

Youths' insight on the effect of drought on family organisational patterns
by

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PRETORIA
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DECLARATION OF ORIGINALITY

I declare that this dissertation which I hereby submit for the degree Master Educationis in Educational Psychology at the University of Pretoria, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution. All resources and citations from literature have been acknowledged in-text and referenced in full.

.....

Susan Schoeman

31 October 2018

ETHICAL CLEARANCE CERTIFICATE



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A handwritten signature in black ink, appearing to read 'Bronwynne Swarts', positioned above a horizontal line.

CC Ms Bronwynne Swarts
Prof Ruth Mampane

This Ethics Clearance Certificate should be read in conjunction with the Integrated Declaration Form (D08) which specifies details regarding:

- Compliance with approved research protocol,
- No significant changes,
- Informed consent/assent,
- Adverse experience or undue risk,
- Registered title, and
- Data storage requirements

DEDICATION

I dedicate this research to everyone who has been at the receiving side of my sacrifices. I have had to give up, adjust and compromise many relationships, commitments and roles to complete this research. Your grace, understanding and love are beyond compare and I am thankful for each and every single person who has walked this journey with me.

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ABSTRACT

This research was conducted in collaboration with a multidisciplinary and multisectoral team, where researchers and partners actively engaged with communities from beginning to end, working together to answer questions, undertake research, and advocate for change. The overarching objective of the study was to better understand the complex relationships between drought, social-ecological systems, and the resilience of youth. The purpose of the research was to explore and understand the youths' insights on how drought affects their family organisational patterns. This research was conducted with youth from the Govan Mbeki Local Municipality, living in the town Leandra, Mpumalanga. The first step in community engagement was to gain insight on how different families perceived and understood drought within their community and what protective factors enabled resilience amongst them. This insight will help to answer the primary research question, "*What are the perceptions of youth on the effects of drought on family organisational patterns?*" This research was approached from an interpretivist paradigm as it attempts to understand the phenomena of drought through the meanings that individuals and communities attach to them. A qualitative methodological approach was used, and a purposive sampling technique assisted in selecting a number of young men and women who meet the research criteria for this study. The population of the overall study consisted of 43 young people, between the ages of 15 to 24, who are employed or engaged in education and training, or who are unemployed or disengaged from education. Qualitative data collection for this research included a series of strategies, which enhanced the contemporary nature of this method. Thematic analysis was used to identify, analyse, and interpret themes within qualitative data. The results indicated that protective parenting, challenging family habits, financial stress, and health and well-being are key factors in determining the resilience of family's organisational patterns.

Keywords: drought, resilience, family resilience, family, youth, Walsh's Family Resilience Framework, family organisational patterns, collaborative research, rural community.

EDITING CERTIFICATE

Editing Certificate

This document certifies that the manuscript detailed below was edited for proper English language, grammar, punctuation, spelling, and overall style by a professional English-language academic editor. Neither the research content nor the author's intentions were altered in any way during the editing process.

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CHAPTER 1: BACKGROUND AND OVERVIEW OF STUDY

1.1. INTRODUCTION TO STUDY AND RATIONALE

Drought can be referred to as a “creeping phenomenon” (Tannehill, 1947), as its onset and end are difficult to determine (Wilhite, 1993). Declaring the end of a drought is difficult to do with surety (Stain, Kelly, Carr, Lewin, Fitzgerald & Fragar, 2011). Without a marked end and its insidious onset, it is challenging for health workers to provide support and intervention during times of distress and need (Anderson, 2009). In a study done by Kolassa et al. (2010), findings showed reliable evidence of poorer mental health outcomes related to recurring traumatic events over an extended period of time compared to those who experienced isolated trauma. Family and community networks have the potential to be key resources in trauma recovery (Walsh, 2007). Therefore, it is important to better understand the effects of prolonged drought on family organisational patterns.

This research has become very close and personal for the researcher, as drought is no stranger to her and her family. Natural disasters are something she has been familiar with as long as she can remember. Growing up on a farm, the harsh reality of the natural elements at play became challenging, as the effects of cyclones, floods, hail storms and drought were forced to be endured. As a child, she would recall looking to her father for answers to multiple questions: Will the orchards be okay? Is the rain coming? Do workers on the farm have enough food and will their families be okay? The answer would invariably be, “We will be okay, don’t you worry.” However, angst was ever present, and many prayers were uttered for the drought to be broken.

Her family and community have had to overcome the hardship of drought and press forward despite the adversity faced. Over time, as each drought creeps in and eventually passes, resiliency has grown and been challenged, influencing every thought, belief and action. She would seek to develop a better understanding of the role of resilience in a community; how various communities in different contexts overcome similar adversity; as well as how such communities have made sense of drought and, in the process, developed resilience thereto.

Family organisational patterns especially relate to accessible resources and relational networks when family is exposed to adversity. Importantly, family organisational patterns indicate the manner in which the resilience of families who have experienced drought manifest. It is important to investigate family organisational patterns to gain a better understanding of how families resile in adverse context of drought, especially when seeking ways to prevent undesirable outcomes that stem from living with adversity, and promote resilience (Greenhill, King, Lane & MacDougall, 2009).

In the period of July 2014 to June 2015, South Africa experienced, on average, the driest season since 1991 and 1993, and the third driest since 1932 and 1933 (Baudoin, Vogel, Nortje & Naik, 2017). January 2015 was characterised by even further below-normal rainfall, exacerbating the experienced drought. An analysis for the district rainfall for South Africa revealed that 2015 was the driest year on record in the country since 1921 (Baudoin, Vogel, Nortje & Naik, 2017). South African Government has responded to the pressing drought by expressing concern and implementing plans to alleviate the impact of drought on individuals, households and families in both urban and rural areas. Various national departments (including the Department of Cooperative Governance and Traditional Affairs; Department of Rural Development and Land Reform; Department of Agriculture, Forestry and Fisheries; and Department of Water and Sanitation) have put together plans to alleviate the impacts of the prevailing drought conditions. On 12 November 2015, the South African Government declared:

Drought is a natural phenomenon which cannot be prevented. However, as government, we are fully conscious of the responsibility we bear to mitigate its economic and social impact on the country and its people, taking into account that water is a scarce resource in South Africa. (Government Communication and Information System, 2015, para.5)

The plans that have been established for drought relief include supplying of water tankers, water conservation, provision of livestock feed, climate change adaptation programmes, fund allocation, and food and nutrition security interventions (Government Communication and Information System, 2015). However, the national

government is yet to address the social needs and effects of drought on the mental health and well-being of families living in such conditions. Due to climate change, weather-related disasters such as drought are escalating and becoming more frequent and prolonged. The mental health of young people, their families, and other vulnerable groups are at risk; support strategies and policies need to be developed with urgency to help such groups at stake (Carnie, Berry, Blinkhorn & Hart, 2011).

There is a pressing need to know more about risk and protective processes, and how to prepare people and families for adversity when exposed to disaster (Masten, 2014). Resilience research and knowledge has the potential to promote understanding of a population and provide insight into potential interventions and support (Steinhardt & Dolbier, 2008).

1.2. COLLABORATIVE RESEARCH

The research is conducted in collaboration with a multidisciplinary and multisectoral team, comprising British, Canadian and South African university researchers, alongside South African and British community partners (namely Khulisa Social Solutions and Boingboing). Collaborative research is an umbrella term for a range of methodologies, where a team of researchers and partners actively engage with communities from beginning to end, work together to answer questions, undertake research, and advocate for change. The objective of the research is to better understanding the effects of drought on family organisational patterns as perceived by adolescents living in the town of Leandra, Mpumalanga, South Africa. This will be discussed in more detail in the purpose of study and a full literature review will be done in Chapter 2.

1.3. PROBLEM STATEMENT

When families experience the effects of mass trauma; family functioning and essential family networks can be particularly interrupted when the trauma is ongoing and recurrent (Walsh, 2007). Climate change has become a leading challenge of the 21st century, and many countries, communities, families, and individuals have faced the ramifications thereof. Natural disasters such as drought have increased in frequency

and intensity (Schillings, 2016), and as a natural result, families are forced to adapt and recover from the effects following the disaster. There is limited research on what protects some families and what makes others vulnerable to adverse outcomes associated with drought (Greenhill, King, Lane & MacDougall, 2009). Resilience research provides knowledge and insight into implementation of potential intervention and support strategies for populations experiencing drought (Steinhardt & Dolbier, 2008).

1.4. PURPOSE OF THE STUDY

The purpose of the research is to explore and understand the effects of drought on family organisational patterns as perceived by adolescents from the Govan Mbeki Municipality, living in the town of Leandra in Mpumalanga. The first step in community engagement is to gain insight on how different families currently perceive and understand drought within their community and what protective factors enables resilience amongst them.

It has been identified that people who are vulnerable, disadvantaged, living in rural and remote places are at risk for severe adversity (Carnie, 2011). Like most rural communities of South Africa, the Govan Mbeki Municipality is exposed to multiple adversities, of which drought is one. According to the South African Weather Service, South Africa received the lowest rainfall between January and December 2015 since 1904. As a result, Mpumalanga was declared a drought disaster area and individuals residing in this area have been exposed to the effects of severe drought conditions.

The main study, from which this proposed study will emerge, includes a purposeful selection of youth (aged of 15 to 25-year-old) who are employed/engaged in education or training and those who are unemployed/disengaged from education to form part of the 43 participants sampled. Participants will be involved in five consecutive qualitative activities; the generated data will follow an instrumental case study design.

Studying the resilience patterns and adolescents' perceptions of drought in drought-affected areas will enrich knowledge and understanding, which in turn will contribute to mental health intervention, prevention and support programmes. This research is

proposed to better inform existing policies, programmes and interventions (Maxwell, 2013) to help families who have been negatively affected by drought and need support. This will be further discussed in Chapter 5.

1.5. METHODOLOGY OVERVIEW

Table 1.1 provides a brief outline of the methodological approach used in this study. The methodology of this study will be explained in further detail in Chapter 3.

Table 1.1: Methodology overview

Research questions	
Primary question	What are the perceptions of youth on the effects of drought on family organisational patterns?
Secondary questions	<ol style="list-style-type: none"> 1. How have youth and their families responded to experiences of drought? 2. What are the youths' perceptions of the effects of drought on their well-being and resilience?
Working personal assumptions	
It is assumed that:	<ol style="list-style-type: none"> 1. People who go through a period of drought experience adversity. 2. Individuals, families and communities are negatively affected by drought. 3. All members within a family are affected in some capacity by drought. 4. The well-being of families has not been adequately supported during a drought period. 5. Families and youths have used coping mechanisms to best overcome adverse conditions.
Theoretical framework	
<i>Walsh's Family Resilience Framework</i>	This framework was developed to help identify and target vital family processes that can reduce stress and vulnerability, stimulate restoration, and empower families during times of prolonged adversity (Walsh, 2012).
Epistemological approach	
<i>Interpretivism approach</i>	Interpretivism is a term given to research that attempts to understand phenomena through the meanings attached thereto by individuals and communities (Jansen, 2007; Nieuwenhuis, 2007).
Methodological approach	
<i>Qualitative research</i>	Qualitative research primarily deals with non-numerical data and focuses on a large range of data collection, such as the use of observations, field notes, focus groups, images, and video (Silverman, 2015)
Research design	
<i>Instrumental case study</i>	A case study design is typically understood as qualitative research that gathers in-depth data, relative to a single case, for the purpose of better understanding a particular situation (Creswell, 2007; Leedy & Ormrod, 2013; Merriam, 2002).
Selection of participants	
<i>Purposive sampling</i>	Purposive sampling technique will assist in selecting a number of young men and women who meet the research criteria for this study. Such criteria will be explained in detail in Chapter 3.
Data collection	
<i>Qualitative data collection</i>	Qualitative data collection for this study includes a series of creative strategies, as well as focus group interviews. This will be further explained in Chapter 3.
Data analysis	

<i>Thematic analysis</i>	Thematic analysis is a method of identifying, analysing and interpreting themes within qualitative data (Braun & Clarke, 2016).
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1.6. CONCEPT CLARIFICATION

1.6.1. Drought

The *Oxford English Dictionary* defines drought as a period of irregularly low rainfall, leading to a shortage of water. Drought is stated as an ongoing chronic disaster or environmental adversity (Stain et al., 2011), which has a slow onset with compounding impacts distinct to the sudden effects of other natural disasters (Dean & Stain, 2010). The specific drought experienced in the Govan Mbeki Municipality in Leandra is further discussed in Chapter 2.

1.6.2. Resilience

Walsh (2003a, p.1) stated:

Resilience – the ability to withstand and rebound from disruptive life challenges – has become an important concept in mental health theory and research... It involves dynamic processes fostering positive adaptation within the context of significant adversity (Luthar, Cicchetti & Becker, 2000). These strengths and resources enable individuals and families to respond successfully to crises and persistent challenges... (Cowan, Cowan & Schultz, 1996). (p.1)

What is understood by the researcher of resilience is based in the ecological perspective. The researcher thus defines resilience as an individual's ability to overcome adversity by using protective factors and resources within themselves and their environment in order to cope, adapt, and grow, despite being faced with adverse circumstances and conditions (Patterson, 2002; Rutter, 2012; Walsh, 2003a, 2016; Zimmerman, 2013).

1.6.3. Family Resilience

Mass trauma can affect entire families, including disrupting family functioning and relationships (Walsh, 2007). Family resilience is unlike individual resilience; it extends beyond the individual as a potential resource for resilience, and focuses on risk and resilience in the family unit (Walsh, 1996, as cited in Walsh, 2003b). According to Lin, Lo, Lui, and Wong (2016) and Patterson (2002), family resilience refers to a family's ability and capacity to effectively manage adversity and challenges as a unit consisting of every member of the family. Within the context of Leandra, family resilience therefore refers to the specific abilities of families in this community to manage the challenges of drought. This may include how different family members contribute to and influence family wellbeing by identifying the different ways in which they manage the adversity of drought.

1.6.4. Family

According to Okon (2012), the definition of family remains open due to diverse perspectives which exist regarding the restructure of families and relationships, such as blood-related families or adoptive households. Walsh (2015) identifies that families across various cultures can have different, varied and multiple structures. Family, as referred to in this research, consists of South African families that are best defined according to *ubuntu*. Nussbaum (2003) described *ubuntu* as our interconnectedness and responsibility to one another, which embraces the interdependence between self and community.

Hanson, Gedaly-Duff and Kaakinen (2005, p.5) defined a family as “two or more individuals who depend on one another for emotional, physical, and economical support.” Most South Africans families consist of different family members – whether immediate, extended or non-related – who share responsibilities and roles as supported by section 1 of the South African Children's Act 38 of 2005 (Republic of South Africa, 2005), which states:

'family member', in relation to a child, means-

- a) a parent of the child;
- b) any other person who has parental responsibilities and rights in respect of the child;

- c) a grandparent, brother, sister, uncle, aunt or cousin of the child; or
- d) any other person with whom the child has developed a significant relationship, based on psychological or emotional attachment, which resembles a family relationship.

1.6.5. Youth

According to the United Nations Educational, Scientific and Cultural Organization (2017), “‘Youth’ is best understood as a period of transition from the dependence of childhood to adulthood’s independence... Youth is a more fluid category than a fixed age group.” The African Union Commission (2006, p.11) defined youth as individuals between the ages of 15 and 35. For the purpose of this study, youth will refer to the developmental stage from 15 to 24 years, as represented in the sample.

1.6.6. Rural Community

The term *rural* is defined in the Rural Development Framework as “sparsely populated areas in which people farm or depend on natural resources, including villages and small towns that are dispersed throughout these areas, and large settlements in former homelands” (Department of Land Affairs, 1997). In this study, therefore, a rural community consists of a collective of people that live in such an area.

1.6.7. Family Organisation Patterns

The family structure or organisation characterises the functioning rules that manage the way family members interact with one another (Goldenberg & Goldenberg, 2012, p.198). The organisation of a family can be best understood through the visualisation of a diagram with lines and arrows presenting a static picture of who relates to who, and how strong or poor the various relationships are within the structure (Johnson, 2001). Maintaining stability in a changing environment is best understood by structure of the family and the patterns that they develop over time (Goldenberg & Goldenberg, 2012). For the purpose of this study, family organisation is represented by the family unit of the participants, including relationships and their everyday activities.

1.7. QUALITY CRITERIA

Demonstrating trustworthiness of data collection supports the definitive trustworthiness of a study (Elo et al., 2014). Trustworthiness is described as a way to ensure that credibility, dependability, confirmability, and transferability are evident in the research (Saumure & Given, 2008).

Credibility is accomplished when researchers have accurately and richly described the phenomenon in question, free of error and distortion (Flick, 2014; Saumure & Given, 2012). This can be achieved by sustained engagements with the participants, researcher reflexivity, and participant checks and validations (Morrow, 2005). This research project purposefully involves participant-researchers throughout the research process. The participant-researchers are trained to be active members in the data generation process, including the analysis and strategy development phases.

Dependability becomes realistic when similar explanations for the phenomenon can be found under similar conditions (Saumure & Given, 2012). Dependability can be accomplished through overseeing the research process by means of an audit trail, as well as keeping research notes (Morrow, 2005). An audit trail consists of a record of detailed timeline of, *inter alia*, research activities, emerging themes, influences on the data collection, and analysis process and it is therefore important that the researcher provides much detail when describing the analysis process and results (Elo & Kyngäs, 2008). This will ensure that the entire research process is saturated with detail-rich information that can inform the readers on how the categories were established.

Confirmability reflects the need to ensure that the interpretations and findings obtained match the data and accurately reflect the phenomenon being researched, as opposed to the beliefs, theories and biases of the researcher (Saumure & Given, 2012; Morrow, 2005). This can be a challenge, given that the research participants will engage in arts-based activities, which are subjectively analysed. However, according to Cole and Knowles (2008), formal and informal arts-based activities allow participants to participate in the co-creation of knowledge about themselves, which provides rich and valuable data.

Transferability is described as being aware of the need to describe the scope of the qualitative study in order that it is relevant to different contexts (Saumure & Given, 2012). According to Morrow (2005, p.252), this can be achieved by providing “sufficient information about the self (the researcher as instrument) and the research context, processes, participants, and researcher-participant relationships to enable the reader to decide how the findings may transfer.” Generalisability is a challenge considering the small sample size and research method of this qualitative study (Maree, 2007). However, the aim of this research is not to generalise the findings, but to learn from other research and relate such to this study.

It is important to note that, although thematic analysis is a common qualitative analysis method, the trustworthiness of its use has not been thoroughly evaluated (Elo et al., 2014). Some aspects of thematic analysis can be clearly described, but it is also dependent upon on the insights and intuition of the researcher, which can make the analysis subjective and difficult for others to understand (Elo & Kyngäs, 2008). Therefore, a key requirement in data analysis is that the established categories need to be precise enough in order that multiple researchers/coders will arrive at the same result when coding the same body of data (Silverman, 2012).

