UNDERSTANDING FEARS IN MIDDLE CHILDHOOD OSHIWAMBO LEARNERS IN THE KHOMAS REGION, NAMIBIA

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I would like to dedicate this thesis to the three most important entities in my life:

- God, who has accompanied and carried me through every phase of my life.
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ABSTRACT

Childhood fears are a common and normal aspect of every child's development. However, although most childhood fears are relatively mild and temporary, they can be distressing for children and interfere with their daily functioning. In order to enable health professionals to support children to cope with their fears, research on the normative content, number, and origins of childhood fears is needed. Aim: The objective of this cross-sectional, quantitative study was to investigate the content, number, and origin of fears experienced by middle childhood Oshiwambo-speaking children from two schools in the Khomas region, Namibia. Method: In order to answer the research question a sample of 102 children between the ages of 10 to 12 years were asked to complete a questionnaire containing the Fear List Method (FLM) and questions based on Rachman's (1977) three pathway theory of fear acquisition. The sample was recruited using the convenience sampling method. Results: The ten most frequently expressed fears in the sample in descending order were: snake, lion, dog, spider, elephant, cat, cow, cheetah, scorpion, and bad people. About fifty percent of the reported fears were animal related. Culture and context specific fears elicited, among others include crime related fears, fears towards people belonging to cultural groups other than the Oshiwambo culture, and a fear of Covid-19. The average number of fears exhibited per child was 8.38, with a mode of 7. The most frequently reported pathway of fear acquisition in the present study was classical conditioning, followed by transmission of negative information, followed by vicarious learning, with 19.04% of answers indicating that a child did not know how he/she acquired a fear. Conclusions: The results of the present study provided first suggestions as to what the normative content, number, and origin of fears in Oshiwambo-speaking children residing in the Namibian context could be, and how these could correspond to, or differ

from, fear profiles of children residing in different contextual backgrounds. Recommendations: In order to determine the validity and reliability of the results obtained, further studies in this context are recommended. Furthermore, within the context of fear content of being afraid of people from another culture derived in this study, the effect of Namibia's history of apartheid and the forced segregation between the ethnic groups residing in Namibia on the fear profiles of Namibian children merits further investigation.

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LIST OF ABBREVIATIONS AND/OR ACRONYMS

Abbreviations and/or acronyms	Full name
FLM	Fear List Method
Origins of Fear Questionnaire	Questionnaire based on Rachman's (1977) three pathway theory of fear acquisition
FSSC-R	Fear Survey Schedule for Children-Revised
FSSC-SA	Fear Survey Schedule-South Africa
POQ	Pathway Origins Questionnaire
APA	American Psychiatric Association
WHO	World Health Organization
DSM	Diagnostic and Statistical Manual of Mental Disorders
ICD	International classification of Diseases system
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
TB	Tuberculosis
USA	United States of America
TV	Television
CS	Conditioned Stimulus
US	Unconditioned Stimulus
CS	Conditioned Response
DEC	Decentralized Ethics Committee
NDF	Namibian Defence Force
NCB	Interpol's National Central Bureau

Chapter 1

INTRODUCTION

1.1 Introduction

In the closing session of the technical workshop on the Child Care and Protection Bill in 2009, Honourable Justice Peter Shivute, Chief Justice of Namibia, stated that "a nation which fails to nurture, protect, educate, and advance the rights and interests of its children today will be all the poorer for it when they are adults tomorrow. We cannot make a better investment for the future of this nation than the one we make in our children" (Shivute, 2010, p. 2). Like Honourable Justice Peter Shivute, stakeholders worldwide are becoming increasingly aware of the fact that the foundation of adult health and psychological well-being is laid during childhood (Burkhardt, 2002). Hence, in order to promote adult health and well-being, it is deemed crucial to invest in children and to secure their overall well-being (Burkhardt, 2002).

Among multiple other emotions, the emotion of fear can have a significant negative impact on a child's psychological well-being (Muris, 2007). Although experiencing limited anxiety, worry and fear is part of every child's development (Mash & Wolfe, 2017), these emotions can become distressing for children and interfere with their family/home, school and social functioning (Swan & Kendall, 2016). Arising problems may not disappear automatically in the course of a child's development, but may continue well into adulthood (Swan & Kendall, 2016). Hence, in order to lower the prevalence of anxiety disorders in adults, it is important to enable health professionals to identify the development of pathological fears early and to teach children how to cope with their fears. The development of such early interventions is

dependent upon extensive research into the phenomenon of childhood fears (Muris, 2007).

The fear and worries of youth have been investigated since the late 1800s (Gullone, 2000). In comparison to other basic human emotions, fear has been among the most extensively researched (Onder, Kusmus, & Cengiz, 2018). Two broad groups of research in this field apply to the present study: 1) normative data about children's fear profiles and 2) cross-national or cross-cultural studies.

The first research category concerns itself with the exploration of 'normal' fear profiles in children that simply serve the purpose of survival and have no significant negative impact on a child's daily functioning (Gullone, 2000). The aim of such research is to establish normative baseline data against which professionals can compare the fear profiles of specific children to determine whether their fears are normal or whether the child is at risk of developing an anxiety disorder. This can be done by evaluating several criteria, such as for example whether an expressed fear is normal for a child's specific age, whether it persist over time, and whether it interferes with a child's daily functioning (Gullone, 2000). Studies that aim to gather baseline data about childhood fears may examine several variables, including the content, number, and origin of childhood fears.

The second research category emerged somewhat later in time (Gullone, 2000) and aims to investigate cross-cultural and cross-national similarities and differences in childhood fears. Research findings indicate that a child's fear profile may be influenced by the cultural and national context in which the child grows up (Burnham, Hooper & Ogorchok, 2011; Burnham et al., 2016; Ingman, Ollendick & Akande, 1999; Muris et al., 2002; Ollendick, Yang, King, Dong & Akande, 1996; Ollendick & Yule,

1990; Tikalsky & Wallace, 1988). This supports the notion that baseline data cannot be generalised across populations and that ideally, researchers should gather normative data about childhood fears from each culture and nation (Mash & Wolfe, 2017).

To date, no study concerning childhood fears has been conducted in the Namibian context. At large, the acceptance and treatment of mental health issues in Namibia appears to receive a low priority (Ashipala, 2013). Ashipala (2013), for example, discovered that the diagnoses and treatment of patients visiting curative mental health services is lingered. Such delays may lead to poor treatment and rehabilitation outcomes, which may further initiate permanent disability of the patient (Ashipala, 2013). In addition to the insufficient treatment of mental illnesses in the public health services, Laubscher (2020) found that approximately 41% of Windhoek's residents stigmatise mental illness. It is therefore important not only to reduce the stigma against mental illnesses in Namibia, but also to increase treatment attendance and efficiency. In line with Honourable Justice Peter Shivute's statement (Shivute, 2010), it can be concluded that the most important population in which this should be implemented are our children.

1.2 Background of the study

For a long time, professionals believed that childhood fears are mild and transitory disturbances that diminish over time (Mash & Wolfe, 2017). They were therefore seen as a common and normal aspect of every child's development (Gullone, 2000). However, it is now known that they can become distressing for children and interfere with their daily functioning, thereby developing into a disorder (Mash & Wolfe, 2017).

According to Beesdo, Knappe and Pine (2009), a range of studies suggest that anxiety disorders are the most frequent mental disorders in children. They have an early onset,

may persist into adulthood, and may cause various associated problems (Gregory et al., 2007; Muris, 2007; Swan & Kendall, 2016). The lifetime prevalence of anxiety disorders is estimated to be between 15% - 20% (Beesdo et al., 2009). The most frequent anxiety disorders among children and adolescents are separation anxiety disorder (2.8% - 8%) and specific or social phobias (7% - 10%) (Beesdo et al., 2009).

Regardless of their high prevalence, their negative accompanying symptoms and their long duration, childhood anxiety disorders often go unnoticed and untreated (Gregory et al., 2007). According to Merikangas et al. (2011), in the US, fewer than 20% of youths with anxiety disorders receive services for their problems. It can be assumed that this rate is even lower in Namibia (Ashipala, 2013). Merikangas et al. (2011) believe that the treatment deficiency of anxiety disorders in youth could be due to the frequent occurrence of fears and anxiety during normal development and the invisible nature of the symptoms.

When considering the high rates of anxiety disorders in children and the delayed identification of, and interventions for these disorders, the following becomes evident: it is important that health professionals are facilitated to be able to identify developing anxiety disorder early and support children to cope with their normative fears. In order to do this effectively, culture specific research on the normative content, number, and origins of childhood fears for various age groups is need.

1.3 Statement of the problem

Global studies comparing the fear profiles of children from different nations and cultures indicate that a child's fear profile is influenced by the context in which it grows up (Burkhardt, Loxton & Muris, 2003; Burnham et al., 2011; Burnham et al., 2016; Ollendick et al., 1996). Hence, normative data about the content, number, and

origin of childhood fears collected in one country cannot be generalised to children from other countries (Mash & Wolfe, 2017). For children and health professionals residing in the African context, specifically Namibia, this is problematic, since the number of studies investigating normative childhood fears in this context are limited. As far as the researcher could establish, only seven studies investigated the fear profiles of children in the African context; five in South Africa (Burkhardt et al., 2003; Burkhardt & Loxton, 2008; Burkhardt, Loxton, Kagee, & Ollendick, 2012; Muris, Du Plessis & Loxton, 2008; Zwemstra & Loxton, 2011), and two cross-cultural studies in Nigeria and Kenya (Ingman et al.,1999; Ollendick et al., 1996).

Research comparing the fear profiles of children in Western countries to those of children in African countries, such as for example by Ingman et al. (1999) and Ollendick et al. (1996), indicates that the number of fears among children from African countries may be higher than that among children from Western countries. Such findings could be ascribed to the children's upbringings in different socio-economic contexts (Burkhardt et al., 2003; Croake, 1969; Donner, Hartmann, & Schwarz, 2020; Murray, 2012). Burkhardt et al. (2003), for example, discovered that the number of fears among children living in a violent and poor environment was higher than that among children living in more secure up-market areas.

Due to the scarce amount of culture specific research about the normative content, number, and origin of childhood fears in the African context, specifically Namibia, and due to the suspected higher number of fears among African children compared to children living in Western countries (Ingman et al., 1999; Ollendick et al., 1996), it is crucial to collect more data about the fear profiles of children belonging to various African cultures. Such information may enable professionals to help Namibian children to better cope with their

fears and prevent normal childhood fears from developing into an anxiety disorder that may prevail into adulthood.

1.4 Research question

The overall objective of this study was to investigate the content and number of fears, and modes of acquisition of these fears, in Oshiwambo-speaking Namibian children in middle childhood. More specifically, the study aimed to answer the following research questions: The three research questions formulated for this study were:

1) What is the content of fears as expressed by Oshiwambo-speaking Namibian children in middle childhood?
2) What are the number of fears as expressed by Oshiwambo-speaking Namibian children in middle childhood?
3) How did the children acquire their most prominent fears (i.e., fears that the children rate as fearing "a lot")?

1.5 Significance of the study

The study may contribute towards the body of literature relating to normative data about the content, number, and origin of fears in middle childhood Oshiwambo children in Namibia. Such information can help to limit the gap of knowledge regarding middle childhood fears in the African context, specifically in Namibia. Since intervention strategies and treatment plans that are culture-specific are more effective than generalized ones (Mash & Wolfe, 2017), it is also hoped that the present study will provide important information for the development of more culture-specific and adapted fear intervention strategies and treatment plans for Oshiwambo children who struggle with anxiety. This might further reduce suffering for many Oshiwambo children, increase their quality of life, enable early intervention/prevention, and reduce the prevalence of anxiety disorders

in the Oshiwambo culture, thereby possibly saving later costs to mental health services (Spence, 1994).

1.6 Delimitations

The present study will only take middle childhood children (i.e., 8 to 12 years) from the Oshiwambo cultural group, recruited from two schools in Katutura, into consideration. Since normative childhood fears change over time (Muris, 2007) this study will only attend to children form one age group (Louw, Louw, & Kail, 2014). The Oshiwambo cultural group was chosen because they make up 50% of Namibia's population, thereby being the largest cultural group in Namibia (Pariona, 2019). Literature, such as for example by Ollendick et al. (1996), Burnham et al. (2011), and Burnham et al. (2016) has demonstrated that the profile of fears that a child exhibit is influenced by its cultural context.

Thus, incorporating children from various Namibian cultures into the study would lead to less specific and hence possibly less accurate results. Moreover, because the sample is drawn from a specific population in the Khomas region, findings cannot be generalized to children in Namibia that do not belong to the study's population.

1.7 Definition of key terms

Middle childhood: according to Louw and Louw (2014) middle childhood refers to the period from about the ages 8 to 12 years. During this period there is little physical growth (Louw & Louw, 2014). However, significant cognitive, social-emotional and self-concept developments take place that enable a child to make more sense of his or her environment (Louw & Louw, 2014). A balanced maturation during this period serves as a solid foundation for a child's later development (Louw & Louw, 2014).

Normal childhood fears: fear can be defined as a strong, emotional reaction to real or imagined danger, or life-threatening events that diminishes once the danger disappears (Mash & Wolfe, 2017; Muris, 2007). The emotional reaction is made up of cognitive- (i.e., searching for potential threat), physical- (i.e., flight/fight response of sympathetic nervous system), and behavioural- (i.e., aggression or escape) systems (Mash & Wolfe, 2017).

A childhood fear can be considered normal if it is age appropriate, in proportion with the intensity of the perceived threat, and if it disappears after the threat disappears (Lichtenstein & Annas, 2000; Mash & Wolfe, 2017). The number and types of common/normal childhood fears change over time with a general age-related decline in number (Beesdo et al., 2009; Gullone & King, 1993; Laing, Fernyhough, Turner & Freestone, 2009; Muris, 2007). According to Beesd, et al. (2009) age-appropriate fears for children in middle childhood are school anxiety, performance anxiety, physical appearance, and social concerns[1]. In the South African context Burkhardt et al. (2003) yielded the following top ten fears in middle childhood using the Fear List Method (FLM): snakes, predators, weapons, crime, death, gangs, spiders, transport, dogs, and crocodiles.

Pathological childhood fears/anxiety disorders: if a child's fear is out of proportion with the perceived threat, maintains even if the threat is not physically present anymore, persists beyond developmentally appropriate periods, and causes significant distress for the child, it can be classified as an anxiety disorder (American Psychiatric Association, 2013). Diagnostic systems such as the Diagnostic and Statistical Manual of Mental Disorders, fifth edition (DSM-5), or the International Classification of

[1] It should be noted that these findings are based on data collected from children residing in the western context.

Diseases system, tenth edition (ICD), can be used to diagnose a child with an anxiety disorder. Although the classifications and requirements for various anxiety disorders differ between these systems, many anxiety disorders share common clinical features, such as for example extensive anxiety, physiological anxiety symptoms, behavioural disturbances (i.e., avoidance of feared situation), and associated distress or impairment (Beesdo et al., 2009).

Culture and context: in the last century there have been ongoing debates about how culture is best defined (Hogg & Vaughan, 2014). Two components that are included in multiple definitions are that culture incorporates 'social habits of a community' and 'systems of shared meaning' (Hogg & Vaughan, 2014). According to Louw et al. (2014) culture can be defined as "the beliefs, norms, customs and general way of life of a specific group of people, which are passed on from generation to generation" (p. 13). Furthermore, they define context as "the setting or specific environment in which development and behaviour occur" (p. 13). The DSM-5 describes culture as follows:

> Culture refers to systems of knowledge, concepts, rules, and practices that are learned and transmitted across generations. Culture includes language, religion and spirituality, family structures, life-cycle stages, ceremonial rituals, and customs, as well as moral and legal systems. Cultures are open, dynamic systems that undergo continuous change over time; in the contemporary world, most individuals and groups are exposed to multiple cultures, which they use to fashion their own identities and make sense of experience. (American Psychiatric Association, 2013, p. 749)

According to Mash and Wolfe (2017) culture and context may have an influence on the way children understand, and make sense of, their environment, thereby possibly

influencing their behaviour. Hence, cultural factors should be carefully considered during the assessment of disorders and the creation of a treatment plans (Nikapota, 2009) . This is in line with the Cultural Compatibility Hypothesis, which states that treatment is likely to be more effective when it is compatible with the cultural patterns of the child and family (Mash & Wolfe, 2017). Moreover, the latest version of the DSM (i.e., DSM-5) includes a framework for developing a cultural formulation of a child's disorder based on the child's and family's cultural identity (American Psychiatric Association, 2013).

Definition of dependent variables:

The **content** of childhood fears refers to the subject of a child's fears- what he/she is afraid of. It can be elicited through various methods. For the purpose of this study, the FLM will be utilised in order to elicit the sample's fear content.

The **number** of fears refers to the quantity of fears that a child experiences. It can either be elicited by counting all the fears that a child lists during the FLM or by counting all fears that a child rates as being afraid of 'a lot' in a fear survey schedule. For the purpose of this study, the former method will be used.

The **origin** of childhood fears refers to the phenomenon that caused a child to become fearful of a specific event or situation. For the purpose of this study Rachman's (1977) three pathway theory of fear acquisition will be utilised as a framework to investigate the origins of childhood fears. Children will be asked about the three pathways for all fears that they rated as fearing 'a lot'.

1.8 Chapter summary

The first chapter provided a summation of the prevalence, impact, and treatment of childhood fears and the relationship between childhood fears and culture was briefly addressed. This was done by considering the background of the study, the problem of the field, the significance of the present study and the study's delimitations. Finally, important key terms that are frequently used throughout the paper have been defined, explained, and put into context. The second chapter will review existing literature about childhood fears.

Chapter 2

LITERATURE REVIEW

2.1 Introduction

In order to address the research questions, literature on the different variables of 'normal' fear profiles; the cultural and contextual influences on childhood fears; the measurement techniques of childhood fears, and contemporary studies will be reviewed. Furthermore, the theoretical frameworks that inform the research questions will be discussed.

2.2 Fear variables in middle childhood

Since studies investigating the variables of childhood fears differ in their use of measurement techniques and the age ranges of samples, it is challenging to present overall global findings for the content, number, and origin of middle childhood fears. Consequently, findings cannot be generalised. Studies such as by Burkhardt et al. (2003), Burkhardt and Loxton (2008), Lane and Gullone (1999), Muris, Merckelbach and Collaris (1997a) and Muris, Merckelbach, Meesters, and Van Lier (1997b) have demonstrated that children's expressed fears are dependent upon the measurement techniques utilized. They used two different methodologies, namely the Fear List Method (FLM) and Ollendick's (1983) FSSC-R to assess childhood fears in the same sample and yielded significantly different results from each. This suggests that the open-ended question of the FLM, which allows children to note down a broad range of fears, elicits different results than the structured FSSC-R, in which the children's answers are limited to a predetermined list of fears. Hence, the results regarding the variables of content and number of childhood fears obtained in earlier studies will be discussed separately for an unstructured and structured measurement technique. Since

the FLM will be utilised for the purpose of this study, results regarding the fear content and number of children in middle childhood as derived through the FLM will be explored first. Subsequently, results regarding the fear content and number of children in middle childhood as derived through the FSSC-R will be discussed. The decision to investigate results obtained through the FSSC-R as a structured measurement technique is based on the notion that it is the most widely used self-report fear survey schedule investigation to date (Gullone, 2000).

Although a substantial number of studies have been conducted in this field, due to the vast variety in methodology and age ranges of samples only a limited number of studies is specifically relevant, and comparable, to the present study (i.e. similar age range and methodology). Consequently, as will become evident in this section, the majority of comparable studies are outdated. The limited number, and outdated nature, of comparable studies make it challenging for contemporary researcher to make inferences/draw conclusions about their findings in relation to earlier but comparable studies. Nevertheless, this section will explore the results of the present study in relation to results obtained in pioneering but comparable studies. Furthermore, in order to provide readers with an impression of the nature of more contemporary studies, this section will end with providing a brief description of five more recent studies in the field.

2.2.1 Normative fear content in middle childhood

The following six studies utilised the FLM to investigate the normative fear content in middle childhood (see Table 2.1):

Pratt (1945) was one of the earliest researchers who utilised the FLM to investigate the fear content of 570 children aged 4 to 16 years[2], living in the USA. He found that overall, the most frequently reported fears were animal-related, including bears, snakes, tigers, elephants, and horses.

Muris et al. (1997b) administered the FLM to a sample of 394 children aged 7 to 12 years, residing in the Netherlands. They found the following 10 most frequently reported fears; spiders (expressed by 10.2% of the sample), death (9.1%), war (7.9%), illness (5.3%), the dark (5.3%), snakes (4.3%), burglars, 3.8%), not being able to breathe (3.0%), ghosts (2.8%), and having my parents argue (2.5%).

Murray (2012) administered the FLM to 8568 children aged 9 years, from Ireland. She reported that the most frequently reported fear (mentioned by over 25% of the sample) was of insects/rodents; followed by a fear of the dark/strange noises/scary places. Finally, the third category of fears, which was expressed by approximately one in 20 children in the study included dogs; scary movies/TV/books; heights/falling/rollercoaster; and reptiles/sharks/fish. Other themes that emerged for some children (approximately one in fifty) included supernatural creatures; being left alone/getting lost; nightmares; and fear of being injured/getting sick/or dying, as well as the fear of death/illness/ injury of a family member or pet.

Finally, there are three studies in the South African context that addressed the content of fears in middle childhood using the FLM (Burkhardt & Loxton, 2008; Burkhardt et al., 2003; Zwemstra & Loxton, 2011). All three created fear rank orders of the top ten fears that were expressed by the children. Burkhardt et al. (2003) examined the fear

[2] It should be noted that the age range of the sample goes significantly beyond middle childhood. Hence, the results could differ from those that would have been obtained from a sample including only children from middle childhood.

profiles of 404 children aged 9 to 13 years, comparing cultural groups from various socio-economic contexts; Burkhardt and Loxton (2008) investigated the fears of 141 children aged 8 to 13 years, that are living in a children's home; and Zwemstra and Loxton (2011) investigated the fears of 39 children aged of 7 to 13 years, that are affected by HIV/AIDS. When comparing the content of the rank orders of the ten most frequently expressed fears in these studies, the following can be found: three out of four studies identified 'snakes' as the most frequently expressed fear; and found 'dogs' and 'death' among the ten most prevalent fears. Fears that were identified by two out of the four studies include: 'spiders', 'predators', 'weapons'; 'crocodiles'; 'boys', 'strangers', 'ghosts'; 'sharks'; and 'lions'. These similarities suggest that in the South African context the fear of snakes, dogs, death, spiders, predators, weapons, crocodiles, boys, strangers, ghosts, sharks, and lions are among the ten most frequently expressed fears in middle childhood, as derived through the FLM.

