into this framework can provide an even more detailed and dynamic model through which to assess the development of childhood anxiety.

With regards to this study, the results clearly highlighted how intra- and interindivdidual factors can impact childhood anxiety. This in turn emphasises the importance of developing valid and reliable screening instruments, standardised for populations other than White South Africans, to contribute to better assessment and detection of anxiety symptomology amongst South African children.
CHAPTER 6: SUMMARY OF FINDINGS, LIMITATIONS, RECOMMENDATIONS AND CONCLUSION

A summary of the main findings, the limitations of the study and recommendations for future research are presented in this chapter.

6.1 Summary of findings

To reiterate, this study aimed to answer the following research question:

Can the isiXhosa versions of the SCAS and SEQ-C serve as valid and reliable measuring instruments in a sample of 6–10-year-old isiXhosa learners in the Western Cape?

From this research question, five objectives were formulated. The findings of this study will be summarised at hand of these objectives.

– To investigate the psychometric properties (i.e., factor structure, reliability and validity) of the translated versions of the SCAS and SEQ-C.

The overall reliability for both scales was good, but the reliability for the subscales was low. Neither the SCAS nor the SEQ-C yielded the factor structures expected. Furthermore, suitable alternative factor structures for the isiXhosa version could not be obtained for either of the scales.

– To ascertain if a significant negative correlation exists between self-efficacy and anxiety.

A small negative relationship between the total SCAS score and the total SEQ-C score and scores on each of the three subscales was obtained. Although insignificant, the fact that these two scales are correlated in a theoretically meaningful way provides some support for the validity of these scales within this sample.

– To ascertain if significant correlations exist between anxiety and age and self-efficacy and age.

Contrary to what was reported in previous research, a significant positive relationship was found between total anxiety scores and age, indicating that anxiety increased with age in this sample. This increase in anxiety with age could well be attributed to older children’s greater
awareness and understanding of their circumstances. As children get older, they become more
aware of poverty and the environmental dangers and lack of security that accompany economic
hardship. As a result, older children are increasingly more likely to feel the psychological
effects of poverty, possibly resulting in heightened levels of anxiety (Save the Children, 2016).

As expected, total self-efficacy scores were positively correlated with age.

- To determine whether there are significant differences in SEQ-C and SCAS scores by
gender.

In line with previous research, girls scored higher than boys on total SCAS score, as
well as on the separation anxiety, physical injury fears, and obsessions/compulsions subscales.
A significant difference in scores was only found on the separation anxiety subscale.

On the SEQ-C, girls scored higher than boys on total self-efficacy, and on each of the
three self-efficacy subscales. Significant differences were found for the total SEQ-C score and
the academic subscale. Based on findings from previous research, it was expected that girls
would score higher than boys on academic and social self-efficacy but lower on total and
emotional self-efficacy.

- To explore how participants interpreted the translated versions of the questionnaires, and
whether cultural and/or linguistic differences influenced how participants understood and
therefore answered the questions.

The focus group interviews provided some insight on how cultural and linguistic
differences affected learners’ understanding of the translated questionnaires, and also how they
answered the questions. From the prevalence of certain responses, and the exploration thereof
in the focus groups, it became apparent that the participants’ living environment also played a
significant role in how they answered certain questions. Further exploration into learners’
interpretation of the questions is necessary before definitive conclusions can be reached from
the scores on the questionnaires within this sample.
6.2 Limitations

6.2.1 Language and translation issues

The translation of the questionnaires could have played a role in the outcome of this study, as the psychological constructs represented by the translated questions could have differed from what was intended by the English versions of the scales. It is also likely that different cultural meanings attached to the same constructs influenced how questions were answered.

Furthermore, as I am not fluent in isiXhosa, I relied on research assistants to administer the questionnaires to the participants. I was not able to regulate the instructions and explanations given by the research assistants, or answer any questions the participants had. This may have also have influenced the eventual outcome of this study.

6.2.2 Age of participants

The limited literacy skills of the 6- and 7-year-olds in this study necessitated lengthy explanations from the research assistants, which could have led to different interpretations of the questions.

While the SCAS has been successfully used with a sample of 7-year-olds (Muris et al., 2000), it was originally intended for use with children aged eight and above, and some concepts in the questionnaires appeared too difficult for the very young learners in this study. Lack of understanding of the questions may have resulted in learners providing answers different to what the question intended to elicit.

6.2.3 Sample size

Kass and Tinsley’s (1979) recommendation of having between five and 10 participants per variable when conducting factor analysis was followed. However, research has shown that samples of 300 or more provide a more stable factor solution (Field, 2009). A larger sample size would thus have provided more reliable results. Furthermore, the small sample size limits the generalisation of results beyond this sample.
6.2.4 Methodology

Convenience sampling of the school where research was conducted as well as research participants could have resulted in possible selection bias. Accordingly, the findings of this study may not be generalisable to all isiXhosa children residing in Stellenbosch, South Africa.