1.8. ETHICAL CONSIDERATIONS

Within research, there are many ethical considerations that need to be addressed. More specifically, the majority of ethical issues fall into one of four categories, namely protection from harm, voluntary and informed participation, right to privacy, and honesty with professional colleagues (Leedy & Ormrod 2013).

1.8.1. Protection from harm

Collecting data may produce internal crises for participants as they confront and recall difficult experiences related to the research (Flick, 2014). However, due to the positive focus of the research, the researcher is hopeful that such experiences will be managed. Participants should not be subjected to any unusual stress, embarrassment or loss of self-esteem (Leedy & Ormrod, 2013). Young people who are impaired in decision-making capacity (through mental illness or substance abuse problems) will

be excluded from the research. Young people will be trained to become co-researchers in this research; therefore, the power discrepancies that are typically involved with participants from vulnerable contexts will be managed.

1.8.2. Informed participation

Participants have a right to know that they are being researched, the right to be informed about the nature of research, and the right to withdraw at any time (Seale, Gobo, Gubrium, & Silverman, 2004). Participants are required to give informed consent as a precondition to participate in the research. Consent should be given voluntarily by an informed and competent person (Flick, 2014). Participants who are younger than 18 will need a parent or guardian to co-sign an assent form.

1.8.3. Right to privacy

Researchers are obliged to protect the identities of participants and not disclose (verbally or written) how a participant has responded or behaved, unless the participant has given written consent to do so (Leedy & Ormrod, 2013). Participants will have the option of electing their level of disclosure. They will be invited to use a pseudonym if they prefer to remain anonymous; otherwise, their first names will be used. By establishing a balanced relationship, disclosure, trust, and awareness of political issues will be encouraged (Orb, Eisenhauer & Wynaden, 2001). Participant anonymity cannot be guaranteed in this research; however, the assent/consent clearly informs the participants of this before they agree to participate.

1.8.4. Honesty with professional colleagues

Researchers need to present their findings with honesty and without misrepresentation of the nature of the findings (Leedy & Ormrod, 2013). Due to the interpretive and subjective characteristics of this research, an audit trail should be maintained by means of research notes of the data analysis process, so as to document and track the research process, and report all findings and process with saturated detail (Morrow, 2005).

1.9. SUMMARY OF CHAPTERS

The focus of Chapter 2 is to provide an extensive and saturated literature review, investigating existing literature of drought and family-related factors, based in Western and non-Western contexts, to better understand the phenomenon of resilience and drought. Chapter 3 aims to gain a better understanding of the research design and methodological approaches that are used in this study. A qualitative research approach will be used, embedded in an interpretivist paradigm. Participants will be purposively selected and engage in focus group activities. Chapter 4 will focus on analysing the data obtained from the participants by using thematic analysis techniques. The data will then be interpreted, and the findings will be reported in Chapter 5. Chapter 5 will be brought to an end with the findings of the study and concluding remarks.

CHAPTER 2: EXPLORING EXISTING LITERATURE AS BACKGROUND TO THE STUDY

2.1. INTRODUCTION

As mentioned in the previous chapter, the research study aims to explore and understand youths' insights into the effect of drought on family organisational patterns in the Govan Mbeki Municipality area. This chapter, therefore, provides an overview of existing literature with regard to drought, family, resilience, family resilience, and organisational patterns. The reviewed literature was selected based on the focus of the study, the research question and the rationale, as formulated in Chapter 1.

The chapter begins with information on the contextual setting in which the study takes place. Attention is then directed to a specific adversity experienced in this setting and how the family system is thereby influenced. This is followed by exploring the definition of family and the role of family as a protective resource when faced with adversity. Next, the definition and provision of clarity is given on the construct resilience, its origin and development. Also highlighted is the theory of family resilience, as well as organisational patterns embedded in Walsh's Family Resilience Framework, which is the essential focus of this study. This chapter is concluded by presentation of the conceptual framework, based on Walsh's Family Resilience Framework, as the framework adopted as applicable to this study.

2.2. THE CONTEXT OF DEVELOPMENT: DROUGHT IN SOUTH AFRICA

There is no universal definition of drought (Botterhill & Chapman, 2002), which makes drought a complex phenomenon with wide-ranging and multidimensional effects. Wilhite (2002) identified four types of drought that can occur: meteorological, agricultural, hydrological and socioeconomic droughts. Even though the various factors that define them differ, they can still be seen to be in influence together (Wilhite, 2002). The current drought affecting Southern Africa is characterised to fall within all four categories (Schillings, 2016), which makes its effects difficult to identify and quantify (Wilhite, 1993). Throughout South African history, drought has been a frequent feature and, although drought progresses slowly, its effects are cumulative

and may be felt for years (Van Niekerk, Mare & Strydom, 2016). Drought can be defined as a slow-onset emergency, as it does not suddenly arise from a specific, distinct event, but progressively develops over time, frequently as a result of the convergence of different events (United Nations Office for the Coordination of Humanitarian Affairs [OCHA], 2011, p.3). Farmers in Tanzania mainly define drought as a lack of rainfall (Slegers, 2008), while Oliver, Brereton and Roy (2013) define drought as an extreme climatic event.

Although drought is common to South Africa, its prolonged nature has insidious and multidimensional effects that can result in economic, environmental and social ramifications (Keshavarz, Karami & Vanclay, 2013). Recent research has shown that the physical effect of natural disasters has been far overstressed compared to social impacts (Dean & Stain, 2010), and although drought results in significant water shortages – affecting inter alia agriculture, food markets, and eating habits – the psychological and social effects of drought are often ignored (Anderson, 2009). Ngaka (2012), Food and Agriculture Organization of the United Nations (2013) and the Department of Rural Development and Land Reform (2013) agree that drought has been classified as a major concern in South Africa in terms of not only economic loss and agricultural collapse but also in terms of the number of people affected.

It has been forecasted that climate change will be accompanied by more drastic and frequent weather events, as well as progressive and pervasive changes to weather patterns (Scheuren et al., 2008), including an increase in frequency of drought (CSIRO, 2008). The effects of drought slowly evolve as time passes, and the severity and scope are often uncertain. Therefore, while its aftermath effects may not be as dramatic as that of an earthquake or cyclone, it can be no less disastrous for a community and family (Caruana, 2010). Research shows that drought has been found to lead to more deaths worldwide (Walter, 2004), be more destructive in scope and impacts than acute disasters, and result in serious psychological impairment (Zamani, Gorgievski-Duijvesteijn & Zarafshani, 2006).

According to the South African Weather Service (SAWS), South Africa experienced the fifth worst drought since the related drought period in 1982 (Monyela, 2017), threatening vulnerable communities such as the community of Govan Mbeki

(Muyambo, Jordaan & Bahta, 2017). The drought in South Africa during 2015 and 2016 was a result of a particularly strong El Niño. As a result, Mpumalanga was one of the six provinces that was declared a drought disaster area as reported to Parliament's Portfolio Committee on Water and Sanitation (Evans, 2015).

Drought-related challenges eventuate through different pathways, especially by contributing to the abrasion of the physical environment on which social and economic well-being depends, thus aggravating the challenges that characterise these rural communities (Rigby, Rosen, Berry & Hart, 2011). Human health is especially at risk amongst the world's most vulnerable people; in South Africa, significant effects on social and emotional well-being may be expected in rural and remote communities (Rigby, Rosen, Berry & Hart, 2011). The World Health Organisation state that disasters can have psychosocial effects on individuals, which include emotional, psychological, behavioural, physiological, and spiritual consequences (Favero & Sarriera, 2012). Disasters affect different human groups and families in different ways; it is therefore important to explore these effects in order to better understand and support people, families and communities affected by natural disasters such as drought.

2.3. THE FAMILY AFFECTED BY DROUGHT

2.3.1. What is a family in a South African context?

The term *family* is very complex and there is no universally accepted definition, as the challenge in attempting to find a definition rests on the wide diversity of family forms that exist around the world (Okon, 2012). The Collins Dictionary defines family as a group of people who are related to each other and, although not stipulated, the majority of people would assume that being related is by means of blood relation or marriage. This definition of family can no longer be accepted, as it is outdated and ethnocentric (McCarthy & Edwards, 2010; Okon, 2012). In a country such as South Africa, which is characterised by a range of different cultures, contexts, and circumstances, one can presume that there is no single, correct definition of family. Ideally, each family is independently permitted to define what it means to them (Okon, 2012). Stewart (2007) stated that relevant relationships may extend beyond nuclear family units. Okon

(2012) described that all across the world, different family structures and patterns exist, such as traditional families with heterosexual marriage; extended families consisting of a number of generations in one home; and a blend of family forms (for example homosexual marriages or unions, cohabitation, single-parent or grandparent-headed households, child-headed households etc.)

As mentioned in Chapter 1, family can be defined as “two or more individuals who depend on one another for emotional, physical, and economical support” (Hanson, Gedaly-Duff & Kaakinen, 2005). For the purpose of this study, Hanson, Gedaly-Duff and Kaakinen’ definition of family will be adopted, as it mentions a number of important factors related to understanding family and family resilience.

2.3.2. Drought and family functioning

In recent decades, regions around the world have experienced regular drought with significant economic and social effects (Bosch, Boeckner & Johnston, 2003). Drought is one of the most complex natural hazards and more people are affected by it than any other hazard; however, there are a limited number of studies which have identified the complex impact of these effects (Wilhite, 1993). Droughts are endemic features of the South African landscape, with multifaceted causes resulting in social, political, and physical consequences and effects (Vogel & Drummond, 1993). A challenging feature in characterising drought effects is that they differ in spatial and chronological scales, where each drought-declared region is unique and the response to drought is dependent on a range of factors (Keshavarz, Karami & Vanclay, 2013).

Resource-poor communities experiencing drought, such as those residing in the Govan Mbeki Municipality, are affected by a range of factors that influence family functioning (Alston & Kent, 2004). Such periods of major social and economic disturbance are greatly disruptive of family life, where family patterns are altered due to a number of interconnected effects (Walsh, 2003a). These effects include reduced household income, limited substitute income sources; conflict of access to water use; food insecurity; malnutrition, health effects; reduced access to health services and education; limited drought relief; related stress and conflict; rural to urban migration; increased workload; reduced quality of life; psychological and emotional effects;

frustration; alienation; disruption in family plans such as delayed retirement; and family disharmony and disengagement (Changnon & Easterling, 1989; Vanclay, 2002; Gupta & Gupta, 2003; Alston & Kent, 2004, 2008; Committee on Disaster Research in the Social Sciences, 2006; Alston, 2010; Favero & Sarriera, 2012).

Whether an event such as drought is experienced by individual family members or by the family as a unit, it can affect family relationships and family organisation in a number of ways (Caruana, 2010). When families experience negative life events, the disruption of normal family functioning can result in negative outcomes, stressors, and maladaptive responses (Landau, Mittal, & Wieling, 2008; Caruana, 2010) that adversely affect family relationships and its members. However, the important role of the family as a facilitator of recovery for individual family members has been acknowledged. There is currently a greater emphasis on the importance of taking into account the effect of trauma on the family unit when considering and developing support for individuals affected by negative life events (Walsh 2007; Rowe & Liddle, 2008; Caruana 2010).

2.3.3. Resilience-promoting factors among families

According to Pequegnat and Szapocznik (2000), families are the most immediate and fundamental social systems that influence and affect human development, providing the essential groundwork for effective behaviour change and protection. Many families experience crises and are able to flourish with warmth, support, and cohesion, whereas other families succumb to adversity (Black & Lobo, 2008). McCubbin and McCubbin (1988) explained that resilient families who experience periods of stressful events and adversity are strengthened through resilience-promoting factors.

Families differ vastly in how they experience strengths and setbacks, regardless of their ethnic status and culture (Black & Lobo, 2008). There is no collective or universal set of key protective factors which enable families, but a review of literature has recognised prominent characteristics within healthy families. Protective factors operate as a buffering agent to moderate and manage exposure to risk (Jenson & Fraser, 2015). Such factors include family member accord where the family displays cohesion, warmth and togetherness; family communication that is open, clear and

collaborative; financial management; flexibility that promotes close relationships and maintenance thereof; family time that optimises sense of togetherness in daily tasks; positive outlook that embraces optimistic confidence in overcoming adversity; and a social support network that offers shared resources and provides support (Henry, Sheffield Morris & Harrist, 2015).

2.3.3.1. Family member accord

According to Crosnoe, Mistry and Elder (2002), children from families that display togetherness and collective efficacy, especially in low-income families, performed much better in school and were more likely to go to university and improve their life opportunities. Togetherness and collective efficacy reflect authoritative parenting. Attachment to parents and caring relationships with siblings promote positive effects on the lives of youths (Jenson & Fraser, 2015). According to Walsh (2015), strong leadership is needed to nurture, guide, and protect youth, as well as provide basic resources. Authoritative parenting and strong leadership are characterised by parental warmth, responsiveness, and communication that contributes directly to family cohesion, which has been recognised to further promote and enable resilience among lower-income and vulnerable families (Bhana & Bachoo, 2011; Schofield & Beek, 2009; McCubbin & McCubbin, 1996).

2.3.3.2. Family communication

Adolescents experience less distress when their families support them to cope through different strategies such as positive cognitive reframing, acceptance, and expressing of emotions (Jenson & Fraser, 2015; Gil-Rivas, Silver, Holman, McIntosh & Poulin, 2007). Walsh (1998) identified three important properties of communication for family resilience, namely clarity, open emotional expression, and collaborative problem solving. The ability to use communication to collaborate and solve problems has been identified as a key resilience factor within a family (Black & Lobo, 2008). In healthy resilient families, parents act as coordinators, where they bring out other members' ideas, voice their own ideas, and encourage the opinions of all family members to be expressed, while avoiding withdrawal and criticism (Mederer, 1999; Lindsey & Mize, 2001).

2.3.3.3. *Family time*

Spending time together during meal times, routines and responsibilities, and doing chores play an important role in creating stability within the family, especially when the family is faced with adversity (McCubbin & McCubbin, 1988). The quality of the parent-child relationship and parent-child interactions may also influence a child's outcomes when faced with diversity (Pfefferbaum, Jacobs, Houston & Griffin, 2015). Walsh (2015) identified that time spent together is highly valued within families, and connected families promote emotional closeness and strong loyalty.

2.3.3.4. *Flexibility*

Flexibility refers to a family's ability to rebound and reorganise when faced with adversity and challenges, while striving to maintain a sense of continuity (McCubbin & McCubbin, 1988). While it is common for families to oppose change and loss, resilient families do not adopt helplessness, but rather reorganise family roles and view change with hopefulness in order to work towards balance (Conger & Elder, 1994; Walsh, 2002; Patterson, 2002).

2.3.3.5. *Financial management*

During times of adversity, the important role of financial security for resilience should not be overlooked (Walsh, 2003b). Financial management refers to "sound decision-making skills for money management and satisfaction with economic status [which] can contribute to family well-being" (McCubbin & McCubbin, 1988, p. 248).

2.3.3.6. *Positive outlook*

According to Beavers and Hampson (2003), high-functioning families have been found to have a more optimistic view of life. Effective methods of coping for families include preserving courage and hope, confirming strengths, upholding possibilities, and remaining optimistic (Shaikh & Kauppi, 2010; McCreary & Dancy, 2004; White, Richter, Koeckeritz, Munch & Walter, 2004). This is supported by Walsh (2003b), who

stated that significant research has documented the strong effects of a positive outlook in coping with stress and overcoming barriers to adversity.

2.3.3.7. Social support network

Available social support networks have been associated with emotional well-being and the ability to compensate for adversity and challenges experienced by the affected family (Jenson & Fraser, 2015; Chase-Lansdale, Wakschalag & Brooks-Gunn, 1995). An exploratory qualitative study done by Ungar, Theron and Didkowsky (2011) also found that disadvantaged youth in five different countries made both mature and developmentally appropriate contributions to their families' well-being, which in turn was beneficial to their coping with persistent adversity. Social support networks are crucial for family resilience, offering the family emotional, psychological, informational, instrumental, and economic support (Walsh, 2015; Gardner, Huber, Steiner, Vazquez & Savage, 2008).

Many stressful experiences undergone by families may be thought of as natural and expected (Lindgaard, Iglebaek & Jensen, 2009). Therefore, patterns of individual recovery from adversity provide reliable evidence that families as systems enable and promote the well-being of individual family members to return to normative levels of functioning (Ungar, 2015).

2.4. DEFINING RESILIENCE

2.4.1 Adolescents and their insights

Resilience is a process that results in positive outcomes for youth who are vulnerable to the stressors they experience in their life and environment (Theron, 2017). The process of resilience is co-facilitated by the individual and the social system (such as the family) of which the individual is part (Ungar, 2011). Therefore, the youth and the social ecology in which they are embedded contribute to the process of resilience.

Existing research on resilience is largely informed by studies which have relied on the measures and reflection of adults' understanding of resilience; therefore, most

resilience literature is not supportive enough of the insights of youths (Wright, Masten, & Narayan, 2013; Liebenberg & Theron, 2015). The marginalising of youths' views and voices can potentially threaten social-ecological initiatives to enable resilience, as adult-directed initiatives may not correspond and reflect how youth would prefer to be supported (Hart et al., 2016).

2.4.2 Significance of family resilience

The study of resilience has a long history, originating from fields of developmental sciences, psychiatry, and education, where much has been learned through clinical observations (Masten, 2014). Resilience was first understood and introduced as a set of stable personal characteristics. However, after continual research into the concept, resilience became to be understood as a dynamic and developmental concept that involves patterns of positive adaptation in the contexts of adversity and high risk (Maholmes, 2014). Walsh (2003b) defined resilience as the ability to withstand and rebound from disruptive life challenges, involving key processes that over time help an individual or family to "struggle well" and overcome obstacles (Masten, 2014; Glick, 2006). Gordon (1996, p.1) described resilience as "the ability to thrive, mature and increase competence in the face of adverse circumstances." Resilience has also been defined as the capacity of individuals and families to adapt, function and display competence despite elevated risk, chronic stress, or persistent trauma (Henry, 1999).

Resilience is a concept that is particularly relevant in South Africa. Ungar (2008) stated:

Resilience is a theory that can inform action and it is a concept that changes our focus from the breakdown and disorder attributed to exposure to stressful environments, to the individual characteristics and social processes associated with either normal, or unexpectedly positive psychosocial development. (p.6)

Family resilience represents an approach which emphasises a family's strengths rather than their weaknesses (Antonovsky, 1979). Family resilience can be understood as a family that responds positively in the face of adversity, adapting and

adjusting in a crisis situation in order to prosper (Shaikh & Kauppi, 2010; Hawley & De Haan, 1996).