Table 2.1: Ten most frequently expressed fears of children in middle childhood as derived through the FLM

	Pratt (1945)*	**Muris et al. (1997b)**	**Murray (2012)***	**Burkhardt & Loxton (2008)**	**Burkhardt et al. (2003)**	**Zwemstra & Loxton (2011)**
Country	USA	Netherlands	Ireland	South Africa	South Africa	South Africa
Age range	4-15	7-12	Primary school	8-13	9-13	7-13
1	Bears	Spiders (10.2%)	Insects/rodents	Snake (41.13%)	Snakes (45.5%)	Snakes
2	Snakes	Death (9.1%)	The dark	Ghosts (30.50%)	Predators (22.8%)	Lions
3	Tigers	War (7.9%)	Strange noises	Spider (18.44%)	Weapons (22.3%)	Dogs
4	Elephants	Illness (5.3%)	Scary places	Darkness/night (15.60%)	Crime (14.1%)	To die
5	Horses	The dark (5.3%)	Dogs	Strangers (13.48%)	Death (13.6%)	Crocodiles
6		Snakes (4.3%)	Scary movies/TV/books	Dog (9.93%)	Gangs (12.6%)	Cars/car accidents
7		Burglars (3.8%)	Heights/falling	Predators (9.22%)	Spiders (11.6%)	Elephants
8		Not being able to breathe (3.0%)	Rollercoaster	Death/dead people (9.22%)	Transport (10.9%)	Frogs
9		Ghosts (2.8%)	Reptiles/shark/fish	Men/boys (8.51%)	Dogs (10.6%)	Sharks
10		Having my parents argue (2.5%)	Being left alone/getting lost; Nightmares; Fear of being injured/getting sick/dying/death/illness/injury of a family member or pet	Weapons (8.51%)	Crocodiles (8.4%)	Hospitalization

** Approximate rank order*

Upon comparison of the results of the six FLM studies (see Table 2.1), the following becomes evident: the fear of various animals appears to play a vital role in middle childhood. Overall, 24 out of 55 fear items identified by the different studies are animal related (=43.64%). The fear of snakes was among the top ten fears in five out of six studies; the fear of dogs in four out of six; the fear of spiders in three out of six; the fear of elephants, sharks, crocodiles, and predators in two out of six; and the fear of bears, tigers, horses, insects, rodents, reptiles, fish, frogs and lions in one out of six studies. Another content that occurs quite frequently in the fear rank orders of the FLM studies is 'death', or anything that can lead to it. The item of 'death' occurs in five out of six studies, accompanied by items such as 'war', 'weapons', 'crime', 'gangs', 'burglars', 'illness', 'not being able to breathe', 'falling', 'car accidents', and 'hospitalisation'.

The following six studies utilised the FSSC-R, or an adapted version of it, to investigate the normative fear content in middle childhood (see Table 2.2):

One of the first researchers to utilize the FSSC-R after its construction by Ollendick in 1983 were Ollendick, Matson, and Helsel (1985). They adminstered the schedule to a sample of 126 children and adolescents aged 7 to 18 years[3], from Illinois and reported yielding the following ten most frequently reported fears: being hit by a car or truck (42%); not being able to breathe (38%); fire/getting burned (38%); death or dead people (36%); bombing attacks/being invaded (34%); getting poor grades (34%); a burglar breaking into our house (33%); having my parents argue (33%); looking foolish (31%); falling from high places (30%); and being sent to the principal (30%).

[3] It should be noted that the age range of the sample goes significantly beyond middle childhood. Hence, the results could slightly differ from those that would have been obtained from a sample including only children from middle childhood.

The researchers further reported that 8 of the 11 fears (two were tied for 10th place) belonged to the Fear of Danger and Death factor.

Ollendick, King and Frary (1989) examined childhood fears in a sample of 1185 children and adolescent between the ages of 7 to 16 years from the USA and Australia, using the FSSC-R. In the age range from 7 to 10 years, they found the following rank order of fears: being hit by car or truck (62.2%), not being able to breathe (56.9%), bombing attack/being invaded (51.6%), fire/getting burned (52.1%), falling from high places (48.9%), earthquake (48.6%), burglar breaking into house (46.1%), death/dead people (41.1%), snakes (35.3%), and getting poor grades (33.6%). The rank order of the age range of 11 to 13 years was almost identical with only one variation in the rank order: the item of 'falling from high places' was ranked 7th instead of 5th. Further, it was reported that seven out of the 10 most common fears come from the factor of Danger and Death.

Muris et al. (1997b) administered the Dutch version of the FSSC-R (Oosterlaan, Prins, & Sergeant, 1992) to a sample of 394 children aged 7 to 12 years residing in the Netherlands. They reported the following rank order of the 10 most common fears: bombing attack/being invaded (70.6%), being hit by a car or truck (70.3%), not being able to breathe (67.8%), getting a serious illness (60.4%), falling from a high place (57.4%), fire/getting burned (53.8%), getting lost in a strange place (52.0%), burglar breaking into the house (48.0%), electric shock (42.6%), and death/dead people (42.4%).

In the South African context, three studies utilised the FSSC-R or the FSSC-SA (Burkhardt et al., 2012) to examine childhood fears (Burkhardt & Loxton, 2008; Burkhardt et al., 2003; Burkhardt et al., 2012). All three of them constructed rank

orders of the ten most frequently expressed fears (see Table 2.2). Four fear contents occurred in the rank order in all three studies, namely: ‘not being able to breathe’; ‘falling from high places’; ‘getting an electric shock’; and ‘bombing attacks/being invaded’, and four contents occurred in rank order in two of the three studies: ‘being hit by a car or truck’; ‘bears and wolves’; ‘getting lost in a strange place’; ‘fire/getting burned; and ‘death/dead people’. This suggests that ‘not being able to breathe’, ‘falling from high places’, ‘getting an electric shock’, ‘bombing attacks/being invaded’, ‘being hit by a car or truck’, ‘bears and wolves’, ‘getting lost in a strange place’, ‘fire/getting burned’, and ‘death/dead people’ are the most prevalent fears in middle childhood South African children, as derived through the FSSC-R/FSSC-SA.

Table 2.2: Ten most frequently expressed fears of children in middle childhood as derived through the FSSC-R or the FSSC-SA

Fear Rank	**Ollendick et al. (1985)**	**Ollendick et al. (1989)**	**Muris et al. (1997b)**	**Burkhardt & Loxton (2008) (FSSC-R)**	**Burkhardt et al. (2003) (FSSC-R)**	**Burkhardt et al. (2012) (FSSC-SA)**
Country	USA	USA and Australia	Netherlands	South Africa	South Africa	South Africa
Age range	7-18	7-16	7-12	8-13	9-13	7-13
1	Being hit by a car or truck (42%)	Being hit by a car or truck (62%)	Bombing attack/being invaded (70.6%)	Not being able to breathe (68.80%)	Not being able to breathe (70.5%)	Getting HIV (78.5%)
2	Not being able to breathe (38%)	Not being able to breathe (56%)	Being hit by a car or truck (70.3%)	Bombing attacks/being invaded (66.67%)	Being hit by a car or truck (65.3%)	Not being able to breathe (69.8%)
3	Fire/getting burned (38%)	Bombing attack/being invaded (51.6%)	Not being able to breathe (67.8%)	Falling from high places (66.67%)	Falling from high places (64.9%)	Sharks (68.6%)
4	Death/dead people (36%)	Fire/getting burned (52.1%)	Getting a serious illness (60.4%)	Getting a shock from electricity (66.67%)	Getting an electric shock (63.9%)	Being hit by a car or truck (68.4%)
5	Bombing attacks/being invaded (34%)	Falling from high places (48.9%)	Falling from high places (57.4%)	Bears and wolves (65.96%)	Getting lost in a strange place (61.6%)	Lions (67.5%)
6	Getting poor grades (34%)	Earthquake (48.6%)	Fire/ getting burned (53.8%)	Fire/getting burned (63.12%)	Bombing attacks/ being invaded (60.6%)	Falling from high places (65.6%)
7	A burglar breaking into our house (33%)	Burglar breaking into house (46.1%)	Getting lost in a strange place (52.0%)	Death/dead people (61.70%)	Germs/getting a serious illness (60.6%)	Bombing attacks/being invaded (65.5%)
8	Having my parents argue (33%)	Death/dead people (41.1%)	Burglar breaking into house (48.0%)	Snakes (61.70%)	Death/dead people (58.4%)	Getting a shock from electricity (62.7%)
9	Looking foolish (31%)	Snakes (35.3%)	Electric shock (42.6%)	Failing a test (61.70%)	Burglar breaking into our house (57.9%)	Bears and wolves (62.7%)
10	falling from high places (30%); and being sent to the principal (30%).	Getting poor grades (33.6%)	Death/dead people (42.4%)	Getting lost in a strange place (60.99%)	Fire/getting burned (57.9%)	Tigers (62.1%)

Upon comparison of the six studies described above (see Table 2.2) the following becomes evident: ‘bombing attacks/being invaded’, ‘not being able to breathe’, and ‘falling from high places’ were among the top ten experienced fears in all six studies. Furthermore, ‘being hit by a car or truck’, ‘fire/getting burned’, ‘death/dead people’ and ‘a burglar breaking into house’ were among the top ten most frequently expressed fears in five out of six studies. Other fear contents that were repeatedly reported include ‘getting lost in a strange place’, ‘getting a shock from electricity’, animal related fears and school related fears.

Finally, the reader’s attention should be drawn to some similarities and differences between the results of the studies that utilized the FLM versus those that utilized the FSSC-R in order to elicit the children’s fear contents. Both measurement techniques yielded that the fear of death, or events that could lead to it, plays a vital role during middle childhood. One significant discrepancy between the results yielded through the two techniques is that whereas the FLM indicates that animal related fears play a vital role during middle childhood, the FSSC-R yielded a very limited number of such. Interestingly however, the South African version of the FSSC-R yielded that four out of the five top ten fears are animal related, suggesting that an adapted, culture or context specific version of the FSSC-R might yield results more congruent with those derived through the FLM.

2.2.2 Normative number of fears in middle childhood

Studies that investigated the normative number of fears in middle childhood have reported a wide variety of numbers (see Table 2.3). As with the content of childhood fears, a factor that might contribute to this is that the number of childhood fears can be elicited in different ways Muris et al. (1997a, b). They can either be yielded by

counting the number of fears that a child lists during an interview or the FLM, or by counting the number of fears that a child rates as fearing 'a lot' on the FSSC-R or any other self-report fear survey schedule investigation.

The following four studies utilised the FLM to investigate the average number of fears in middle childhood:

Eme and Schmidt (1978) investigated a sample of 9 years old children in North America and yielded an average number of 4.7 fears per child. Lapouse and Monk (1959) investigated a sample of 6 to 12 years old children in North America and yielded an average number of 11 fears per child. Nalven (1970) investigated a sample of 10 to 11 years old children and yielded and average number of 5.33 fears per child. Finally, Zwemstra and Loxton (2011) investigated a sample of 7 to 13 years old children in South Africa and yielded an average number of 1.8 fears per child.

In summation, the number of fears per child, as indicated in earlier studies using the FLM, ranges between 4.7 and 11, and an average of 5.7 fears per child is yielded.

Table 2.3: Number of fears experienced by children in middle childhood as derived through the FLM

Researchers	**Country**	**Age-group**	**Average number of fears**
Eme and Schmidt (1978)	North America	9	4.7
Lapouse and Monk (1959)	North America	6-12	11
Nalven (1970)	North America	10-11	5.33
Zwemstra and Loxton (2011)	South Africa	7-13	1.8

When considering the four studies that have investigated the number of fears experienced by children in middle childhood, using the FLM, it becomes evident that the majority of these studies (Erne & Schmidt, 1978; Lapouse & Monk, 1959; Nalven, 1970) are outdated and have been conducted in North America. Furthermore, it should be noted that the most contemporary study (Zwemstra & Loxton, 2011) was conducted on a special population (i.e., a sample of 39 South African children affected by HIV). Both factors could have an adverse impact on the comparability of these studies to each other, and to the present study. Another aspect that should be noted when looking at the results of the four studies is that the South African study yielded a significantly lower average number of fears per child than the North American studies, which is in conflict to Ingman et al.'s (1999) and Ollendick et al.'s (1996) hypothesis that African children experience a higher number of fears than children living in Western countries.

The following ten studies utilised the FSSC-R to investigate the average number of fears in middle childhood (see Table 2.4):

Burkhardt (2002) investigated a sample of 8 to 12 years old children in South Africa and yielded an average number of 3.62 fears per child. Croake (1960) investigated a sample of 8 to 12 years old children in North America and yielded an average number of 25.75 fears per child. Dong, Yang and Ollendick (1995) investigated a sample of 7 to 13 years old children in China and yielded an average number of 16.5 fears per child. Ingman et al. (1999) investigated a sample of 8 to 17 years old children in Nigeria and Kenya and found an average number of 25.1 fears per child in the Nigerian sample and an average number of 20.94 fears in the Kenyan sample. Ollendick (1983) investigated a sample of 8 to 11 years old children in North America and yielded an average number of 11 fears per child. Ollendick et al. (1985) investigated a sample of

7 to 12 years old children in North America and yielded an average number of 13.94 fears per child. Ollendick et al. (1996) investigated a sample of 7 to 13 years old children in North America, Australia, China, and Nigeria and yielded an average number of 14.47 fears per child in the North American sample, an average number of 16.83 fears per child in the Australian sample, an average number of 16.98 fears in the Chinese sample, and an average number of 26.53 fears in the Nigerian sample. Ollendick et al. (1989) investigated a sample of 7 to 13 years old children from America and Australia and yielded an average number of 15 fears per child. Slee and Cross (1989) investigated a sample of 8 to 12 years old children in Australia and yielded an average number of 9.4 fears per child. Finally, Shore and Rapport (1998) investigated a sample of 7 to 12 years old children in Hawaii and yielded an average number of 25.99 fears per child.

In summation, the number of fears per child, as indicated by earlier studies using the FSSC-R, ranges between 3.62 and 25.99, and an average of 16.33 fears per child is yielded.

Table 2.4: Number of fears experienced by children in middle childhood as derived through the FSSC-R

Researchers	**Country**	**Age Group**	**Average number of fears**
Burkhardt (2002)	South Africa	8-12	3.62
Croake (1969)	North America	8-11	25.75
Dong, Yang, and Ollendick (1995)	China	7-13	16.5
Ingman et al. (1999)	Nigeria	8-17	25.1
	Kenya	8-17	20.94
Ollendick (1983)	North America	8-11	11
Ollendick et al. (1985)	North America	7-12	13.94
Ollendick et al. (1996)	North America	7-13	14.47
	Australia	7-13	16.83
	China	7-13	16.98
	Nigeria	7-13	26.53
Ollendick et al. (1989)	America & Australia	7-13	15
Slee and Cross (1989)	Australia	8-12	9.4
Shore and Rapport (1998)	Hawaii	7-12	25.99

When considering the ten studies that have investigated the number of fears experienced by children in middle childhood, using the FSSC-R, it becomes evident that the majority of these studies are also outdated. Furthermore, they also contradict Ingman et al.'s (1999) and Ollendick et al.'s (1996) hypothesis.

Upon comparison of the two groups of studies (i.e. FLM and FSSC-R) it can be noted that the average number of fears in middle childhood yielded through the FLM (i.e., 5.7) is significantly lower than the average number yielded through the FSSC-R (i.e.,

16.33). This suggests that structured measurement instruments (i.e., FSSC-R) yield a higher number of fears than unstructured measurement techniques (i.e., FLM). The wide range of measurement techniques and results regarding the normative number of fears in middle childhood and the fact that most studies in this field are outdated make it difficult for professionals to draw conclusions about what number of fears can be considered normal during middle childhood.

2.2.3 Origins of childhood fears

Upon examination of the literature regarding the origin of childhood fears it becomes evident that childhood fears can be ascribed to an interaction of two broad factors: nature (evolution/genetics) and nurture (learning theories).

One phenomenon that could possibly explain the origin of fear in children is evolution (Gullone, 2000; Öhman, Dimberg, & Öst, 1985). According to this framework fear is an integral part of a child's development that equips it with reflexes to avoid or escape potentially dangerous stimuli or situations (Gullone, 2000; Öhman et al., 1985). The reflexes are controlled by the sympathetic nervous system, which initiates the fight-or-flight-response in the sight of potential danger (Mobbs, Hagan, Dalgleish, Silston, & Prevost, 2015). Hence, every child possesses intelligent survival mechanisms that enable him/her to adapt to his or her environment and navigate threats (Mobbs et al., 2015). More specific explanations for the origin of childhood fears that fall within this framework are genetic theories. Evidence from twin studies suggests that up to 50% of the variance in childhood fears can be explained by heritability (Eley & Gregory, 2004; Lichtenstein & Annas, 2000; Rose & Ditto, 1983; Stevenson, Batten, & Cherner, 1992). Lichtenstein and Annas (2000), for example, conducted a study to investigate the heritability and prevalence of specific fears and phobias in childhood, with a

sample of 1106 pairs of 8 to 9 years old Swedish twins. They found that genetics contributed to both, the general susceptibility of fears, and the specific fearfulness, of a child. However, the researchers, as well as other scientists (i.e., Muris & Field, 2010) concluded that both, heritable factors as well as environmental factors, such as trauma or negative information, play a vital role in the make-up of a child's fear profile.

In nurture/environmental theories, learning experiences play a significant role in the acquisition of fears (Muris & Field, 2010). A well-known theory that has been supported by various researchers is Rachman's (1977) three pathway theory of fear acquisition (Egliston & Rapee, 2007; Field, 2006; Ollendick & King, 1991). He theorized that there are three main routes along which children can acquire their fears: classical conditioning, modelling or vicarious learning, and transmission of negative information. Studies that have investigated the applicability of Rachman's (1977) theory yielded evidence for all three pathways (Muris et al., 1997a; Muris et al., 2008; Ollendick & King, 1991). However, their results about which of the pathways carries the most weight in the development of childhood fears differ.

The first pathway, classical conditioning, ascribes fear to the personal experience of a traumatic event or to exposure to something associated with it. A child is conditioned to become fearful of something either because it has had a traumatic experience with the stimulus or situation directly, or because it associates a stimulus or event with a past traumatic experience. Watson and Rayner's (1920) Little Albert experiment can be used to illustrate the pathway of classical conditioning. In their experiment, Watson and Rayner (1920) conditioned an 11 month old boy of fear a white rat. Initially, Albert did not show any signs of fear towards the rat. However, after the researchers repeatedly combined a loud noise that frightened the little boy with the sight of the rat,

Albert started showing symptoms of fear towards the rat, later even in absence of the loud stimulus. Simply put, Albert was conditioned to fear the rat by associating a traumatic experience (i.e., loud noise) with it. The theory behind the experiment is that an association is formed between a conditioned stimulus (CS) (i.e., white rat) and an unconditioned stimulus (US) (i.e., loud sound), which leads to a conditioned response (CR) (i.e., fear of rat) in a subject (Field, 2006). Classical conditioning serves as a foundation for many theories of fear acquisition and a substantial amount of evidence that supports the model has been gathered (Davey, 1997; Dollinger, O'Donnell, & Staley, 1984; Field, 2006; Gullone, & Ollendick, 1998; King, Mineka & Zinbarg, 2006; Öhman & Mineka, 2001; Yule, Udwin & Murdoch, 1990).

The second pathway, vicarious learning, ascribes fear to the observation of another person's fearful reaction to a stimulus or situation (i.e., another person having a bad or frightening experience). In other words, if a child observes that someone else exhibits a fearful behaviour towards a stimulus or situation, he/she becomes fearful of the stimulus or situation him-/her- self. Most researchers agree that vicarious learning can be seen as a form of conditioning, (Bandura, 1969; Berger, 1962; Hygge, 1976; Mineka & Cook, 1993; Olsson & Phelps, 2007) or that it is at least functionally and procedurally similar enough to belong to the same theoretical framework as classical conditioning (Field, 2006). A child is conditioned to become fearful of a stimulus or situation through the observation of a model. Whereas most researchers support the notion that vicarious learning is a pathway of fear acquisition (i.e., Askew & Field, 2007; Öst, 1985, 1987, 1991; Öst & Hugdahl, 1981, 1985), some have not found significant changes in fear after their intervention (i.e., Field, Argyris & Knowles, 2001).

The third pathway, transmission of negative information, refers to a process in which children become fearful of a specific stimulus or an event after they heard or read that the stimulus or event is dangerous (Muris & Field, 2010). Threat information has been an intrinsic part of culture and society for centuries (Ragan, 2006). For example, according to Davies, Lee, Fox, and Fox (2004) around 41% of nursery rhymes are violent in some ways. It could be argued that such tales serve to draw children's attention to potentially threatening situations (Muris & Field, 2010). Overall, a variety of researchers have provided evidence that threat information can be a pathway of fear acquisition, such as for example Buijzen, Van der Molen and Sondij (2007), Cantor and Nathanson (1996), Comer and Kendall (2007), Harrison and Cantor (1999), Hoekstra, Harris and Helmick (1999), Hoven et al. (2005), Muris and Field (2010), Smith and Moyer-Guse (2006), Van der Molen and Bushman (2008), and Valkenburg, Cantor and Peeters (2000). It should however be noted that a wide variety of researchers have also found controversial results regarding this pathway of fear acquisition, such as for example Field et al. (2001), Field and Lawson (2003), Graham and Gaffan (1997), Menzies and Clarke (1993), Milgrom et al. (1995), Muris et al. (1997a), Muris et al. (2008), Muris and Merckelbach (2000), and Muris, Merckelbach, Ollendick, King and Bogie (2001).

It is unlikely that merely one of Rachman's (1977) proposed pathways accounts for all fear contents that a child experiences (Mineka & Zinbarg, 2006). Rather, researchers believe that a combination of these pathways lead to the variety of fears that a child exhibits (Askew & Field, 2008; Askew, Kessock-Philip, & Field, 2008; Muris, 2007). However, as can be seen in Table 2.5 there is no consensus in earlier studies as to which pathway of fear acquisition is the most dominant/most frequent pathway. Four factors that might have contributed to the lack of consensus, and that should be kept in

mind when considering the results, are the diversity in age ranges of the samples, the utilisation of different measuring techniques, the variety in the types of samples tested (i.e., normal populations versus populations with phobias), and the rather outdated nature of most of these studies.

Table 2.5: Dominance of each of Rachman's (1977) three pathways

Researchers	Age group	Measurement technique	Classical Condit-ioning	Vicarious Learning	Trans-mission of negative information
King et al. (1997)*	1-12	Parent interviews	26.7%	53.34%	6.7%
Menzies and Clarke (1993)*	Avera ge age of 5.5	Parents completed a Pathway Origin Questionnaire (POQ)	2%	26%	14%
Merckelbach, van den Hout, Hoekstra, & de Ruiter (1989)*	19-60	POQ	78%	42%	45%
Öst and Hugdahl (1981)*	19-60	POQ	58%	17%	10%
Rimm, Janda, Lancaster, Nahl, & Dittmar (1977)	Under-gradua te studen ts	Structured interviews	35%	7%	9%
Muris et al. (2008)	10-14	Questionnaire	46%	4%	35%
Muris et al. (1997a)	9-13	Questionnaire	39.7%	0.8%	26.7%
Muris et al. (2000a)	4-12	Interviews	33.1%	25.5%	55.2%
Ollendick and King (1991)	9-14	Questionnaire	35.7%	56.2%	88.8%

*= conducted on patients with a diagnosed phobia.

Overall, it appears as of classical conditioning and transmission of negative information are the two more prominent pathways of fear acquisition; with classical

conditioning being the dominant pathway in five out of nine studies, and transmission of negative information being the dominant pathway in two out of nine studies, and the second most dominant pathway in five out of nine studies. Interestingly, the only two studies that yielded vicarious learning as the dominant pathways of fear acquisition (King et al., 1997; Menzies & Clarke, 1993) have utilised parent interviews as their means of data collection. For the four studies that have been conducted on children in approximately middle childhood (Muris et al., 2008; Muris et al., 1997a; Muris et al., 2000a; Ollendick & King, 1991) (see box in Table 2.5) transmission of negative information seems to have played the biggest role in fear acquisition, followed by classical conditioning.

It should however be considered that similar to the studies that investigated the number of childhood fears, most of the studies investigating the origin of childhood fears are outdated. Statements regarding the results of the present study in relation to results of earlier studies in this field should therefore be read with caution.

2.3 Cultural and contextual influences

A variety of global studies have demonstrated that children's fear profiles may differ across cultures (Burnham et al., 2011; Burnham et al., 2016; Ingman et al., 1999; Muris et al., 2002; Ollendick & Yule, 1990; Ollendick et al., 1996; Tikalsky & Wallace, 1988). Hence, it is proposed that a correlation between fears and cultural variables may exist (Ollendick et al., 1996). Among others, such variables may include "religious beliefs, housing conditions, literacy levels, child-rearing practices, health and welfare systems, family structure, community support networks, job opportunities, economic and scientific developments, sex roles, ethnic- moral- and family- codes, rhythm of

social changes, and migratory trends" (Fonseca, Yule, & Erol, 1994, as cited in Burkhardt, 2002, p. 54).