No piloting procedures were used in the present study. Conducting a pilot study with the aim of revising items and then re-administering the questionnaires could have resulted in fewer items that did not load saliently onto a factor, and provided a suitable factor solution for both the SCAS and SEQ-C.

6.3 Recommendations for future research

In view of the results of this study, the following recommendations may be considered for future research on childhood anxiety amongst South African children. Firstly, considering the cultural and linguistic diversity of South Africa, it is imperative to ascertain the extent to which the psychological concepts being measured have the same meaning across and within the different cultural groups within South Africa. Further verification of the appropriate wording of items consistent with colloquial isiXhosa speech, preferably in cooperation with isiXhosa learners and teachers, is required to ensure the language usage is relevant and understandable for the intended population in which it is to be used.

With regards to the reliability and validity of the translated versions of the SCAS and SEQ-C, other aspects of reliability, such as interrater reliability and test-retest reliability, should be examined in the future. Additional research is also needed to confirm which items should be retained in the SCAS and SEQ-C. The convergent validity of the SCAS with other measures of childhood anxiety should also be established.

The participants of this study were all children in middle childhood. Future studies using adolescents will be valuable to verify the psychometric properties of the isiXhosa versions of the SCAS and SEQ-C with older children and to establish the utility of these measures within this group.
Future research should also investigate whether the norms of the original SCAS are applicable across cultures and to translated versions of the measure within the South African context.

Lastly, in light of the high levels of anxiety amongst marginalised children in South Africa, as illustrated by this study and previous research, focus should be placed on early intervention in an attempt to ameliorate the potentially debilitating experiences of anxiety amongst South African children, specifically children from marginalised communities. Within the schooling environment, teachers could be equipped with the necessary skills to recognise and address symptoms of anxiety within the classroom. This would enable them to recognise symptoms of anxiety and know when and how to refer learners with serious symptoms for professional services.

6.4 Conclusion

The development of childhood anxiety disorders involves a complex interaction between environmental, cultural, biological, and psychological variables (Donovan & Spence, 2000; Mash & Wolfe, 2016). To add to this complexity, factors such as differences in beliefs, traditions and child-rearing practices across cultures have an effect on the occurrence and symptomatic presentation of anxiety, how it is experienced by the child and how it is perceived by others (Mash & Wolfe, 2016). The interplay of these factors on the development and presentation of childhood anxiety makes it especially difficult to pinpoint causes of anxiety, as well as to assess and treat it. This difficulty is compounded by the fact that mental health resources are scarce in many communities across South Africa.

Early detection of mental illness in children and adults can significantly reduce the negative impact thereof on the lives of those affected. However, to do so requires the availability of reliable and valid screening tools, and many anxiety measures currently used in the South African context are not adapted for use within our diverse, multicultural context (Foxcroft et al., 2004).
This study has drawn attention to how linguistic nuances and cultural practices influence children’s understanding of questions on standardised measures, which in turn influences how they answer the questions. This underscores the fact that anxiety measures developed in Western countries cannot necessarily be used reliably amongst all population groups in South Africa and stresses the need for the development of culturally appropriate tests.

While the results from tests with limited reliability should be interpreted with caution, the high levels of anxiety found amongst children in this study, and in previous research conducted in South Africa, highlights the need to further delve into the various possible causes of the heightened levels of anxiety reported by South African children. It then follows that the development and implementation of appropriate early intervention programmes should also enjoy attention.
REFERENCES


Eley, T. C. (2001). Contributions of behavioral genetics research: Quantifying genetic, shared environmental and nonshared environmental influences. In M. D. Vasey & R. Mark...


dHeader


APPENDIX A: PERMISSION FOR USE OF MEASURING INSTRUMENTS

2/3/2017
Re: SEQ-C translation

Muris Peter (PSYCHOLOGY) <peter.muris@maastrichtuniversity.nl>
Thu 2/9/2017 6:53 AM

To: Botha, J, Me <16429664@sun.ac.za> <16429664@sun.ac.za>

Self efficacy is concerned with the perceived ability to conduct certain behaviours
You should make sure that this is still measured by the scale
If so then that’s fine with me
All the best Peter

On Feb 9, 2017, at 7:07 PM, “Botha, J, Me <16429664@sun.ac.za>” <16429664@sun.ac.za> wrote:

Prof Muris

Regarding my previous email about the translation of the SEQ-C - would it be permissible to alter
the wording of the questions to change it into a statement, e.g. “How well can you get...” into “I
can get...”. The statements will be rated on the exact same scale as the original.

There is no direct translation for the phrase ‘how well’ in isiXhosa and changing the wording will thus ease translation and make the questionnaire easier to understand for children.

I have discussed these changes with my supervisor, who is a native isiXhosa-speaker, and he believes the change will be beneficial.

Your feedback is appreciated
Jeanine Botha

From: Botha, J, Me <16429664@sun.ac.za>
Sent: Thursday, February 2, 2017 10:44:51 PM
To: Muris Peter (PSYCHOLOGY)
Subject: Re: SEQ-C translation

Prof Muris

Thank you for the scale!