When families are stricken by natural disaster, complex processes occur that affect all aspects of family behaviour (Bolin, 1976). A basic systematic assumption is that adversity and persistent life challenges affect the whole family, and in turn, key transactional processes influence and determine adaptation (or maladaptation) for all family members, their relationships, and the family unit (Walsh, 2016). In order to ensure family development and growth, families have boundaries and a variety of instrumental and expressive functions to perform and maintain (Boss, 1988). However, when faced with a range of influencing and devastating impacts, such as those caused by prolonged drought, the family system is subject to strain and change. Notwithstanding adversity and change, many families have effectively coped with natural disasters, other crises and challenges (Simon, Murphy & Smith, 2005).

Not much research has been conducted on family resilience in its relation to the effects of drought and on the family system thereafter. Much resilience research focuses on community, social, and individual resilience, as well as the relationship to normative and non-normative stressors. It is found that considerable research concerning drought and the social effects thereof is based in Australia, involving comprehensive, small-scale studies of specific communities (Stehlik, Gray & Lawrence, 1999; Alston & Kent, 2004; Dean & Stain, 2007; Dunstan & Todd, 2012). A comprehensive study done by Stehlik, Gray and Lawrence (1999) found that farming families undergoing drought experienced financial crises, which led to family stress and health issues, increasing suicide levels, intra-family conflict, marital conflict, intergenerational conflict, reduced interaction in the community, and extreme poverty.

Literature and studies have identified many characteristics that were present in families who overcame their adversity and crises. According to Cole, Clark and Gable (2001), influential factors in predicting family resilience include the ability to adapt, member appreciation, clear family roles, attachment and involvement, communication, community ties, motivation, and shared time. Simon, Murphy and Smith (2005) state that families may be successfully resilient if they maintain balanced relationships through communicating their needs to one another, as well as spending time with one

another. Another study done by Greeff (2000) also revealed that trust and pride in the family, together with loyalty between family members, assisted in dealing with changes and crises successfully.

Family resilience is needed more than before as families face unpredicted challenges in a rapidly changing world that is characterised by significant social, political, economic, and ecological revolutions (Walsh, 2015). As a result, families are experiencing rapid transformation as they attempt to address, challenge and overcome these changes and adaptations in order to function well.

2.5. CONCEPTUAL FRAMEWORK OF THIS STUDY

2.5.1 Walsh's Family Resilience Framework

Many studies on resilience have focused on the psychopathology and negative life trajectories of families who experience economic disadvantage and are at risk for poor educational, social, psychological, and health outcomes (McLoyd, 1998; Maholmes 2014). However, as suggested by Maholmes (2014), scholars have increasingly developed theoretical models that focus on the strength of these families and how these strengths translate into positive outcomes. Over the last 20 years, the field of family therapy has refocused attention from family deficits to family strengths (Nichols & Schwartz, 2000). One of these models is the Family Resilience Framework (FRF) (Walsh, 2006).

The family resilience theory “serves as a conceptual map to identify and target key family processes that can reduce stress and vulnerability in high-risk situations, foster healing and growth out of crisis, and empower families to overcome prolonged adversity” (Walsh, 2003a, p.5). The framework identifies and synthesises key processes within three domains of family functioning, namely family beliefs system, organisational patterns, and communication processes (Walsh, 2003a). For the purpose of this research, I will focus on family organisational patterns (see Table 2.1), which are key to this study.

Table 2.1: Key organisational processes in family resilience, adapted from Walsh (2015, p.66)

Organizational Processes	
Flexibility	<ul style="list-style-type: none"> • Rebound, adaptive change to meet new challenges • Reorganize, restabilize: continuity, dependability, predictability • Strong authoritative leadership: nurture, guide, protect • Varied family forms: cooperative parenting/caregiving teams • Couple/coparent relationship: mutual respect; equal partners
Connectedness	<ul style="list-style-type: none"> • Mutual support, teamwork, and commitment • Respect individual needs, differences • Seek reconnection and repair grievances
Mobilize social and economic resources	<ul style="list-style-type: none"> • Recruit extended kin, social, and community supports; models and mentors • Build financial security; navigate stressful work/family challenges • Transactions with larger systems: access institutional, structural supports

2.5.2 Organisational patterns as a key process in family resilience

According to the study done by Lindgaard, Iglebaek and Jensen (2009), which explored parents' perceptions of how the 2004 tsunami in Southeast Asia affected them and their families, the parents indicated that experiencing the natural disaster influenced family relations. Specifically, they indicated that their family's sense of cohesion was strengthened, and family members showed one another increased care. Daily practises, routines and activities also changed as families made practical changes in their daily lives to address the needs of each family member after the tsunami. However, another study on the social experience of drought in rural Iran revealed that farming families experienced alienation, psychological and emotional impacts, frustration, changed family plans, as well as family and community disharmony and disintegration (Keshavarz, Karami & Vanclay, 2013). Families need to organise themselves in different ways in order to meet their needs and overcome the challenges that they face. Family organisational patterns play a key role in forming healthy families, so that the family can function optimally in the face of adversity and crises (MacPhee, Lunkenheimer & Riggs, 2015). The pattern of the family organisation is the underlying structure of a family function. Clearer organisational structure in the family enables the family to be more functional. Family organisation is organised into

three subcategories, namely flexibility, connectedness, and mobilisation of economic and social resources (Kalil, 2003; Walsh, 2003b).

Flexibility refers to a families' ability to recover, "bounce back" and reorganise in the face of adversity or disruption. Flexibility also refers to a family's ability to maintain continuity despite challenges and disruption (Walsh, 2015). Flexibility is an important process needed to rearrange family roles, adjust to changed circumstances and, at the same time, reduce the sense of chaos and uncertainty to thereby restore safety, order, and stability (Walsh, 2007).

Connectedness is demonstrated in family members' commitment to one another, while maintaining a balance with respect for individual needs and differences. Family members need to respect and tolerate each member's differences in response to crises (Walsh, 2007). Some family members may show anxious clinging and express a need to be in constant contact with a loved one, while others may distance themselves in order to avoid pain or stress (Walsh, 2007). Connectedness may also be demonstrated in cooperation in caregiving as well as other types of partnerships and organisation within the family (Lester et al., 2011; Walsh, 2015).

Social and economic resources are made available when families mobilise support services such as kin, social and community networks for emotional and practical support during times of adversity and challenges (Imber-Black, 1992; Speck, 2003; Walsh, 2002, 2015). It is important for vulnerable families to access provision of support through the creation of support networks such as multigenerational or multifamily groups (Walsh, 2002). This further includes creating and maintaining financial strength, while still recognising the importance of balancing work and family life (Walsh, 2015). Involvement of extended social systems may include friends, neighbours, health care services, spiritual support through clergy, support from school systems, employers, and neighbourhood and community organisations (Walsh, 2007).

2.5.3 Relevance of this conceptual framework to this study

Walsh's FRF is well suited for this study as it allows for the conceptualisation of family resilience within the specific context of drought. Natural disasters such as drought are fundamentally cross-scale in their impact, disrupting family functioning across multiple levels of socio-cultural systems (Boon, Cottrell, King, Stevenson & Millar, 2011).

Walsh (2016, p.4) stated that "from a biopsychosocial systems orientation, risk and resilience are viewed in light of multiple, recursive influences" and should therefore be investigated together. This framework perspective is able to provide context for thinking about principles of protective factors, risk and resilience (Jenson & Fraser, 2015). The bioecological systems theory developed by Bronfenbrenner (1986) is also useful for identifying and organising factors that nurture and reinforce resilience, as well as different risks experienced by the family.

According to Ungar (2012), individuals and their social systems (such as family) play active roles in facilitating good outcomes as they navigate towards meaningful resources that promote and support positive adjustment when faced with adversity. This framework allows identified factors and risks to be mapped around an individual and the family system, and the effects of family resilience to be organised into direct or indirect influences. Using this framework, the effectiveness of the different resilience-promoting factors can be evaluated (Boon, Cottrell, King, Stevenson & Millar, 2011). Because slow onset disaster events afford families the opportunity to adapt to drought as it develops, this model will be helpful to characterise the relationship between different resilience-promoting factors used by the family in order to reduce the impact of the disaster (Boon, Cottrell, King, Stevenson & Millar, 2011).

As South Africa continues to experience drought and other natural disasters, it is important to understand what enables some families to continue functioning despite the adversity that they experience. By definition, the focal point of a family resilience framework focuses on a family's strengths under stress in response to persistent adversity (Walsh, 2016). A family resilience framework, embedded in a socioecological system, is valuable in community-based intervention and prevention services (Walsh, 2015). It is recognised that Walsh's FRF is an American model which,

based on current literature, has not yet been applied extensively to South African families. This research thus also offers the opportunity to understand whether key resilience processes exist in some families from South African communities, such as the Govan Mbeki Municipality, who experience the effects of a natural disaster such as drought.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

In the preceding chapter, a full literature review was done in order to fully understand and explore the various constructs, themes, and ideas presented in this study, as well as provide relevant background. In this chapter, I describe the chosen research methodology and design used in order to answer the relevant research questions. This chapter includes an explanation of the research design, a description of the meta-theoretical paradigm, and the sampling of the participants. This chapter concludes with explanations of the data collection procedure and data analysis process.

3.2 RESEARCH DESIGN

Instrumental Case Study

An instrumental case study design was selected for this study. This case study was used to better understand a particular situation in Govan Mbeki and to gain insight into the issue of drought in order to help refine the theory of resilience (Stake, 1995). Case studies make use of multiple sources and techniques to gather data such as direct observations, interviews, documents, artefacts, and other sources (Maree, 2007; Merriam, 2002). Furthermore, this design does not only consider one or two participants' views and perceptions, but instead offers a multi-perspective analysis of the views and perceptions of relevant groups and the relationships between them (Maree, 2007). This allows the researcher an opportunity to gain tremendous insight into a case to explore, interpret, and describe the phenomenon clearly (Creswell, 2007). Figure 3.1 below presents the boundary of the Govan Mbeki Municipality where the research took place.



Figure 3.1: Map of area of Govan Mbeki Local Municipality, Mpumalanga

The aim of instrumental case study is to engage with and account for the complexity of social activity in order to uncover and understand meanings that individuals and groups attribute to settings and research constructs (Stark & Torrance, 2005). Overall, case study research designs allow researchers to collect and consider multiple experiences that are not easily measurable (Hancock & Algozzine, 2016). Typically, a case study is understood as qualitative research that gathers in-depth data for the purpose of better understanding a particular situation (Creswell, 2007; Leedy & Ormrod, 2012; Merriam, 2002).

This case study focuses on the perceptions of youth living in the Govan Mbeki Municipality in Mpumalanga. The case was selected to gain insight into the effects of drought on families, in order to make recommendations that contribute towards improving existing intervention programmes that help families who are in need, and to contribute to theories on family resilience. A case study aims to “tell it like it is” from the data collected, which produces a rich description of the phenomenon from the perspective of the participants (Stark & Torrance, 2005; Gillham, 2008). In the context of this study, results interpreted by the data will specifically influence and assist the participants involved in the study by illuminating issues and possible explanations (Gillham, 2008).

One possible limitation is that case studies seem to be incapable of providing generalisations due to its dependence on a single case (Maree, 2007). However, focusing on a single case can promote understanding and inform practice in similar situations (Leedy & Ormord, 2013; Durrheim, Painter & Terre Blanche, 2006), which is the true nature and purpose of a case study.

A frequent concern about case studies is that they produce large bodies of data that is unreadable (Yin, 2003). This concern can be applicable, considering the multiple sources and techniques used to gather data, but by following a comprehensive research strategy and continuously monitoring interpretations, these challenges can be prevented (Durrheim, Painter & Terre Blanche, 2006). Conversely, by following a qualitative interpretivist study, this is not regarded as a limitation (Maree, 2007). A common misunderstanding about a case study design is that the approach supports a bias towards authenticity, with a tendency to confirm the researcher's preconceived beliefs (Flyvbjerg, 2006). However, such critique is misleading, as a case study design has its own objectivity as strict as the objectivity of quantitative methods and the value (trustworthiness) is carefully appraised (Gillham, 2008).

3.3 EPISTEMOLOGICAL PARADIGM: INTERPRETIVISM

A paradigmatic framework is valuable as it will guide the researcher to “reflect upon the broader epistemological and philosophical consequences of their perspective” (Perren & Ram, 2004, p. 95). Each research paradigm has certain assumptions, strategies, methods, limitations, and advantages that influence and inform their research (Ponelis, 2015). This research follows an interpretivist paradigm with a qualitative methodological approach. Interpretivism is a term given to research that attempts to understand phenomena through the meanings that individuals and communities attach to them (Jansen, 2007; Nieuwenhuis, 2007). Trusting the participants' views of the phenomenon or situation being studied is crucial to this framework (Creswell, 2014). This paradigm recognises that multiple realities exist and can change over time – including from place to place – due to the varied backgrounds, assumptions, and experiences embedded in the social context shared by individuals (Wahyuni, 2012).

Epistemological assumptions of the interpretivist paradigm assume that knowledge is gained through personal experience and is acquired inductively to construct a theory (Mack, 2010). Additionally, knowledge develops from specific circumstances and cannot be condensed to simplistic interpretations. According to Nieuwenhuis (2007), interpretivist assumptions deem that human life can only be understood subjectively and cannot be observed from an external reality. Interpretivism principally focuses on how people construct their social world through shared meanings and relation to one another and their environment.

Interpretivism has been critiqued as it is viewed as a paradigm that abandons scientific procedures of authentication and, in effect, any results produced cannot be generalised to other situations (Phoenix et al., 2013). Nevertheless, the research produced will also be similar to other people's work and resonate with others; it is therefore still beneficial regardless of lack of generalisation (Mack, 2010).

Another critique to interpretivism is that the ontological assumption is subjective rather than objective (Mack, 2010). However, an interpretivist should bracket their assumptions and biases so that the data can better inform the researcher about what is happening in the environment, rather than be informed by their own deductions (Ponterotto, 2005; Mack, 2010). Interpretivists also see their biases as a means to dialogue with participants (Ponterotto, 2005), and therefore the researcher's own subjectivity is essentially a valued and key part of the inquiry process.

The value of an interpretivist paradigm is embedded in the acceptance of multiple perspectives, which often leads to more comprehensive understanding of a particular phenomenon (Klein & Meyers, 1999). This approach has been selected as there is a need to understand the effects of drought on families from a subjective point of view, and, more specifically, on the organisational patterns within families in the Govan Mbeki Municipality. This approach will be used to help explore and understand the individual meanings this community ascribes to drought, and importance of rendering the complexity of the situation within their community (Creswell, 2014).

Interpretivist research is value bound as the researcher is part of the research being studied and therefore cannot be separated from the research, which results in a

subjective approach to the study (Wahyuni, 2012). The experiences and values of the researcher influence the data collected as the researcher studies the social reality through the perspective of the people in specific social phenomena.

3.4 RESEARCH METHODOLOGY: QUALITATIVE RESEARCH

Qualitative research primarily deals with non-numerical data and focuses on a broad range of data collection strategies, such as the use of observations, field notes, texts, images, video, and audio (Silverman, 2015). Maree (2007) defined qualitative research as research that focuses on interacting and observing participants in their natural environment, in a particular context, and how they make meaning of their experiences.

Qualitative researchers believe that there are multiple truths and perspectives to be discovered from various individuals, each having equal validity and truth (Creswell, 2013). This research design recognises the multilayeredness and complexity of problems and experiences sustained by people; it aims to reveal its multidimensional form without trying to simplify observations (Leedy & Ormrod, 2013). Qualitative research helps the researcher to understand the meaning of the events and experiences held by the participants in the study, as well as understand the context that influences such experiences (Maxwell, 2013). This research is interested in the process rather than the outcomes of events (Merriam, 1988) and therefore does not focus solely on the results, but the courses of action that influenced the results.

Therefore, qualitative research is best suited for this study as it provides new insight into the effects of drought and develops new theoretical perspectives about family resilience, including discovering problems that exist within the concept of family resilience (Leedy & Ormrod, 2013). Qualitative research produces results and theories that are understandable and meaningful to the participants as well as others (Maxwell, 2013). This research method will specifically help youth identify and make meaning of their responses to drought, and also understand how their families cope with the effects of drought. Moreover, this research is proposed to better inform existing

policies, programmes, and interventions, as well as provide insight and knowledge in limited research and case-specific areas (Crowe, Inder & Porter, 2015).

Qualitative research also involves participatory and community-based research with participants in the study (Maxwell, 2013), allowing face credibility and in-depth focus of the effects of drought on this particular community. According to Silverman (2012), qualitative research is ordinarily limited to a particular set of interactions and certain contexts, and therefore cannot be generalised to a broader population. Silverman went on to state that it can contribute to theory building and also allows researchers to examine how particular behaviours are embedded in particular patterns of social organisation. In relation to this study, quantitative research will assist to better understand the response of the social organisation of the Govan Mbeki community to drought.

Qualitative research is by definition not neutral or objective; therefore, researchers need to be aware of their own subjectivity when collecting and analysing data (Ravich & Carl, 2016). Constant reflection will need to be done throughout the research process as to account for subjectivities and assumptions that may have developed or shaped the research. Qualitative research constitutes a relationship, which embodies trust and reciprocity between the researcher and participants (Ravich & Carl, 2016). Trust and reciprocity can be contextual and might mean different things to different people in different contexts. Therefore, field workers who are from the Govan Mbeki Municipality will be trained to collect the necessary data from the participants, with whom they will hopefully have more affinity and reciprocity throughout the research process.

3.5 SAMPLING OF PARTICIPANTS

Non-probability sampling technique will be used to generate data. Purposive sampling technique is preferred to generate information-rich data (Morrow, 2005), and is used when participants are selected for a particular reason (Leedy & Ormrod, 2013) according to specific characteristics (Nieuwenhuis, 2010; Durrheim, Painter & Terre Blanche, 2006). Purposefully selecting participants will best help the researcher understand the research problem and the research questions (Creswell, 2014).

It is important to note that there are disadvantages when using purposive sampling. The results of purposive sampling cannot be generalised to the larger community (Maree, 2007). This non-probability sample is also time and context specific (Pieterse & Maree, 2010), which again, does not make it generalisable. However, the aim of this research is not to generalise, but to inform similar research. It is also important to note that the data may not be saturated due to the small sample size of the research (Nieuwenhuis, 2010). The population, from which a sample will be selected, resides in the Govan Mbeki Municipality in Mpumalanga. This community is preferred and has been identified because it has been affected by a prolonged drought over the past three to four years. The selected participants engaged in a number of activities, which are detailed later in this chapter. The specific demographics of the participants involved can be found in Tables 3.1 and 3.2.