Ollendick et al. (1996), for example, compared the fear profiles of 1200 children, aged 7 to 17 years, from Amerika, Nigeria, Australia, and China. They found differences in gender, age, and content of fears between the four cultural groups. In the American, Australian, and Chinese sample girls reported more fears than boys; this was however not the case in the Nigerian sample. Furthermore, in the American and Australian sample younger children reported more fears than older children; in the Nigerian sample no age differences were found; and in the Chinese sample the number of fears that a child experienced peaked at the age 11 to 14 years. Finally, children from the Nigerian and Chinese samples presented more fear of social evaluation and their safety than the other two samples and some fears turned out to be country specific, such as for example the Chinese children's fear of ghosts, the Nigerian children's fear of the ocean and the American children's fear of guns.

Burnham et al. (2011) assessed the fears of 584 North American and South American children, in grade 2- to- 5, using the FSSC-R. They found that children from both countries experienced geographically related fears; South American children expressed fears of earthquakes (South America has a tendency for earthquakes (Burnham, Hooper, & Ogorchok, 2011)) and children from North America showed an increased fear of tornados and hurricanes (Both disasters occurred in North America shortly before the study was conducted (Burnham et al., 2011)). Furthermore, children from North America expressed a heightened fear of "shootings" and "people carrying weapons", which could be connected to prior school and university shootings in the

area (Burnham et al., 2011). Overall, the South American children had significantly higher levels of fears than North American children.

Similarly, Burnham et al. (2016) compared the fears of 637 middle high school students from Turkey, South Korea, and the USA and found that South Korean children expressed the culture specific fear of getting fat, while Turkish children expressed a fear of going to hell.

Ingman et al. (1999) conducted a cross-cultural study with 852 Kenyan and Nigerian children and adolescents. They found that Nigerian children expressed a higher number of fears than Kenyan children, who have been exposed to the Western culture to a greater extent than Kenyan children[4]. Overall, both cultural samples expressed a higher number of fears than children from the USA, Great Britain, Australia, and China China (Ingman et al., 1999; Ollendick et al. 1989, 1991, 1996; as cited in Burkhardt, 2002).

Researchers such as for example King et al. (1989), Neal, Lilly & Zakis (1993), Ollendick (1983), and Shore and Rapport (1998) have noted that the factor structure of children's fears may vary between cultural groups. For western children, a general 5-factor structure of fear was found: 1) fear of failure and criticism; 2) fear of the unknown; 3) fear of minor injury and small animals; 4) fear of danger and death; and 5) medical fears (King et al., 1989; Ollendick, 1983). For African American children a 3-factor structure was found: 1) general fears, fear of death, danger and small animals; 2) fear of the unknown, and things that crawl; 3) and medical fears (Neal, Lilly & Zakis, 1993). And for an ethnoculturally diverse sample of Hawaii children a

[4] Kenya has a history of influence from western settlers and as a result has more similarities with Western cultures than Nigeria (Burkhardt, 2002).

7-factor solution was found: 1) fear of danger and death; 2) fear of the unknown; 3) worries; 4) anticipatory social fear; 5) animal fears; 6) aversive social fears; and 7) social conformity fears (Shore & Rapport, 1998).

In summation, various studies have demonstrated that a child's fear profile may be culture and context dependent, and that a child's culture and context can lead them to experience culture-specific fears. It should however be noted that overall, cross-cultural studies have found more similarities in childhood fears than differences (Burnham et al., 2011; Burnham & Gullone, 1997; Ollendick & King, 1991), suggesting that some childhood fears, such as for example the fear of animals, the dark, blood, loud noises, strangers, or imaginary beings, are universal (Burkhardt, 2000; Lichtenstein & Annas, 2000; Ollendick, King & Muris, 2002). Furthermore, cross-cultural studies suggest that a child's culture can have a significant influence on the number of fears that a child experiences. This is supported by researchers such as for example Ingman et al. (1999) and Ollendick et al. (1996), who reported that children from Western countries, or higher socio-economic contexts express less fears than children from non-western countries or lower socio-economic contexts. The reason for this could be twofold: first, in some cultures, especially in Western cultures, showing fear is frowned upon (Burkhardt, 2002). If a child, especially a boy, is unusually fearful, parents may become concerned (Burkhardt, 2002). This could prevent children from expressing their fears unhampered. Second, the socio-economic context in which a child grows up might play a role (Burkhardt et al., 2003; Croake, 1969; Donner et al., 2020; Murray, 2012). Burkhardt et al. (2003), for example, discovered that the number of fears among children living in a violent and poor environment was higher than that among children living in more secure up-market areas.

2.4 Measuring techniques of fear variables in children

2.4.1 Fear List Method (FLM)

Examining childhood fears through the Fear List Method (FLM) simply involves asking children to list all their fears, either in writing or orally, and rate the level of each (Burkhardt & Loxton, 2008). It is used to acquire a broad, unlimited and exploratory understanding of the fears that children experience (Burkhardt & Loxton, 2008). Due to the somewhat cognitive demands of this technique, the FLM has generally been implemented only in older samples, i.e., age 8 and upwards. Nevertheless, Pratt (1945), one of the earlier researchers who made use of this technique, interviewed 570 children between the ages 4 to 16 years and did not report any difficulties experienced by the younger children. More recently, Zwemstra and Loxton (2011) used the FLM to explore the fears of South African children aged 7 to 13 years that are affected by HIV/AIDS. Other researchers that made use of the FLM to investigate childhood fears include Angelino, Dollins, and Mech (1956), Angelino and Shedd (1953), Burkhardt et al. (2003), Burkhardt and Loxton (2008), Burnett (2008), Du Plessis (2006), Murray (2012) and Nalven (1970).

The FLM has a high face validity, and one significant advantage of this technique is that it acquires a broad, unlimited, and exploratory understanding of childhood fears by allowing children to answer on their own terms (Burkhardt et al., 2003). However, the FLM is cognitively demanding, it's reliability cannot be tested, and the constructed list of fears may not be complete (Gullone, 2000).

2.4.2 Self-report fear survey schedule investigations

Examining childhood fears through self-report fear survey schedule investigations involves asking children to complete a standardized fear survey schedule. There are

approximately 20 different self-report fear survey schedules that have been used in the past, including Croake's (1967) 69 item fear schedule; Ryall and Dietiker's (1979) 48 item fear schedule; or Ollendick's (1983) 80 item Fear Survey Schedule for Children-Revised (FSSC-R). The schedules can differ in their number of items, length, and wording (Gullone, 2000). Given the cognitive requirements of self-report fear survey schedule investigations, they are mostly used in sample groups aged 6 years or above (Gullone, 2000).

Fear survey schedules are the most frequently used techniques for assessing childhood fears (Gullone, 1999; 2000). They are easy, convenient, and inexpensive to administer; can obtain a great amount of information; and can be objectively scored. Furthermore, they can assess responses to a large variety of fear stimuli or situations and the intensity of the children's fears can be measured. Finally, the gathered data is easy to quantify, and the results are comparable across different groups (Gullone, 1999; 2000). Criticism against self-report fear survey schedule investigations include that they limit children's responses and that they might not reflect the children's experiences accurately due to for example social desirability or demand characteristics (Gullone, 2000).

The most widely used self-report fear survey schedule investigation is Ollendick's (1983) Fear Survey Schedule for children revised (FSSC-R) (Gullone, 2000). The FSSC- R is an 80 item self-report measure that provides information on the number, severity, and types of fears that a child experiences (Ollendick, 1983). It consists of five factors, namely: fear of the unknown, fear of failure and criticism, fear of minor injury and small animals, fear of danger and death, and medical fears (Ollendick, 1983). According to Gullone (2000) the FSSC-R has robust psychometric properties.

2.4.3 Other measurement techniques

In addition to the two commonly used methods described above, retrospective accounts, observational investigations, parent/teacher reports, and child interviews have been utilised to assess childhood fears.

In order to examine childhood fears through retrospective accounts a questionnaire that infers about the fears one experienced as a child, or earlier in time, is administered to adults, adolescents or adults (Schwarz & Sudman, 2012). Researchers that have utilised this method include Hall (1897), Jersild and Holmes (1935a), Loxton, Roomaney and Cobb (2018), Menzies (1996), Menzies and Clarke (1993), Menzies and Parker (2001), and Reynolds and Alfano (2016). Furthermore, Menzies and Clarke (1994) conducted a review of retrospective studies done on childhood fears. A major advantage of retrospective accounts is that they can enquire about the fear profile of a child over a wide age range in only one study, which makes it easier for researchers to examine the developmental trends of childhood fears (Schwarz & Sudman, 2012). However, the technique may lack adequate levels of inter-rater reliability, test-retest reliability, and construct validity (Schwarz & Sudman, 2012), which led to their scarce use over time (Gullone, 2000).

Examining childhood fears through observational investigations involves exposing children to relevant stimuli or situations and observing their reactions to it (Bless, Higson, & Sithole, 2013). Researchers that have utilised this method include Anderzen Carlsson, Sorlie, Gustafsson, Olsson, and Kihlgren (2008), Buss, Davis, Ram, and Coccia (2018), Buss and Kiel (2004), Garstein and Marmion (2008), Garstein et al. (2010), Gerull and Rapee (2002), Graziano and Mooney (1980), Jersild and Holmes (1935a), Jones and Jones (1928), Kiel and Hummel (2017), Lee, Chang, and Huang

(2008), Melamed, Weinstein, Hawes, and Katin-Borland (1975), Rothbart (1986), Rymarczyk, Zurawski, Siuda, and Szatkowska (2019), Scarr and Salapatek (1970), Valentine (1930), and Winnicott (1941). Observational investigations have the advantage of enabling researchers to better explore individual differences in reaction to stimuli (Bless et al., 2013). However, the technique has a few disadvantages: due to time and resource limitations sample sizes are rather small (Gullone, 2000). Furthermore, the studies have a narrow focus on a specific fear arousing stimuli (Gullone, 2000). Moreover, since it is difficult to distinguishing emotions in young children, and because there are differences in behavioural reactions of fear among people, researchers may falsely interpret the observed behaviours (Gullone, 2000). As a result, observational investigations are used rather seldomly in contemporary research (Gullone, 2000).

Examining childhood fears through parent/teacher reports involves asking parents or teachers to reflect on a child's fears (Gullone, 2000). Researchers that have utilised this measurement technique include Bouldin and Pratt (1998), Cummings (1944; 1946), Draper and James (1985), El-Housseiny, Merdad, Alamoudi and Farsi (2015), Garstein, Hancock, and Iverson (2018), Garstein and Marmion (2008), Graham and Gaffan (1997), Gustafsson, Arnrup, Broberg, Bodin, and Berggren (2010), Hagman (1932), Jersild and Holmes (1935b), Lapouse and Monk (1959), Matson and Love (1990), McMurty, Noel, Chambers, and McGrath (2011), Muris and Merckelbach (2000), Nauta et al. (2004), Salcuni, Dazzi, Mannarini, Di Riso, and Delvecchio (2015), Schreier and Heinrichs (2010), Shindova, Belcheva, and Mateva (2014), and Slaughter & Griffiths (2007). The advantages of parent/teacher reports are that adults may have better intellectual abilities than children, and that teachers and parents can observe a child's behaviour more consistently than a researcher (Gullone, 2000).

However, parents and teachers could be biased or miss significant behaviours of the child (Gullone, 2000). Furthermore, various studies, such as for example by El-Housseiny et al. (2015), demonstrated that mothers may tend to underestimate their children's fears.

Examining childhood fears through child interviews involves conducting an open-ended or semi-structured interview with children. Researchers that have utilised this method in order to investigate childhood fears include Bauer (1976), Caroll and Ryan-Wenger (1999), Cervantes, Ullrich, and Matthews (2018), Derevensky (1979; 1974), Dibrell and Yamamoto (1986), Erne and Schmidt (1978), Foster and Hagedorn (2014), Jersild et al. (1933), Jersild and Holmes (1935a), Kruuse and Kalmus (2017), Leibring and Anderzen-Carlsson (2019), Maurer (1965), Milgrom, Mancl, King, and Weinstein (1995), Muris et al. (2000a), Muris, Merckelbach, Gadet and Moulaert (2000a), Muris, Merckelbach, Mayer, and Prins (2000b), Sagar and Lavalle (2010), Sidana (1975), Slee and Cross (1989), Van Der Molen, Valkenburg and Peeters (2002), and Winker (1949). Child interviews are helpful in giving researchers an in-depth understanding of a child's experience of his or her fears (Gullone, 2000). However, the interviewer may be biased by his or her expectations or other variable (Gullone, 2000).

It should be noted that not all of the studies mentioned under 2.2 were conducted solely on children in middle childhood. Hence, their findings cannot all be compared to those obtained in the present study.

2.5 Contemporary research in the field of childhood fears

In order to provide the reader with an impression of contemporary research in this field, five more recent studies will be depicted. It should however be kept in mind that

the results of these studies should not be directly compared to the results obtained in the present study, as they differ in sample ages, methodology, and target areas.

Husky, et al. (2021) used data from the School Children Mental Health in Europe (SCMHE) study to explore fear subtypes and self-reported mental health in 9613 children, aged 6 to13 years old, attending elementary school in eight Europen countries. They found that the number of fear subtypes is strongly associated with self-reported internalizing and externalizing problems. Furthermore, they found that the subtype 'fear of animals' was less likely than other fears to be associated with psychopathology. Accoding to the researchers, the findings support the notion that children who report excessive and generalized fear should be targeted for prevention.

Lewis, Rafihi-Ferreira, Freitag, Coffman, and Ollendick (2021) conducted a systemized 25-year review of nighttime fears in children and the efficacy of psychosocial treatments for children's nighttime fears. Adhering to the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines, they found that there has been a significant improvement in children's nighttime fears and reductions in disruptive nighttime behaviours following behavioural interventions and cognitive-behavioural strategies.

Dubatovskaya and Nichkova (2020) used the "Distribution of roles in the family" and the "Gender Role" questionaires, as well as the "Fears in the houses" method, in order to determine the influence of gender-role parental positions on the manifestation of fears of children of primary school age. Their study involved 50 children, aged 6 to 7 years, and 87 parents. According to the researchers, their results indicate that the presence of fear in primary school children does not depend on the gender of the child,

and that there are significant differences in gender positions of mother and father in relation to the child.

Conrad, Reider and LoBue (2021) attempted to investigate the relationship between parent-child conversations about snakes and spiders and the development of a fear of snakes and spiders in early childhood. According to the researchers, such naturalistic conversations may contain negative talk and may be one mechanism for the development of fears. The study involved interviewing 241 pre-school aged children about snakes and spiders, and observing 15 parent-child conversations at the zoo. It was found that participants provided less positive and more negative information about snakes and spiders than other animals, and that children reported more fear.

Finally, Phillips, Games, Scheurich, Barrett and Fisak (2019) provided an overview of normative fears in preschool-aged children in Barret and Fisak's (2019) book Anxiety in Preschool-children. The authors further describe the developmental trajectory of normative fears in this age group and of the etiology of excessive fears. According to Phillips, et al. (2019) fears in preschool-aged children are commonly occurring, non-pathological, and generally follow an expected course.

2.6 Theoretical framework

2.6.1 Developmental perspective

The study will be based on the notion that experiencing fears is a normal and common part of development (Louw et al., 2014) and that childhood fears are a universal phenomenon that occurs in children worldwide (Gullone, 2000; Muris et al., 2008). A developmental perspective will be applied, in which fear contents are normal at one age but can debilitate a few years later, and in which it is assumed that the number of normative fears decreases as age increases (Louw et al., 2014; Mash & Wolfe, 2017).

According to Erikson (as cited in Louw & Louw, 2014) children in middle childhood are in a developmental stage or psychological crisis called *Industry versus Inferiority*. He believed that children who can resolve this psychological crisis will develop a sense of competence regarding their ability to handle various skills, such as for example their ability to cope with fears. This might have a positive impact on their fear profiles. Gordon, King, Gullone, Muris and Ollendick (2007) for example reported that children between the ages of 8 to 16 years utilize self-control, distraction, and disclosure to others as coping mechanisms to deal with their fears. Those children who are however not able to master the crisis might get a sense of inferiority and a lack of confidence in their ability to adapt to their environment (Erikson, as cited in Louw & Louw, 2014), which might have a negative influence on their fear profiles, by for example causing age-inappropriate fears and a heightened number of fears.

2.6.2 Bronfenbrenner's (1979) ecological theory

All findings will be interpreted in consideration of Bronfenbrenner's (1979) ecological theory. According to him, the study of human development should consider the context in which a child grows up, including those aspects of a child's environment that may have an indirect influence on them. He theorized that every child's context exists of four interactive systems: the microsystem, mesosystem, exosystem, and macrosystem. The microsystem can be described as a child's most immediate environment, such as for example family, school, and peer groups (Bronfenbrenner, 1979; Swick & Williams, 2006). The mesosystem refers to the interrelations of all microsystems that surrounds a child (Bronfenbrenner, 1979; Swick & Williams, 2006). The exosystem is made up of those contexts to which a child has no physical connection or influence, but which may still have an impact on a child's psychological development, such as for example parent's working environments (Bronfenbrenner, 1979; Tudge, Mokrova,

Hatfield, & Karnik, 2009). Finally, the macrosystem consists of cultural groups, societies, or political trends that share belief systems or values (Bronfenbrenner, 1979; Tudge et al., 2009), such as for example a governmental health program (Swick & Williams, 2006).

2.6.3 Rachman's (1977) three pathway theory on fear acquisition

The investigation of the origin of childhood fears will be based on Rachman's (1977) three pathway theory of fear acquisition. Rachman (1977) theorized that fears can be acquired either directly, through aversive classical conditioning, or indirectly, through vicarious learning or transmission of negative information. The first pathway, classical conditioning, ascribes fear to the experience of a traumatic event. A child is conditioned to become fearful of something either because it has had a traumatic experience with the stimulus or situation directly, or because it associates the stimulus or event with a past traumatic experience (Rachman, 1977). The second pathway, vicarious learning, ascribes fear to the observation of another person's fearful reaction to a stimulus or situation (Rachman, 1977). In other words, if a child observes that someone else exhibits a fearful behaviour towards a stimulus or situation, he/she becomes fearful of the stimulus or situation him-/her-self. The third pathway, transmission of negative information refers to a process in which children become fearful of a specific stimulus or an event after they heard or read that the stimulus or event is dangerous (Rachman, 1977). Overall, the theory has received global support, such as for example by Egliston and Rapee (2007), Field (2006), Muris and Field (2010), and Ollendick and King (1991).

2.6.4 Application to the present study

The three theories are reciprocally connected to the study; they will inform the investigation of the normative content, number, and origin of fears in middle childhood Oshiwambo children, and the obtained results can then again be used to inform the theories. The results will contribute to the theories; a) by delivering information on what fears can be considered normative in middle childhood Oshiwambo children (developmental theory); b) by adding knowledge about the applicability of Rachman's (1977) three pathways of fear acquisition; and c) by adding knowledge about the influence a child's context can have on their content, number, and origin of fears (Bronfenbrenner's (1979) ecological theory).

2.7 Chapter summary

Chapter two has presented earlier literature regarding the content, number, and origin of normative fears in middle childhood and the results of cross-cultural studies in this field were illustrated. Furthermore, six groups of measurement techniques that can be used to assess childhood fears were explored: the FLM, self-report fear survey schedule investigations, retrospective accounts, observational investigation, parent/teacher reports, and child interviews. Finally, some contemporary studies were described

The next chapter will lay out the research methodology of the present study and the research procedure, research design, and research instruments will be explained and discussed. The methods of data analysis will be explained.

Chapter 3

METHODOLOGY

3.1 Introduction

Chapter three aims to lay out the methodologies utilised to answer the research questions. The research design will be explained and the population and sample for the study will be described. Furthermore, the research instruments will be presented and discussed, and the procedure of the study will be outlined. Finally, the chapter will clarify the data analysis procedures and the ethical implications for the study will be considered.

3.2 Research design

In order to answer the research questions a descriptive, cross-sectional and quantitative research design was applied. The design was chosen for the following reasons:

The primary aim of a descriptive study is to gather more information about a phenomenon (Bless et al., 2013). Hence, a descriptive study supported the overall goal of investigating the normative content, number, and origin of fears from middle childhood Oshiwambo children enrolled in two schools in the Khomas region. Furthermore, descriptive research gives researchers the opportunity to observe a phenomenon in a completely natural and unchanged environment (Dudovskiy, 2021).

In a cross-sectional design all data is collected at a single point in time (Bless et al., 2013). Hence, a cross-sectional study contributed towards the goal of the study to derived fear information from children in a specific age range (i.e., middle childhood), instead of gathering information about the development of childhood fears over time. Since it is assumed that children's fear profiles change depending on their ages (Muris,

2007), gathering data from a limited age range is important when investigating normative fears.

Quantitative research tests already existing theories (Bless et al., 2013). Data is collected according to a very specific set of steps and the researcher attempts to remain as neutral and objective as possible (Bless et al., 2013). Furthermore, quantitative research relies extensively on numbers and statistics in the analysis and interpretation of findings (Bless et al., 2013). Since the aim of the study is to gather normative data about the content, number, and origins of fears in Oshiwambo children in middle childhood, thereby investigating three variables that have been investigated in various other populations in earlier studies, quantitative research that tests already existing theories appeared applicable. Another factor that contributed to the decision of using a quantitative approach was the aim of obtaining results that can be generalised as far as possible, which is enhanced by the structured and objective nature of quantitative research.

3.3 Population

The population of the study consisted of 10 to 12 years old Oshiwambo children in "School A" and "School B" in the Khomas region. According to the two schools' secretaries there are approximately 1498 children within this age group in "School A" and 1410 children within this age group in "School B" ("Secretary A", "Secretary B", personal communication, March 23, 2021). Since normative childhood fears change over time (Muris, 2007), only children from one age group, namely middle childhood, were included in the study.

The choice of including participants from the Oshiwambo cultural group only was informed by the literature review, which highlighted the importance of conducting

culture specific research, due to the impact a child's cultural context may have on his/her fear profile. The Oshiwambo cultural group was chosen because they make up 50% of the Namibian Population (Pariona, 2019). The cultural group resides primarily in the northern regions of Namibia, with their predominant language being Oshiwambo (Pariona, 2019). Their religion can be described as a mix of Lutheran faith and traditional beliefs in good and bad spirits (Pariona, 2019).

The two schools were selected because they are both located in Okuryangava, a northern part of Katutura. According to a Socio-Economic Survey that was conducted by the City of Windhoek in 2002, approximately 40% of the population in Okuryangava is from Ohangwena, and 20% of Omusati, and Oshikoto, which are regions that are mainly populated by people belonging to the Oshiwambo cultural group. Hence, the chances were high that many Oshiwambo-speaking children would be enrolled in these two schools.

Namibia was founded in 1990 after it gained independence from South Africa (Pariona, 2019). It currently has a population of about 2.1 million people, making it the country with the second lowest population density in the world (Pariona, 2019). Over 21 different languages are spoken and about 11 different cultural groups exist (Mendelsohn, Jarvis, Roberts, & Robertson, 2009). Due to the enforced segregation of Namibians into distinct areas by colonial governments, the cultural groups still partly remain in the regions that were allocated to them in the past (Mendelsohn et al., 2009).

3.4 Sample

The sample for the study consisted of 102 school-going Namibian, Oshiwambo-speaking, children between the ages of 10 to 12 years. In addition, 5 children were recruited for a pilot study only, they were not included into the sample. In order to

obtain the sample and recruit the participants for the pilot study, a non-probability sampling method, namely convenience sampling, was used. In convenience sampling the researcher announces the study and all participants that wish to participate in the study and meet the inclusion criteria are accepted (Stratton, 2021). According to Stratton (2021) the sampling technique is used when participants are available around a location. Furthermore, convenience sampling is cheap, not as time consuming as other sampling strategies, and simplistic (Stratton, 2021). Since the study focused on the specific location Okuryangava in Katutura, to reach as many Oshiwambo-speaking children as possible, and since time was of the essence, convenience sampling appeared most applicable for the purpose of this study.