The population I am looking at is very small, which is why I've included the 6-year-olds. I will be doing cognitive testing and a pilot study with the translated version before doing my study. If it doesn't work with the young ones I'll only include the older children in my sample.

Thanks again
Jeanine

From: Muris Peter (PSYCHOLOGY) <peter.muris@maastrichtuniversity.nl>
Sent: Thursday, February 2, 2017 7:55:47 PM
To: Botha, J, Me <16429664@sun.ac.za>
Subject: RE: SEQ-C translation

No problem Jeanine
Here you go!

About the use of the scale in 6-year-olds,

https://outlook.office.com/owa/?viewmode=ReadMessage&itemId=AAAIAABBNDgbYmZLThMMtNtNOJAC21N2ZmTU4NzIjCTRjZTA5NGAAA... 1/2
Re: SEQ-C translation - Botha, J, Me <16429664@sun.ac.za>

They may have difficulty with understanding the rating scale ...
All the best Peter

From: Botha, J, Me <16429664@sun.ac.za> [mailto:16429664@sun.ac.za]
Sent: vrijdag 3 februari 2017 8:22
To: Muris Peter (PSYCHOLOGY)
Cc: Somhlaba, Notha Z., Dr <pes@sun.ac.za>
Subject: SEQ-C translation

Dear Professor Muris,
I am a Psychology Master's student at Stellenbosch University in Stellenbosch, South Africa. I am currently conducting a study on the effects of non-mother tongue education on the self-efficacy and anxiety levels of a group of 6-9 year old isiXhosa (African language) learners.

I hereby request permission to use the SEQ-C and to translate it into isiXhosa in order to administer it to these learners.

If there are any further questions, please feel free to conduct me or my supervisor, Dr Notha Somhlaba, at pes@sun.ac.za. Professor Helene Loxton, with whom you have worked, is serving as my mentor for this study and can also be contacted.

Kind regards
Jeanne Botha

Get Outlook for iOS
Re: SCAS permission to use

Sue Spence <s.spence@griffith.edu.au>

Fri 2/3/2017 4:29 PM

To: Botha, J. Me <16429664@sun.ac.za> <16429664@sun.ac.za>

Dear Jeanine

You have my permission to use the SCAS and to translate it into isiZulu. Please check on the internet first to make sure that nobody has already done that. You then have my permission to use it in research and clinical practice but not to re-publish it nor for commercial gain. That would need a licence.

In doing the translation, please make sure to use 2 independent, bilingual translators to do forward and backward translation checks.

Finally, the SCAS was originally designed for 9 year olds in terms of the reading level, so you would need to recommend use of either the parent version or to read it aloud and then ensure understanding of items with the younger age group.

Good luck with the study.

With kind regards

Sue

Susan H Spence, AO, FASSA, FAPS, PhD, MBA., BSc (Hons)
Professor Emeritus, School of Applied Psychology and Australian Institute of Suicide Research and Prevention,
Level 1, Building M24, Mount Gravatt Campus,
Griffith University,
176, Messina Ridge Rd., Mt Gravatt,
QLD, 4121
Australia
Email: s.spence@griffith.edu.au
Tel: +61 7 37353333

http://www.brave-online.com/
http://www.scaswebsite.com/

On Fri, Feb 3, 2017 at 5:07 PM, Botha, J. Me <16429664@sun.ac.za> <16429664@sun.ac.za> wrote:

To whom it may concern

I am a Psychology Master's student at Stellenbosch University in Stellenbosch, South Africa. I am currently conducting a study on the effects of non-mother tongue education on the self-efficacy and anxiety levels of a group of 6-9 year old isiXhosa (African language) learners.

I hereby request permission to use the SCAS and to translate it into isiXhosa in order to administer it to these learners.

If there are any further questions, please feel free to conduct me or my supervisor, Dr. Nicoa Somhlaba, at njs@sun.ac.za

Kind regards

Jeanine Botha

Get Outlook for iOS

https://outlook.office.com/owa?viewmode=ReadMessage&itemID=AAAMXEDNDTltym2kTihlMnTht0DJ2ZS31N2ZmTU4NjZCmTRjZTAANGAAAA...
APPENDIX B: ETHICAL CLEARANCE FROM REC STELLENBOSCH UNIVERSITY

APPROVAL NOTICE
Response to Modifications

20 June 2017

Project number: SU-HSD-004332

Project title: Self-efficacy and anxiety in a group of isiXhosa-speaking learners receiving second-language education in Western Cape schools.

Dear Jeanine Botha

Your response to modifications received on 15 May 2017 was reviewed by the REC: Humanities and has been approved.

Ethics approval period: 20 June 2017 – 19 June 2018

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (SU-HSD-004332) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary).