Table 3.1: Frequency table of total number of participants in the study

Total no. Groups	Total no. participants	Total no. Males	Total no. Females
8	43	18	25

3.6 DATA COLLECTION TECHNIQUES

Qualitative data collection for this study includes a series of strategies that enhance the contemporary nature of our method. The data collection steps include setting the boundaries for the study (sampling criteria and site), collecting information through semi-structured observations and interviews, documents and visual material, as well as establishing the protocol for recording information (Creswell, 2014). The following section will describe the five-phase data collection process implemented. Figure 3.2 provides an outline and overview of the five-phase data collection process. For the purpose of this research, only phases 1 and 2 will be discussed as it pertains to this specific study. Phases 3 to 5 will be discussed in the Addendum.



Figure 3.2: Five-phase data collection process

Phase 1: Group discussions and arts-based activity with participants

Participants engaged in arts-based activities, which have been proven to be effective data generation tools (a choice from body mapping, draw and talk, clay modelling and sand play). Figure 3.3 provides examples of the various arts-based activities used. Dialogue was used as medium of discussion during the art-based activities to collect the data needed for this research. Through these activities, researchers guided and prompted the young people using group discussion, in order to gain insight into their health and well-being, including the challenges of drought and the role of resilience. Group discussions produce rich detail where the participants can build on one another's ideas and comments to provide an in-depth view of the phenomenon (Nieuwenhuisb, 2010).

Group discussions require the researcher to act as a facilitator (Seabi, 2012) who encourages and focuses on group discussion. The researcher actively moderated and controlled the discussion to prevent domination by more outspoken individuals and include the viewpoint of less assertive participants (Nieuwenhuis, 2010b). Because of the number of the participants included and the nature of the research (bigger project), other co-researchers assisted in data collection. Participants were divided into eight

focus groups, with each group facilitated and moderated by two researchers. Each group consisted of between four and six participants, one researcher who acted as a facilitator, and the second researcher who recorded the session and assisted with observations. The researcher of the study facilitated a group and was assisted by an honours student who obtained permission to act as co-researcher to assist in facilitating the research process. All the groups were guided by the same research questions and were conducted on the same day. To elicit the opinions, views and beliefs from the participants', unstructured, open-ended questions were used within a group interview setting.

The data collected was preserved through audio recordings of the group discussions between the participants during the art-based activities. The audio recordings during this phase were transcribed to be used during data analysis. The data collected also included qualitative visual materials consisting of photographs of the art-based activities completed by the participants, as presented in Figure 3.3.

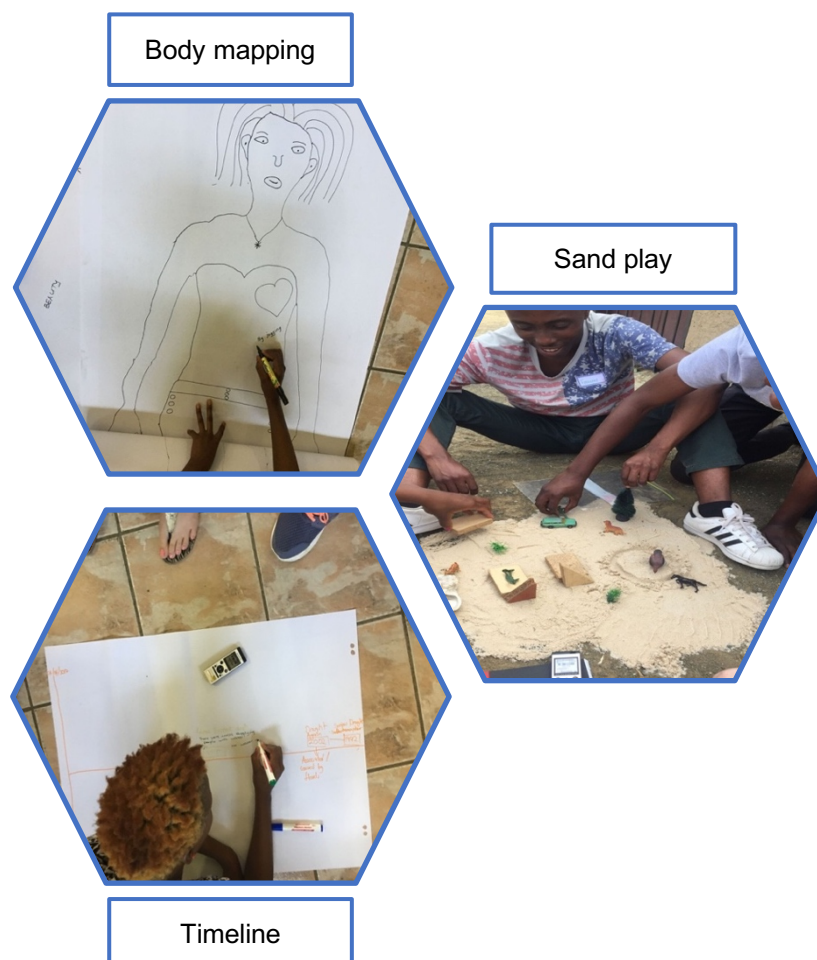


Figure 3.3: Examples of art-based activities completed by participants

Phase 2: Workshop training of participants as co-researchers of the study

The main researcher, along with the other researchers, facilitated a short workshop where participants were trained to become co-researchers. The aim of the workshop was to equip these participants with certain skills needed to collect research. The historical data collected by the participants does not form part of this research; the sole purpose of this workshop was to train the participants to acquire research skills and gain research understanding in order to further benefit from the overall research process. These skills include identifying research problems, data collection techniques and participant . Participants were also trained to conduct interviews and obtain data through the use of interviews, drawings and timelines.

3.7 DATA ANALYSIS

Qualitative data is invariably unstructured and unmanageable, consisting of verbatim transcriptions of interviews, field notes, observations and other documents (Huberman & Miles, 2002). The data obtained is usually very detailed and in microform, which requires the researcher to provide coherence and structure to the unwieldy data set. A favoured method is qualitative thematic analysis, which is one of the several qualitative methods available for analysing data and interpreting the meaning thereof (Schreier, 2013). The aim of thematic analysis is to define the characteristics of the data within the document by examining and reducing the data to concepts/themes that describe the phenomenon (Hsieh & Shannon, 2005; Wood, 2006; Elo & Kyngäs, 2008).

For the purpose of this research, an inductive approach to data analysis will be used, which is a process that is defined as moving from the specific to the general so that particular instances and observations can be combined into a larger and more general statement (Elo & Kyngäs, 2008). As indicated by Elo & Kyngäs (2008), the researcher followed three main phases distinct to the inductive analysis process (see Figure 3.4), namely preparation, organisation, and reporting. Figure 3.5 represents an overview of the inductive qualitative thematic analysis process to be used.



Figure 3.3: Three main phases of inductive analysis process

During the preparation phase, a word or theme is selected as the unit of analysis (Polit & Beck, 2004, McCain, 1988). This is followed by an analytic process where the researcher attempts to make sense of the data and learn what is going on as to gain a sense of whole (Elo & Kyngäs, 2008).

The next step is the organisation phase, which includes open coding, creating categories, and abstraction (Elo & Kyngäs, 2008). Open coding is when key words are written next to the text while reading. The text is read through and analysed a number of times until there is a saturation of headings that describes all the content of the text. The headings are transferred to coding sheets where categories are then freely generated. The aim to further reduce the headings into similar and dissimilar categories until all the data is accounted for, and that there is evidence of comparison between the different data groups and headings (Dey, 1993). During the last process of the organisation phase (abstraction), general descriptions are formulated through the generated categories.

During the final phase (reporting), the results are shared in the form of a model, conceptual map, or categories (Elo & Kyngäs, 2008). The analysing process is also reported and shared.

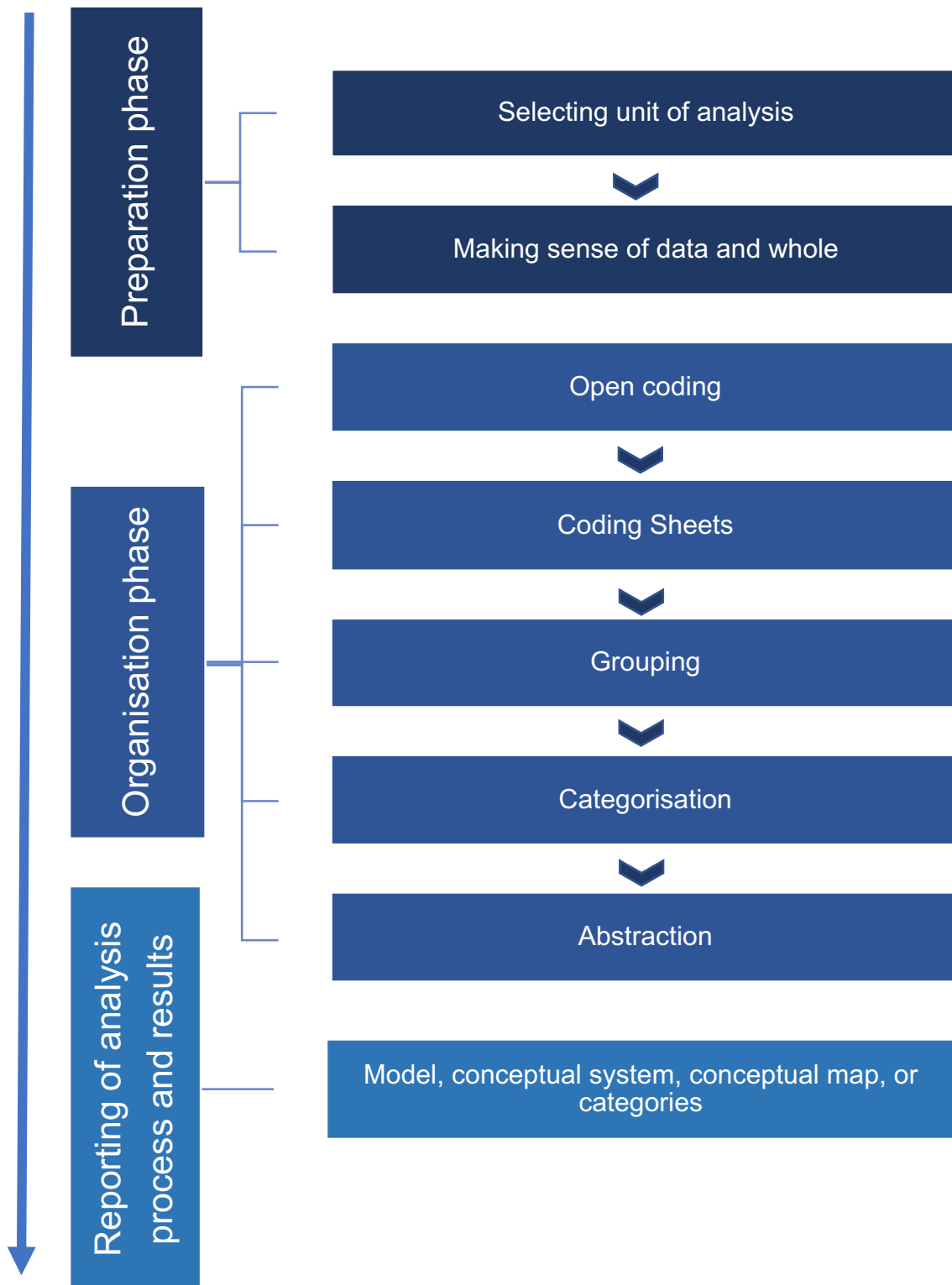


Figure 3.5: Overview of inductive qualitative thematic analysis process

CHAPTER 4: RESEARCH FINDINGS

4.1. INTRODUCTION

Chapter 4 investigates the findings of the research questions outlined in the foregoing chapter. The findings are presented under themes that emerged during thematic data analysis. The verbatim transcripts from the focus group interviews guided me in the thematic analysis and the findings. The focus groups are numbered from one to eight. For the purpose of this research, the participants will be referred to according to their focus group and participant number. For example, participant 3 (P3) from focus group 5 (FG5) will simply be referred to as FG5.P3.

The following key will be used to indicate the focus group number and the participant within that group (the participant number will change according to the participant from which the data was gathered), for example:

Focus group 1, Participant 1:	FG1.P1
Focus group 2, Participant 2:	FG2.P2
Focus group 3, Participant 3:	FG3.P3
Focus group 4, Participant 4:	FG4.P4
Focus group 5, Participant 5:	FG5.P5
Focus group 6, Participant 6:	FG6.P6
Focus group 7, Participant 7:	FG7.P7
Focus group 8, Participant 8:	FG8.P8

4.2. IDENTIFIED THEMES AND SUBTHEMES

Four themes were identified through inductive thematic analysis. Of the four themes, the first theme comprises three subthemes, as per Table 4.1, and the remaining three themes are without subthemes. Each theme will be discussed in the sequence followed in Table 4.1.

Table 4.1: Themes identified from data

Theme	Subtheme
1. Protective parenting	1.1. Emotional parenting 1.2. Pragmatic parenting 1.3. Future-oriented value sharing
2. Changing family habits	
3. Financial stress	
4. Health and well-being	

4.2.1. Theme 1: Protective parenting

Protective parenting involves a number of practices that convey security and stability at home, including involved and supportive parenting (Beach, Lei, Brody, Dogan & Philibert, 2015). Protective parenting can be described as a multidimensional construct that involves a number of different parenting strategies and processes. This theme includes emotionally and pragmatic parenting consisting of encouragement and support from family members, as well as family members passing on values (such as optimism and knowledge of right and wrong) that they have used during adversity. For the purpose of this study, protective parenting will be discussed according to three subthemes, namely emotional parenting, pragmatic parenting, and future-oriented value sharing. Each subtheme will be discussed, including the inclusion and exclusion criteria for the subthemes.

4.2.1.1. Subtheme 1: Emotional parenting

Emotional parenting refers to family structures which promote cohesion, harmony, caregiving and expressiveness (Armstrong, Birnie-Lefcovitch & Ungar, 2005). This subtheme includes any reference to family members who support, protect, and encourage youth in the face of stressors and the adversity experienced due to drought. Emotional parenting also refers to family members who maintain relationships and connect with youth, teach and encourage cultural and spiritual beliefs, and utilise different means of distracting the youth to have a non-drought focus. A non-drought focus can be defined as redirecting one's thoughts and focus to other important

interests and activities, such as work, school and the future. Table 4.2 indicates the inclusion and exclusion criteria for this subtheme.

Table 4.2: Inclusion and exclusion criteria of emotional parenting as subtheme

Subtheme	Inclusion criteria	Exclusion criteria
Emotional Parenting	Any reference made on evidence and experience of family members that include supporting, protecting, teaching, maintaining positive relationships, and encouraging youth.	Any reference made on evidence or experience of family members that exclude supporting, protecting, teaching, maintaining positive relationships, and encouraging youth.

This subtheme is supported strongly by participants from seven of the eight focus groups, as shown in Table 4.3. The participants referred to family members who support, protect, teach, maintain a positive relationship and encourage them.

Table 4.3: Number of participants that reported on subtheme of emotional parenting

Theme	Subtheme	FG1	FG2	FG3	FG4	FG5	FG6	FG7	FG8
Protective parenting	Emotional parenting	X		X	X	X	X	X	X

Participant 3 (FG3) explained that his family is very supportive and even though things will not get better, the family gives him hope. Referring to his family, he said:

FG3.P3: They make you believe that something is going to come up; something is going to happen and – yeah. They believe in making us as their children stronger than they are.

During times of adversity, family members are connected and show concern and care for one another. This is supported by participant 3 (FG4) who confirmed that, during times of drought, more love is shown.

FG4.P3: You can see that your brother is taking care of you, whether you are sick or when you are in a drought; everyone takes care of each other, making sure everyone is hydrated and saves water for each other.

During the body map activity, where each participant was required to draw a body map that represented how they stay healthy during drought, participant 6 (FG8) explained that during times of drought, what makes him stronger is his family (see Figure 4.1). This theme is also supported by participant 3 (FG5).

FG8.P6: Know what helps my heart is my family and praying to God.

FG5.P3: Yeah, it's like, it goes hand in hand with my family; keeping the love and support – that's what keeps me going.

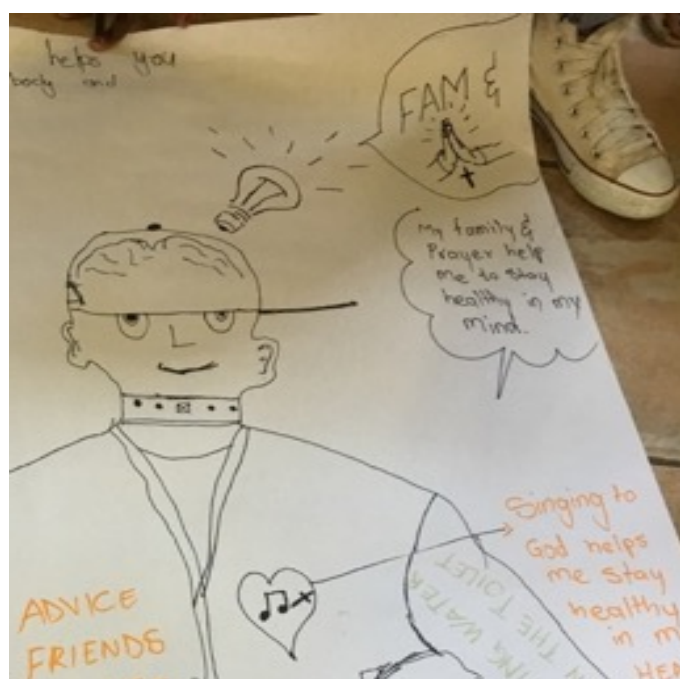


Figure 4.1: Body map representing how FG8.P6 stayed healthy during drought

Participant 6 (FG4) further elaborated that parents want to ensure that their children are safe:

FG4.P6: So, imagine you are encountering that disaster of drought. I think every one of us has a parent or a family. So, obviously if there is something like a drought, your mom or your dad will want you to not be affected and she will make sure that they stay by your side all the time.

During this time of drought, it was reported that parents distract their children by redirecting their focus to other things. Participant 3 (FG7) said that when he is feeling sad, he just talks to his mother who helps him do things and directs his focus to his career and studies.

FG7.P3: Like if I'm feeling sad, I just talk to my mom. I'm not okay just because the things that are not going well, just because of the drought. Then she can help me to do the things that I'm worried about, like what I must do to focus on my career and on my studies.

During the body map activity, participant 5 (FG1) explained that during times of drought, one needs to stay positive by doing positive things, in order to not give up hope (see Figure 4.2). She further explained that it is her father that helps her to stay positive.

FG1.P5: Telling me that I must stay focused so that I can know that there's something going on, or something is going to happen, because everything happens for a reason.