3.5 Research instruments

All participants were asked to complete a questionnaire in writing (see Appendix A for English version of the questionnaire). The questionnaire was available in English and Oshiwambo and the researcher as well as an Oshiwambo-speaking teacher were present during the administration of the research instrument to answer any arising questions. An experienced translator, who is a native speaker of Oshiwambo, was hired to translate the English version of the Questionnaire into Oshiwambo. The process of translation included forward translation from English to Oshiwambo. Thereafter, the translated version was reviewed and discussed by a small panel to ensure the accuracy of the translation and concepts used. The questionnaire was based on a questionnaire designed by Loxton et al. (2018) for the purpose of a similar study and consisted of three parts: 1) biographical information, 2) the Fear List Method (FLM), and 3) a standardized questionnaire based on Rachman's (1977) three pathway theory of fear

acquisition (hereafter referred to by the researcher as the 'Origins of Fear Questionnaire'). [5]

The biographical questionnaire inquired about the age, gender, mother tongue, and school of the participants. The aim of this was to ensure that all participants meet the inclusion criteria and to be better able to assess the extent to which the gathered data can be generalised (i.e., to what age group, how balanced the sample was in terms of gender, etc).

The FLM was used to assess the content and number of fears experienced by the sample of children. It is an unstructured and open-ended assessment technique in which children are solely requested to list all their fears (Burkhardt & Loxton, 2008). In addition, the children are asked to rate the level of each fear (i.e., "I fear it only a little" or "I fear it a lot", with "a lot" indicating their prominent fears). The FLM is a widely used method with high face validity (Gullone, 2000). However, little evidence exists for its reliability, since the reliability cannot be assessed (Gullone, 2000). Although the FLM has received some criticism, the present study will utilize this method for the following reason: it acquires a broad, unlimited, and exploratory understanding of the fears that children experience by allowing them to answer on their own terms (Burkhardt & Loxton, 2008; Burkhardt et al., 2003; Burkhardt et al., 2012; Muris et al., 2008). This differs from measures such as the FSSC-R (Ollendick, 1983), which limits the children's responses to a pre-determined list of fears based on the fear profiles of children from different cultural backgrounds (Burkhardt et al., 2003). Since the aim of this study is to acquire exploratory culture specific information about the

[5] It should be noted that the 'Origins of Fear Questionnaire' is not an official name for the questionnaire and was only formulated by the researcher in order to simplify the process of referring to it throughout the paper.

content, number, and origin of childhood fears, a measure that elicits broad and unlimited responses appeared more applicable.

The Origins of Fear Questionnaire was used to enquire about the origins of all prominent fears (i.e., fears rated as fearing "a lot") listed in the FLM. The decision to limit the questionnaire to prominent fears only was informed by the fact that Rachman's (1977) theory refers to the emotion of fear only, not mentioning pathways to slight uneasiness in response to stimuli. Following the method employed by Loxton et al. (2018), Muris et al. (2000a), and Muris et al. (2008), the participants were given the same four options relating to each of the fears that they rated as fearing "a lot": 1) "I had a bad or frightening experience of it" (indicating classical conditioning accounted for the fear acquisition), 2) "I know someone who had a bad or frightening experience of it" (indicating that vicarious learning accounted for the fear acquisition), 3) "I heard bad or frightening things about it" (indicating that transmission of negative information accounted for the fear acquisition), and 4) "I do not really know why I am afraid of it" (indicating that none of Rachman's (1977) pathways accounted for the fear acquisition, or that a child is unsure of how the fear originated). Since earlier studies indicated that more than one of Rachman's (1977) pathways can play a role in the acquisition of a fear (Mineka & Zinbarg, 2006), children were informed that they may choose more than one option relating to each of their prominent fears. There is no information about the psychometric properties of the 'Origins of Fear Questionnaire' other than face validity (Muris et al., 2008). However, Merckelbach, Muris, and Schouten (1996) found a strong consensus between child and parent accounts of the origins of fears, which suggests that the questionnaire is reliable and valid.

Since the questions of the two research instruments are relatively simple, straight forward, and unguided, it was not perceived as necessary to adapt or alter them to the Namibian context. This is in line with other researchers who utilized the two research instruments in the African context, specifically South Africa, without adapting them, such as for example Burkhardt and Loxton (2008), Burkhardt et al. (2003), Muris et al. (2008), and Zwemstra and Loxton (2011).

3.6 Procedures

Permission for the study was sought from the University of Namibia's (UNAM) Decentralized Ethics Committee (DEC) (see Appendix B for ethical clearance certificate), UNAM's Postgraduate Research Support services (see Appendix C), the Ministry of Education, Arts and Culture of Namibia, and the Educational Director of the Khomas region. Once the research project was approved by the above-mentioned stakeholders, the principals of the two schools were contacted to arrange a meeting to discuss the proposed research project (i.e., purpose, procedure, risks and benefits of the study) and seek permission to conduct the study at their schools. After permission was granted, the researcher consulted with the principals on the most effective way to reach children that meet the inclusion criteria (i.e., aged 8 to 12 years; Oshiwambo-speaking; enrolled in "School A" or "School B"), as well as their parents. A letter entailing a simple explanation of the purpose, procedure, duration, obligations, risks, and benefits of the study was distributed, along with a consent and assent form (see Appendix D for letter and consent form and Appendix E for assent form). The letter and consent forms also clearly stated that the possible participants are under no obligation to participate in the study and that the collected data will be kept anonymous and confidential (names will not be recorded on the questionnaire). Furthermore, the contact number of the researcher was provided on the forms and parents and children

were invited to contact the researcher should they have any questions regarding the study. Once the consent and assent forms were signed, they were handed to the responsible teacher and an appointment for a pilot study as well as the data collection was made. In order establish whether the questionnaire is understandable for the children and whether it elicits reliable data, a pilot study was conducted with 5 children that were randomly selected from the sample via a lottery technique. Afterwards the questionnaire was slightly adapted and simplified. In order to avoid biases such as the *test effect* (as described in Bless et al., 2013) the participants that were tested in the pilot study were not admitted into the sample for the final study.

Data collection was conducted in various classrooms at the children's school, after school hours. The researcher, as well as an Oshiwambo-speaking teacher, were present at all times in order to answer any arising questions. In order to set the children at ease and establish rapport the researcher engaged in small talk with the children before explaining the procedure and questionnaire. Among other things the researcher explained what psychologists do and what the purpose of research is. Afterward the questionnaires were handed out to the children, allowing them to choose between English and Oshiwambo. The procedure and questionnaire was explained to the children and they were informed that there is no time limit set. The children were first asked to complete part one (biographical information) and two (FLM) of the questionnaire. Once they completed this, the researcher or teacher assisted the children in transcribing all fears that the children rated as fearing "a lot" in the FLM into a table for the third part of the questionnaire (Origins of Fear Questionnaire). The purpose of this was to simplify the procedure by allowing the children to focus on one task at a time and not having to understand too much information at once at the beginning of data collection. Finally, the data collection was concluded by asking the children to

draw a picture of something they like onto the back of the questionnaire. The purpose of this being to draw their attention away from their fears and focus on more positive things again.

3.7 Data analysis

In order to analyse the collected data descriptive statistics, frequencies, and tables and figures were used. Descriptive statistics are concise numerical quantities that describe the basic features, characteristics, and distribution of data in a given data set (Lee, 2020). They provide the analyst with an overview of the central tendencies (i.e., average, mean, median, mode) and the degree of dispersion in the data (i.e., range, variance) (Lee, 2020). Since the present study followed a descriptive study research design and simply aimed at gathering more knowledge about childhood fears, the utilisation of descriptive statistics, which provide simple summaries about the sample and form the basis of a quantitative analysis (Bless et al., 2013), appeared most suitable for data analysis to the researcher. Frequencies indicate the number of times an event or a value occurs in a set of data (Bless et al., 2013). A frequency table lists items and shows the number of times the item occurs in a set of data (Bless et al., 2013). Since the aim of the present study was to gather normative data about childhood fears and elicit the most frequently expressed fear contents and origins of fears in the sample, the utilisation of frequencies and frequency tables to analyse the collected data appeared most suitable to the researcher. Tables and graphs provide a visual representation of raw data (Joyce, Neill, Watson, & Fisher, 2008). They are used to organise information and show patterns and relationships (Joyce et al., 2008). The utilisation of tables and graphs in the present study provided the researcher with a summary of data that is concise and easy to read. Furthermore, it assisted the researcher in identifying trends, see proportions, and maintain an overview of the data.

After collection of the data, it was entered into the spreadsheet software program Microsoft Excel (2019) and the program's functions were used to study the data. In order to analyse and summarise the biographical information of the sample a frequency table was used. The content of childhood fears as expressed by the sample was explored by looking at frequencies and creating a frequency table (i.e., how frequently each fear content was mentioned by the sample). Furthermore, specific fear contents were grouped into broader categories or themes and the proportions of these groups were presented and analysed using a figure. The number of childhood fears was investigated using descriptive statistics (i.e., average, range, mode), frequencies (i.e., frequency of children reporting each number of fear within the range), and a figure (to display the frequency of children reporting each number of fear within the range). Finally, the origin of childhood fears was analysed using frequencies and frequency tables (i.e., how frequently each pathway of fear acquisition was mentioned).

3.8 Ethics

Ethical clearance was sought from the University of Namibia's Decentralized Ethics Committee. Children were only admitted into the study if informed consent was received from the parents/legal guardians and assent was received from the children. By virtue of their age children are a part of a vulnerable group and hence parental consent was needed in addition to the children's assent. In order to obtain informed consent and assent, all aspects of the study were explained in a child friendly manner (i.e., the purpose, procedure, risks and benefits; their obligations and rights; confidentiality; and their right to withdraw from the study at any time without any negative consequences), arising questions were answered, and the consent and assent forms were signed by the researcher, the participants and their parents or legal guardians.

Any information and data that could identify the participants or legal guardians was kept confidential. The collected data is stored in a password protected file on the researcher's laptop (soft copies) and in a lockable cabinet (hard copies). All data will be destroyed after five years via formatting and shredding.

No psychological effects were anticipated to be caused by the study. However, should any slight emotional upset have occurred, the researcher, who is a postgraduate clinical psychology student, would have provided counselling, guidance and/or containment on site. Additionally, all participants and/or their legal guardians were encouraged to get in touch with either the researcher, her supervisor (who is a registered clinical psychologist), or an additional registered clinical psychologist should any discomforts have arisen due to the study at a later point in time. The contact details of the additional clinical psychologist (Dr. M. Janik; 061- 256 198), who would have provided therapy free of charge, was provided. Should the researcher have discovered any severe fear in a child during the testing phase, the child would have been referred to Dr. M. Janik. In line with a study conducted by Zwemstra and Loxton (2011), all assessments were ended by asking the children to draw a picture of something they like. The purpose of this was to take the children's minds off their fears and redirect them to something more positive.

3.9 Chapter summary

Chapter three was directed at discussing the methodology utilised in order to conduct the study. More specifically, the research design, the population, the sampling technique, the research instrument, the procedure, the data analysis, and the research ethics were described and justified.

Chapter four will lay out the results obtained in the study.

Chapter 4

RESULTS

4.1 Introduction

Chapter four aims at laying out the results obtained from the quantitative research approach. The results were interpreted through data analysis conducted in excel. First, the demographic results will be presented. Second, the content of childhood fears as expressed by the sample will be laid out, followed by the number of fears reported by the children. Finally, the prominence of the different pathways of fear acquisition will be portrayed.

4.2 Biographical information

Table 4.1 describes the biographical characteristics of the sample. One hundred and two children participated in the study (n=102), of which 61 were females and 41 males. None of the participants were aged 8 or 9 years, 48 were aged 10 years (47.06% of the sample), 43 were aged 11 years (42.16%), and 11 were aged 12 years (10.78%). Twenty of the participants in the sample were learners in “School B” (19.61%), and 82 belonged to “School A” (80.39%). Finally, 28 children chose to answer the questionnaire in Oshiwambo (27.45%), whereas the remaining 74 participants chose to complete an English questionnaire (72.55%).

Table 4.1: Biographical characteristics of the sample

Demographics	**Frequency**	**Percentage**
Participants' Age		
8	0	0
9	0	0
10	48	47.06
11	43	42.16
12	11	10.78
Total	**102**	**100.00**
Gender		
Male	41	40.20
Female	61	59.80
Total	**102**	**100.00**
School		
"School B"	20	19.61
"School A"	82	80.39
Total	**102**	**100.00**
Language of research		
English	74	72.55
Oshiwambo	28	27.45
Total	**102**	**100.00**

4.3 Content of fears in the sample

The first research question in the study aimed at investigating the contents of fears as expressed by Oshiwambo-speaking Namibian children in middle childhood. The measurement technique utilised for the purpose of this objective was the Fear List Method (FLM). As portrayed in Table 4.2, a total of 132 different fear contents were reported by the sample. The ten most frequently expressed fears in descending order were: snake (reported by 94.12% of the sample), lion (65.69%), dog (57.84%%),

spider (45.10%), elephant (37.25%), cat (37.25%), cow (25.50%), cheetah (23.53%), scorpion (22.55%), and bad people (18.63%). Additional fears that were reported by at least ten percent of the sample were: bee (14.71%), mouse (13.73%), frog (12.75%), rhino (12.75%), crocodile (12.75%), chicken (10.78%), and zebra (10.78%). Hence, 17 fear contents were reported by at least ten percent of the sample. Out of the 17 fears that were expressed by at least ten percent of the sample 16 were animal related, with 'bad people' being the only fear non-animal related.

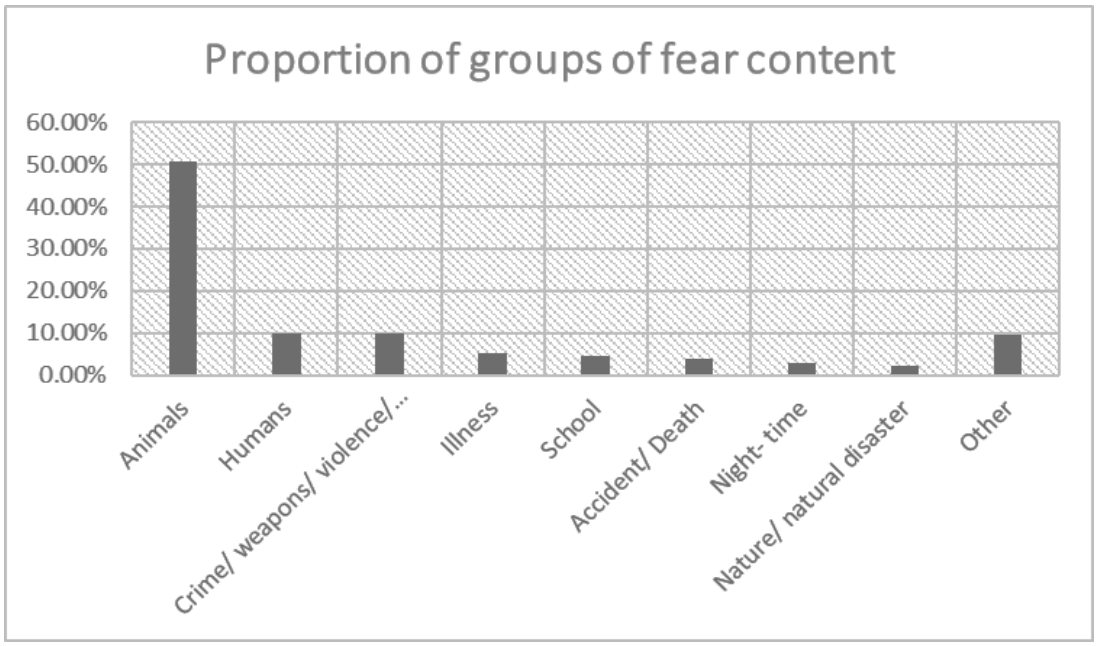
Table 4.2: Frequency distribution of fear contents

Fear content	Frequency	Fear content	Frequency	Fear content	Frequency	Fear content	Frequency	Fear content	Frequency
Snake	96	Chicken	11	Fish	6	Wild animals	4	Springbok	2
Lion	67	Zebra	11	Covid-19	6	Ants	3	Nightmares	2
Dog	59	Tiger	10	Leopard	5	Boys	3	Death	2
Spider	46	Shark	10	Pig	5	Bear	3	Rabbit	2
Elephant	38	Darkness	10	Strangers	5	Buffalo	3	Car/Truck	2
Cat	38	Monkey	9	Tortoise	5	Beating	3	Worm	2
Cow	26	Illness	8	Teachers	5	Cockroach	3	Wild cat	2
Cheetah	24	Goat	8	Damaras	5	Flies	3	Witch	2
Scorpion	23	Fire	7	Wild dog	4	Failing Grade	3	School	2
Bad people	19	Giraffe	7	Police	4	Knife	3	Oryx	2
Bee	15	Rat	7	Ostrich	4	Murderer	3	Mole	2
Mouse	14	Thieves	7	Octopus	4	Mosquitos	3	Men	2
Frog	13	Gecko	6	Kidnapping	4	Scary movie	3	Kudu	2

Fear content	Frequency	Fear content	Frequency	Fear content	Frequency	Fear content	Frequency	Fear content	Frequency
Rhino	13	Owl	6	Ghost	4	Wolf	3	Jackal	2
Crocodile	13	Hyena	6	Car accident	4	Seal	2	Injection	2
HIV/AIDS	2	Antelopes	1	Falling	1	Santa	1	Test	1
Home	2	Adults	1	Failing subject	1	Spade	1	Getting laughed at	1
Grasshopper	2	Big people	1	Gout	1	Storm	1	Loosing stuff	1
Gorilla	2	Bullies	1	Hippo	1	Sexual molestation	1	Sleep	1
Eagle	2	Bat	1	Jelly Fish	1	Sex	1	Panga	1
Chickenpocks	2	Corkscrew	1	Measles	1	Thunder	1	Himba	1
Crazy people	2	Cough	1	Poker	1	TB	1	Kavango	1
Bugs	2	Caracal	1	Panda	1	War	1	Hight	1
Butterflies	2	Dolphin	1	Rape	1	X-ray	1	Grandmother	1
Being alone	2	Fight	1	Snail	1	NDF	1	Uncle	1
Hot water	1	Firewood	1	Gun	1	Not sleeping	1	Eland	1
Wildebees	1	Horse	1						

Figure 4.1 portrays the different groups of fears in which the fear contents reported by the sample could be divided, as well as the proportion of these groups. Sixty seven out of the 132 reported fear contents were animal related (50.75% of all fear contents); 13 were human related (i.e., bad people, strangers, Damaras, boys, men, crazy people, adults, big people, bullies, Himbas, Kavangos, grandmother, uncle) (9.85%); 12 were crime, weapon, violence or war related (i.e., thieves, police, kidnapping, knife, murderer, fight, rape, gun, sexual molestation, war, Namibian Defence Force (NDF), and panga) (9.09%); 8 were illness related (i.e., illness, Covid-19, injection, HIV/AIDS, chickenpocks, cough, gout, measle, Tuberculosis, and X-ray) (6.06%); 6 were school related (i.e., teachers, failing grade, school, failing subject, test, and getting laughed at by classmates) (4.55%); 5 were accident or death related (i.e., car accident, death, car/truck, falling, hight) (3.79%); 4 were night-time related (i.e., darkness, nightmares, not sleeping, sleep) (3.03%); 3 were nature/natural disaster related (i.e., fire, storm, thunder) (2.27%); and 14 were classified as "other" (i.e., ghost, scary movie, witch, home, being alone, hot water, corkscrew, fire wood, poker, Santa, spade, sex, and loosing stuff) (10.60%). It can hence be summarised that most fears reported in the present study were animal related, followed by human related fears and violence related fears.

Figure 4.1: Proportion of groups of fear contents

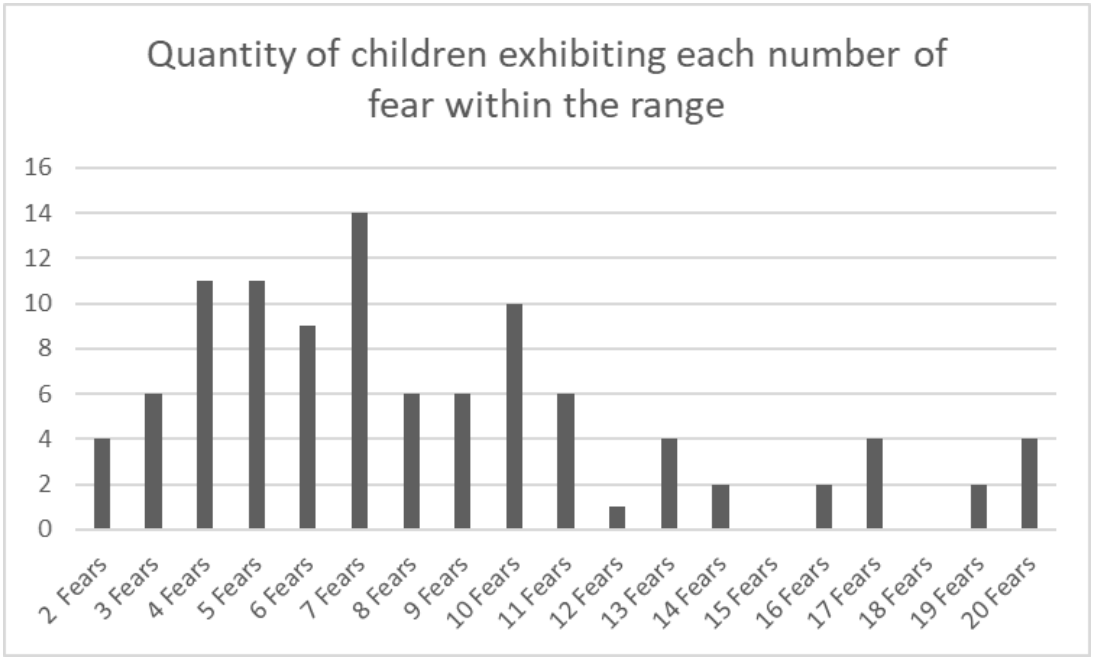


4.4 Number of fears in the sample

The second research question in the study aimed at investigating the number of fears as expressed by Oshiwambo-speaking Namibian children in middle childhood. As with the content of childhood fears, the instrument used to derive at the number of fears per child was the FLM. The average number of fears exhibited per child was 8.38, with a range of 2 – 20 and a mode of 7. Figure 4.2 portrays how many children exhibited each number of fear within the range. Out of the sample of 102 children, 4 children listed having two fears; 6 children listed having three fears, 11 children listed having four fears, 11 children listed having five fears, 9 children listed having six fears, 14 children listed having seven fears, 6 children listed having eight fears, 6 children listed having nine fears, 10 children listed having ten fears, 6 children listed having eleven fears, 1 child listed having twelve fears, 4 children listed having thirteen fears, 2 children listed having fourteen fears, 0 children listed having fifteen fears, 2 children listed having sixteen fears, 4 children listed having seventeen fears, 0 children listed

having eighteen fears, 2 children listed having nineteen fears, and 4 children listed having twenty fears. As can be seen in Figure 4.2, the majority of children (i.e., 53.92 % of the sample) reported having 4,5,6,7, or 10 fears.

Figure 4.2: Quantity of children exhibiting each number of fear within the range



4.5 Origin of fears in the sample

The third research question in study aimed at investigating how the children acquired their most prominent fears (i.e., fears that the children rate as fearing “a lot”). In order to derive at the origins of fears expressed by the sample a questionnaire based on Rachman’s (1977) three pathway theory of fear acquisition was used. As portrayed in Table 4.3, a total of 541 reports regarding the pathway of fear acquisition were derived from the sample.