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee: Human Research (Humanities)

National Health Research Ethics Committee (NHREC) registration number: REC-050411-032.
The Research Ethics Committee: Humanities complies with the SA National Health Act No.61 2003 as it pertains to health research. In addition, this committee abides by the ethical norms and principles for research established by the Declaration of Helsinki (2013) and the Department of Health Guidelines for Ethical Research: Principles, Structures and Processes (2nd Ed.) 2015. Annually a number of projects may be selected randomly for an external audit.
8 December 2017

Project number: SU-HSD-004332

Project title: Self-efficacy and anxiety in a group of isiXhosa-speaking learners receiving second-language education in Western Cape schools.

Dear Jeanine Botha

Your amendment submitted on 31 October 2017 was reviewed and approved by the REC: Humanities.

Ethics approval period: 20 June 2017 – 19 June 2018

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (SU-HSD-004332) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee: Human Research (Humanities)
APPENDIX C: PERMISSION TO CONDUCT RESEARCH FROM WCED

Directorate: Research
Audrey.wyngaard@westerncape.gov.za
tel: +27 21 467 9272
fax: 0865902282
Private Bag x9114, Cape Town, 8000
wced.wcape.gov.za

REFERENCE: 20170313 –9108
ENQUIRIES: Dr A T Wyngaard

Mrs Jeanine Botha
52 Amatoni
Herold Street
Stellenbosch
7600

Dear Mrs Jeanine Botha

RESEARCH PROPOSAL: SELF-EFFICACY AND ANXIETY IN A GROUP OF ISIXHOSA-SPEAKING LEARNERS RECEIVING SECOND-LANGUAGE EDUCATION IN WESTERN CAPE SCHOOLS

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators’ programmes are not to be interrupted.
5. The Study is to be conducted from 24 July 2017 till 29 September 2017
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:
The Director: Research Services
Western Cape Education Department
Private Bag X9114
CAPE TOWN
8000

We wish you success in your research.

Kind regards,
Signed: Dr Audrey T Wyngaard
Directorate: Research
DATE: 14 March 2017

Stellenbosch University  https://scholar.sun.ac.za
Dear Mrs Jeanine Botha

RESEARCH PROPOSAL: SELF-EFFICACY AND ANXIETY IN A GROUP OF ISIXHOSA-SPEAKING LEARNERS RECEIVING SECOND-LANGUAGE EDUCATION IN WESTERN CAPE SCHOOLS

Your application to conduct the above-mentioned research in schools in the Western Cape has been approved subject to the following conditions:

1. Principals, educators and learners are under no obligation to assist you in your investigation.
2. Principals, educators, learners and schools should not be identifiable in any way from the results of the investigation.
3. You make all the arrangements concerning your investigation.
4. Educators' programmes are not to be interrupted.
5. The Study is to be conducted from 01 February 2018 till 29 June 2018
6. No research can be conducted during the fourth term as schools are preparing and finalizing syllabi for examinations (October to December).
7. Should you wish to extend the period of your survey, please contact Dr A.T Wyngaard at the contact numbers above quoting the reference number?
8. A photocopy of this letter is submitted to the principal where the intended research is to be conducted.
9. Your research will be limited to the list of schools as forwarded to the Western Cape Education Department.
10. A brief summary of the content, findings and recommendations is provided to the Director: Research Services.
11. The Department receives a copy of the completed report/dissertation/thesis addressed to:

   The Director: Research Services
   Western Cape Education Department
   Private Bag X9114
   CAPE TOWN
   8000

We wish you success in your research.

Kind regards.
Signed: Dr Audrey T Wyngaard
Directorate: Research
DATE: 04 October 2017
APPENDIX D: REQUEST TO CONDUCT RESEARCH AT SCHOOLS

Information letter: schools

13 May 2017

Dear Principal,

Request for your permission to allow me to participate in a research project

Title of project:
Self-efficacy and anxiety in a group of isiXhosa-speaking learners receiving second-language education in Western Cape schools.

I am conducting research as a graduate student at Stellenbosch University to examine whether non-mother tongue education affects learners' self-efficacy and anxiety levels. I, therefore, ask for your permission to conduct this research on children in Grades 1–3 of your school. Previous research indicates that anxiety disorders are among the most common psychiatric disorders of childhood and that they can significantly interfere in a child’s normal daily functioning. South African research indicates that the prevalence of anxiety disorders amongst South African children is high and that South African children also display higher levels of anxiety than their Western peers. Furthermore, research indicates that low levels of self-efficacy contribute to feelings of anxiety.

Considering the known effects of non-mother tongue education on self-efficacy and anxiety, it is imperative for research to be undertaken to examine the self-efficacy and anxiety of non-mother tongue learners within the South African context. Data from such a study could be used to identify at-risk individuals in order to develop and implement future interventions for learners receiving non-mother tongue education. Intervention programmes would aim to minimize the symptoms of anxiety through increasing self-efficacy and preventing the development of anxiety disorders. Reduced anxiety levels could, in turn, lead to improved second language proficiency and ultimately better educational attainments.