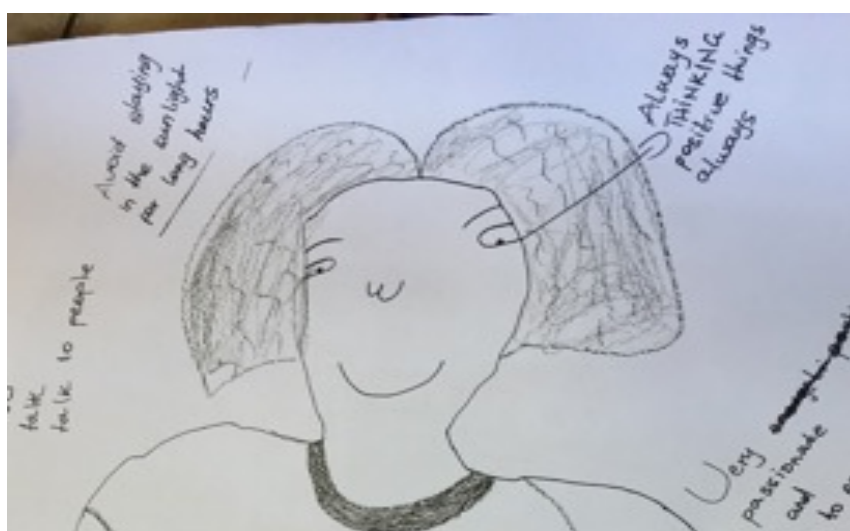


Figure 4.2: Body map representing how FG1.P5 stayed healthy during drought

It is also apparent from the discussions that parents support their children by keeping them connected to their culture and encouraging them to practice their spiritual and cultural beliefs. Referring to his parents, participant 3 (FG3) said:

FG3.P3: They do everything – making sure we are still connected to God, our ancestors, and all those things. Like, telling us that those people are and still, will be looking after us, like, yeah, doing those kinds of things. And we grew up, we grew up, like in that environment, where they tell us that, uh, our ancestors will always look after us, so that, somehow, give us strength and give us hope and all those things.

Participant 3 (FG3) further explained that his house is a house that prays together and described it as a family thing.

FG3.P3: To keep me strong emotionally, I pray, because my mother is a church person. So yeah, we pray together, we hope that things get better, because everything is possible with God. That is what they told me.

The subtheme can best be summarised by participants from the fourth focus group. This group explained that having a home makes things easier and it means to have a family that is supportive, loving and caring.

FG4.P4: Home means support. Home means love, care.

FG4.P3: If you have like a family, it makes it much easier.

FG4.P1: What makes it easier is the love you get from family – the support.

When responding to the question of how family helps the participants, Participant 1 (FG6) shared the following:

FG6.P1: They motivate me. They are always there for me. When they are by my side, I am strong.

Participants who responded to the subtheme explained that having a family makes the adversity of drought much easier because they get support and love from their families. Participant 3 (FG3) confirmed on behalf of all in the focus group that, even though they are struggling to adapt to the changing environment, home makes them feel okay and welcomed and they do not have to stress about a lot of things. He concludes by saying:

FG3.P3: We know that as long as we are home, there is a way to get through this.

4.2.1.2. Subtheme 2: Pragmatic parenting

Pragmatic parenting can be defined as parents' sense of competence in dealing with their children's problems (Armstrong, Birnie-Lefcovitch & Ungar, 2005). Pragmatic parenting refers to ways in which parents adapt to adversity and model ways in which to best overcome the challenges they face. This subtheme includes any reference to any family member who facilitates access to resources and models on how to manage practical aspects of drought (namely how to manage with less money, food or water). Table 4.4 indicates the inclusion and exclusion criteria for this subtheme, and Table 4.5 the focus groups that reported on this subtheme.

Table 4.4: Inclusion and exclusion criteria of pragmatic parenting as subtheme

Subtheme	Inclusion criteria	Exclusion criteria
Pragmatic Parenting	Any reference made on evidence and experience of any family member that includes facilitation of access to resources and/or information to managing drought, and acting as a role model to youth.	Any reference made on evidence and experience of any family member that excludes facilitation of access to resources and/or information to managing drought, and acting as a role model to youth.

Table 4.5: Number of participants that reported on subtheme of pragmatic parenting

Theme	Subtheme	FG1	FG2	FG3	FG4	FG5	FG6	FG7	FG8
Protective parenting	Pragmatic parenting	X		X	X	X	X	X	X

Participants from six focus groups referred to family members adapting to the restricted access to water by travelling to water points where they can get water for their household. Participant 5 (FG1) and participant 1 (FG1) shared that it is often the elders of a family that would walk to fetch water. A number of participants (FG6.P1, FG3.P2 and FG8.P6) said that they remember a time when their fathers had to go fetch water for their household.

FG1.P1: It depends, it depends, but most of the time is elders that go and fetch the water because fetching the water is not just an easy thing to do for a child...to go and fetching the water. Fetching the water is a tough thing; you need the muscles, strong muscles to fetch the water, so adults go.

FG1.P5: The elders - whoever.

FG6.P1: My dad used to go and fetch water.

FG3.P2: I remember there was a time when my father had to take a car and fetch water in other sections and bring it home.

FG8.P6: My parents make it possible; my dad goes somewhere to fetch water.

Some participants expressed the value of parents and elders sharing information regarding drought and how to save water. Participant 5 (FG6) and participant 2 (FG6) both shared that they think parents need to teach their children about drought so that they can learn to recognise the warning signs, save water, and preserve the little water that they can access to give to their parents who will use it purposefully and to the advantage of the family. Accordingly, the participants were obedient and favoured bringing home any excess water for family and communal use, which they saw as a way of preserving and saving water.

FG6.P5: Like the parents, I think they must warn the kids about drought and so forth... so that they can learn and recognise these things.

FG6.P2: The parents should teach their kids about drought and then how to save water because if the parent is taking the child away from the drought to a nice place, and then when the child comes back and finds a little bit of water, that child doesn't know anything about drought and then will take – what can I say – will take these things – this water and maybe build mud or waste water in a sort of way. So, I think the parent should teach the kid about drought ... They should maybe just say: my kid, there is no water at home, so the little bit of water you find, you must bring it to me, as your parent and then the child will. She or he will take that water and bring it to the parent. The parent will use the water in a useful way and so I think the parent plays a good role.

Participant 1 (FG7) described how her grandparents were the ones who taught her and her family to save water. The intergenerational influence of parenting from grandparents is a clear indication of not only family ties, but of the duration of drought in the community. This participant provided an overview of growing up in a family and community that is affected by drought and, importantly, about drought knowledge that is passed on from one generation to the next.

FG7.P1: My grandparents always taught us to save water.

Sharing of information is not limited to the parents alone but also includes elders in the community. Participant 4 (FG3) explained that, as a family, they go to church during times of drought and at church they connect and discuss with the elders the effects of drought. This statement indicates that the church building is also used as a meeting space and a place where the community come together to discuss their concerns.

FG3.P4: They simply tell us they do not have much stress about drought, they simply do this and this, so that is make me more comfortable.

Some participants, such as participant 6 (FG4), explained that during times of drought, food becomes very expensive, but regardless of the food prices, parents manage to buy the family food. This indicates that, even in times of demanding price increase, parents found a way to make sure that the family is provided for and everyone can eat.

FG4.P6: I mean, when there is drought, the food sometimes – eh, not sometimes – especially in times when there is drought, it becomes expensive, you see. So, when it becomes expensive – if I – let’s suppose I’m not working, but my parents are working, at least regardless of the prices of the food, they are gonna manage to buy them even if they are expensive. And then I am okay because even when there is drought, and food is expensive I can still eat.

Finally, the participants confirmed that parents did their best to make sure that the family’s basic needs are met and they continue to function effectively, regardless of the challenges posed by the effects of drought.

4.2.1.3. Subtheme 3: Future-oriented value sharing

Future-oriented value sharing refers to various ways in which families facilitate adjustment by providing suggestions, listening to fears and concerns, and giving recommendations

(Gil-Rivas et al. 2007). This subtheme also includes ways in which family members protect one another by promoting hope and resilience in the face of adversity, and promote children to continue with normal activities through value sharing. This subtheme includes any reference to family members who provide guidance, morals, and advice that will assist youth in overcoming the challenges of drought. Table 4.6 indicates the inclusion and exclusion criteria for this subtheme. As seen in Table 4.7, participants from five focus groups reported that different family members positively influenced them through providing moral support, guidance, and encouragement.

Table 4.6: Inclusion and exclusion criteria of future-oriented value sharing as subtheme

Subtheme	Inclusion criteria	Exclusion criteria
<i>Future-oriented value sharing</i>	Any reference made on evidence and experience of any family member that includes providing guidance, morals, and future-oriented advice to youth.	Any reference made that excludes evidence and experience of any family member providing guidance, morals, and future-oriented advice to youth.

Table 4.7: Number of participants that reported on subtheme of future-oriented value sharing

Theme	Subtheme	FG1	FG2	FG3	FG4	FG5	FG6	FG7	FG8
Protective parenting	Future-oriented value sharing	X		X		X	X	X	

During a sand play activity, participants had to construct a scene, using various objects, that represents what it means for youth to be okay during drought. Focus group 1 created a scene using objects that represented a number of people in their lives who support them (see Figure 4.3).



Figure 4.3: Sand play activity by focus group 1

Participant 5 (FG1) shared that her father is her role model as he is always positive and teaches her what is right and wrong. Participant 6 (FG1) said that she relies on her twin sister to say “positive things” to her. Participant 2 (FG3) received positive messages from her mother.

FG1.P5: Well actually, my dad is my role model. Actually, he helps me with a lot of stuff, tells me what’s wrong, what’s right. So, which is a good thing.

FG1.P6: She always tells me...tells me to think positively and just say positive things to me, yes. Like “don’t give up,” “always have faith,” “things will be all right” and things like that.

FG3.P2: You see I believe in my mother, everything she tells me, like I believe will happen. So she used to tell me that everything was going to be ok, everything was going to be right but it was difficult.

Participant 1 (FG6) explained that her family is always there by her side, supporting and motivating her. Participant 3 (FG6) said that his family always gives him tips on what to do, such as:

FG6.P1: To stay in school and have positive friends that encourage him.

Participant 5 (FG3) shared that family members really support one another when they come together and talk about drought, and how they can save water and give one another advice. She further shared that supporting one another means to sometimes talk about other topics to shift focus away from the drought. She also added that parents try to make their children “stronger” when they face adversity.

FG3.P5: I just - usually - some friends and family - make a group and talk about how we can save water and give some advice or something like that, you know, we really support each other as a family.

FG3.P5: Like, we just have some groups and chill out around talk about other things, good memories, like, don't just focus on how this drought is affecting us a lot. So I like that, is how we support each other.

FG3.P5: They believe in making us as their children stronger than they are, during that time.

According to the participants, families provide youth with hope during times of drought. Participant 3 (FG3) confirmed these sentiments:

FG3.P3: My family is very supportive, like, even though this is never going to get better, like, they give you that hope. They give you that hope. They make you believe that something is gonna come up. Something is going to happen and yeah.

Participant 1 (FG7) shared that her grandparents tell her to “be confident” and when she is having a difficult time, she must have hope that one day she will get through it. It is important to the youth that parents and family members are honest and open about their circumstances and provide hope regarding the challenges of drought. Participant 1 (FG5) said that it is important to him that his family is open and honest, and that they redirect his focus to academics and future rather than the situation at hand, trusting that as parents, they will protect them despite them being exposed to the situation. The following illustrative dialogue presented by FG5P1 indicates a direct discussion with an elder, which is representative of a promise elders make to youths to protect them from harm resulting from exposure to drought:

FG5.P1: It makes you feel better if that person does not beat around the bush that person tells you straight that the situation is like this: “But don't focus on it; maybe you can focus on your academics. Rather than you focusing on the situation, we as your elders will make sure that you will be protected and will make you feel like you are not exposed to the situation.”

The theme of protective parenting correlates with a South African study that identified that supportive family relationships assisted youth in overcoming a range of challenges and adversity (Theron & Theron, 2010). The researcher’s findings are also supported by an international study where results revealed that the effects of a natural disaster influenced family relations (families were strengthened by sense of cohesion and family members exhibited increased care for one another) and family values (families were more directed toward strengthening human relations) (Lindgaard, Iglebaek & Jensen, 2009).

This theme compares to another study which investigated the family environment and how it functioned with posttraumatic growth among children exposed to a tsunami in Thailand. The Thailand study revealed that parents who experienced positive changes after the disasters encouraged their children to reframe the event and its consequences in a positive way (Hafstad, Gil-Rivas, Kilmer & Raeder, 2010). The study also revealed that a family environment characterised by high levels of cohesion can influence the degree to which youth are affected by adversity.

4.2.2 Theme 2: Changing family habits

Changing family habits can be defined as the way a family responds when there is a disruption in family routines and roles. This theme comprises management of drought-related challenges by changing family habits, including the extent to which families accept that normal family routines cannot be followed under the changed circumstances (Hafstad, Haavind & Jensen, 2011). It also includes adapting and adjusting water usage habits and family habits.

In addition, the theme covers any references to adapted family habits as a result of drought (such as food rationing, hygiene habits, and lifestyle changes). It also comprises new ways or initiatives that the family may come up with to handle the adversity of drought. Table 4.8 indicates the inclusion and exclusion criteria for the theme.

Table 4.8: Inclusion and exclusion criteria of changing family habits as theme

Theme	Inclusion criteria	Exclusion criteria
Changing family habits	Any reference made on evidence and experience of any family member that includes family members changing their habits on water usage and behaviour.	Any reference made on evidence and experience of any family member that excludes family members changing their habits on water usage and behaviour.

Table 4.9: Number of participants that reported on theme of changing family habits

Theme	FG1	FG2	FG3	FG4	FG5	FG6	FG7	FG8
Changing family habits			X		X	X	X	X

In response to the effects of drought, youth from five focus groups reported a change in family habits, as shown in Table 4.9. Some of the groups reported water saving initiatives by the family as a whole as a result of the drought. Many families had to buy water or collect water and ration what they have in order to bath, cook and clean. Both participant 2 (FG3) and participant 3 (FG3) shared that it was difficult for their families to save water and ration it between different household tasks.

FG3.P2: So, we didn't bath, so that we could have something to drink during the day, and maybe cook with during the night, so yeah, it was difficult.

FG3.P3: Yeah, it was very bad, because we had to sacrifice the hygiene for some things we drink and some things to cope with it. Yeah, saving water can be difficult sometimes.

This was very strenuous for the participants' families and they struggled to adapt. Many families had to change the way they used water in their houses, especially regarding personal hygiene such as bathing and cleaning. Participant 2 (FG6) said that the whole family would wash using one bath of water, and participant 1 (FG6) went to explain that because of the drought, the family's usual routine was disrupted. Participant 1 (FG5) explained the effects that drought had on both his family and that of his neighbours.

FG6.P2: We will use one bath of water to wash for all of our family. Let's pretend maybe we are five in my family. My father is going to start first, then my mother, then my other brothers and sisters; and then myself. We're all going to use one water, which is not right, but we have to do it because we don't have a choice.

FG6.P1: Like, we can't cook, you can't wash your clothes, you can't bath and you going to... the more you don't bath the more you're going to get infections... so... it's going to be a struggle.

FG5.P1: Most of the time here, when drought affects us, we have a shortage of water and we have to learn to save water. Most of the time we use little water when we need to bath. Our neighbours' veggies don't grow, so they have to make other means to make money and to get food.

Participant 2 (FG3) shared that sometimes they didn't bath so that they could have water for drinking and cooking. He explained that this was very difficult as they had to use every drop of water wisely. Participant 3 (FG3) and participant 2 (FG8) shared similar experiences.

FG3.P2: We didn't bath so that we could have something to drink during the day, and maybe cook with, yeah, during the night. So, it was difficult.

FG3.P3: It was very bad because we had to sacrifice the hygiene for some things like water to drink and some other things. Saving water can be difficult sometimes.

FG8.P2: We need water to cook, to bath. So, when there is an unavailability of water, you find that you have to bath once a day and some of us are used to bathing twice a day. Like, we have problems.

Generally, family had to instil and learn environmentally friendly and conservation habits because of experiences of drought. Thus, this can be seen as positive influence of drought. The following statement by participant 3 (FG3) is a clear indication of how drought had influenced the family to conserve water and the environment:

FG3.P3: No longer at my house, we no longer leave the taps running. We no longer allow my younger siblings to play with water like they used to before, so I think now we are more cautious.

Some youth reported a change in family roles. According to participant 3 (FG7), he had to adjust his role and focus in order to support the family as a whole.

FG7.P3: It was hard for my family because most of the time when I come back from school I must take a wheelbarrow and go to the place like....[fetch water]... It was far and I must study in that time so I decided to take a wheelbarrow and (unclear) fetch water so that we can feed our family with that water. And it was hard for me 'cause I needed to focus on my school and that time I need to go and fetch water.

This theme is supported by Walsh (2007), who stated that families need to reorganise themselves to adapt to changed conditions. The findings of this research also correlate with an international study where the results revealed that the experienced effects of a tsunami influenced daily routines and activities, where families made practical

changes in their daily lives to accommodate the needs of individual family members after the disaster (Lindgaard, Iglebaek & Jensen, 2009).

4.2.3 Theme 3: Financial stress

Financial consequences of natural disasters such as drought are most likely to intensify adverse consequences for families. A loss of or threat to an individual’s resources can result in a stress response (Caruana, 2010). Financial stress can therefore be defined as any type of loss that threatens the financial security, livelihood and lifestyle of a family. Financial stress comprises any reference made to family members losing their jobs due to drought-related challenges. It also includes lack of financial security as a result of the effects of droughts, as well as increase in financial expenses (such as having to buy water to accomplish daily tasks). Table 4.10 indicates the inclusion and exclusion criteria for this theme.

Table 4.10: Inclusion and exclusion criteria of financial stress as theme

Theme	Inclusion criteria	Exclusion criteria
Financial stress	Any reference made on evidence and experience of family or family member that includes financial stress due to drought-related challenges.	Any reference made on evidence and experience of family or family member that excludes financial stress due to drought-related challenges.

Youth from five focus groups reported an increase in financial stress as the drought prolonged (see Table 4.11). Many family members lost their jobs as a direct result of the drought. They also reported a lack of food security due to an increase in food prices.

Table 4.11: Number of participants that reported on theme of financial stress

Theme	FG1	FG2	FG3	FG4	FG5	FG6	FG7	FG8
Financial stress			X		X	X	X	X

In the activity where the group had to draw a timeline that represented activities or events that indicated the presence of a drought, group 7 indicated events

categorised by financial changes and difficulty (see Figure 4.4). For example, participant 2 (FG7) shared a story where her grandfather lost his job at the factory where they process the maize meal because of the decline in maize production. She further explained that many families relied on the income of that family member to buy the family food. Participant 1 (FG7) shared a similar experience.