Table 4.3: Frequency distribution of pathways of fear acquisition

Pathway of fear acquisition	**Frequency**	**Percentage**
"I had a bad or frightening experience of it" (i.e., classical conditioning)	179	33.09
"I heard bad or frightening things about it" (i.e., transmission of negative information)	132	24.40
"I know someone else who had a bad or frightening experience of it" (i.e., vicarious learning)	127	23.48
"I do not really know why I am afraid of it" (i.e., none of Rachman's (1977) proposed pathways)	103	19.04
Total	**541**	**100.00**

Of the 541 reports regarding pathways of fear acquisition, 179 (33.09%) indicated that a fear developed as a result of classical conditioning, 132 (24.40%) indicated that a fear developed as a result of transmission of negative information, 127 (23.48%) indicated that a fear developed as a result of vicarious learning, and 103 (19.04%) indicated that none of Rachman's (1977) pathways played a significant role in the development of a fear.

The number of times each of Rachman's (1977) pathways was reported to have led to the either of the ten most frequently expressed fears in the sample is depicted in Table 4.4.

Table 4.4: Prominence of each pathway of fear acquisition for the ten most frequently expressed fears in the sample

Fear content	**Classical conditioning** **Frequency**	**Vicarious learning** **Frequency**	**Transmission of negative information** **Frequency**	**Unsure of how fear was acquired** **Frequency**
Snake	34	18	26	7
Lion	20	14	13	15
Dog	8	10	3	4
Spider	12	6	6	1
Elephant	9	8	7	9
Cat	8	1	1	6
Cow	2	2	1	4
Cheetah	5	5	8	2
Scorpion	5	5	3	2
Bad people	3	1	4	1
Total	**106**	**70**	**72**	**51**

Corresponding to the findings for the overall study classical conditioning was the most prominent pathway of fear acquisition for the ten most frequently expressed fears, followed by transmission of negative information, followed by vicarious learning, followed by not being sure of how a fear was acquired.

4.6 Chapter summary

Chapter four portrayed the biographical information and the results regarding the content, number, and origin of middle childhood fears as obtained from the sample. The participants' ages ranged between 10 and 12 years and there were slightly more males than females in the sample. The majority of participants chose to answer the

questionnaire in English and were enrolled in “School A”. Data regarding the fear contents as derived from the sample indicates that the majority of fear contents were animal related, with the most frequently expressed fear content being the fear of snakes. Culture and context specific fear contents found include crime related fears, a fear of the police or NDF, a fear of fire, a fear of car accidents, a fear of HIV and TB, a fear of Covid-19, and a fear toward people from various cultures other than the Oshiwambo culture. The average number of childhood fears per child retrieved from the sample was 8.38, with a range of 2-20. The most frequently reported pathway of fear acquisition in the sample was classical conditioning, followed by transmission of negative information and vicarious learning.

Chapter five will aim at discussing the obtained results and putting them into the context of earlier, similar studies.

Chapter 5

DISCUSSION

5.1 Introduction

The previous chapter has laid out the results obtained in the study. Chapter 5 will focus on discussing the results obtained and putting them into context of already existing literature about similar studies. First, the results regarding the content of childhood fears will be discussed, followed by the results regarding the number of childhood fears, and finally the results regarding the origins of childhood fears will be explored.

Since studies such as for example by Burkhardt and Loxton (2008), and Burkhardt et al. (2003) have demonstrated that the content and number of fears reported by children are dependent upon the measurement techniques utilised, findings of the present study will only be put into context of earlier studies that have utilised the Fear List Method (FLM).

5.2 Content of fears in the sample

5.2.1 Ten most frequently expressed fears in the sample

The ten most frequently expressed fears in the sample of 10 to 12 year old Oshiwambo-speaking Namibian children in descending order were: snake (expressed by 94.12% of the sample), lion (65.69%), dog (57.84%), spider (45.10%), elephant (37.25%), cat (37.25%), cow (25.50%), cheetah (23.53%), scorpion (22.55%), and bad people (18.63%); with the vast majority of these fears being animal related. This is in line with already existing literature about similar studies conducted by Pratt (1945), Muris et al. (1997b), Murray (2012), and Zwemstra and Loxton (2011). The authors reported that 5 out of 5 (Pratt, 1945), 2 out of 10 (Muris et al., 1997b), 3 out of 10 (Murray, 2012), 3 out of 10 (Burkhardt & Loxton, 2008), 4 out of 10 (Burkhardt et al., 2003),

and 7 out of 10 (Zwemstra & Loxton, 2011) of the most frequently reported fears in their study were animal related.

The fear of snakes was reported by 94.12% of the sample, making it by far the most frequently reported fear in the present study. This is in line with three similar studies conducted in the South African context (Burkhardt & Loxton, 2008; Burkhardt et al., 2003; Zwemstra & Loxton, 2011), in which the fear of snakes was also the most frequently reported fear. The results of this study are also similar to two studies conducted by Pratt (1945) and Muris et al. (1997b), who found the fear of snakes to be among the ten most frequently expressed fears in their samples. The only study utilising the FLM that did not report the fear of snakes to be among the ten most frequently expressed fears was conducted by Murray (2012) in Ireland. One possible reason that could account for these findings is the level of exposure children from the different studies have to snakes. Namibia is populated by about 81 species of snakes (Van den Berg, 2021) and South Africa by about 130 to 160 species (Siyabona Africa, 2021), suggesting a high level of human snake interaction. Results from studies in both contexts suggest a high level of fear of snakes in middle childhood children. The Netherlands have about 3 species populating the country (Van den Berg, 2021), suggesting few interactions between humans and snakes. Ireland does not have a single species of snake on the island (Owen, 2018), suggesting no interaction between human and snakes. Findings from studies in these contexts suggest a low-level to no fear of snakes in middle childhood children. It can hence be argued that the higher the level of exposure to snakes is for children in a given country, the more likely it is that participants will express a fear of snakes. This is in line with Bronfenbrenner's (1979) ecological theory.

Bronfenbrenner's (1979) ecological theory is further supported by the fact that the findings regarding the ten most frequently expressed fears of the present study are very similar to those of South African studies (Burkhardt & Loxton, 2008; Burkhardt et al., 2003; Zwemstra & Loxton, 2011), but only have limited similarity to studies conducted in Ireland (Murray, 2012), the Netherlands (Muris et al., 1997b), and the USA (Pratt, 1945). The fear of snakes, lions, cheetahs (i.e., predators), and dogs were reported by all three South African studies, the fear of spiders by two out of three South African studies, and the fear of elephants and bad people (i.e., gangs) by one out of three South African studies. Overall, this means that 20 out of the 40 fears (50%) among the ten most frequently expressed fears in the present study and the three South African studies are matching. In comparison, only 8 out of the 35 (22.86%) most frequently mentioned fears reported by the present study and the studies conducted in the USA (Pratt, 1945), the Netherlands (Muris et al., 1997b), and Ireland (Murray, 2012) are congruent.

5.2.2 Culture and context specific fears in the sample

The present study reported about, and supports, the notion that a child's context can have a significant impact on his/her fear profile. Hence, a brief description of the participants' context (i.e., Katutura) will be provided before discussing some of the fear contents obtained in the present study in relation to the participants' context. The information will be based on different sources, such as for example journal articles (Nickanor & Kazembe, 2016), newspaper articles (Nakashole, Karuuombe, Tendane, & Ndeyanale, 2021; New Era, 2020; Ngatjiheue, 2020), master's thesis (Mbongo, 2017), and reports (i.e., Pang, 2020). Since the present study is informed by Bronfenbrenner's (1979) ecological theory, the participant's context will be described corresponding to Bronfenbrenner's (1979) four interactive systems.

Microsystems/mesosystem: it can be assumed that a large proportion of the participants in the sample resides in a low-income household in which many/extended family members share a small space for housing. Furthermore, the level or quality of education provided in the Katutura context appears to be varying from low to average.

Exosystem: it can be assumed that a large proportion of the participants in the sample (and/or their caregivers) experience unemployment, food insecurities, lack of service delivery (i.e., water and electricity) and poor sanitation. Furthermore, the system appears to be marked by drug abuse, environmental pollution, inadequate health care provision and high levels of crime. Overall, the participants' exosystem appears to be shaped by the interrelated dynamics of poverty and crime (New Era, 2020; Ngatjiheue, 2020). For example, the lack of electricity in some areas of Katutura leave these areas in complete darkness throughout the night, making it easier for criminals to operate. This is supported by results from the present study in which the participants reported being afraid of the dark, suggesting that they might associate it with a terrifying experinece.

Macrosystem: Namibia was rated as a high middle-income country by the World Bank in 2020, but also has the highest poverty levels among the world (i.e., over 10% of Namibia's population live in abject poverty). The apparent imbalance between Namibia's high income and the simultaneous extreme prevalence of poverty can be ascribed to enduring income inequalities in the country with Namibia having the third highest levels of income inequality globally (The world bank, 2022). The participants' macrosystem is also marked by rapid urbanisation and hence rapid growth of informal settlements (i.e., Katutura). Furthermore, Namibia has a history of apartheid, enforced

segregation and suppression. A final contextual aspect that could have had a significant impact on the participant's fear profiles is the Covid-19 pandemic.

When considering the contextual aspects of the participants in relation to the fear contents obtained from the sample, a correlation between context and fear content can be found for: 1) crime related fears, 2) a fear of the police or NDF, 3) a fear of fire, 4) a fear of car accidents, 5) a fear of HIV and TB (or related symptoms), 6) a fear of Covid-19, 7) a fear toward people from various cultures other than the Oshiwambo culture.

Crime related fears: out of the 132 reported fear contents elicited from the present sample, 11 (8.33%) were crime-related (i.e., bad people, thieves, police, kidnapping, knife, murder, fight, rape, gun, sexual molestation, panga), with 18.63% of the sample reporting a fear of "bad people". Specifically for the Katutura area, frequently occurring crimes include house break-ins, robbery, assault, gender-based violence and sexual offences (Nakashole, Karuuombe, Tendane, & Ndeyanale, 2021; Nation Master, 2022; New Era, 2020; Ngatjiheue, 2020). According to Nation Master (2022) Namibia was ranked 15th out of 93 countries for worries about home break-ins and enters in 2014, and 51st out of 184 countires for murder rates. Interpol's National Central Bureau (NCB) (2022) reported that Namibia's crime areas of concern include drug crime, firearms trafficking, and trafficking in human beings. When considering Namibias crime areas of concern in relation to the reported fear contents of thieves, kidnapping, murder, rape, gun, and sexual molestation obtained from the sample, a reciprocal connection between context and fear profile can be assumed.

The high frequency of reports of crime related fears in the present study is in line with results obtained in Burkhardt et al.'s (2003) South African study, in which 22.3% of

participants were afraid of weapons, 14.1% of crime, and 12.6% of gangs. When looking at the results obtained by Muris et al. (1997b) in the Netherlands however, it becomes evident that the number of crime-related fears reported by the sample is significantly lower, with only 3.8% of the sample reporting a fear of burglars. One possible explanation for the similarities and differences in the quantity of crime related fears between the three studies could be the variety in the level of crime rates in the countries. Whereas Namibia and South Africa are marked by high crime rates in comparison to other countries (Nation Master, 2022), the crime rates in the Netherlands are relatively low (Nation Master, 2022). This suggests that the higher the crime rates in a country, the more crime related fears will be experienced by the children residing in it.

A fear of the police or NDF: four participants in the present study reported having a fear of the police, and one participant reported a fear of the Namibian Defence Force (NDF). As far as the researcher could determine these fear contents were rarely, if at all, reported in earlier studies investigating childhood fears. Based on various newspaper articles, such as for example by The Namibian (2021) and Namibia Fact Check (2020), the participants' context is marked by police violence, brutality, and misconduct. Furthermore, since the beginning of the Covid-19 pandemic, many reports of NDF soldiers violently enforcing Covid-19 restrictions in informal settlements have circulated the media.

A fear of fire: seven participants in the study reported having a fear of fire. As can be read in various newspaper articles, such as for example by Bause (2007) and Mutanga (2020), shack fires that result in complete destruction or death are a common phenomenon in the Katutura area. The frequent outbreaks and spread of shack fires

can be connected to a lack of access to electricity, compelling residents to use open fires for cooking and warmth; as well as to lacking safety measures in houses or shacks, a lack of running water for containment of fires, and a lack of quick access opportunities for fire fighters.

A fear of car accidents: four participants in the study reported having a fear of car accidents. Namibia is ranked 40th out of 183 countries when considering the frequency of car accidents, making it a high-risk country for vehicle accidents, injuries, and deaths (World Health Organisation, 2018). Furthermore, road traffic accidents are the 11th most frequent causes of death in the country (World Health Organisation, 2018).

A fear of HIV and TB (or related symptoms): two participants in the study reported having a fear of HIV/AIDS, one participant reported a fear of TB, and one participant reported a fear of a cough (a prominent symptom of TB). HIV/AIDS is the most frequent cause of death in Namibia and TB the sixth most frequent cause. Furthermore, Namibia is ranked 6th in the world for the highest numbers of HIV/AIDS deaths (World Health Organisation, 2018). Considering the prominence of HIV/AIDS and TB related deaths in the participants' context and considering that the fear of HIV/AIDS was the most frequently expressed fear content in a South African study, it appeared surprising to the researcher that the frequency of reports of a fear of HIV/AIDS or TB was not higher. Two possible explanations for the rather low number of reports of this fear content are that: 1) eight participants gave the general report of being afraid of illnesses, possibly incorporating the specific illnesses of HIV/AIDS and TB; and 2) that since the start of the Covid-19 pandemic the focus of health-related matters was almost solemnly on the novel virus, thereby possibly drawing the participants' attention away from HIV/AIDS and TB.

A fear of Covid-19: approximately 6% of the sample reported having a fear of Covid-19. It is an infectious disease caused by the SARS-CoV-2 virus that was first reported in Wuhan on the 31st of December 2019 (World Health Organisation, 2022a). The outbreak of Covid-19 was declared a public health emergency of international concern (WHO's highest level of alarm) by the director-general of the World Health Organisation (WHO) (World Health Organisation, 2022c). Specifically for the Namibian context, the WHO reported that from 3rd January 2022 to 2nd February there have been 3 969 Covid-19 deaths (World Health Organisation, 2022b). Since the virus was only recently discovered, it is not surprising that the present study appears to be the first in the field to yield the fear content of Covid-19. Due to the destructive nature of the virus, and since the fear of Covid-19 is a novel fear in children, it's impact on childhood fears warrants further investigation.

A fear toward people from various cultures other than the Oshiwambo culture: another group of fear contents elicited from the sample that warrants further investigation are the fears towards people from various cultures other than the Oshiwambo culture. About five percent of the sample reported being afraid of Damaras, and the fear of Himbas and Kavangos was reported by one child each. As far as the researcher could establish, no other study that investigated childhood fears reported having elicited a fear towards people from different cultures. Upon application to Bronfenbrenner's (1979) ecological theory, two factors from the participant's macro system could possibly have had an influence on the development/expression of such culture specific fears: a) Namibia consists of roughly 11 ethnic groups, making it one of the most culturally diverse nations in the world (Pariona, 2019); b) Namibia's history of apartheid, more specifically the forced segregation between the 11 ethnic groups residing in Namibia, known as the Bantustan

Policy (Melber, 2019). The fear towards people from different cultures exhibited by the children is concerning and likely based on stereotypical misconceptions. The results obtained thus call for further investigation and intervention.

5.2.3 Conclusions and final thoughts regarding the content of fears in the sample

In summation, the present study yielded both, fear contents that appear to be universal, but also a substantial amount of culture and context specific fear contents that appear to be connected to the participants' environment and are in support of Bronfenbrenner's (1979) ecological theory. When considering the ten most frequently expressed fear contents in the present study, the normative fear contents of the participants in the sample do not raise any concerns. The majority of these fears were animal related, which is considered as a universal fear (Burkhardt, 2000; Lichtenstein & Annas, 2000; Ollendick, King & Muris, 2002). It can be assumed that most of these fear contents will diminish over time (i.e., cat, cow, cheetah, lion, elephant) and hence not result in mental health problems or require professional intervention. However, when considering the culture and context specific fear contents obtained in the present study, some fears appear to be related to chronic risk factors in the participants' environment, therefore raising concern. As stated earlier, the participants of the present study are exposed to high levels of crime and even police violence, which is evident in their fear profiles. Since the participants' crime and violence related fears were likely triggered by real, imminent, and permanent threats in the participants' environments, the fear contents have a significant chance of developing into long lasting mental health difficulties or disorders. Furthermore, the fear content of a fear towards people from various cultures other than the Oshiwambo culture has the

potential to develop into racial stigmatism, discrimination, and Xenophobic related symptoms.

Whereas a high frequency of fear contents related to real, imminent, and permanent threats in the participants' environment is also evident in South African studies (i.e., crime, gangs, men), the majority of fear contents reported by studies conducted in Western contexts involve fears that are likely to resolve over time (i.e., war, strange noises, scary places, scary movies/TV/books, rollercoaster, weapons). This suggests that children residing in the African context might be at greater risk of developing mental health problems based on their childhood fears than children residing in the Western context. Considering this there is a significant need to gather more knowledge regarding the fear profiles of children residing in African contexts, and develop effective intervention strategies, should the hypothesis be confirmed.

5.3 Number of fears in the sample

The average number of fears exhibited per child in the sample of the present study was 8.38, with a range of 2-20 and a mode of 7.

Eme and Schmidt (1978) yielded an average number of 4.7 fears per child from a sample of 9 years old North American children; Lapouse and Monk (1959) yielded and average number of 11 fears per child from a sample of 6 to 12 years old North American children; Nalven (1970) yielded an average number of 5.3 fears per child from a sample of 10 to 11 years old North American children; and Zwemstra and Loxton (2011) yielded an average number of 1.8 fears per child from a sample of 7 to 13 years old South African children.

Upon comparison of these studies with the present study it becomes evident that the present study elicited the second highest average number of fears per child.

Furthermore, there is a significant difference in the number of fears elicited between the present study and the South African study conducted by Zwemstra and Loxton (2011). It should however be noted that three out of the four earlier studies using the FLM to derive at the average number of fears per child are outdated, and since the only more contemporary study was conducted on a special population (i.e., a sample of 39 South African children affected by HIV), the comparison of the results of these studies to each other, and to the results of the present study, should be read with caution.

Ollendick et al. (1996) conducted a cross-cultural study in order to investigate similarities and differences in childhood fear profiles across cultures. He reported that Nigerian children in his study exhibited a significantly higher number of fears (i.e., 26.53) than children living in North America (14.47), Australia (16.83), and China (16.98), suggesting that children from the African context might experience a higher number of fears than children living in Western countries. Ollendick et al.'s (1996) hypothesis is in line with findings by Ingman et al. (1999), who investigated the cross-cultural aspects in fear profiles in Kenyan and Nigerian children aged 8 to 17 years and reported that the children from both cultures exhibited a significantly higher number of fears than scores obtained from children residing in the USA, Australia, and China.

When considering the results obtained in the present study together with the results obtained by Eme and Schmidt (1978), Lapouse and Monk (1959), Nalven (1970), and Zwemstra and Loxton (2011) in relation to Ingman et al.'s (1999) and Ollendick et al.'s (1996) hypothesis, their hypothesis can neither be rejected nor supported. The number of childhood fears derived in the present study (i.e., 8.38), which was conducted in the African context, is significantly higher than the number of childhood

fears found by Eme and Schmidt (1978) (i.e., 4.7) and Nalven (1970) (i.e., 5.3) in a sample of North American children residing in the Western context, which is in support of Ingman et al.'s (1999) Ollendick et al.'s (1996) hypothesis. However, the highest number of fears reported (i.e., 11 by Lapouse & Monk, 1959) was also derived from a sample of North American children, and the lowest number of fears reported (i.e., 1.8 by Zwemstra & Loxton, 2011) was derived from a sample of South African children, which contradicts Ollendick et al.'s (1996) hypothesis. Two factors might have contributed to the study of Lapouse and Monk (1959) and Zwemstra and Loxton (2011) controverting Ollendick et al.'s (1996) hypothesis: a) Lapouse and Monk's (1959) study included the youngest age group (i.e., 6 years old) of children in their sample, and b) Zwemstra and Loxton's (2011) study was conducted on a special population (i.e., a sample of 39 South African children affected by HIV). Studies conducted by Burnham and Gullone (1997), Dong et al. (1995), Gullone and King (1992, 1997), Mash and Wolfe (2017), and Spence and McCathie (1993) suggest that as the age of a children increases, the number of fears they experience decreases. It would thus make sense that Lapouse and Monk's (1959) study, which included the youngest group of children of the studies described above, derived the highest number of fears. Furthermore, since Zwemstra and Loxton's (2011) study was conducted on a rather small sample of children from a special population, the findings might not be representative of South African children in general.

Regardless of the discussion regarding the applicability of and Ingman et al.'s (1999) and Ollendick et al.'s (1996) hypothesis, it can be inferred from the comparison of the present study to earlier similar studies that Namibian children residing in the Katutura area might experience a relatively high number of fears compared to children from other contextual backgrounds. The socio-economic context in which the children of

the present study reside could account for the high number of fears per child as compared to similar studies conducted in the North American or South African contexts. As described earlier, residents of the informal settlements of Katutura are faced with food insecurities, poor sanitation, and high environmental pollution, thereby exposing them to high risk for (chronic) health hazards (Mbongo, 2017). Furthermore, Katutura appears to be marked by high crime rates (Ngatjiheue, 2020). This suggest that children residing in the Katutura context might face a greater exposure to threats compared to children residing in up-market areas, thereby leading them to experience a higher number of fears. Furthermore, in line with Burkhardt et al.'s (2003) discussion of their findings in a similar study conducted in South Africa, the possible impact of the history of apartheid on the participant's fear profiles should be borne in mind. The promotion of violence towards local communities during the apartheid regime and the legacy of severe disparities in living conditions may have led to psychological and resource insecurities that are still evident today. The notion that a child's socio-economic context can have a significant impact on the number of fears it experiences is further supported by Burkhardt et al. (2003), Croake (1969), Donner et al. (2020), and Murray (2012).

5.3.1 Conclusions and final thoughts regarding the number of fears in the sample

When considering the overall existing literature regarding the possible influence a child's socio-economic context can have on the number of fears he/she experiences, the following summation can be made: Whereas earlier cross-cultural studies (i.e., section 2.3) indicate that children from lower socio-economic contexts experience a higher number of fears than children from higher socio-economic contexts, earlier culture-specific studies suggest that no correlation exists. Hence, based on earlier

studies it cannot be said with certainty that children residing in the African context experience a higher number of fears than children residing in the Western context, as was proposed by Ingman et al. (1999) and Ollendick et al. (1996). Nevertheless, when comparing the results of the present study to those obtained in earlier studies using the FLM, the results of the present study seem to be in support of Ingman et al.'s (1999) and Ollendick et al.'s (1996) hypothesis, yielding the second highest average number of fears per child. Considering the high frequency of risk factors in the participants' environment, it is not surprising that they might experience a rather high number of fears compared to children residing in more secure contexts. Two possible factors that could explain the dispute or conflict in literature regarding the possibility of a correlation between a child's context and the number of fears he/she experiences are: 1) as stated earlier, it should be noted that earlier culture-specific studies that used the FLM to derive at the number of childhood fears are outdated or were conducted on a special population. Hence, the comparability of these studies among each other, and to the present study, is questionable. 2) Furthermore, the body of literature investigating the number of childhood fears using the FLM is limited.

Since the results of the present study suggest that children residing in the Katutura context might experience a higher number of fears than children residing in the Western context, it can be stated that there is a significant need to gather more knowledge regarding the fear profiles of children residing in African contexts, and develop effective intervention strategies, should the hypothesis be confirmed.

5.4 Origin of fears in the sample

The most frequently reported pathway of fear acquisition in the present study was classical conditioning (33.09%), followed by transmission of negative information

(24.40%), followed by vicarious learning (23.48%), with 19.04% of reports indicating that a participant did not know how they acquired a fear (see Table 4.3). It can thus be inferred that the findings of the present study are in overall support of Rachman's (1977) three pathway theory of fear acquisition, with 80.97% of reports indicating that at least one of Rachman's (1977) three pathways has played a role in the acquisition of their most prominent fears (i.e., fears they fear 'a lot').