The Western Cape Education Department (WCED), as shown in the attached permission letter, and the research ethics committee (REC) at Stellenbosch University have already approved this research project. Should I get your permission to conduct this study in your school, I would conduct the research in the period spanning 24 July–29 September 2017. All children in Grade 1–3 with isiXhosa as their home language will be asked to participate. I will ask the parents of the learners to give consent for their child(ren)'s participation before any research is undertaken. The assenting children in Grades 1–3, with parental permission to
participate, will be required to complete three short, child-friendly questionnaires, which should not take longer than 90 minutes. These questionnaires will be administered at your school’s earliest convenience, and during an appropriate time slot negotiated with you or the relevant teachers, so that the research process will not interfere with the learners’ school curriculum.

Your assistance in the above regard would be highly appreciated, and I hope that, given the importance of your school’s participation in this research, this request will meet your favourable consideration. Please feel free to contact me at any time should you feel it necessary. I thank you in advance for your co-operation.

Yours sincerely,

Mrs. Jeanine Botha
MA Psychology Student
16429664@sun.ac.za
083 236 0823

---

APPENDIX E: INFORMATION AND PARENTAL CONSENT LETTER

(ENGLISH VERSION)
Dear parent / guardian

I cordially request you to give me parental permission for your child to take part in a research project. To learn more about what this study is about, please take some time to read the information presented here, which will explain the details of this project. Please feel free to ask me any questions about any part of this project that you do not fully understand. It is very important that you are satisfied that you clearly understand what this research entails and, if you agree to your child’s participation, how he/she could be involved. Even if you give your permission (and you are free to decline this permission, if you choose to), your child’s participation will be entirely voluntary. If you say 'no' to my request for your child’s participation, this will not affect you or your child negatively in any way whatsoever. You are also free to withdraw him/her from the study at any point, even if you do initially agree to let him/her take part.

The Western Cape Education Department (WCED) and the research ethics committee (REC) at Stellenbosch University have already approved this research project.

1. What is this research study all about?

The purpose of this study is to examine whether non-mother tongue education affects learners' self-efficacy and anxiety levels. Previous research indicates that anxiety disorders are among the most common psychiatric disorders of childhood and that they that they can significantly interfere in a child’s normal daily functioning. South African research indicates that the prevalence of anxiety disorders amongst South African children is high and that South African children display higher levels of anxiety than their Western peers. Furthermore, research indicates that low levels of self-efficacy contribute to feelings of anxiety. Considering the known effects of non-mother tongue education on self-efficacy and anxiety, it is imperative for research to undertaken to examine the self-efficacy and anxiety of non-mother tongue learners within the South African context. Data from such a study could be used to identify at-risk individuals in order to develop and implement future interventions for learners receiving non-mother tongue education. Intervention programmes would aim to minimize the symptoms of anxiety through increasing self-efficacy and preventing the development of anxiety
disorders. Reduced anxiety levels could, in turn, lead to improved second language proficiency and ultimately better educational attainments.

2. **Why has your child been invited to participate?**

   The target group of the study includes Grade 1–3 learners who have isiXhosa as their home language but are attending English or Afrikaans schools as well as isiXhosa learners attending isiXhosa schools. As your child falls within this group, I have earmarked him/her to participate in the study, if you give me permission to include him/her in it.

3. **What will my child need to do?**

   Should you give permission for your child to participate in the study, he/she will be required to complete three short questionnaires, which will take about 60 minutes. This will be done during school hours, at a time negotiated with your child’s school, so that it does not interfere with the school curriculum. Your child may also be asked to participate in a follow-up group discussion, which will be aimed at gaining better insight into learners’ understanding of the questionnaires they completed. The group discussions will take approximately 30 minutes and will also be conducted during school hours.

4. **What will your responsibilities be?**

   As the parent/guardian of your child, your responsibility (if you allow your child to participate) is to sign and return the informed consent form attached. Please note that participation is not compulsory, and if you decline consent, your child will not be penalised in any way. The study will only commence once I have obtained permission from both the parents/guardians, and the children agree to take part.

5. **Will your child benefit from taking part in this research?**

   No direct personal benefits exist for your child if he/she participates in the research. However, any children, identified by themselves, their parents or teacher, as experiencing any anxiety-related problems can go to the Welgevallen Community Psychology Clinic at Stellenbosch University for further help. The clinic is located at Welgevallen House, Suidwal Street, Stellenbosch. Their contact number is 021 808 2696.

6. **Are there any risks involved in your child taking part in this research?**

   No physical risks, stress or discomfort are involved in this study. If you have any concerns about your child’s behaviour during the course of the project, I can arrange for the child to consult with a psychologist the Welgevallen Community Psychology Clinic at Stellenbosch University.

7. **Who will have access to your child’s questionnaires?**
I will treat all information collected from the children as confidential at all times, and only I will have access to the information. In the final report, children will only be referred to in terms of their sex, age, and ethnicity. No information will be able to be linked directly to your child in any way.