FG7.P2: Yes, here my grandfather once told me that when they were working in some factories where they make maize meal and all that. He told me that they ended up losing their jobs and now the prices – they had to up the prices of the maize meal and now they ended up eating red maize meal.

FG7.P1: At the same time, food prices were going high and my family had little food to eat.

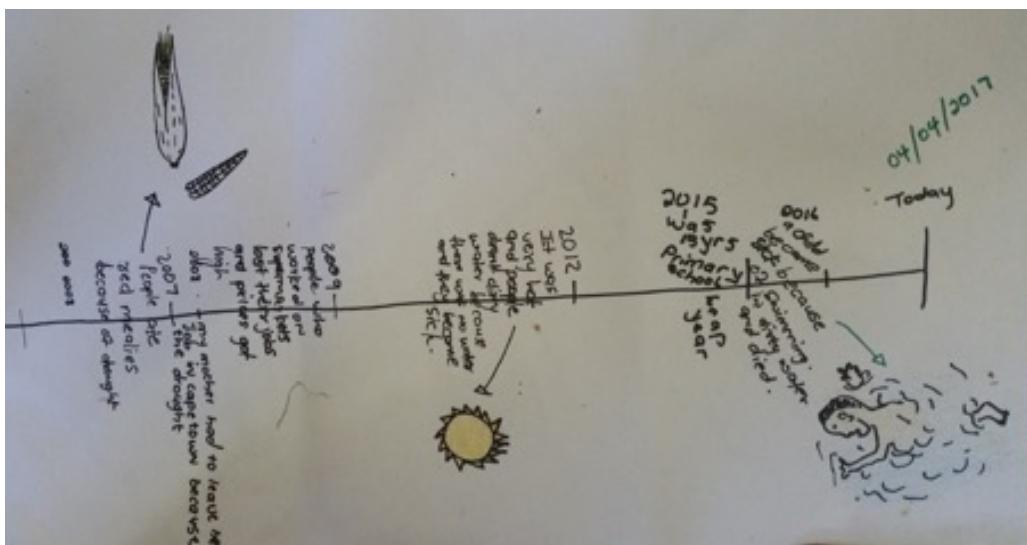


Figure 4.4: Timeline activity as shared by group 7

Participant 2 (FG8) also stressed the challenge of the increase in food prices because of drought and the result of families not being able to afford food, which could possibly lead to suffering from starvation.

FG8.P2: The prices in the market, when the prices of food increases. I think it is when we realised the drought is serious because in our families there is only one breadwinner. You find that you can no longer afford food because the

prices has increased. That way it affects us as a family, because we perhaps in future may suffer from starvation.

Participant 3 (FG3) shared that his family had to buy a lot of bread because they couldn't cook food at home and as a result, it put a lot of financial strain on his parents. Similarly, participant 4 (FG3) explained an experience where her family had to constantly go to town to buy water and, as a result, put pressure on the household.

FG3.P3: I remember at my house, since there was no water we couldn't cook. Like, we spend a lot of time eating bread and I don't think that's healthy, no. Like we had no water so we spent much time eating bread. I think somehow that affected us, even though we didn't go to a doctor most of the time, but no, it was not good because we spent too much money, like a lot of money buying bread. And there was also food at home that we couldn't cook so that affected our parents' pockets, and all those things.

FG3.P4: Households were not doing well.

Some farming families had to downscale as a means to survive during the drought. In an activity where the group had to draw or display a scene that showed when they knew there was a drought, focus group 5 drew a farmer with his cows and crops (see Figure 4.5). Referring to his family farm, participant 1 (FG5) used this drawing to explain that his father had to downscale in order to keep the family business during this time of drought. Participant 5 (FG6) also explained that as a farming family, when the drought struck, the crops died and her parents ended up losing their jobs and money.

FG5.P1: The business started to run out of money and the worst part of it is he (father) became sick and we lost – we had financial constraints because we were depending on the business he was running. And I found that the farm was supposed to be closed and he had to sell the farm, so he could buy a small farm and have money to carry on with the business.

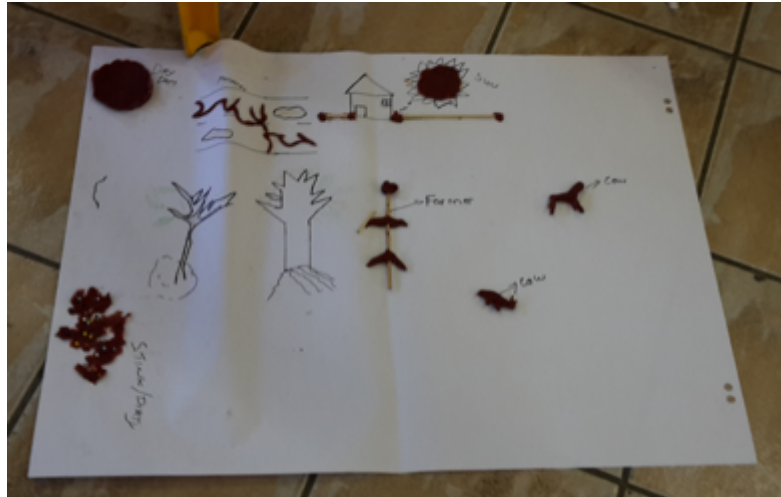


Figure 4.5: Creative activity of focus group 5 showing the effects of drought

FG6.P5: Most of our parents are working as farmers and when the drought strikes, we have the problem that, maybe like, the crops are starting to die. So our parents can lose their jobs and they can lose their money.

The evidence in this study was similar to international literature, which states that negative outcomes for families is exacerbated by the adverse effects of natural disasters on financial security (Borden, 2004). According to literature, this is especially the case of drought where reduced farm production, heightened debt, and limited employment opportunity can lead to exacerbating poverty over time (Caruana, 2010). This theme correlates with an international study done in rural New South Wales reporting on the Aboriginal communities' views of how prolonged drought affected families and communities. This study revealed that drought had sociodemographic and economic impacts such as loss of livelihood and participation; and aggravation of existing socioeconomic disadvantage (Rigby, Rosen, Berry & Hart, 2011).

4.2.4 Theme 4: Health and well-being

When families experience adversity and acute loss, and their stress responses are left unaddressed, it can result in serious mental and physical health implications (Caruana, 2010). Health and well-being can be defined as the effects drought has on the physical and mental health of a family and its members. This theme includes any

reference to a decrease in health and wellness of family members due to drought and drought-related challenges. Table 4.12 indicates the inclusion and exclusion criteria for this theme.

Table 4.12: Inclusion and exclusion criteria of health and well-being as theme

Theme	Inclusion criteria	Exclusion criteria
Health and well-being	Any reference made on evidence and experience of any family member that includes decrease in health and wellness of family members due to drought-related challenges.	Any reference made on evidence and experience of any family member that excludes decrease in health and wellness of family members due to drought-related challenges.

Some of the participants shared experiences where drought threatened or affected their family’s health and well-being. Four focus groups reported on this theme (see Table 4.13).

Table 4.13: Number of participants that reported on theme of health and well-being

Theme	FG1	FG2	FG3	FG4	FG5	FG6	FG7	FG8
Health and well-being			X			X	X	X

For example, Participant 2 (FG6) explained that some family members could not attend work or school because their everyday hygiene was affected. These families didn’t have water for bathing, which, according to participant 2 (FG6), can result in them getting sick and some people can even die.

FG6.P2: People can’t go to school or work or other places because if there’s a drought, where are they going to get water to cook or to wash their bodies before they go? They can’t go to school and work stinking. People start getting sick. People start getting sick and others die because of the drought.

Participant 3 (FG3) shared that during the drought, his family had to eat a lot of bread because they couldn’t cook food. This affected their well-being as he felt it wasn’t very

healthy for them, but they couldn't go to the doctor or buy other food as it was too expensive. Participant 2 (FG8) shared a similar experience.

FG3.P3: It was no good because we spend too much money, like a lot of money buying bread and there was food at home that we couldn't cook so that affected our parents' pockets, and all those things.

FG8.P2: Some suffer from lack of nutrition in their body because the amount of food prices have increased and people cannot afford particular foods like healthy food.

Some participants shared stories where family members (specifically children) got seriously ill because they had limited access to water and had to drink dirty, stagnant water. In an activity where the group had to draw or display a scene that showed when they knew there was a drought, the seventh focus group drew people drinking dirty water and, as a result, getting sick (see Figure 4.6). Participant 2 (FG8) then shared a story where a young child in his community drank the dirty water and died because of an infection. Participant 4 (FG7) also shared a story where people got sick because of dirty water as a result of limited access to clean drinking water.

FG8.P2: It was 2016 when children went to swim in dams with dirty water, and one kid died because of the dirty water, because he got sick and he died in 2016.

FG7.P4: When there is serious drought, there's no water and then people ended up drinking dirty water then that causes sickness. As you see here, people are coughing, it is dry and they are sick because of this dirty water.



Figure 4.6: Creative activity of focus group 7 showing the effects of drought

Participant 4 (FG7) continued to explain that this affected her family because when they consume the dirty water, they end up getting waterborne diseases which can result in death.

FG7.P4: It affected us because when you are sick...you are affected by this dirty water, and you have diarrhoea, so you are affected because you end up dead.

Participant 3 (FG3) shared a different perspective on the effect of drought on her family's health. She shared that she lives with her grandmother who is a diabetic and has to eat and drink at certain times during the day. However, her grandmother ended up in hospital because she was unable to support her specific diet during the drought.

FG3.P2: I am staying with my grandmother and at the same time there was serious drought and my grandmother needs to eat now and then, and because when we all know that...the disease that is called sugar, there is something better [diabetes]... she needs to cook now and then, and she needs to eat now

and then and she needs to take her pills. So that lead to her going to the hospital.

These findings are similar to an international systematic review of the health effects of drought (Stanke, Kerac, Prudhomme, Medlock & Murray, 2013). This review revealed that drought has nutrition-related effects, increase in water-related diseases, and mental health effects such as distress and other emotional consequences.

4.3. CONCLUSION

This chapter outlined the results of the study that highlighted four significant themes, each aimed at representing the effects of drought on family organisation patterns as perceived by youth. The findings were also briefly related to South Africa and international resilience research with the aim of highlighting certain similarities and differences between the findings and the theory.

In the next chapter, I will discuss how these results relate to the theoretical framework chosen from both a South African and international perspective. Recommendations for practice and suggestions for further research on this topic will also be discussed in the next chapter.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1. INTRODUCTION

This final chapter will be devoted to an overview of the preceding chapters, as well as provide a summary of how the investigation into family resilience during drought relates to the themes in the penultimate chapter. It will also provide solutions to the main research question. Therefore, I will answer the primary and secondary questions that guided this study. Lastly, this chapter will focus on a discussion of the research results, with the findings of this study anchored in the existing literature. This chapter will conclude with the limitations of this specific research as well as provide recommendations that can be explored further.

5.2. OVERVIEW OF PREVIOUS CHAPTERS

Chapter 1

In Chapter 1, an introduction and rationale for this study was presented. It was explained that the purpose of this study is to explore and understand youths' insight on the effect of drought on family organisational patterns. The first step in community engagement is to gain insight on how different families currently perceive and understand drought within their community and what protective factors enables resilience amongst them. Thereafter, the primary research question and sub-questions were described. Also defined were key concepts in order to provide clarity in relation to drought, resilience and family resilience. An overview was presented of the chosen research paradigmatic perspective, design and methodology. Finally, the quality criteria and ethical considerations to be considered during this study were discussed.

Chapter 2

In Chapter 2, the literature relating to the research topic was reviewed. The most important aspects included identifying the wide range of effects of drought, as well as how drought affects family functioning. I addressed literature relating to the

significance of family resilience and resilience-promoting factors among families. Thereafter, the conceptual framework of Walsh's FRF and Bronfenbrenner's ecological systems theory was discussed, which informed and supported this specific study.

Chapter 3

In Chapter 3, a detailed discussion and explanation was offered of the reason behind the selection of the research methodology used for this study. An interpretivist paradigm was adopted and a qualitative research approach was followed, utilising a case study design. Furthermore, the study was described in terms of data collection, analysis and interpretation methods, and details were given on the selection of the research site and research participants.

Chapter 4

In Chapter 4, the research results were presented and findings discussed. I stated how themes and subthemes were reached. In addition, an interpretation and synthesis of the data was undertaken by integrating the findings with information from relevant literature reviewed. The data was analysed by identifying recurring themes and subthemes, which, through an inductive approach to data analysis, emerged from the data itself without the constraints of existing theoretical frameworks (Braun & Clarke, 2006). The analysed data assisted to frame a representation of participants' perceptions on the effect of drought on family organisational patterns. The results further served to represent an indication of resilience within families that could possibly have enhanced their personal and collective resilience processes during drought.

5.3. QUESTIONS REVISITED

The main research question links to following sub-questions: "1) How have the youths and their families responded to experiences of drought?" and "2) What are the effects of drought on the well-being and resilience of youths and their families?" The primary research question of the study is: "What are the perceptions of youth on the effects of drought on family organisational patterns?" This section aims to address the research

question. Figure 5.1 below provides a visual summary of the themes identified in chapter 4 and how they relate to the sub-questions and primary research question.

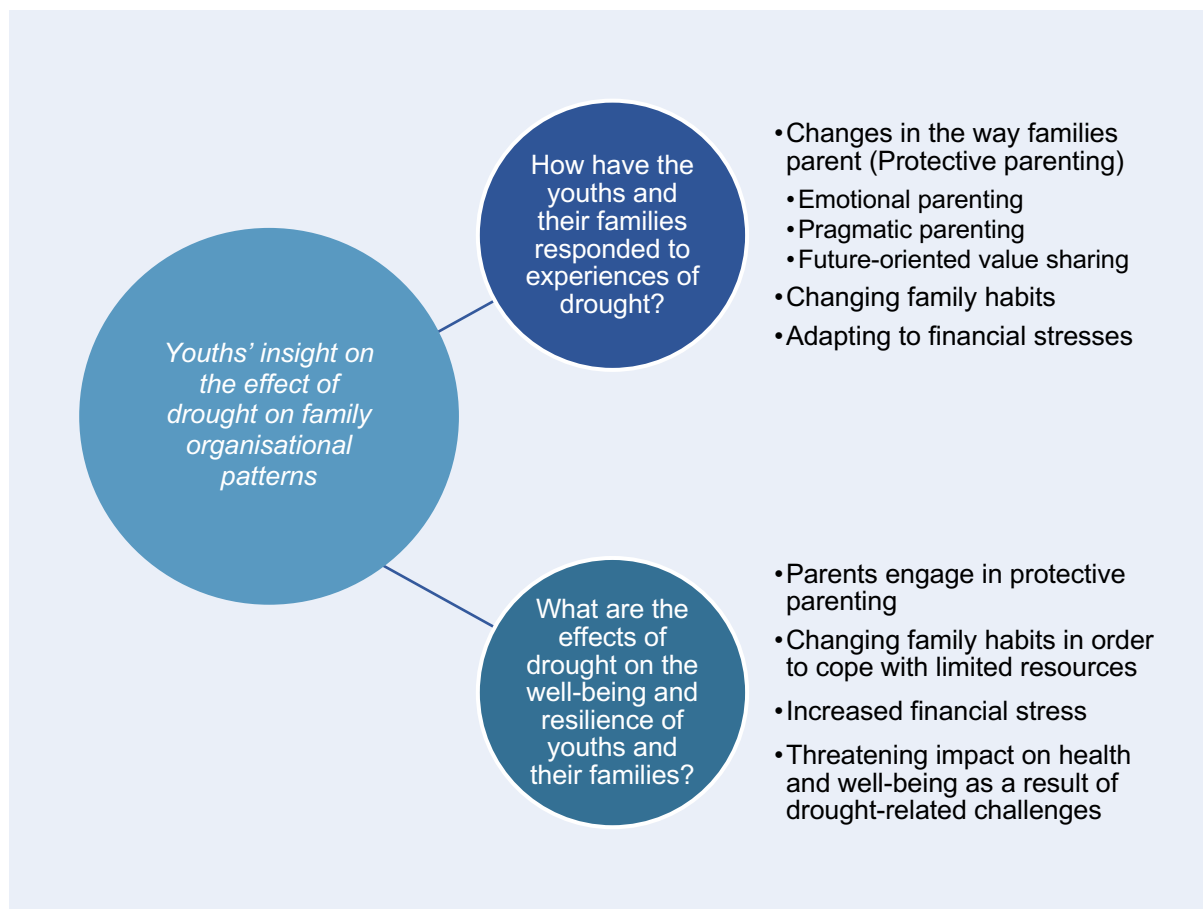


Figure 5.1: Relationship between identified themes and research questions

5.3.1. Sub-question 1: How have the youths and their families responded to experiences of drought?

Firstly, the data revealed that adolescents and their families responded to drought in a number of different ways. Although a natural disaster such as drought brings many challenges and adversity, it also has the influence to promote cohesion, connectedness and family support. Landau, Mittal and Wieling (2008) and Caruana (2010) identified that when families experience negative life events (such as drought), the family disruption of normal family functioning can result in negative outcomes, stressors, and maladaptive responses. However, this research has shown that families do not necessarily adopt maladaptive responses, but rather adaptive responses.

A common response to a family's experience of drought was the change in the way families parent. This is referred to as protective parenting, which includes emotional and pragmatic parenting, as well as future-oriented value sharing.

Families that experience a crisis such as a drought are able to continue functioning with support and cohesion despite the stressors they face (Black & Lobo, 2008). Youths reported the changes in the parenting style of their parents, which was seen to have helped them to overcome adversity and challenges presented by drought. Parents adopted strategies like distraction (which helped to refocus youths' thoughts by introducing positive distractions), thereby helping the youths to focus on more important things such as school and their careers. The data revealed that parents acted as facilitators of hope, encouraging their children, supporting and loving them, and keeping them connected to their family and culture, despite being worried about the effects of drought on their family system.

Families also changed their daily habits, specifically their water use habits in response to restricted access to water as a result of the drought. The change in water habits was to ensure that families had just enough water to complete daily tasks such as cooking and bathing. Families had to adjust their daily routines and activities to accommodate the needs of each family member (Lindgaard, Iglebaek, and Jensen, 2009). They also had to adapt to financial stress, as some family members lost their work as a result of the drought, as well as adjust to having fewer financial resources to maintain a healthy lifestyle.