As can be seen in Table 4.3, the difference in frequencies of reports of transmission of negative information having played a role in the acquisition of a fear (i.e., 132) and vicarious learning having played a role (i.e., 127) is rather small. This pattern (i.e., classical conditioning being the most frequently reported pathway, and transmission of negative information and vicarious learning being similar) is similar to findings by Merckelbach et al. (1989) and Rimm et al. (1977) (see Table 2.5). However, since both studies are outdated, and since the researcher could not find any further similarities between the two earlier studies and the present study, no further inferences about the parallel will be made. Nevertheless, the similarity in frequencies between reports of transmission of negative information and vicarious learning, drew the researcher's attention to the fine line between the prompts for transmission of negative information (i.e., "I heard bad or frightening things about it") and vicarious learning (i.e., "I know someone who had a bad or frightening experience of it"). The fine line in possible interpretation of the prompts for transmission of negative information and vicarious learning could have a negative impact on the validity and reliability of the results obtained through the questionnaire. Hence, the researcher engaged in further investigation of the boundaries between the prompts used to represent the pathways, as well as the three pathways in general. For discussion of this matter as a limitation

of the present study see section 6.3.2, and for a critical reflection of the boundaries between Rachman's (1977) pathways in general see section 6.4.1.

The majority of earlier studies investigating the origins of childhood fears yielded classical conditioning as the most frequently indicated pathway of fear acquisition, followed by transmission of negative information, followed by vicarious learning (see Table 2.4). This is in line with the findings of the present study. However, when looking at the four studies that are most similar to the present study in terms of the age group of the sample (Muris et al., 2008; Muris et al., 1997a; Muris et al., 2000a; Ollendick & King, 1991) some discrepancies become evident. Two out of the four studies (Muris et al., 2000a; Ollendick & King, 1991) yielded transmission of negative information as the most prominent pathway of fear acquisition, and two yielded classical conditioning as the most prominent pathway. Overall, transmission of negative information seems to have played the biggest role in the origins of childhood fears in these four studies, followed by classical conditioning, followed by vicarious learning. Upon comparison of these four similar studies to the present study it can thus be reported that classical conditioning and transmission of negative information appear to play a more significant role in the acquisition of middle childhood fears than vicarious learning.

5.4.1 Ten most frequently expressed fears in the sample

When considering the reported pathways of fear acquisition for the ten most frequently expressed fears in the present sample (see Table 4.4), three findings appear unfounded and therefore call for further discussion. The most frequently reported pathway of fear acquisition for snakes, lions, and elephants was classical conditioning, suggesting that the children had personal frightening encounters with the animals. Although an

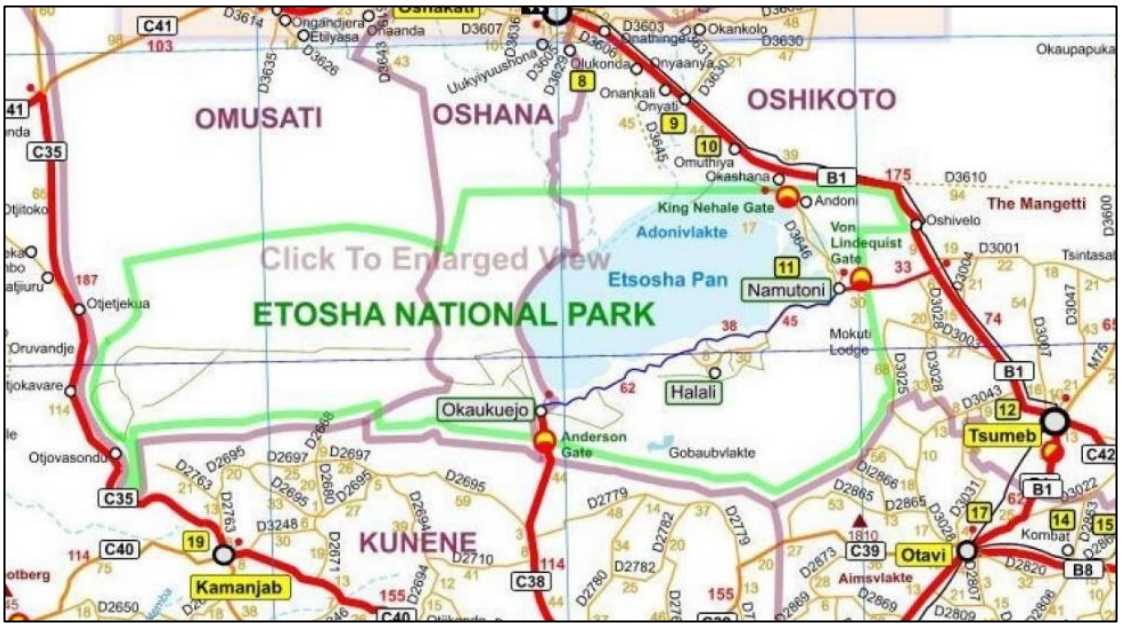
encounter with a snake in the urban area of Katutura and an encounter with a lion or elephant in general seems odd at first, some literature supports the possibility of such interactions.

As stated previously, according to Van den Berg (2021), Namibia is populated by about 81 species of snakes, of which 11 are classified as very dangerous and five as dangerous. According to Theart (2020) there were 31 reported snake conflict incidences in the Katutura area in the year 2020, of which 27 belonged to a species classified as very dangerous (i.e., 20 Zebra Cobra; 6 Puff Adder; 1 Anchieta's Cobra). Theart (2020) further stated that the actual number of human-snake encounters in that area is assumed to be significantly higher with only a few being reported. It can therefore be stated that it is not entirely impossible that 34 participants of the sample have had an interaction with a dangerous snake before, conditioning them to fear it.

The possibility of an encounter between some of the children and elephants or lions could be ascribed to geographics. Although the participants of the present study reside in Katutura, it can be assumed that a significant number of children in the sample has family living in the Omusati, Oshana, and Oshikoto regions of Namibia, in which the majority of the Oshiwambo cultural group reside (Pariona, 2019), whom they visit on a regular basis. In Figure 5.1 it can be seen that all three regions border with the Etosha National Park, one of the largest conservation areas in Africa (Namibia Wildlife Resort, 2022). The northern fence of the National Park has been severely damaged since 2012 (Smit, 2018), allowing wild animals such as elephants and lions to escape from the park into the Omusati, Oshana, and Oshikoto regions. According to Goelst, Moeller and Kilian (2018) there was an estimated population of 414 Lions in the Etosha National Park in 2018, and according to Killian (2015) there was an estimated

population of 2911 Elephants in the park in 2015. Given the high population of lions and elephants in the park and the severely impaired fence, it is not unlikely that a significant number of children from the present sample has encountered one of the two animals before. This is further supported by various newspaper articles such as for example by Jason (2020a), Jason (2020b), and Movirongo (2021) that reported about human-elephant and human-lion conflicts in these regions.

Figure 5.1: Map of Etosha National Park bordering to the Omusati, Oshana, and Oshikoto regions



The final observation that the reader's attention should be drawn to are two deviations/ spikes in the frequencies the pathway of transmission of negative information, and the option of being unsure of how a fear was acquired, was reported by participants for the ten most frequently expressed fears. As can be seen in Table 4.4, for both options one frequency value is significantly higher than the remaining frequencies yielded for that specific pathway. Whereas the frequency values of reports of transmission of negative information having played a role in the acquisition in one of the ten most frequently expressed fear contents ranges between 1 and 13 for nine out of the ten fears, the

frequency value for the fear of snakes is 26. Similarly, 15 participants indicated that they are not sure how they acquired their fear of a lion, whereas the remaining frequencies for this pathway for the ten most frequently expressed fear contents range between 1 and 9. One possible factor that could explain the significant increase in frequency of reports of transmission of negative information having played a role in the acquisition of the fear of snakes could be the high prevalence of snakes in the Namibian context (Van den Berg, 2021). Due to the high chances of encountering a dangerous snake in this context, it can be assumed that parents and teachers caution their children about this threat on a regular basis. The researcher was not able to find a plausible explanation for the escalation in frequency value of reports of being unsure how the fear of a lion developed, and the matter thus calls for further investigation.

5.4.2 Conclusions and final thoughts regarding the origin of fears in the sample

As can be read in section 6.3.2 and 6.4.1 a couple of factors might have had a negative impact on the validity and reliability of the results regarding the origin of fears obtained not only in the present study, but also in earlier studies conducted by researchers in different contexts. Furthermore, although the possibility of classical conditioning having led to a fear of snakes, lions, and elephants has been demonstrated, the validity and reliability of these results is still questionable. It should however be noted that the overall results of the present study regarding the origin of childhood fears (i.e., Table 4.3), appear to have good face validity. Considering the high exposure to threats in the participants' environment, yielding classical conditioning as the most frequently reported pathway of fear acquisition appears applicable but also concerning. Having yielded classical conditioning as the most frequently reported pathway to fear acquisition suggest that a significant amount of the children's fears have been acquired

through distressing, possibly traumatic, experiences. This further stresses the need for the development of effective interventions. Overall, it can hence be concluded that although the validity and reliability of specific and detailed analysis results (i.e., exact frequencies) in the present study is questionable, the overall suggestions of the results appear to be valid, in support of Bronfenbrenner's (1979) ecological theory, and raise concern.

5.5 Chapter summary

Chapter five put the results of the present study into context of earlier similar studies and provided possible explanations for the obtained results. Multiple similarities and differences were found between the results of the present study and earlier research, as well as some theoretical frameworks, such as for example Rachman's (1977) three pathway theory of fear acquisition and Bronfenbrenner's (1979) ecological theory, were criticised and/or supported. The results obtained in the present study strongly suggest a correlation between a child's context and fear profile, thus supporting Bronfenbrenner's (1979) ecological theory. The findings of the present study suggest that Oshiwambo-speaking children in the Katutura context are at greater risk of developing long lasting mental health difficulties in relation to their childhood fears than children residing in higher socio-economic contexts. This points to the need to gather more knowledge about the population's fear profiles in order to develop effective intervention strategies. A significant amount of the participants' fear contents appeared to be connected to real, imminent, and permanent threats in the participants' environment, decreasing the chances that the fear contents will diminish over time. The population of the present study also appears to have a higher number of fears than children from higher socio-economic backgrounds, and a significant proportion of their fears seem to have been acquired through distressing or traumatic experiences.

Finally, it should be noted that a significant number of similarities were found between the fear profiles of participants in the contemporary study and the fear profiles of participants in pioneering or earlier studies. This suggests that at least some aspects of middle childhood fear profiles are stable over time.

Chapter 6

CONCLUSIONS, STRENGTHS, LIMITATIONS, CRITICISMS AND RECOMMENDATIONS

6.1 Introduction

The previous chapter focused on discussing the results obtained in the present study by putting them into context of earlier studies and exploring some possible explanations. This chapter will provide conclusions about the present study and address some strengths and limitations. Furthermore, some criticism relating to Rachman's (1977) three pathways will be provided and future recommendations will be made.

6.2. Conclusions

The aim of the present study was to investigate the content, number, and origin of fears in middle childhood Oshiwambo children from two schools in the Khomas region, Namibia. In order to gather data, the Fear List Method (FLM) and a questionnaire based on Rachman's (1977) three pathway theory of fear acquisition was utilised. The participant's ages ranged between 10 and 12 years and there were slightly more males than females in the sample. Most participants chose to answer the questionnaire in English and were enrolled in "School A". The results obtained in the present study indicate that the majority of fear contents reported by the participants are related to animals, with the most frequently expressed fear content being a fear of snakes. Fear contents that were identified as being culture and context specific include crime related fears, a fear of the police or NDF, a fear of fire, a fear of car accidents, a fear of HIV and TB (or related symptoms), a fear of Covid-19, and a fear toward people from various cultures other than the Oshiwambo culture. Furthermore, the fear contents

derived in the present study shared significantly more similarities with fear contents obtained in South African studies, than with fear contents derived from studies conducted in the USA, Netherlands, and Ireland. Results regarding the number of childhood fears in the present study indicate an average number of 8.38 fears per child, which is the second highest number obtained in comparison to 4 similar, earlier studies conducted in North America and South Africa. Results regarding the origin of childhood fears indicate that the most frequently reported pathway of fear acquisition in the present study was classical conditioning, followed by transmission negative information and vicarious learning.

Based on the results of the present study the following summation can be made: Namibian, Oshiwambo-speaking, middle childhood children residing in the Katutura context appear to experience some universal fear contents that are likely to resolve over time, but also a substantial amount of culture and context specific fears that appear to be related to real, imminent, and permanent risks factors in the participants environment. Hence, some of the culture and context specific fears experienced by the children have a significant potential of leading to mental health difficulties or developing into disorders. Since the results of the present study suggest that classical conditioning is the most frequently reported pathway to fear acquisition for the participants, it can also be assumed that a substantial number of these fears were acquired through distressing or traumatic experiences. Considering these two factors in relation to the relatively high number of childhood fears derived in the present study, it can be stated that there is a significant need to gather more knowledge regarding the fear profiles of Namibian children. Based on the findings of the present study it can be assumed that the fears of a significant number of children residing in the Katutura context will evolve into mental health problems without intervention, pointing to the

urgent need for the development and implementation of effective intervention strategies.

6.3 Strengths and limitations

6.3.1 Strengths

- A noteworthy strength of the present study is that it is a pioneering study in the Namibian context. While some studies investigating childhood fears have been conducted in the South African context, studies of such nature are scarce in the African context, as compared to western contexts, and lacking in the Namibian context. Although further investigation is required to estimate the validity and reliability of the results obtained in the present study, the present study has provided the field with a first impression of what the fear profiles of children living in a Namibian context similar to that of the participants' could look like. The pioneering nature of the present study should also be kept in mind when considering the results, discussions, and limitations of the present study.
- Another strength of the present study is that it uncovered the imminent need for further investigation of the fear profiles of children residing in the Katutura context and the need for the development and implementation of effective intervention strategies.
- The present study has also uncovered and re-emphasized some problem areas of research in the field of childhood fears, such as for example the questionable validity and reliability of the 'Origins of fear' questionnaire based on Rachman's (1977) three pathway theory of fear acquisition that was used by various earlier studies in the field (Loxton et al., 2018; Muris et al., 2008; and Muris et al., 2000a), and the overall lack of consensus among researchers in

the field regarding matters such as for example definitions of important key terms or measurement tools.

- The final strength of the present study that should be mentioned is its culture and context specific nature. Only children belonging to the Oshiwambo cultural group and residing in the Katutura context were admitted into the study. Since culture and context specific intervention strategies are more effective than generalized ones (Mash & Wolfe, 2017) the present study aimed at delivering culture and context specific results, that might then assist health professionals in developing specific, and hence more effective, intervention strategies. The need for specific research in the Namibian context is increased by the fact that Namibia has a vast variety of cultures and contexts.

6.3.2 Limitations

The following limitations were encountered in the collection of data regarding the origin of childhood fears:

- The third part of the questionnaire, the part of the questionnaire designed to elicit the origins of childhood fears, of six participants had to be excluded from the study since the children indicated that one or more of Rachman's (1977) three pathways had played a role in the acquisition to their most prominent fears, but simultaneously indicated that they do not know how they acquired the specific fear. Based on this there is a chance that some participants did not fully understand the nature of part three of the questionnaire, thereby possibly delivering unreliable results. In order to increase the validity and reliability of this part of the questionnaire it thus would have been better to ask the children to provide a short description of how they acquired their fears in addition to identifying the pathway.

- There is a fine line between the possible interpretation of the prompts to indicate the nature of the pathways of transmission of negative information (i.e., “I heard bad or frightening things about it”) and vicarious learning (“I know someone else who had a bad or frightening experience of it”) to the participants. Both prompts could be interpreted as indicating that a conversation led to the development of a fear. There are two factors that could have led to this: 1) the prompts failed to validly reflect or describe the pathway which they were supposed to measure; or 2) there is a fine line between the definitions or categorisation of Rachman’s (1977) three pathways of fear acquisition in general. Upon examination of both possibilities, it appeared that both factors were applicable. The fine line between the possible interpretations of the two prompts could have had a negative impact on the validity of the collected data. See section 6.4.1 for further discussion of factor 2.
- There is no support for the validity of the prompt for vicarious learning other than face validity. The prompts for classical conditioning and transmission of negative information that were used in the present study were almost identical with the ones used by Loxton et al. (2018), Muris et al. (2008), and Muris et al. (2000a). The prompt for the pathway of vicarious learning of the present study however differed from the ones used by Loxton et al. (2018), Muris et al. (2008), and Muris et al. (2000a). Whereas Muris et al. (2000a) used the prompt “Have you seen other people being afraid of [the content of …]” (pg. 45), Muris et al. (2008) and Loxton et al. (2018) used the prompt “I knew/know someone who was also afraid of …” (pg. 184 and 1512). The prompt used for the present study was “I know someone else who had a bad or frightening experience of it”. The lack of consensus in the prompts used for the pathway

of vicarious learning can be ascribed to the lack of consensus as to what the definition for vicarious learning is. See section 6.4.1 for further discussion of this matter.

- It would have been interesting to provide children with a fifth option for the measurement of origins of childhood fears; gives them the opportunity to mention pathways of fear acquisition other than the ones described by Rachman (1977). This could give the researcher not only a better understanding of the applicability of Rachman's (1977) three pathway theory of fear acquisition, but also provide her with the opportunity to investigate the possibility of extension of these pathways.

The following additional limitations were encountered:

- The sample only included children aged 10 to 12 years, instead of covering the middle childhood age group of 8 to 12 years as planned. The drawback can be ascribed to the utilisation of convenience sampling as a sampling method, in which all participants that wish to participate in the study and meet the inclusion criteria are accepted (Stratton, 2021). In order to yield more generalisable results for the age group of middle childhood (i.e., covering the whole age group in the sample) it would thus have been more effective to use a sampling technique that ensures that all age groups required are included into the sample, such as for example stratified random sampling.
- A more detailed biographical questionnaire could have provided the researcher with more insight regarding the contextual influences on the participant's fear profiles. Having a better understanding of contextual influences, such as for example described by Bronfenbrenner (1979), could have supported the researcher in making more informed inferences and interpretations regarding

the results obtained. Since findings of the present study support the notion of a child's context having a significant influence on its fear profile, a more detailed investigation of contextual influences could have led to further important or interesting findings.

- As can be seen in Table 4.2, some fear contents elicited from the present study appear rather peculiar (i.e., corkscrew, poker). Whereas the quantitative design of the present study did not allow for further inquiry about such fears, a qualitative or mixed method approach would have allowed for the researcher to get a better understanding of such fear contents through an interview with the participants, thereby possibly increasing the validity and reliability of the results obtained. Similarly, a mixed method approach could have allowed the researcher to enquire in more detail about very broad fear contents reported, such as for example the fear of 'bad people', 'crazy people, or 'wild animals', which also could have increased the validity and reliability of results obtained.
- The final limitation to the study was that the researcher did not belong to the investigated Oshiwambo cultural group. Although the questionnaire and answers received were translated by a professional translator, and a teacher belonging to the Oshiwambo cultural group was present at all times, some possibly significant phenomena, findings, or indications, especially regarding possible culture specific fears, might have gone unnoticed by the researcher.

6.4 Criticisms and recommendations

6.4.1 Criticisms

There seems to be a lack of consensus in literature as to how Rachman's (1977) three pathways of fear acquisition are defined and what types or categories of interaction belong to which pathway. The researcher could find a widely accepted definition of

classical conditioning as a pathway, such as for example the one provided by the American Psychological Association: “a type of learning in which an initially neutral stimulus—the conditioned stimulus (CS)—when paired with a stimulus that elicits a reflex response—the unconditioned stimulus (US)—results in a learned, or conditioned, response (CR) when the CS is presented” (American Psychological Association, 2022, p. 1). However, there seems to be a lack of consensus as to how vicarious learning and transmission of negative information are defined and what these pathways entail or refer to. For example, it is unclear whether the medium media belongs to the pathway of vicarious learning or transmission of negative information. Whereas the American Psychological Association (APA) defines vicarious learning as “the acquisition of information, skills, or behaviour through watching the performance of others, either directly or via such media as films and videos” (American Psychological Association, 2022, p. 1), therefor clearly including media to the pathway vicarious learning; Muris and Field (2010) allocated media to the pathway of transmission of negative information, for which it was difficult to find a dependable definition altogether. Overlaps in, and lack of, categories and definitions like this make it difficult for researchers to deliver valid results that can be compared to other results yielded by other studies. Should researchers continue to base their research instruments on Rachman’s (1977) three pathway theory of fear acquisition there is an urgent need for clear and agreed upon definitions and boundaries for these pathways.

6.4.2 Recommendations

Since the present study is the first study of its kind to be conducted in the Namibian context, additional studies in this context would not only determine the validity and reliability of the results obtained, but also give indications on the extent to which the findings of the present study can be generalised across Namibian children in the age

group of 10 to 12 years. In doing so, it would also be important to conduct the same study on a variety of the cultural groups residing in Namibia. This could assist health professionals in determining whether findings regarding childhood fears in the Namibian context can be generalised across all cultural groups residing in Namibia, or whether culture specific research is necessary to provide optimal health care and prevention programs for Namibian children.

Furthermore, the fear content of being afraid of people from another culture derived in the present study is concerning and therefore calls for further investigation and intervention. Coupled to this, and considering Bronfenbrenner's (1979) ecological theory, the effect of Namibia's history of apartheid and the forced segregation between the ethnic groups residing in Namibia on the fear profiles of Namibian children merits further investigation.

Finally, it is recommended that the researcher sets a meeting with the principals of the two schools in which data was collected to discuss the results obtained in the present study, especially focusing on the areas of concern. It is hoped that the meeting will motivate the principals to further investigate the matter and possibly search for effective intervention strategies for children residing in the Katutura context.

REFERENCES

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders.* London: American Psychiatric Publishing.

American Psychological Association. (2022, April 28). *APA Dictionary of Psychology*. Retrieved from American Psychological Association: https://dictionary.apa.org/classical-conditioning

Anderzen Carlsson, A., Sorlie, V., Gustafsson, K., Olsson, M., & Kihlgren, M. (2008). Fear in children with cancer: Observations at an outpatient visit. *Journal of Child Health Care 12*(3), 191-208.

Angelino, H., & Shedd, C. (1953). Shifts in the content of fears and worries relative to chronological age. *Proceeding of the Oklahoma Academy of Science,* 180-186.

Angelino, H., Dollins, J., & Mech, E. (1956). Trends in the "fears and worries" of school children as related to socio- economic status and age. *The Journal of Genetic Psychology, 89*(2), 263-276.

Ashipala, D. (2013). Mental health policy implementation as an integral part of primary health care services in Oshana region, Namibia (Unpublished masters thesis). University of Namibia.

Askew, C., & Field, A. (2007). Vicarious learning and the development of fears during childhood. *Behaviour Research and Therapy,* 45(11), 2616-2627.

Askew, C., & Field, A. (2008). The vicarious learning pathway to fear 40 years on. *Clinical Psychology Review*, 28(7), 1249-1265.

Askew, C., Kessock-Philip, H., & Field, A. (2008). What happens when verbal threat information and vicarious learning combine? *Behavioural and Cognitive Psychotherapy, 36*(4), 491-505.

Bandura, A. (1969). *Principles of behavior modification.* New York: Holt, Rineheart and Winston, Inc.

Bauer, D. (1976). An exploratory study of developmental changes in children's fears. *Journal of Child Psychology and Psychiatry*, *17*(1), 69-74.

Bause, T. (2007, November 19). *Four Families Lose Everything in Katutura Shack Fire*. Retrieved from The Namibian: https://www.namibian.com.na/37598/archive-read/Four-families-lose-everything-in-Katutura-shack-fire

Beesdo, K., Knappe, S., & Pine, D. (2009). Anxiety and anxiety disorders in children and adolescents: Developmental issues and implications for DSM-V. *Psychiatric Clinics of North America*, *32*(3), 483-524.