8. **Will you or your child be paid to take part in this study and are there any costs involved?**

   Neither you nor your child will receive remuneration for participation in this project, and it will cost you nothing to participate.

9. **Is there anything else that you should know or do?**

   You can contact either myself or my supervisor, Dr A. M. Lesch, on 021 808 3459 for further assistance. If you have any concerns or complaints that I have not adequately addressed, please contact the Committee for Human Research, Stellenbosch University, at 021 938 9207.

10. **Rights of research subjects**

    You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. If you have questions regarding your rights as a research subject, contact Ms Maléne Fouché (mfouche@sun.ac.za; 021 808 4622) at the Division for Research Development.

    Should you agree for your child to participate in this research study, please complete the consent form on the following page and return it to school.

Yours sincerely,

Mrs. Jeanine Botha  
MA Psychology Student  
16429664@sun.ac.za  
083 236 0823

---

**Consent form: Parent / legal guardian**

**TITLE OF THE RESEARCH PROJECT:** Self-efficacy and anxiety in a group of isiXhosa-speaking learners receiving second-language education in Western Cape schools.

**REFERENCE NUMBER:** SU-HSD-004332
**RESEARCHERS NAME:** Jeanine Botha  
**CONTACT NUMBER:** 083 236 0823

By signing below, I (name of parent/legal guardian) …………………………………… agree to allow my child (name of child) …………………………………… who is ……… years old and attends …………………………………… (name of school) to participate in a research study entitled:
- I have read or had read to me this information and consent form and that it is written in a language with which I am comfortable.
- My child must agree to take part in the study and he/she must complete an assent form before any research is undertaken.
- I have had a chance to ask questions and all my questions have been satisfactorily answered.
- I understand that taking part in this study is voluntary and I have not been pressurised to let my child take part.
- I understand that all information gathered from the study will remain confidential.
- I may choose to withdraw my child from the study at any time and my child will not be penalised or prejudiced in any way.
- I understand that no potential risks exist for my child if he/she participates in this study.
- I understand that the information gathered in the study will be published but that none of the presented information will be linked to my child in any way.

Signed at (place) …………………………………….. on (date) …………………………………….. 2018.

……………………………………………
Signature of parent/legal guardian

**APPENDIX F: PARTICIPANT ASSENT FORM (ENGLISH VERSION)**

**TITLE OF THE RESEARCH PROJECT:** Self-efficacy and anxiety in a group of isiXhosa-speaking learners receiving second-language education in Western Cape schools.

**REFERENCE NUMBER:** SU-HSD-004332  
**RESEARCHERS NAME:** Jeanine Botha  
**CONTACT NUMBER:** 083 236 0823
I (name) ............................................................ have been invited to take part in a research study.

- The researcher, my teacher, and my parents have explained the details of the study to me and I understand what they have said to me.
- They have also explained that this study will involve completing 3 short questionnaires, which will take place during normal school hours.
- I might also be asked to take part in a group discussion to talk about my experience answering the questionnaires.
- I know that I am free to withdraw from the study at any time if I am unhappy, and that I will not be penalised in any way if I do so.
- I know that I do not have to answer any questions if I don't want to.
- By writing my name below, I voluntarily agree to take part in this research project. I confirm that I have not been forced to take part by anyone.

................................................................................................
Name
................................................................................................
Date

APPENDIX G: DEMOGRAPHIC QUESTIONNAIRE (ISIXHOSA VERSION)

Konke NGAM

Igama .........................................................
Iminyaka yobudala .........................................................
Ibanga .........................................................
Isini intombazana inkwenkwe
Indawo .........................................................
APPENDIX H: SPENCE CHILDREN’S ANXIETY SCALE (ISIXHOSA VERSION)

Biyela ngesangqa igama elichaza ukuba ezi zinto zenzeka kaninzi kangakanani kuwe. Akukho mpendulo zichanekileyo okanye zingachanekanga.

<table>
<thead>
<tr>
<th>1. Ndiyaxhalatyiswa zizinto.</th>
<th>Nakanye</th>
<th>Ngamanye amaxesha</th>
<th>Kaninzi</th>
<th>Ngalo lonke ixesha</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Ndiyaboyika ubumnyama.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>3. Xa ndinengxaki ndibanemvakalelo engaqheleleka esiswini.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>5. Ndingaziva ndisoyika ukuba ndedwa ekhaya.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>8. Iyandixhalabisa eyokuba kude nabazali bam.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>10. Iyandixhalabisa eyokuba ndiyakwenza kakubi emsebenzini wam wesikolo.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>12. Ndinoloyiko lokuba kungenzeka into embi komnye wosapho lam.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>15. Ndiziva ndisoyika ukulala ndedwa.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>17. Ndimhle kwezemidlalo.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>19. Ingathi andikwazi ukukhupha iingcinga ezimbi okanye ezisileyo engqondweni yam.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>20. Xa ndinengxaki intliziyo yam 1ye ibethe kakhulu ngenene.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>22. Ndinenkxalabo yokuba mhlawumbe kungenzeka into embi kum.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>23. Ndiyoyika ukuya koogqirha okanye koogqirha bamazinyo.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>24. Xa ndinengxaki ndiye ndizive ndingcangcazelu.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>25. Ndiyoyika ukuba kwindawo eziphakamileyo okanye kwikhethshi.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>27. Kufuneka ndicinge ngeengcinga ezizodwa ukuze ndinqande ukwenzenza kwezinto ezimbi (njengamanani namagama)</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>29. Iyandixhalabisa into yokungazi ukuba abanye abantu bacinga ntoni ngam.</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
<tr>
<td>30. Ndiyoyika ukuba kwindawo ezixineneyo (njengakudederhu lwesemenkile, kwimiboniso-</td>
<td>Nakanye</td>
<td>Ngamanye amaxesha</td>
<td>Kaninzi</td>
<td>Ngalo lonke ixesha</td>
</tr>
</tbody>
</table>
31. Ndiziva ndivuyile.
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