5.3.2. Sub-question 2: What are the effects of drought on the well-being and resilience of youths and their families?

Youth reported that during the drought period, their families experienced a great deal of adversity and challenges. The data revealed that many families employed different strategies and processes to overcome the challenges faced and promote resilience. According to the data, many families adjusted their family habits and parenting styles to best overcome the challenges and to minimise the negative effects on the youth. The youth reported that these changes helped them to feel supported and protected

from the effects of drought, and promoted their well-being. Therefore, family flexibility and changes in family habits have been identified as resilience-promoting processes, as families were able to reallocate roles and adapt to changed conditions, while at the same time reduce the sense of chaos or disorientation. Regardless of their circumstances, most families were able to employ resilience-promoting strategies such as remaining optimistic and affirming strength and future possibilities. Positive outlook has a strong effect on families when coping with stress and overcoming the challenges of drought.

However, it cannot be denied that the health and well-being of family members were strained and threatened. The youths in themes three and four focused on the risks associated with drought. These risks affected family well-being and resilience, such as hygiene and health, as well as financial strains. What is interesting in these themes is how the youths related to themes with hope, indicating how families survived despite drought stressors.

Participant 2 (FG7) shared an instance where his grandfather lost his job because of the effects of drought. Many of the youths were worried about the health-related problems associated with drought. For example, participant 4 (FG7) and participant 2 (FG8) both shared experiences where people got sick because of dirty water. The data revealed that many families were affected by job loss and, as a result, experienced significant financial strain. The financial strain resulted in limited and unhealthy food choices as families could not afford to buy fresh and healthy food. They further reported that both of these factors prevented families from becoming well adapted during those challenging times.

The youth did not report experiences where families accessed or mobilised social or economic resources during the drought; instead families relied much on themselves. This could be a crucial component of resilience that could explain why many families experienced such difficulty during drought, indicating that social and economic resources are important supports in promoting resilience.

5.3.3. Primary research question: What are the perceptions of youth on the effects of drought on family organisational patterns?

As supported by the sub-questions, the data revealed that the youth of the Govan Mbeki Municipality was able to identify a number of effects of drought on the organisational system of the family. Figure 5.2 provides a visual summary of the effects of drought identified by youth, of which each will be discussed individually.

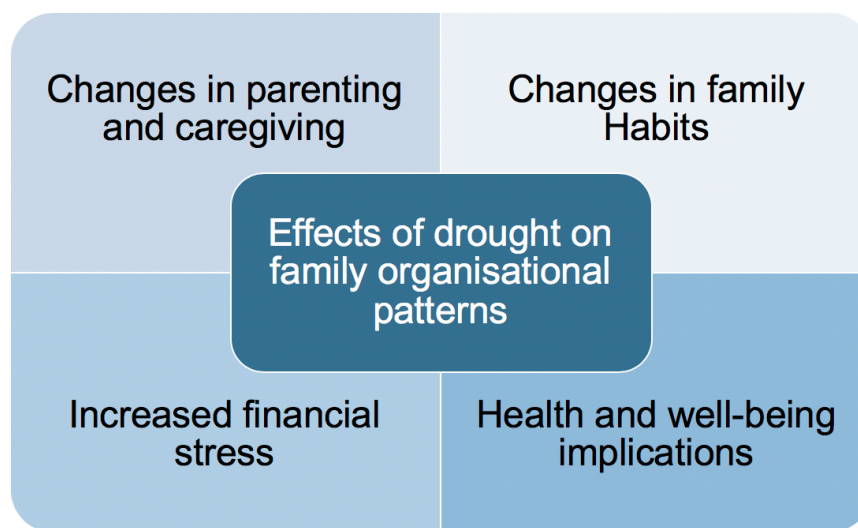


Figure 5.2: Summary of effects of drought on family organisational patterns

Firstly, the youth reported changes in the parenting styles of their parents and caregivers, resulting in supportive, encouraging, and protective parenting. Changes in parenting styles helped the youth to better cope with the challenging effects and stress of drought, as parents did their best to support and protect them from the negative effects of drought. Youth reported that even though their living expenses increased, parents made sure that their families were still able to eat and continue functioning. The data also revealed that families facilitated youths' adjustment by providing suggestions, listening to fears and concerns, and giving recommendations. This helped the youth feel supported, stronger, and able to overcome challenges and adversity.

Secondly, the youth reported changes in family habits, specifically water use habits. Families recognised that they need to use less water, and conserve and save as much as they can in order to complete daily tasks. This proved to be a challenge as many youths reported that they did not always have enough water to cook and clean with. The data revealed that family members were eventually required to travel far to collect water and to share water for bathing. Some families reported occasions where they were not able to bath; this created fear of becoming sick and affected their daily routines.

Youth also reported an increase in financial stress due to drought-related challenges. Many family members lost their jobs as a direct result of the drought and were unable to support their family, resulting in an increase in family stress. Youth also reported that families experienced a lack of food security due to the increase in food prices.

Lastly, youth reported that the negative outcomes they experienced due to drought threatened their health and well-being. Families were threatened by the spread of waterborne diseases, as well as mental health effects such as distress. Financial insecurity and negative impacts on health and well-being exacerbate negative outcomes for families and challenge their ability to resile in difficult circumstances.

According to the data, families were not able to access and make use of social and economic resources to reduce the negative impact of drought. The data did not reveal if families were unable to identify these resources or if these resources were unavailable during this time. Thus, parents are seen as the primary source of strength and support.

The flexibility of parenting to protect youth is well portrayed. Their use of distraction to refocus the youths' thoughts to positive goals – their education and future – shows the significance of hope and positive outlook. These can be seen as coping strategies used to enhance family resilience. However, accordingly the negative effects of drought on the family organisation appeared to be much stronger than mentioned protection or resources available to families. The main resources mentioned, namely access to employment and health, were threatened.

5.4. REVISITING THE THEORETICAL FRAMEWORK

This research corresponds with Walsh’s FRF (Walsh, 2002). Walsh identified various organisational processes that are key processes in reducing stress and vulnerability in high-risk situations such as drought (Walsh, 2003a). Figure 5.3 provides a visual summary of the themes identified in chapter 4 and how they relate to Walsh’s FRF.

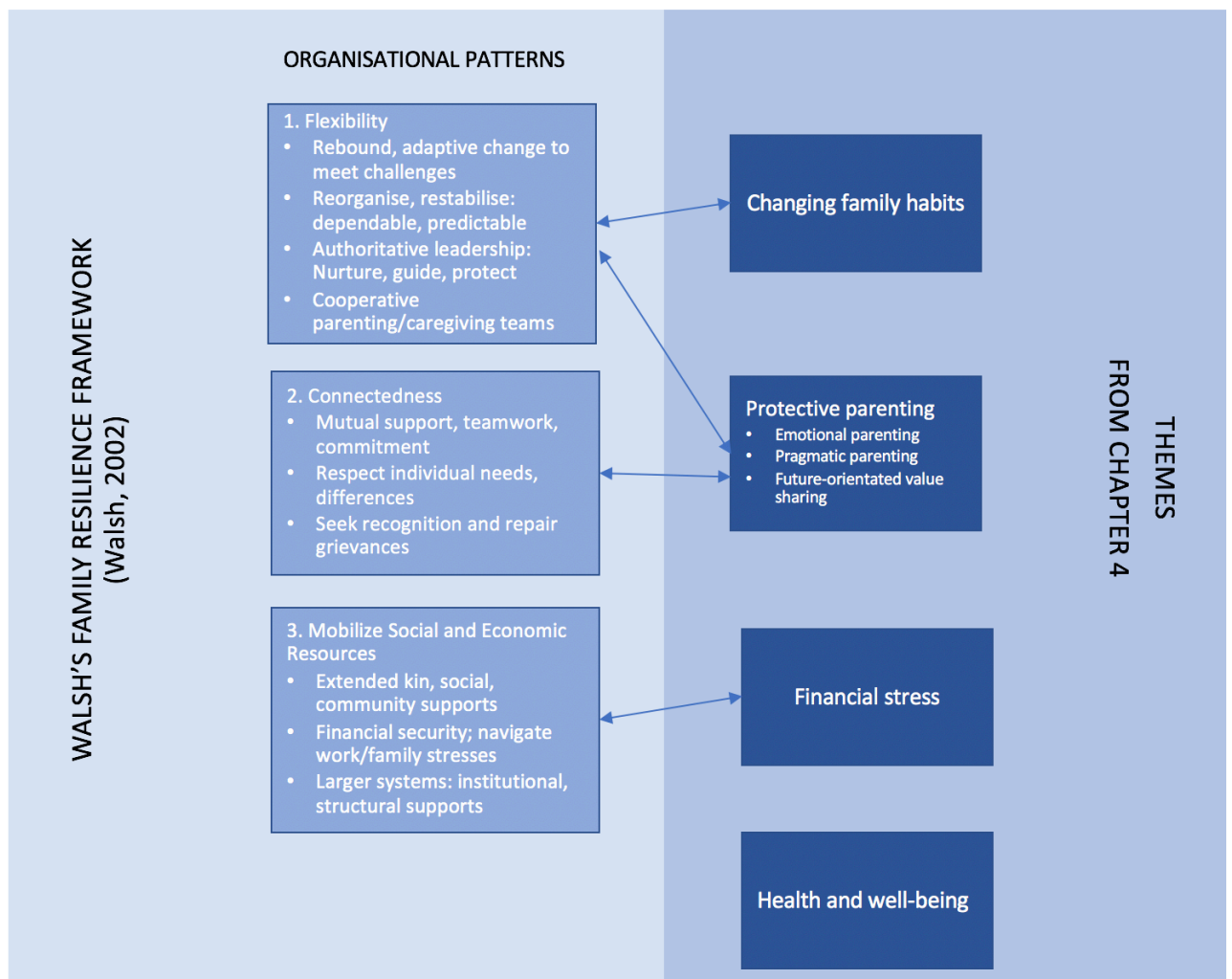


Figure 5.3: Themes identified in chapter 4 in relation to Walsh’s Family Resilience Framework

According to the research, flexibility plays an important role in family functioning. As stated by Walsh (2003a), flexibility is seen as a core process of family resilience as it enables the family to rebound from adversity and challenges. The data revealed that parents or caretakers who provided youth with protective parenting guided the youth through the disruptive and challenging transitions caused by drought. Youth reported

that they were more hopeful about the future because their family ensured that the hardship of drought was not their burden to bear; instead, they were encouraged to focus on their schooling and futures. The data revealed that many families adapted to the challenges produced by a drought and were able to cope despite the adversity they faced. This indicates that flexibility contributes to family resilience in the context of drought.

According to Walsh (2003a), connectedness is an important component of resilience, as it shows a family's commitment to each member, while maintaining respect and balance for each member's needs and differences. This data did not reveal much support in terms of the importance of connectedness. Walsh (2003a) further mentions that connectedness can also be demonstrated by the cooperation in caregiving and other types of family partnerships. This research revealed that parents mostly assumed the parental role within the family even when faced with adversity. Some of the data did reveal that youth would participate in other caregiving activities such as fetching and saving water. However, shared caregiving roles and partnerships are common within the African culture and to these families regardless of whether or not drought is experienced. This data, therefore, suggests that connectedness according to the FRF does not necessarily promote resilience in this community.

According to Walsh (2003a), it is important for families to access provision of support during times of adversity through family groups and building financial strength. This data revealed that many families reported financial difficulties during the drought. As a result of these difficulties, family habits and routines needed to be changed due to job loss by family members and the drastic increase in food prices.

This research identified the important role of parenting and how different types of parenting promote resilience and family functioning. Emotional parenting and pragmatic parenting are both related to Walsh's connectedness dimension; however, this research has shown that these are two different concepts that need to be explored in greater detail. Protective parenting is an important theme that was highly reported on and referred to, and it is important to note that different parenting approaches can promote or hinder family functioning and resilience, as seen in the results. It is clear

from the research that youths experience less distress when their families support them in coping through various strategies (Gil-Rivas et al., 2007).

Looking beyond organisational patterns, Walsh (1998) additionally identified three essential properties of communication influencing family resilience: clarity, open emotional expression, and collaborative problem-solving. However, this research revealed that youth prefer communication that is not collaborative, but rather prefer when parents take control and authority.

Many youths reported a change in family habits as a response to the challenges of drought. A change in family habits relates to Walsh's flexibility dimensions, which refers to a family's ability to rebound and reorganise to maintain a sense of continuity (McCubbin & McCubbin, 1988). However, this research revealed that when faced with diversity, families change family habits in order to continue functioning, and do not continue current habits and routines.

As revealed in the study and supported by the literature, the social and economic disturbance of drought is disruptive of family life and patterns, and families need to adapt in order to promote family functioning (Walsh, 2003b). In response to adversity, habits and routines need to change. According to Cole, Clark and Gable (2001), clear family roles are important factors in predicting family resilience. However, this research has shown that clear family roles are not necessarily an important factor, as everyone in the family assumes different roles and contributes to family functioning in order to promote continuance and development. This could be attributed to the collectivistic nature of the African culture.

5.5. LIMITATIONS OF THIS STUDY

One of the main limitations of this study is the singular focus due to the case study research design. Case studies are generally criticised for their small sample groups. The specific case study design is likely to impact the study's generalisability and the results should, therefore, be viewed with caution. The research population consisted of African youth and does not represent African families or other population groups in South Africa beyond the Govan Mbeki Municipality. Although the study was conducted

in a semi-rural township, the results cannot be generalised for all townships across South Africa. It is therefore suggested that results from this case study be used as a foundation for future research on this topic in different settings, characterised by different population groups.

Although all the participants were able to express themselves in English, the language seemed to be a barrier at times, especially when participants wanted to share information and stories specific to their indigenous cultural and familial practices. However, an interpreter was not necessary as the more English-proficient participants were able to assist in translating words and phrases so that they still would remain true to their indigenous meaning.

Due to the collaborative nature of this research, I was unable to decide which data collection methods would be used. The methods of the greater project were established prior to the researcher's involvement and engagement. A possible limitation of this was that some of the creative-based methods that generated data (body mapping) had a more individual focus rather than a family focus. This could explain the limited number of responses relating to the family.

Another limitation of this study is that many of the youth shared information relating to "what should be done" during a drought instead of sharing information on how they personally respond to drought. This topic, however, was not part of the research focus and was not explored in further detail. Lastly, it was evident that many students were well prepared on the topic of drought prior to our first focus group. It was clear that many of the students studied the topic in much detail and shared that learned knowledge during our research. This could influence the results as the information shared did not stem from personal experience or family practices, but from information learned at school and textbooks.

A personal limitation during the study was trusting that every researcher involved in the process bracketed their personal research goals when facilitating each focus group. It was apparent from the gathered data that some facilitators guided responses and probed some responses more than others in order to gather specific information related to their specific research. Although all the gathered data informed the greater

project of resilience, I could not use all the data gathered as some of it did not relate to the specific research topic.

5.6. REFLEXIVITY

Reflexivity involves critical reflection of how the researcher constructs knowledge from the research process and how these factors in this process influence the different aspects of research, from planning and management to the write up of the report (Guillemin & Gillam, 2004). A reflexive researcher is able to step back and take a critical look at their role in the research process. The aim of reflexivity is to improve the quality and validity of the research (Guillemin & Gillam, 2004).

I gained much experience on how to conduct research in a South African community such as Leandra, having been able to experience and appreciate the amount of planning, organisation, and resources it requires in order to access and work with community members of a different culture and language to that of the researcher. A personal reflection is that the research allowed me to access a community in a more formal manner. I often engaged with youth and families in similar communities; however, not in the capacity and role of a researcher. Initially, I found it challenging to view and represent myself as a researcher while still connecting and building rapport with the community. This different role allowed for a better understanding of the research process and relationships formed when conducting research.

This research has held meaning for me from the very beginning as I could relate to the adversity of drought within a family system, having been exposed to such challenges as a child. I was excited to discover if the youth of this community had similar experiences to which I had, regardless of coming from different backgrounds. The literature studied and worked with came to life as the I started to collect data and analyse the findings. It was meaningful to relate the experiences of the youth on drought to different theories and literature all over the world and to better understand how different families function when faced with adversity. Not all of the research collected could be embedded in the literature encountered; however, this placed much emphasis on the importance of resilience research, as well as research relating to the effects of drought in South Africa.

This research allowed me the opportunity to be guided and supported by a number of educational psychologists with years of experience in their field. This provided surety that no harm would be done towards any participant. Working with a large group of researchers allowed me to learn from them as the research process unfolded. The fear and anxiety stemming from being trusted with so much authority in this research were easily understood by the other novice researchers, which created a safe space to learn and become confident in becoming a researcher.

I spent some time working through the working assumptions held at the beginning of the study. This is summarised in Table 5.1.

Table 5.1: Comparison of credibility of initial working assumptions

Initial working assumptions	End-of-study reflections
1. People who go through a period of drought experience adversity.	It was evident from the research process and expressed in the data that people (youth and their families) experienced adversity related to drought and drought-related challenges.
2. Individuals, families and communities are negatively affected by drought.	This assumption did not change, as this is what the findings in chapter 4 produced. However, it did become apparent that adversity and drought-related challenges foster resilience and can enhance family functioning.
3. All members within a family are affected in some capacity by drought.	My findings did reveal that all members of a family are affected by the effects of drought. The data also revealed the role of different interactions within an individual's system (Bronfenbrenner, 1986) and how their interactions with their family, peers, education systems, or work are affected when they experience adversity.
4. The well-being of families has not been adequately supported during a drought period.	This assumption has been challenged. As reported by the youth, the well-being of families has been supported by their families themselves and their community. There was some evidence which indicated support by governmental and non-governmental agencies in response to the drought. However, most of the data referred to families supporting themselves through different mechanisms identified in chapter 4.
5. Families and youths have used coping mechanisms to best overcome adverse conditions.	This assumption did not change, as youth reported a number of different ways in which their families responded and coped with the challenges of drought. These mechanisms were

	identified in chapter 4 and include changing the way family's parent, changing family habits, adapting to financial stress, and adapting to the effects of drought on health and well-being.
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5.7. RECOMMENDATIONS

5.7.1. Recommendations for future research

The evidence in the study revealed the many effects that drought has on the organisational patterns of families. I would recommend follow-up studies in the following areas:

- A further study could be conducted with a focus on parents' insight on the effect of drought on family organisational patterns. This will allow researchers to better understand the family system as a whole and whether youths and parents perceive challenges and drought in the same way, which in turn would better inform intervention at a family level.
- A follow-up study could be done where researchers are reflective and sensitive to the methods used to collect data. Researchers could use other data collecting methods to elicit information regarding the effects of drought. In other words, researchers should ask resilience-focused questions relating to the effects of drought on family functioning to different members within a family.
- A future study is recommended to be done in another context and community affected by drought. The study should replicate the research design of this current study in order to compare research results. These results will better inform the field of resilience and determine whether these results are context- and culture-specific or can be generalised to a larger population.
- A future study could be conducted with a focus on solutions proposed by families who experienced droughts, with directed questions such as: "What

strategies do families recommend for overcoming adversities/stressors in times of drought?” and “What coping mechanisms are used by families to overcome the adversity of drought?” This will create an opportunity to best identify how different stakeholders (family, community, government, service providers, and educational psychologists) can assist families in times of adversity by enhancing and supporting their coping mechanisms used during such times.