Berger, S. (1962). Conditioning through vicarious instigation. *Psychological Review*, *69*(5), 450-466.

Bless, C., Higson, S. C., & Sithole, S. (2013). *Fundamental of social research methods: An African perspective.* Cape Town: Juta.

Bouldin, P., & Pratt, C. (1998). Utilizing parent report to investigate young children's fears: A modification of the Fear Schedule for Children- II: A research note. *Journal of Child Psychology and Psychiatry*, *39*(2), 271-277.

Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist*, *34*(10), 844.

Buijzen, M., Van der Molen, J., & Sondij, P. (2007). Parental mediation of children's emotional responses to a violent news event. *Communication Research*, 34(2), 212-230.

Burkhardt, K. (2002). Fears in a selected group of middle childhood South African children: A cross- cultural study (Unpublished masters thesis). University of Stellenbosch. South Africa

Burkhardt, K., & Loxton, H. (2008). Fears, coping and perceived efficacy of coping mechanisms among South African children living in children's homes. *Journal of Child and Adolescent Mental Health*, *20*(1), 1728-2591.

Burkhardt, K., Loxton, H., & Muris, P. (2003). Fears and fearfulness in South-African children. *Behaviour Change*, *20*(2), 94-102.

Burkhardt, K., Loxton, H., Kagee, A., & Ollendick, T. (2012). Construction and validation of the South African version of the Fear Survey Schedule for Children: An exploratory factor analysis. *Science Direct*, *43*(3), 570-582.

Burnett, J. (2008). Aspects of middle childhood fears: Reports by children and their parents from a South African farming community (Unpublished masters thesis). University of Stellenbosch.South Africa

Burnham, J., & Gullone, E. (1997). The Fear Survey Schedule for Children- II: A psychometric investigation with American data. *Behaviour Research and Therapy, 35*(2), 165-173.

Burnham, J., Hooper, L., & Ogorchok, H. (2011). Differences in the fears of elementary school children in North and South America: A cross- cultural comparison. *International Journal for the Advancement of Counselling*, *33*(4), 235-251.

Burnham, J., Kim, S., Yildiz, B., Riechel, M., Erdur- Baker, O., Kirby, C., & Morgado, J. (2016). A cross- cultural comparison of fears in Turkish, South Korean, and American students. *Journal of Asia Pacific Counseling*, *6*(10), 21-40.

Buss, K., & Kiel, E. (2004). Comparison of sadness, anger, and fear facial expressions when toddlers look at their mothers. *Child Development, 75*(6), 1761-1773.

Buss, K., Davis, E., Ram, N., & Coccia, M. (2018). Dysregulated fear, social inhibition, and respiratory sinus arrhythmia: A replication and extension. *Child Development*, *89*(3), 214-228.

Cantor, J., & Nathanson, A. (1996). Children's fright reactions to television news. *Journal of Communication*, *46*(4), 139-152.

Caroll, M., & Ryan- Wenger, N. (1999). School- age children's fears, anxiety and human figure drawing. *Journal of Pediatric Health Care, 13*(1), 24-31.

Cervantes, W., Ullrich, R., & Matthews, H. (2018). Our children's fear: Immigration policy's effects on young children. *Center for Law and Social Policy, Inc. (CLASP)*.

City of Windhoek. (2002). *Socio- Economic Surveys: Babilon- Kilimandjaro.* Windhoek, Namibia: City of Windhoek.

Comer, J., & Kendall, P. (2007). Terrorism: The psychological impact on youth. *Clinical Psychology: Science and Practice*, *14*(3), 179-212.

Conrad, M., Reider, L., & LoBue, V. (2021). Exploring parent-child conversations about live snakes and spiders: implications for the development of animal fears. *Visitor Studies*, *24*(1), 58-78.

Croake, J. (1967). Adolescent fears. *Adolescence, 2*, 459-468.

Croake, J. (1969). Fears of children. *Human Development*, 239-247.

Cummings, J. (1944). The incidence of emotional symptoms in school children. *British Journal of Educational Psychology*, 151-161.

Cummings, J. (1946). A follow- up study of emotional symptoms in school children. *British Journal of Educational Psychology*, 163-177.

Davey, G. (1997). A conditioning model of phobias. In G. Davey, *Phobias: A handbook of theory, research and treatment* (pp. 301-322). Chichester: Wiley.

Davies, P., Lee, L., Fox, A., & Fox, E. (2004). Could nursery rhymes cause violent behaviour? A comparison with television viewing. *Archives of Disease in Childhood*, *89*(12), 1103-1105.

Derevensky, J. (1974). What children fear. *McGill Journal of Education*, 77-85.

Derevensky, J. (1979). Children's fears: A developmental comparison of normal and exceptional children. *The Journal of Genetic Psychology*, *135*(1), 11-12.

Dibrell, L., & Yamamoto, K. (1986). In their own words: Concerns of young children. *Child Psychiatric and Human Development*, 14-25.

Dollinger, S., O'Donnell, J., & Staley, A. (1984). Lightening- strike disaster: Effect on children's fears and worries . *Journal of Consulting and Clinical Psychology*, 1028-1038.

Dong, Q., Yang, B., & Ollendick, T. (1995). Fears in Chinese children and adolescents and their relations to anxiety and depression. *Journal of Child Psychology and Psychiatry*, *35*(2), 819-831.

Donner, S., Hartmann, H., & Schwarz, R. (2020, March 2). *Economic Transformation*. Retrieved from BTI Transformation Index: https://www.bti-project.org/en/index/economic-transformation.html

Draper, T., & James, R. (1985). Preschool fears longitudinal sequence and cohort changes. *Child Study Journal*, 147-156.

Du Plessis, M. (2006). The origins of fears in a selected group of middle childhood South African children (Unpublished masters thesis). University of Stellenbosch. South Africa

Dubatovskaya, V., & Nichkova, L. (2020). Influence of gender-role parent positions on the manifestation of fears in primary school children. *Artium magister*, *35*(2), 22-26.

Dudovskiy, J. (2021, April 12). *Business Research Methodology*. Retrieved from Descriptive Research: https://research-methodology.net/descriptive-research/

Egliston, K., & Rapee, R. (2007). Inhibition of fear acquisition in toddlers following positive modelling by their mothers. *Behaviour Research and Therapy*, *45*(8), 1871-1882.

El- Housseiny, A., Merdad, L., Alamoudi, N., & Farsi, N. (2015). Effect of child and parent characteristics on child dental fear ratings: analysis of short and full versions of children's Fear Survey Schedule- Dental Subscale. *Oral- Health Dent Manag*, *14*(1), 9-16.

Eley, T., & Gregory, A. (2004). Behavioral genetics. In T. Morris, & J. March, *Anxiety disorders in children and adolescents* (pp. 71-97). New York: Guilford.

Eme, R., & Schmidt, D. (1978). The stability of children's fears. *Child Development*, 1277-1279.

Field, A. (2006). Is conditioning a useful framework for understanding the development and treatment of phobias. *Clinical Psychology Review*, *26*(7), 857-875.

Field, A., & Lawson, J. (2003). Fear information and the development of fears during childhood: Effects on implicit fear responses and behavioural avoidance. *Behaviour Research and Therapy*, 41(11), 1277-1293.

Field, A., Argyris, N., & Knowles, K. (2001). Who's afraid of the big bad wolf: A prospective paradigm to test Rachman's indirect pathways in children. *Behaviour Research and Therapy*, *39*(11), 1259-1276.

Fonseca, A., Yule, W., & Erol, N. (1994). Cross- cultural issues. In T. Ollendick, N. King, & W. Yule, *International handbook of phobic and anxiety disorders in children and adolescents* (pp. 317-330). New York: Plenum Press.

Foster, J., & Hagedorn, W. (2014). A qualitative exploration of fear and safety with child victims of sexual abuse. *Journal of Mental Health Counseling*, *36*(3), 243-262.

Garstein, M., & Marmion, J. (2008). Fear and positive affectivity in infancy: Convergence/ discrepancy between parent- report and laboratory- based indicators. *Infant Behavior and Development*, *31*(2), 227-238.

Garstein, M., Bridgett, D., Rothbart, M., Robertson, C., Iddins, E., Ramsy, K., & Schlect, S. (2010). A latent growth examination of fear development in infancy: Contributions of maternal depression and the risk for toddler anxiety. *Developmental Psychology*, *46*(3), 651.

Garstein, M., Hancock, G., & Iverson, S. (2018). Positive affectivity and fear trajectories in infancy: Contributions of mother- child interaction factors. *Child Development*,*89*(5), 1519-1534.

Gerull, F., & Rapee, R. (2002). Mother knows best: effects of maternal modelling on the acquisition of fear and avoidance behaviour in toddlers. *Behaviour research and therapy*, *40*(3), 279-287.

Goelst, C., Moeller, M., & Kilian, W. (2018). *Etoscha National Park Canicore Monitoring Project Update.* Windhoek.

Gordon, J., King, N., Gullone, E., Muris, P., & Ollendick, T. (2007). Nighttime fears of children and adolescents: Freuquency, content, severity, harm expectations, disclosure, and coping behaviours. *Behaviour Research and Therapy, 45*(10), 2464-2472.

Graham, J., & Gaffan, E. (1997). Fear of water in children and adults: Etiology and familial effects. *Behaviour Research and Therapy*, *35*(2), 91-108.

Graziano, A., & Mooney, K. (1980). Family self- control instruction for children's nighttime fear reduction. *Journal of Consulting and Clinical Psychology*, 206.

Gregory, A., Caspi, A., Moffitt, T., Koenen, K., Eley, T., & Poulton, R. (2007). Juvenile mental health histories of adults with anxiety disorders. *American Journal of Psychiatry, 164*(2), 301-308.

Gullone, E. (1999). The assessment of normal fear in children and adolescents. *Clinical Child and Family Psychology Review*, *2*(2), 91-106.

Gullone, E. (2000). The development of normal fear: A century of research. *Clinical Psychology Review*, *20*(4), 429-451.

Gullone, E., & King, N. (1992). Psychometric evaluation of a revised Fear Survey Schedule for children and adolescents. *Journal of Child Psychology and Psychiatry, 33*(6), 987-998.

Gullone, E., & King, N. (1993). The fears of youth in the 1900s: Contemporary normative data. *The Journal of Genetic Psychology, 154*(2), 137-153.

Gullone, E., & King, N. (1997). Three- year follow- up of normal fear in children and adolescents age 7 to 18 years. *British Journal of Developmental Psychology*, *15*(1), 97-111.

Gustafsson, A., Arnrup, K., Broberg, A., Bodin, L., & Berggren, U. (2010). Child dental fears as measured with the Dental Subscale of the Children's Fear Survey Schedule: the impact of referral status and the type of informant (child versus parent). *Community Dentistry and Oral Epidemiology*, *38*(3), 256-266.

Hagman, E. (1932). A study of fears of children of pre- school age. *Journal of Experimental Education*, 110-130.

Hall, G. (1897). A study of fears. *American Journal of Psychology*, 147-249.

Harrison, K., & Cantor, J. (1999). Tales from the screen: Enduring fright reactions to scary media. *Media Psychology*, *1*(2), 97-116.

Hoekstra, S., Harris, R., & Helmick, A. (1999). Autobiographical memories about the experience of seeing frightening movies in childhood. *Media Psychology*, *1*(2), 117-140.

Hogg, M., & Vaughan, G. (2014). *Social psychology: An introduction.* Harlow: Pearson Education Limited.

Hoven, C., Duarte, C., Lucas, C., Wu, P., Mandell, D., & Goodwin, R. (2005). Psychopathology among New York City public school children 6 months after September 11. *Archives of General Psychiatry*, *62*(5), 545-552.

Husky, M., Bitfoi, A., Chan-Chee, C., Carta, M., Goelitz, D., Koc, C., . . . Kovess-Masfety, V. (2021). Self-reported fears and mental health in elementary school children across Europe. *European Child & Adolescent Psychiatry 1-11*. doi:10.1007/s00787-021-01823-5

Hygge, S. (1976). Information about the model's unconditioned stimulus and response in vicarious classical conditioning. *Journal of Personality and Social Psychology*, 764-771.

Ingman, K., Ollendick, T., & Akande, A. (1999). Cross- cultural aspects of fears in African children and adolescents. *Behaviour Research and Therapy*, *37*(4), 337-345.

Interpol's National Central Bureau (NCB). (2022, May 04). *Tackling Organized Crime in Southern Africa*. Retrieved from INTERPOL: https://www.interpol.int/en/Who-we-are/Member-countries/Africa/NAMIBIA

Jason, L. (2020a, May 13). Another elephant put down in Omusati. Windhoek: New Era Live.

Jason, L. (2020b, April 21). Elephants wreak havoc in Omusati. Windhoek: New Era (Namibia).

Jersild, A., & Holmes, F. (1935a). *Children's Fears.* New York: Teachers College, Columbia University.

Jersild, A., & Holmes, F. (1935b). Some factors in the development of children's fears. *Journal of Experimental Education*, 133-141.

Jersild, A., Markey, F., & Jersild, C. (1933). Children's fears, dreams, wishes, daydreams, likes, dislikes, pleasant and unpleasant memories. *Child Development Monographs*.

Jones, H., & Jones, M. (1928). Fear. *Childhood Education*, 136-145.

Joyce, C., Neill, A., Watson, V., & Fisher, J. (2008). *Tables and Graphs*. Retrieved from Assessment Resource Banks: https://arbs.nzcer.org.nz/tables-and-

graphs#:~:text=Tables%20and%20graphs%20are%20visual,report%20findings%20from%20their%20research.

Kiel, E., & Hummel, A. (2017). Contextual influences on concordance between maternal report and laboratory observation of toddler fear. *Emotion*, *17*(2), 240.

Killian, J. (2015). *Aerial Survey of Etosha National Park: Internal Report to the Ministry of Environment and Tourism.* Elephant Database.

King, N., Gullone, E., & Ollendick, T. (1998). Etiology of childhood phobias: Current status of Rachman's three pathways theory. *Behaviour Research and Therapy*, *36*(3), 297-309.

King, N., Ollier, K., Iacuone, R., Schuster, S., Bays, K., Gullone, E., & Ollendick, T. (1989). Fears of children and adolescents: A cross- sectional Australian study using the Revised Fear Survey Schedule for Children. *Journal of Child Psychology and Psychiatry*, *30*(5), 775-784.

Kruuse, K., & Kalmus, V. (2017). Supernatural creature, accidents, and war: Young childre's television- related fears and coping strategies. *Television and New Media,* 252-268.

Laing, S., Fernyhough, C., Turner, M., & Freestone, M. (2009). Fear, worry, and ritualistic behaviour in childhood: Developmental trends and interrelations. *Infant and Child Development*, *18*(4), 351-366.

Lane, B., & Gullone, E. (1999). Common fears: A comparison of adolescents' self-generated and fear survey schedule generated fears. *The Journal of Genetic Psychology*, *160*(2), 194-204.

Lapouse, R., & Monk, M. (1959). Fears and worries in a representative sample of children. *American Journal of Orthopsychiatry*, 803-818.

Laubscher, M. (2020). Evaluating public stigma towards mental illness in Windhoek (Unpublished masters thesis). University of Namibia. Namibia

Lee, C., Chang, Y., & Huang, S. (2008). The clinically related predictors of dental fear in Taiwanese children. *International journal of paediatric dentistry*, *18*(6), 415-422.

Lee, J. (2020). *Descriptive statistics.* Kingston: Elsevier.

Leibring, I., & Anderzen- Carlsson, A. (2019). Fear and coping in children 5-9 years old treated for acute lymphoblastic leukemia- A longitudinal interview study. *Journal of Pediatric Nursing*, 46, 29-36.

Lewis, K., Rafihi-Ferreira, R., Freitag, G., Coffman, M., & Ollendick, T. (2021). A 25-year review of nighttime fears in children: past, present, and future. *Clinical Child and Family Psychology Review*, *24*(3), 391-413.

Lichtenstein, P., & Annas, P. (2000). Heritability and prevalence of specific fears and phobias in childhood. *Journal of Child Psychology and Psychiatry*, *41*(7), 927-937.

Louw, A., & Louw, D. (2014). Middle childhood. In A. Louw, & D. Louw, *Child and adolescent development* (pp. 224-300). Bloemfontein: Psychology Publications.

Louw, D., Louw, A., & Kail, R. (2014). Basic concepts of child and adolescent development. In D. Louw, & A. Louw, *Child and adolescent development* (pp. 3-50). Bloemfontein: Psychological Publications.

Loxton, H., Roomaney, R., & Cobb, C. (2018). Student's self- reported fears and the perceived origins thereof. *Journal of Child and Adolescent Mental Health*, *30*(3), 183-189.

Mash, E., & Wolfe, D. (2017). *Abnormal child psychology.* Boston: Cengage.

Matson, J., & Love, S. (1990). A comparison of parent- reported fear for autistic and nonhandicapped age- matched children and youth. *Australia and New Zealand Journal of Developmental Disabilities*, *16*(4), 349-357.

Maurer, A. (1965). What children fear? *The Journal of Genetic Psychology*, 265-277.

Mbongo, L. T. (2017). Food insecurity and quality of life in informal settlements of Katutura, Windhoek, Namibia (Unpublished masters thesis). University of Namibia. Namibia

McMurty, C., Noel, M., Chambers, C., & McGrath, P. (2011). Children's fear during procedural pain: preliminary investigation of the Children's Fear Scale . *Health Psychology*, *30*(6), 780.

Melamed, B., Weinstein, D., Hawes, R., & Katin- Borland, M. (1975). Reduction of fear- related dental management problems with use of filmed modeling. *The Journal of the American Dental Association*, 822-826.

Melber, H. (2019). Colonialism, land, ethnicity, and class: Namibia after the second national land conference. *Africa Spectrum*, *54*(1), 73-86.

Mendelsohn, J., Jarvis, A., Roberts, C., & Robertson, T. (2009). *Atlas of Namibia: A portrait of the land and its people.* Cape Town: Sunbird.

Menzies, R. (1996). The origins of specific phobias in a mixed clinical sample: Classificatory differences between two origins instruments. *Journal of Anxiety Disorders*, *10*(5), 347-354.

Menzies, R., & Clarke, J. (1993). The etiology of fear of heights and its relationship to severity and individual response patterns. *Behaviour Research and Therapy*, *31*(4), 355-365.

Menzies, R., & Clarke, J. (1994). Retrospective studies of the origins of phobias: A review. *Anxiety, Stress, and Coping*, *7*(4), 305-318.

Menzies, R., & Parker, L. (2001). The origins of height fear: an evaluation of neoconditioning explanations. *Behaviour Research and Therapy, 39*(2), 185-199.

Merckelbach, H., van den Hout, M., Hoekstra, R., & de Ruiter, C. (1989). Conditioning experiences and phobias. *Behaviour Research and Therapy, 27*(6), 657-662.

Merikangas, K., He, J., Burstein, M., Swendsen, J., Avenevoli, S., Case, B., . . . Olfson. (2011). Service utilization for lifetime mental disorders in U.S. adolescents: Results of the National Comorbidity Survey- Adolescent Supplement (NCS-A). *Journal of the American Academy of Child & Adolescent Psychiatry*, *50*(1), 32-45.

Milgrom, P., Mancl, L., King, B., & Weinstein, P. (1995). Origins of childhood dental fear. *Behaviour Research and Therapy, 33*(3), 313-319.

Mineka, S., & Cook, M. (1993). Mechanisms involved in the observational conditioning of fear. *Journal of Experimental Psychology*, *122*(1), 23-38.

Mineka, S., & Zinbarg, R. (2006). A contemporary learning theory perspective on the etiology of anxiety disorders- It's not what you thought it was. *American Psychologist*, *61*(1), 19-26.

Mobbs, D., Hagan, C., Dalgleish, T., Silston, B., & Prevost, C. (2015). The ecology of human fear: Survival optimization and the nervous system. *Frontiers in Neuroscience*, *9,* 55.

Movirongo, C. (2021, March 11). Human-wildlife conflict incidents across the country on the rise. Namibia Economist.

Muris, P. (2007). *Normal and abnormal fear and anxiety in children and adolescents.* Burlington, Ma: Elsevier.

Muris, P., & Field, A. (2010). The role of verbal threat information in the development of childhood fear. "Beware the Jabberwock!". *Clinical Child and Family Psychology Review*, *13*(2), 129-150.

Muris, P., & Merckelbach, H. (2000c). How serious are common childhood fears? II. The parents' point of view. *Behaviour Research and Therapy*, *38*(8), 813-818.

Muris, P., du Plessis, M., & Loxton, H. (2008). Origins of common fears in South African children. *Journal of Anxiety Disorders*, *22*(8), 1510-1515.

Muris, P., Meesters, C., Merckelbach, H., Verschuren, M., Geebelen, E., & Aleva, E. (2002). Fears of stroms and hurricanes in Antillean and Belgian childre. *Behaviour Research and Therapy*, *40*(4), 459-469.

Muris, P., Merckelbach, H., & Collaris, R. (1997a). Common childhood fears and their origins. *Behaviour Research and Therapy*, *35*(10), 929-937.

Muris, P., Merckelbach, H., Gadet, B., & Moulaert, V. (2000a). Fears, worries and scary dreams in 4- to 12- year-old children: Their content, development, pattern, and origins. *Journal of Clinical Child Psychology*, *29*(1), 43-52.

Muris, P., Merckelbach, H., Mayer, B., & Prins, E. (2000b). How serious are common childhood fears? *Behaviour Research and Therapy*, *38*(3), 217-228.

Muris, P., Merckelbach, H., Meesters, C., & Van Lier, P. (1997b). What do children fear most often? *Journal of Behaviour Therapy and Experimental Psychiatry*, *28*(4), 263-267.

Muris, P., Merckelbach, H., Ollendick, T., King, N., & Bogie, N. (2001). Children's nighttime fears: Parent- child ratings of frequency, content, origins, coping behaviours, and severity. *Behaviour Research and Therapy*, *39*(1), 13-28.

Murray, A. (2012). What can children's fears tell us about childhood. *The Irish Psychologist*, *3*, 12.

Mutanga, M. (2020, November 24). *Man Badly Burned During Shack Fire*. Retrieved from Informante: https://informante.web.na/?p=298454

Nakashole, P., Karuuombe, M., Tendane, S., & Ndeyanale, E. (2021, December 23). *Crimes that shook Namibia in 2021*. Retrieved from The Namibian: https://www.namibian.com.na/6216581/archive-read/Crimes-that-shook-Namibia-in-2021

Nalven, F. (1970). Manifest fears and worries of ghetto vs. middle- class suburban children. *Psychological Reports*, 285-286.

Namibia Fact Check. (2020, June 16). *Spotlight: Police Brutality in Namibia*. Retrieved from Namibia Fact Check: https://namibiafactcheck.org.na/news-item/spotlight-police-brutality-in-namibia/

Namibia Wildlife Resort. (2022, February 10). *Etoscha National Park*. Retrieved from NWR: https://www.nwr.com.na/etosha-national-park/

Nation Master. (2022, February 02). *Crime levels: Countries Compared*. Retrieved from Nation Master: https://www.nationmaster.com/country-info/stats/Crime/Crime-levels

Nauta, M., Scholing, A., Rapee, R., Abbott, M., Spence, S., & Waters, A. (2004). A parent- report measure of children's anxiety: psychometric properties and comparison with child- report in a clinic and normal sample. *Behaviour Research and Therapy*, *42*(7), 813-839.

Neal, A., Lilly, R., & Zakis, B. (1993). What are African American children afraid of? *Journal of Anxiety Disorders*, *7*(2), 129-190.

New Era. (2020, September 18). *Poverty and inequality in Namibia*. Retrieved from New Era Live: https://neweralive.na/posts/letter-poverty-and-inequality-in-

namibia#:~:text=Globally%2C%20Namibia%20has%20the%20third,country%20but%20with%20poor%20nationals.

Ngatjiheue, C. (2020, January 10). Poverty fuels crime in Katutura East. The Namibian.