32. Ndisuke ndizive ndisoyika ngokwenene ngaphandle kwesizathu
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

33. Ndiyazoyika izinambuzane okanye izigcawu.
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

34. Ndisuke ndibenesizunguzane okanye ndiyobeko kungekho sizathu saloo nto.
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

35. Ndiye ndizive ndisoyika xa ndiza kuthetha phambi kwekla yam.
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

36. Intliziyo yam isuke ibethe kakhulu ngaphandle kwesizathu.
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

37. Iyandixhalabisa eyokuba ndisuke ndisoyika kungekho ntotemaniyo kungakhe
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

38. Ndiyazithanda.
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

40. Izinto ezithile kuye kufuneka ndiziphindaphinde (njengokuhlamba izandla zam, ukucoca okanye ukubeka izinto ngendlela ecwangcisiweyo).
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

41. Ziyandikhathaza iingcinga ezimbi okanye ezisileyo okanye imifanekiso engqondweni yam.
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

42. Kufuneka izinto ezithile ndizenze nje ngendlela eiyoyo ukuze ndingaba okanye kwezinto ezimbi.
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

43. Ndiyasingcaba ngomsebenzi wami wesikolo
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

44. Bendiya kuziva ndisoyika ukuba bekuya kufuneka ndingabikho ehaya ubusuku bonke.
Nakanye Ngamanye amaxesha Kaninzi Ngalo lonke ixesha

45. Ingaba ikho na enye into oyoyika ngenene?
Nceda, bhala ukuba iyintoni:
........................................................................................................................................
........................................................................................................................................

EWE

HAYI
<table>
<thead>
<tr>
<th>46. Uye uyoyike kaninzi kangakanani le nto?</th>
<th>Nakanye</th>
<th>Ngamanye amaxesha</th>
<th>Kaninzi</th>
<th>Ngalo lonke ixesha</th>
</tr>
</thead>
</table>

Siyabulela!
# APPENDIX I: SELF-EFFICACY QUESTIONNAIRE FOR CHILDREN (ISIXHOSA VERSION)

Nceda urhangqele inani elichaza ukuba ucinga ukuba ukwazi kangakanani ukwenza into nganye kwezi zinto. Akukho mpendulo zichanekileyo okanye zingachanekanga.

<table>
<thead>
<tr>
<th>Hayi kwaphela</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ndiyakwazi ukucela ootitshala ukuba bandincede ngomsebenzi wesikolo ndakuxinga.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Ndiyakwazi ukuvakalisa izimvo zam xa abanye endifunda nabo eklasini bengavumelani nam.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Ndiyakwazi ukuzivuyisa xa kwenzeke into engemnandanga.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Ndiyakwazi ukufunda nokuba kukho ezinye izinto ezinika umdla ezinokwenziwa.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Ndiyakwazi ukuphinda ndizole xa ndisoyika kakhulu.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Ndiyakwazi ukuzivenza umhlobo wabanye abantwana.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Ndiyakwazi ukufunda isahluko, ndisifundela uvavanyo.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Ndiyakwazi ukuncokola nomntu endingamaziyo.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Ndiyakwazi ukuzininganda ekuphakuzeleni.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. Ndiyakwazi ukuvugqiba wonke umsebenzi wam wesikolo ekhaya yonke imihla.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. Ndiyakwazi ukusebenza ngemvisiswano nabo ndifunda nabo eklasini.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. Ndiyakwazi ukuzilawula izimvo zam.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. Ndiyakwazi ukuphulaphula ngenyameko kwiklasi nganye.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. Ndiyakwazi ukuxelela abanye abantwana ukuba benza into endingayithandiyo.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. Ndiyakwazi ukuzikhuthaza xa ndiziva ndiphantsi.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. Ndiyakwazi ukuziva zonke izifundo esikolweni.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. Ndiyakwazi ukubalisela iqela labantwana ngesiganeko esihleksayo.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. Ndiyakwazi ukuxelela umhlobo ukuba andiziva mnandi.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. Ndiyakwazi ukwanelisa abazali bam ngomsebenzi wam wesikolo.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>20.</td>
<td>Ndiyakwazi ukuhlala ndingumhlobo wabanye abantwana.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>21.</td>
<td>Ndiyakwazi ukunqanda iinginga ezingemnandi.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>22.</td>
<td>Ndiyakwazi ukuphumelela uvavanyo.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>23.</td>
<td>Ndiyakwazi ukunqanda ingxabano nabanye abantwana.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>24.</td>
<td>Ndiyakwazi ukugxalatyiswa zizinto ezinokwenzeka.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