Nickanor, N., & Kazembe, L. (2016). Increasing levels of urban malnutrition with rapid urbanization in informal settlements of Katutura, Windhoek: neighbourhood differentials and the effect of socio-economic disadvantage. *World Health Popul.*, *16*(3), 5-21.

Nikapota, A. (2009). Cultural issues in child assessment. *Child and Adolescent Mental Health*, *14*(4), 200-206.

Öhman, A., & Mineka, S. (2001). Fears, phobias, and preparedness: Toward an evolved module of fear and fear learning. *Psychological Review*, *103*(8), 483-522.

Öhman, A., Dimberg, U., & Öst, L. (1985). Animal and social phobias: Biological constraints on learned fear responses. In S. Reiss, & R. Bootzin, *Theoretical issues in behavior therapy.* Orlando: Academic Press.

Ollendick, T. (1983). Reliability and validity of the Revised Fear Survey Schedule for Children. *Behaviour Research and Therapy*, 117-123.

Ollendick, T., & King, N. (1991). Origins of childhood fears: An evaluation of Rachman's theory of fear acquisition. *Behaviour Research and Therapy*, *29*(2), 117-123.

Ollendick, T., & Yule, W. (1990). Depression in British and American children and its relation to anxiety and fear. *Journal of Consulting and Clinical Psychology*, *58*(1), 126.

Ollendick, T., King, N., & Muris, P. (2002). Fears and phobias in children: Phenomenology, epidemology, and aetiology. *Child and Adolescent Mental Health*, 98-106.

Ollendick, T., Matson, J., & Helsel, W. (1985). Fears in children and adolescents: Normative data. *Behaviour Research and Therapy*, 465-467.

Ollendick, T., Yang, B., King, N., Dong, Q., & Akande, A. (1996). Fears in American, Australian, Chinese and Nigerian children and adolescents: A cross-cultural study. *Journal of Child Psychology and Psychiatry*, *37*(2), 213-220.

Olsson, A., & Phelps, E. (2007). Social learning of fear. *Nature Neuroscience*, *10*(9), 1095-1102.

Onder, A., Kusmus, G., & Cengiz, O. (2018). Investigating childhood fears during preschool period in terms of child, mother and teacher opinions. *European Journal of Educational Research*, *7*(4), 973-983.

Oosterlaan, J., Prins, P., & Sergeant, J. (1992). Dutch translation of the Fear Survey Schedule for Children. *3rd Congress of the Society for Research in Child and Adolescent Psychiatry*. Sarasota, USA.

Öst, L. (1985). Ways of acquiring phobias and outcome of behavioural treatments. *Behaviour Research and Therapy*, *96*(3), 683-689.

Öst, L. (1987). Age of onset in different phobias. *Journal of Abnormal Psychology*, *96(3),* 223-229.

Öst, L. (1991). Acquisition of blood and injection phobia and anxiety response patterns in clinical patients. *Behaviour Research and Therapy*, *29*(4), 323-332.

Öst, L., & Hugdahl, K. (1981). Acquisition of phobias and anxiety response patterns in clinical patients. *Behaviour Research and Therapy*, *19*(5), 439-447.

Öst, L., & Hugdahl, K. (1985). Acquisition of blood and dental phobia and anxiety response patterns in clinical patients. *Behaviour Research and Therapy*, *23*(1), 27-34.

Owen, J. (2018, August 16). *National Geographic*. Retrieved from Snakeless in Ireland: Blame Ice Age, Not St. Patrick: https://www.nationalgeographic.com/animals/article/snakeless-in-ireland-blame-ice-age-not-st-patrick

Pang, S. (2020). *Socio-economic recovery plan.* Namibia: United Nations Namibia.

Pariona, A. (2019, July 18). *Ethnic Groups of Namibia*. Retrieved from Worldatlas: https://www.worldatlas.com/articles/tribes-and-ethnic-groups-of-namibia.html

Phillips, L., Games, N., Scheurich, J., Barrett, P., & Fisak, B. (2019). Normative fears in preschool-aged children. In B. Fisak, & J. Barrett, *Anxiety in preschool children* (p. 16). Routledge.

Pratt, K. (1945). A study of the "fears" of rural children. *The Journal of Genetic Psychology*, 179-194.

Rachman, S. (1977). The conditioning theory of fear- acquisition: A critical examination. *Behaviour Research and Therapy*, *15*(5), 375-387.

Ragan, K. (2006). *Outfoxing fear: Folktales from around the world.* New York: Norton.

Reynolds, K., & Alfano, C. (2016). Things that go bump in the night: frequency and predictors of nightmares in anxious and nonanxious children. *Behavioral Sleep Medicine*, *14*(4), 442-456.

Rimm, D., Janda, L., Lancaster, D., Nahl, M., & Dittmar, K. (1977). An exploratory investigation of the origin and mainenance of phobias. *Behaviour Research and Therapy*, *15*(3), 231-238.

Rose, R., & Ditto, W. (1983). A developmental- genetic analysis of common fears from early adolescence to early adulthood. *Child Development*, 361-368.

Rothbart, M. (1986). Longitudinal observation of intant temperament. *Developmental Psychology*, *22*(3), 356.

Ryall, M., & Dietiker, K. (1979). Reliability and clinical validity of the Children's Fear Survey Schedule. *Journal of Behavior Therapy and Experimental Psychiatry*, 303-309.

Rymarczyk, K., Zurawski, L., Siuda, K., & Szatkowska, I. (2019). Empathy in facial mimicry of fear and disgust: simultaneous EMG-fMRI recordings during observation of static and dynamic facial expressions. *Frontiers in Psychology*, *10*, 701.

Sagar, S., & Lavalle, D. (2010). The developmental origins of fear of failure in adolescent athletes: Examining parental practices. *Psychology of Sport and Exercise*, *11*(3), 177-187.

Salcuni, S., Dazzi, C., Mannarini, S., Di Riso, D., & Delvecchio, E. (2015). Parents' perception of children's fear: from FSSC-IT to FSSC-PP. *Frontiers in Psychology*, *6*, 1199.

Scarr, S., & Salapatek, P. (1970). Patterns of fear development during infancy. *Merrill- Palmer Quarterly, Behaviour and Development*, 53-90.

Schreier, S., & Heinrichs, N. (2010). Parental fear of negative child evaluation in child social anxiety. *Behaviour research and therapy*, *48*(12), 1186-1193.

Schwarz, N., & Sudman, S. (2012). *Autobiographical memory and the alidity of retrospecgtive reports.* New- York: Springer Science and Buisiness Media.

Shindova, M., Belcheva, A., & Mateva, N. (2014). Factors in dental environment related to development of child dental fear and parent- child agreement on its evaluation. *Medicine, 4*(1), 91-5..

Shivute, H. J. (2010). Revision of Namibia's draft child care and protection bill. *Public Participation in Law Reform* (p. 2). Windhoek: United Nations Children's Fund.

Shore, G., & Rapport, M. (1998). The Fear Survey Schedule for Children Revised (FSSC- HI): Ethnocultural variations in children's fearfulness. *Journal of Anxiety Disorders*, *12*(5), 437-461.

Sidana, U. (1975). Socio- economic status of family and fear in children. *Journal of Social and Economic Studies*, 89-99.

Siyabona Africa. (2021). *Common Highly Dangerious Snakes of South Africa*. Retrieved from Siyabona Africa: https://www.nature-reserve.co.za/dangerous-snakes.html

Slaughter, V., & Griffiths, M. (2007). Death understanding and fear of death in young children. *Clinical Child Psychology and Psychiatry*, *12*(4), 525-535.

Slee, P., & Cross, D. (1989). Living in the nuclear age: An Australian study of children's and adolescent's fears. *Child Psychiatry and Human Development*, *19*(4), 270-278.

Smit, E. (2018, May 31). *Etoscha Fence will take ten more years*. Retrieved from Save the Elephants: https://www.savetheelephants.org/about-elephants-2-3-2/elephant-news-post/?detail=etosha-fence-will-take-ten-more-years-namibia

Smith, S., & Moyer-Guse, E. (2006). Children and the war on Iraq: Developmental differences in fear responses to television news coverage. *Media Psychology*, *8*(3), 213-237.

Spence, S. (1994). Preventative strategies. In T. Ollendick, N. King, & N. Yule, *International handbook of phonic and anxiety disorders in children and adolescents* (pp. 453-474). New York: Plenum Press.

Spence, S., & McCathie, H. (1993). The stability of fears in children: A two- year prospective study. *Journal of Child Psychology and Psychiatry*, *34*(4), 579-585.

Stevenson, J., Batten, N., & Cherner, M. (1992). Fears and fearfulness in children and adolescents: A genetic analysis of twin data. *Journal of Child Psychology and Psychiatry*, *33*(6), 977-985.

Stratton, S. (2021). *Prehospital and Disaster Medicine*. Retrieved from Population Research: Convenience Sampling Strategies: doi:10.1017/S1049023X21000649

Swan, A., & Kendall, P. (2016). Fear and missing out: Youth anxiety and functional outcomes. *Clinical Psychology: Science and Practice*, *23*(4), 417-435.

Swick, K., & Williams, R. (2006). An analysis of Bronfenbrenner's bio- ecological perspective for early childhood educators: Implications for working families experiencing stress. *Early Childhood Education Journal*. *33*(5), 371- 378.

The Namibian. (2021, 11 19). *There's a Way to Stop Police Brutality*. Retrieved from The Namibian: https://www.namibian.com.na/6215509/archive-read/Theres-a-Way-to-Stop-Police-Brutality

The world bank. (2022, April 7). *Namibia Overview*. Retrieved from The World Bank: https://www.worldbank.org/en/country/namibia/overview#1

Theart, F. (2020, August 10). *Snakes in the City- The Windhoek Experience*. Retrieved from Conservation Namibia: https://conservationnamibia.com/blog/b2020-snakes-in-city.php

Tikalsky, F., & Wallace, S. (1988). Culture and the structure of children's fears. *Journal of Cross- Cultural Psychology, 19*(4), 481-492.

Tudge, J., Mokrova, I., Hatfield, B., & Karnik, R. (2009). Uses and misuses of Bronfenbrenner's biological theory of human development. *Journal of Family Theory and Review*, 198-210.

Valentine, C. (1930). The innate bases of fear. *The Journal of Genetic Psychology*, 394-420.

Valkenburg, P., Cantor, J., & Peeters, A. (2000). Fright reactions to television. *Communication Research, 27*(1), 82-99.

Van den Berg, L. (2021, January 18). *Are there Snakes in the Netherlands? We Find Out*. Retrieved from About the Netherlands: https://aboutthenetherlands.com/are-there-snakes-in-the-netherlands/

Van der Molen, J., & Bushman, B. (2008). Children's direct fright and worry reactions to violence in fiction and news television programs. *Journal of Pediatrics, 152*(3), 420-424.

Van Der Molen, J., Valkenburg, P., & Peeters, A. (2002). Television news and fear: A child survey. *Communications*, 303-317.

Watson, J., & Rayner, R. (1920). Conditioned emotional reactions. *Journal of Experimental Psychology*, 1-14.

Winker, J. (1949). Age trends and sex differences in the wishes, identifications, activities and fears of children. *Child Development*, 191-200.

Winnicott, D. (1941). The observation of infants in a set situation. *International Journal of Psycho- Analysis*, 229-249.

World Health Organisation. (2018). *Road Traffic Accidents*. Retrieved from World Health Rankings: https://www.worldlifeexpectancy.com/cause-of-death/road-traffic-accidents/by-country/

World Health Organisation. (2022a, February 03). *World Health Organisation*. Retrieved from Coronavirus Disease (COVID-19): https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/coronavirus-disease-covid-19

World Health Organisation. (2022b, February 03). *World Health Organisation*. Retrieved from WHO Coronavirus (Covid-19) Dashboard Global > Namibia: https://covid19.who.int/region/afro/country/na

World Health Organisation. (2022c, February 03). *World Health Organisation*. Retrieved from Timeline: WHO's COVID-19 Response: https://www.who.int/emergencies/diseases/novel-coronavirus-2019/interactive-timeline#!

Yule, W., Udwin, O., & Murdoch, K. (1990). The 'Jupiter' sinking: Effects in children's fears, depression and anxiety. *Journal of Child Psychology and Psychiatry*, *31*(7), 1051-1061.

Zwemstra, P., & Loxton, H. (2011). Fears of South African children affected by HIV/AIDS. *AIDS Care*, *23*(7), 859-865.

APPENDIX A

Questionnaire English

Questionnaire

Part 1: Biographical questionnaire

1. How old are you?

   .....

2. Are you a girl or a boy?

   .....

3. What language do you speak with your parents?

   .....

4. Which school do you go to?

   .....

1

Part 2: Fear List Method

"All of us are afraid sometimes. What are you afraid of?".

Please write down all the things that you are afraid of in the table below and indicate how afraid you are of it by ticking either the "a little bit" box or the "a lot" box. The fears can include ANYTHING; for example, illnesses, animals, war, natural disasters, people, etc.

	"I am afraid of..."	**How afraid are you of it?**	
		"A little bit"	"A lot"
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			

Part 3: 'Origins of Fear Questionnaire'

Now it is time to find out how you became afraid of the things you fear a lot. Please tick the applicable way (A, B, C, or D) of how you became afraid of the fears listed on the left (you can choose more than one way).

The things I fear "a lot":	**(A) I had a bad or frightening experience of it.**	**(B) I know someone else who had a bad or frightening experience of it.**	**(C) I heard bad or frightening things about it.**	**(D) I do not really know why I am afraid of it.**

Thank you for answering my questions!

If you are done, please draw me a nice picture of anything you like below.

APPENDIX B

Ethical clearance certificate from DEC

UNAM
UNIVERSITY OF NAMIBIA

ETHICAL CLEARANCE CERTIFICATE

Ethical Clearance Reference Number: FEHS-/ 619/ 2021 Date: 6 September 2021

This Ethical Clearance Certificate is issued by the University of Namibia Research Ethics Committee (UREC) in accordance with the University of Namibia's Research Ethics Policy and Guidelines. Ethical approval is given in respect of undertakings contained in the Research Project outlined below. This Certificate is issued on the recommendations of the ethical evaluation done by the Faculty/Centre/Campus Research & Publications Committee sitting with the Postgraduate Studies Committee.

Title of Project An Investigation Into Fears Of Middle Childhood Oshiwambo Children From Two Schools In The Khomas Region, Namibia

Student: MAREIKE LERCH

Student Number: 220036535

Supervisor(s): *Dr E. N. Shino*

FACULTY OF EDUCATION AND HUMAN SCIENCES

Take note of the following:

1. Any significant changes in the conditions or undertakings outlined in the approved Proposal must be communicated to the HREC-H. An application to make amendments may be necessary.
2. Any breaches of ethical undertakings or practices that have an impact on ethical conduct of the research must be reported to the HREC-H
3. The Principal Researcher must report issues of ethical compliance to the HREC-H (through the Chairperson of the Faculty/Centre/Campus Research & Publications Committee) at the end of the Project or as may be requested by HREC-H
4. The HREC-H retains the right to:

i) Withdraw or amend this Ethical Clearance if any unethical practices (as outlined in the Research Ethics Policy) have been detected or suspected,

ii) Request for an ethical compliance report at any point during the course of the research.

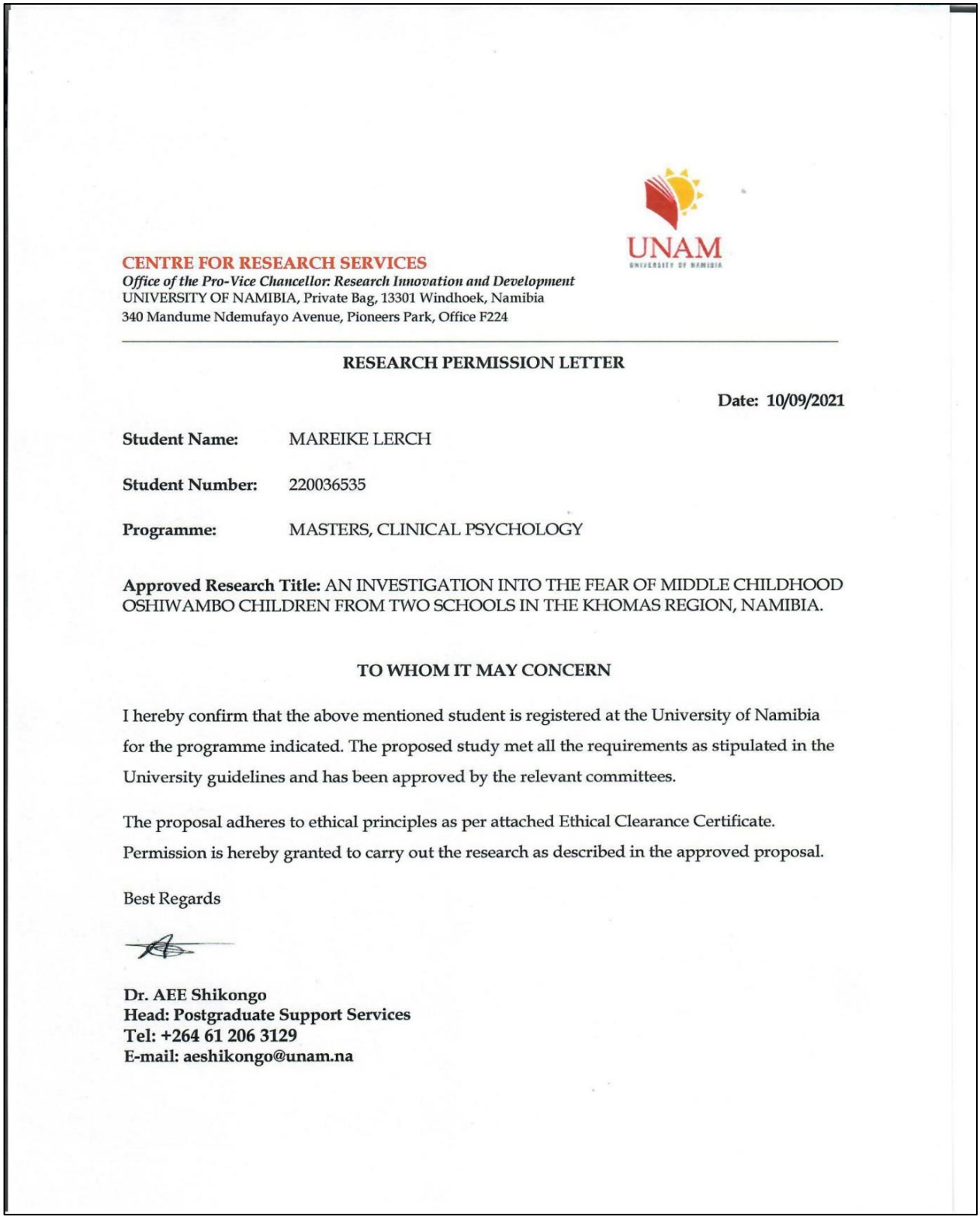
HREC-H wishes you the best in your research.

Prof. C Wilders(Chairperson)

Pamela Claassen (Secretary)

APPENDIX C

Research permission letter



CENTRE FOR RESEARCH SERVICES
Office of the Pro-Vice Chancellor: Research Innovation and Development
UNIVERSITY OF NAMIBIA, Private Bag, 13301 Windhoek, Namibia
340 Mandume Ndemufayo Avenue, Pioneers Park, Office F224

RESEARCH PERMISSION LETTER

Date: 10/09/2021

Student Name: MAREIKE LERCH

Student Number: 220036535

Programme: MASTERS, CLINICAL PSYCHOLOGY

Approved Research Title: AN INVESTIGATION INTO THE FEAR OF MIDDLE CHILDHOOD OSHIWAMBO CHILDREN FROM TWO SCHOOLS IN THE KHOMAS REGION, NAMIBIA.

TO WHOM IT MAY CONCERN

I hereby confirm that the above mentioned student is registered at the University of Namibia for the programme indicated. The proposed study met all the requirements as stipulated in the University guidelines and has been approved by the relevant committees.

The proposal adheres to ethical principles as per attached Ethical Clearance Certificate. Permission is hereby granted to carry out the research as described in the approved proposal.

Best Regards

Dr. AEE Shikongo
Head: Postgraduate Support Services
Tel: +264 61 206 3129
E-mail: aeshikongo@unam.na

APPENDIX D

Letter and consent form

PARENT/ LEGAL GUARDIAN CONSENT FOR CHILD TO PARTICIPATE IN RESEARCH STUDY FROM THE UNIVERSITY OF NAMIBIA

October 2021

Dear parent/s or legal guardian/s

Re: Request for permission for your child to participate/ take part in research

My name is Mareike Lerch. I am registered for the Masters in Clinical Psychology program at the University of Namibia. As part of the requirement for this degree, I need to carry out research. My research is about fears experienced by Oshiwambo- speaking children during middle childhood (8-12 years).

I would thus like to invite your child to take part in my study. The purpose of the study is to find out what the children are afraid of, how many fears children have, and how their fears started. The information from the study might assist different types of counsellors to better understand and address children's fears.

If you agree/ giver permission for your child to take part in this study, I will ask your child to complete a questionnaire about their fears. The completion of the questionnaire will take approximately 30 minutes and no learning activities will be disrupted; and it will take place at your child's school.

There are no foreseeable risks for your child in completing the questionnaire. However, if your child is in need of counselling after participation in the study, Dr M. Janik (registered clinical psychologist; 061- 256 198) will provide therapy for your child free of charge. All information gathered will be treated confidentially, meaning that nobody will be able to trace the results of the study to you or your child. Your or your child's name and surname will not be indicated on the questionnaire or mentioned in any publications- so his/ her identity remains secret. You and your child can choose whether to be part of this study or not. Furthermore, your child may withdraw their consent at any time and discontinue participation without penalty. If you have any questions or concerns about this study, please feel free to contact Mareike Lerch at lerchmareike.ml@gmail.com or 081 4212442 and/or her supervisor Dr E. Shino at eshino@unam.na or 061 206 3807/ 081 250 9414. If you give permission for your child to take part in the study, please sign the consent/ permission section below.

Sincerely yours,

Mareike Lerch

By signing below, I ..... *(name of parent)* agree that the researcher may approach my child to take part in this research study.

Consent/ Permission

I ..... (*name of parent*) hereby giver permission for my child to take part in this research study.

_____ _____

Signature of Parent/ Legal Guardian **Date**

_____ _____

Signature of witness **Date**

APPENDIX E

Assent form

ASSENT FORM FOR MINORS

October 2021

Dear learner,

Hello, my name is Mareike. I am a student at the University of Namibia and doing a masters degree in Clinical psychology. I would like to invite you to take part in a research study. Research can help us find out more about children and the things that affect their lives. For my research study I want to find out what you are scared of and why you are scared of it. To do this I will ask you to fill out a questionnaire that will ask you to list all of your fears (i.e. things that you are afraid/ scared of) and then indicate how you got to be afraid of it. You will take approximately 30 min to complete the questionnaire, and you can choose whether you want an English or an Oshiwambo questionnaire.

After you completed the questionnaire, you might feel a little bit scared because you were asked to think about the things that you are afraid of. If you do not want to take part in the study or you agreed to take part in the study, but want to stop, you can stop and nothing bad will happen to you. The good part is, that if you agree to take part in the study, you will help adults to better understand what children are scared of and hence be better able to help them to be less afraid.

If you have questions about the study or feel scared after the study you can talk to your parents or teachers. You can also ask them to talk to me, so that I can help you. My name is Mareike Lerch and you or your parents may call me on 081 4212442.

If you do not want to fill out my questionnaire you do not have to feel bad about it or be too scared to say that you do not want to take part. Even if you start but then do not want to carry on, you can just tell me, and no one will be angry. You also do not have to take part if your parents tell you to, but you do not really feel like it yourself.

Do you understand this research study and are you willing to take part in it?	YES	NO
Do you understand that you can stop being in the study at any time?	YES	NO

_____ _____

Signature of Child Date