**Siyabulela!**
APPENDIX J: FOCUS GROUP INTERVIEW SCHEDULE

A. Introduction

B. Explanation of round rules

C. Questions

General:
1. How was it for you to answer these questions (SCAS and SEQ-C)?
   - Was it hard to understand? Or did you know what you were being asked?
   - Did you feel worried when you had to answer them? Or happy?
2. What do you think it means to be nervous or worry?
3. How does your body feel when you worry?
   (For example, does your tummy hurt, does your heart beat fast, do you breathe fast?)
4. What are some things you worry about?

Specific:
SEQ 1: I can get teachers to help me when I get stuck on schoolwork.
   - What do you think the question is asking?
   - Are there any words that you don’t understand in this question?
   - Can you repeat the question in your own words?
   - Can you explain how you chose your answer?
SEQ 8: I can have a chat with an unfamiliar person.
   - What do you think the question is asking?
   - Are there any words that you don’t understand in this question?
   - Can you repeat the question in your own words?
   - What do you think of when you hear the word ‘unfamiliar’?
   - Can you explain how you chose your answer?
SEQ 9: I can prevent myself becoming nervous.
   - What do you think the question is asking?
   - Are there any words that you don’t understand in this question?
   - Can you repeat the question in your own words?
   - What do you think of when you hear the word ‘nervous’?
   - Can you explain how you chose your answer?
   - What do you do to stop yourself from being nervous?
SCAS 7: I feel afraid if I have to use public toilets or bathrooms.
   - What do you think the question is asking?
– Are there any words that you don’t understand in this question?
– Can you repeat the question in your own words?
– Can you explain how you chose your answer?
– Are you afraid to use bathrooms in shops or the ones near your house?
– Why are you afraid?

**SCAS 14:** I have to keep checking that I have done things right (like the switch is off, or the door is locked).

– What do you think the question is asking?
– Are there any words that you don’t understand in this question?
– Can you repeat the question in your own words?
– Can you explain how you chose your answer?
– What will happen if you don’t check if you have done things right?

**SCAS 29:** I worry what other people think of me.

– What do you think the question is asking?
– Are there any words that you don’t understand in this question?
– Can you repeat the question in your own words?
– What do you think of when you hear the word ‘worry’?
– Can you explain how you chose your answer?

**SCAS 40:** I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order).

– What do you think the question is asking?
– Are there any words that you don’t understand in this question?
– Can you repeat the question in your own words?
– What do you think it means to do something over and over?
– Why do you feel you need to do this thing over and over?

**SCAS 41:** I get bothered by bad or silly thoughts or pictures in my mind.

– What do you think the question is asking?
– Are there any words that you don’t understand in this question?
– Can you repeat the question in your own words?
– What do you think of when you hear the word ‘bothered’?
– Can you explain how you chose your answer?
– What kind of thoughts or pictures do you see?
D. Conclusion

- Are there any more questions or anything anyone would like to add?
APPENDIX K: LETTER TO PARENTS/LEGAL GUARDIANS: COMPLETION OF RESEARCH

Department of Psychology
Stellenbosch University
Private Bag x 1
Matieland
7602
Stellenbosch, South Africa

Completion of research project: Self-efficacy and anxiety in a group of isiXhosa-speaking learners in Western Cape schools.

Self-efficacy and anxiety in a group of isiXhosa-speaking learners receiving second-language education in Western Cape schools.

Dear parent / guardian

I would like to thank you for allowing your child to participate in my research project, in which I looked at the anxiety levels of young South African children.

Previous research indicates that anxiety disorders are among the most common psychiatric disorders of childhood and that they can significantly interfere in a child’s normal daily functioning. South African research indicates that the prevalence of anxiety disorders amongst South African children is high and that South African children display higher levels of anxiety than their Western peers. As was expected, learners who participated in this study reported higher levels of anxiety than children from Australia and Europe. The results alone are not necessarily cause for concern. However, if you are concerned about your child’s behaviour in any way, I encourage you to contact me. My contact information is listed below. I will be able to assist you by arranging an appointment for your child with a psychologist the Welgevallen Community Psychology Clinic at Stellenbosch University, at no charge. You are welcome to contact me with any other enquiries as well.

Yours sincerely,

[Signature]

Mrs. Jeanine Botha
MA Psychology Student
16429664@sun.ac.za
083 236 0823