5.7.2. Recommendations for educational psychologists

Throughout its history, drought has been a frequent occurrence in South Africa and although drought progresses slowly, its effects are cumulative and may be felt for years (Van Niekerk, Mare & Strydom, 2016). According to Theron and Donald (2013), if educational psychologists want to make a difference in the lives of youth and the social ecologies from which they come, they need to have knowledge of resilience theory and the application thereof. This is supported by Toland and Carrigan (2011) who urge that educational psychologists need to adopt a resilience perspective as a guiding principle in their daily practice. These findings will contribute to the support programmes and interventions that educational psychologists may implement when working with youth threatened by challenges such as drought. These findings will also contribute to understanding how youth and families are affected by challenges such as drought and how educational psychologists can provide specific support to these youth and families during such times.

Ungar (2011) suggested that in understanding the process and outcomes of resilience and how youth overcome adversity, more attention and research can be paid to understanding how young people achieve resilience and how educational psychologists can promote resilience in the context of drought. Educational psychologists should be resilience-promoting agents, prioritising the process underlying resilience particularly in relation to youth in developing contexts.

5.8. CONCLUSION

This research allowed for a deeper dive into the world of drought and resilience, as well as a better understanding the role of an educational psychologist in conducting research in the context of drought. This research allows educational psychologists to better understand the challenges youth and families' experiences in drought. The data and information collected produced significant resources that can be used to work with youth individually and systemically when they are in need. This research has supported the notion that resilience is rooted in complex and dynamic processes, and an understanding of resilience processes is essential if any intervention by educational psychologists is to be effective (Theron & Donald, 2013). These processes, however, should not be assumed to be true for youth across diverse cultures and contexts; this research can only be used for the purposes of assisting children who identify with the area of Leandra. This research recognises the diversity of families and different family systems, including their wide-ranging challenges as characterised by their context, and the possibility of several pathways to resilience.

This research offers the opportunity to identify the evolving and interactive, ecologically-embedded discussions which are crucial in understanding youth and the challenges they face. This is especially true for challenges such as drought, which has become a common adversity in their lives.

In the words of French philosopher and author, Albert Camus (as cited in Thody, 1970, p.169), "In the depths of winter, I found there was, within me, an invincible summer...No matter how hard the world pushes against me, within me there's something stronger – something better, pushing right back."

The field of educational psychology is filled with inspiring, challenging and thought-provoking stories. In order to listen and respond well, educational psychologists too need to have a better understanding of resilience in their own lives. It is through an understanding of self that one's tools can be used to instil hope in others. Understanding and promoting resilience has the power and potential to create invincible summers in the midst of winters. By understating one's resilience tools and how to operate them, educational psychologists can better use them in daily practice.

When such tools are mastered, it brings forth the ability to teach others to do the same in their lives, regardless of cultural and contextual differences.

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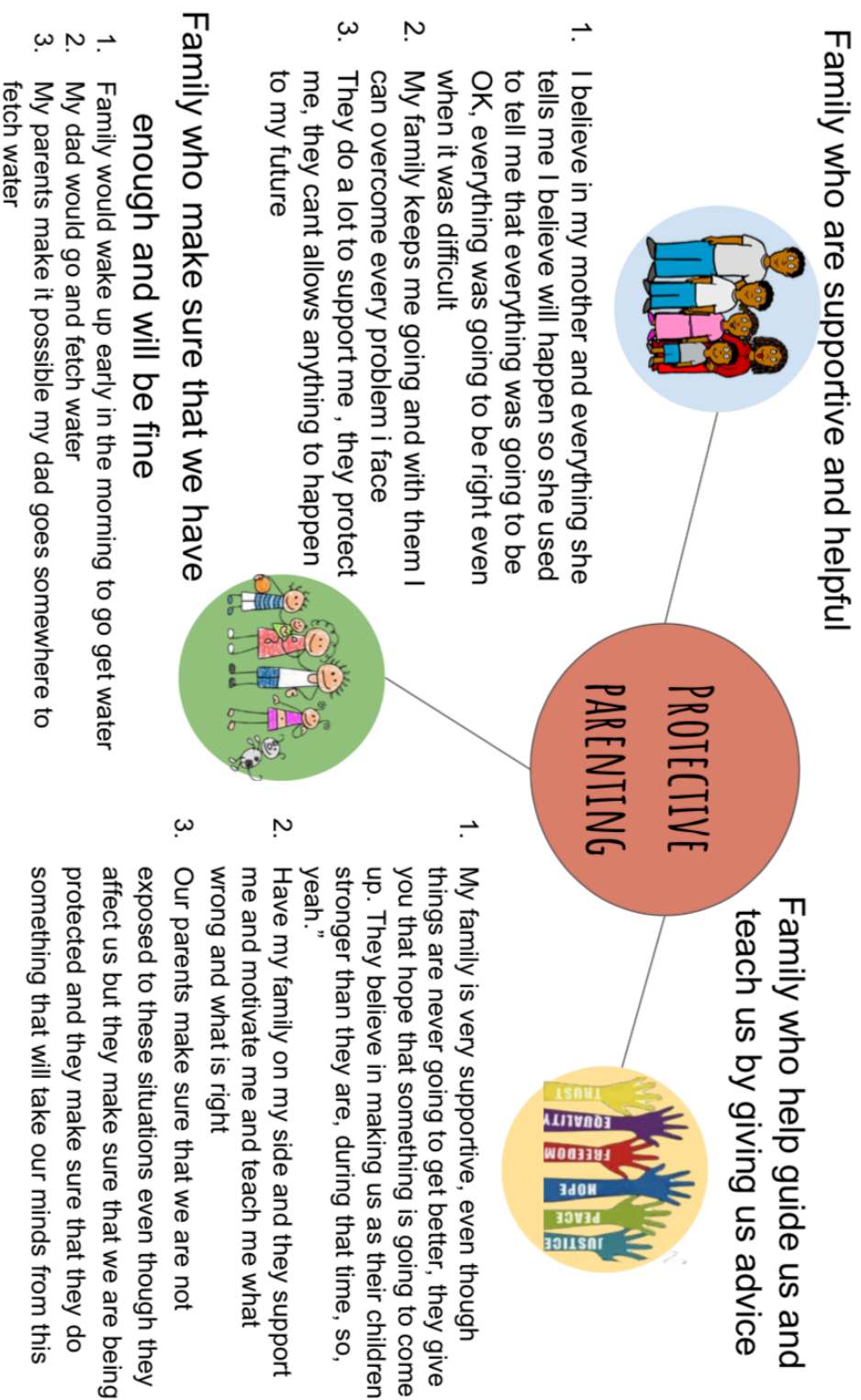
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LIST OF ADDENDA

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Addendum A: Post consensus coding posters for member checking

WHICH CHARACTERISTICS OF THE FAMILY MAKE YOUNG PEOPLE MORE RESILIENT TO DROUGHT - RELATED STRESS?



WHICH CHARACTERISTICS OF THE FAMILY MAKE YOUNG PEOPLE MORE RESILIENT TO DROUGHT-RELATED STRESS?



As a family we change how we live



1. We no longer leave the taps running. We no longer allow my younger siblings to play in the water like they used to before, so I think now we are more cautious.
2. We will use one bath of water to wash our family. My father will start first and then my mother, then my brothers and sisters and then myself.
3. Yes it did affect us because we needed to have food then there was little food to eat, so you store it for the night, tomorrow you have to eat a little and store it for the night.



PARTICIPANT INVITATION AND ASSENT FORM (Adolescents)

We invite you to participate a project called: *Patterns of resilience among young people in a community affected by drought: Historical and contextual perspectives.*

Who are we?

We are researchers from the University of Pretoria (South Africa), the University of Brighton (United Kingdom), and two organisations called BoingBoing (United Kingdom) and Khulisa Social Solutions (South Africa). Our contacts are at the end of this letter if you need them.

What are we doing in this project?

We want to learn from you (and about 50 other young people from Govan Mbeki municipality) about what helps young people whose communities are badly affected by drought to be resilient. To be resilient is to keep doing OK in life even when life is hard. With your help, we also want to learn what adults in your community know about what has helped your community to keep doing OK in times of drought. Together with you, we want to come up with a plan that will help communities to help young people to be resilient.

The Research Ethics Committee of the Faculty of Education, University of Pretoria has said it is OK for us to do this study (number: ##). They know we will work carefully using South Africa's and international ethical rules (this is actually called the guidelines and principles of the international Declaration of Helsinki and the ethical guidelines of the National Health Research Ethics Council). The committee will maybe want to look at the forms you sign (if you say yes to being in this study) to check that we did everything in the right way.

Why are we asking you to be part of this project?

Because you

1. Are 15-17 years old, *and*
2. Are OK talking English and can read and write in English, *and*.
3. Live in Secunda area, Mpumalanga.

What do you need to know?

- You can say no. If you say no, there will be no problem, you don't need to give a reason. Even if you say yes now, it is OK for you to change your mind later and stop taking part. The only time that you will not be able to change your mind, is if you choose to participate in Activity 6 and if this activity has been video-recorded.
- If you want to participate, then you must ask your parents/caregivers to agree that you can participate. If they say no, then we can unfortunately not let you participate. If they say yes, but you say no, then there will be no problem: nobody can force you to say yes. If they say yes and you say yes, then you and your parents/caregivers must complete and sign pages 6-7.
- If something (like drug use) makes it hard for you to understand clearly what this project is about, we will not be able to let you take part.

If you say yes, what will you be asked to do?

You will be asked to do all six activities listed below. We will ask your permission to audio-record activities 1-2 and 4-6.

Activity number	Date ¹ & Time	Place ²	Description of Activity
1.	25 March 2017, 09.00 – 16.00	Secunda	Make a drawing or a model out of clay (we will lend you everything you need to do this) that will help answer the following questions: <ol style="list-style-type: none">1. What is the most important health/wellbeing (feeling good about life) issue for young people?2. What does it mean to be resilient (do OK in life) when there is drought?3. What/who makes it possible for young people to be resilient when there is drought?
2.	22 April 2017 09.00 – 16.00	Secunda	Learn how to be a researcher – we will teach you how to 'interview' (talk to) an older adult in your community about what he/she remembers about (i) how drought changed your community and (ii) how the community coped with/solved these changes. We will also teach you how to

¹ Tentative; to be confirmed by community partners at January meeting

² Will be added following meeting with community partners in January; likely to be the Khulisa offices

			first ask this older adult to agree in writing that it is OK for you to do the interview and we will show you how to make notes about what this older adult says (we will give you a list of questions and a little book in which to write down the answers).
3.	Any date between 23 April and 19 May that suits you and the adult you will interview	Secunda	You 'interview' the older adult and write up the answers. Doing the interview will take about 1 hour of your time. The time you spend travelling to do the interview will depend on where you meet the older adult.
4.	20 May 2017 09.00 – 16.00	Secunda	Share what you learnt from the older adults with us – you can choose to read us what you wrote down or tell us the story about what you learnt. We will ask for your permission to keep the written notes you made.
5.	24 June 2017 09.00 – 16.00	Secunda	We will use what you taught us in Activity 1-3 to come up with a theory about what helps young people to keep doing OK in times of drought, but we need you to check this theory. You can change it or add to it. Then, together we will use this theory to think about a plan that will help communities to help young people to do OK (be resilient) in times of drought. With your help we also need to think about how best to tell your community about this plan (e.g., via an exhibition or a play or a song, etc.) We will bring people who are good at drama to help with this plan.
6.	29 July 09.00 – 16.00	Secunda	This last activity is about putting the plan into action. Depending on what form the plan will take, we might be able to video it and upload the video onto YouTube.

What do you get out of this?

Because you will be working as a co-researcher in this project, we would like to offer you a R500 Checkers voucher³ for each activity that you take part in. Except for Activity 3, we will give you the voucher at the end of the day's activity. We will give you the voucher for Activity 3 at the end of Activity 4.

Can you get hurt by taking part?

We don't think that you can get hurt physically, but there are some other risks. We explain them below and what we will do to manage them.

<i>Probable/possible risks/discomforts</i>	<i>Strategies to minimize risk/discomfort</i>
You will spend your whole Saturday participating in Activities 1-2, 4-6.	Because this is a long time, we will have two tea breaks and a lunch break. During the breaks we will give you a juice and a fruit (e.g., an apple). For lunch, we will provide hot food (e.g., pap and wors).
Talking English could be tiring or difficult.	If you prefer, you can speak in your home language. We will ask members of the research team or others in your group to translate into English so that the researchers who speak English can also understand.
You will complete Activities 1-2, 4-6 in a group.	Because you will be part of a group, other young people will know that you participated and what you said. To try and minimize outsiders knowing what you said, we will agree on group rules (e.g., treating one another respectfully; not talking to others about what specific participants said/did).
If we video Activity 6 your community and many other people will know that you participated.	You do not have to take part in the video. Alternatively, if you do want to take part but you don't want other people to identify you, then we can find ways of hiding your face (e.g., by wearing a mask). You can also choose whether your name is added to the credits or list of people who are in the video.

There is one other thing that you must know: If you tell us, while we are doing the research with you that you are planning to hurt someone or that someone is abusing you, then we must tell people (including the police) who can help.

What will happen to what you write or draw or make or say during the study?

We will ask a person/people to listen to the audio-recordings of activities 1-2 and 4-6 and type what you and the others said. This person/these people will sign a form in which they promise to keep the recording private (meaning they can't tell anyone anything about what they listen to and type up). Once

³ Tentative; to be confirmed by community partners at January meeting

everything is typed up, the researchers from the University of Pretoria will delete (erase/wipe out) what was recorded.

We (the researchers from the Universities of Pretoria and Brighton and from Khulisa and BoingBoing) will study the typed-up version of what you and others said. We will also study your written notes about what you learnt from the older adult. If you make drawings/clay models during Activity 1, we will ask your permission to take photographs of your drawings/clay models and we will also study these photographs. We will probably quote what you said/wrote or show the photographs of what you made when we write about what we learnt from you or when we tell others about what we learnt from you (e.g., at a conference or when we teach students).

We will keep a copy of what you said/wrote and/or drew/made in a safe place at the University of Pretoria. We will keep the copies for 10 years. Your name will not be on any of these copies. We will allow university students who have to complete research projects about resilience or drought or communities or adolescents to use these copies for their research projects.

Who will see the forms you sign and what happens to them?

Only the researchers from the University of Pretoria and Khulisa Social Solutions will see the forms you sign. They will store these forms for 10 years.

Will it cost you anything to take part in this study?

No, it will not cost you anything. We will pay the cost of the local bus/local taxi that you use to participate in activities 1 to 6.

Do you have questions you want to ask?

- You can contact Mosna Khaile, the project manager, at 0767756180 or mosnak@live.com if you have any further queries. You can also email Linda Theron at Linda.theron@up.ac.za or Angie Hart at A.Hart@brighton.ac.uk
- You can contact the chair of the Research Ethics Committee, ## () if you have any concerns or complaints that have not been adequately addressed by the researcher.
- You will receive a copy of this information and consent form for your own records.

Looking forward to meeting you!

Mosna, Angie, Linda and the team

Addendum C: Declaration by parent/legal guardian

Phone Number: _____

Cell Phone Number: _____

In case the above details change, please contact the following person who knows me well and who does not live with me and who will help you to contact me:

Name & Surname:

Phone/ Cell Phone Number /Email:

Declaration by Parent/Legal Guardian

By signing below, I [full name] agree to allow my child/the child I legally care for [child's full name:] to take part in a research study entitled: *Patterns of resilience among young people in a community affected by drought: Historical and contextual perspectives*

I declare that:

- My child asked me to read the information about this study. I have read and understood this information and consent form and it is written in a language with which I am fluent enough and comfortable.
- I have had a chance to ask questions to both the person obtaining consent, as well as the researcher (if this is a different person), and all my questions have been adequately answered.
- I understand that my child's participation in this study is **voluntary** (I can say no and my child can too) and I have not been pressurised to allow him/her to take part.
- I understand that what he/she contributes will be shared with international researchers, but that his/her name and other identifying particulars will not be linked to my answers.
- I understand that if a video is made as part of this study, other people could recognise my child and know that he/she participated. I give permission for this.
- My child may be asked to leave the study before it has finished, if the researcher feels it is in his/her best interests.
- I understand that researchers will not be asking questions about abuse/harm, but that they have will have to report abuse/harm to child protection services if they should become aware that your child is being abused/harmed.

Signed at (*place*) on (*date*) 2015

.....
Signature of parent/legal guardian

.....
Signature of witness

Addendum D: Declaration by person obtaining consent

Declaration by person obtaining consent

I (*name*) declare that:

- I explained the information in this document to
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above.
- I did/did not use an interpreter.

Signed at (*place*) on (*date*) 2015

.....
Signature of person obtaining consent

.....
Signature of witness

Addendum E: Declaration by researcher

Declaration by researcher

I (*name*) declare that:

- I explained the information in this document to
- I encouraged him/her to ask questions and took adequate time to answer them.
- I am satisfied that he/she adequately understands all aspects of the research, as discussed above
- I did/did not use an interpreter.

Signed at (*place*) on (*date*) 2015

.....
Signature of researcher

.....
Signature of witness

Addendum F: Ethics clearance letter for greater study



**Ethics Committee
13 February 2017**

Dear Prof L Theron

REFERENCE: UP 16/11/02

We received proof that you have met the conditions outlined. Your application is thus approved, and you may **continue with your fieldwork**. Should any changes to the study occur after approval was given, it is your responsibility to notify the Ethics Committee immediately.

Please note that this is **not a clearance certificate**. Upon completion of your research, you need to submit the following documentation to the Ethics Committee:

- Integrated Declaration Form (Form D08),
- Initial Ethics Approval letter and,
- Approval of Title.

Please note:

- *Any amendments to this approved protocol need to be submitted to the Ethics Committee for review prior to data collection. Non-compliance implies that the Committee's approval is null and void.*
- *Final data collection protocols and supporting evidence (e.g.: questionnaires, interview schedules, observation schedules) have to be submitted to the Ethics Committee before they are used for data collection.*
- *Should your research be conducted in schools, please note that you have to submit proof of how you adhered to the Department of Basic Education (DBE) policy for research.*
- *Please note that you need to keep to the protocol you were granted approval on should your research project be amended, you need to submit the amendments for review.*
- *The Ethics Committee of the Faculty of Education does not accept any liability for research misconduct, of whatsoever nature, committed by the researcher(s) in the implementation of the approved protocol.*
- *On receipt of the above-mentioned documents you will be issued a clearance certificate. Please quote the reference number: **UP 16/11/02** in any communication with the Ethics Committee.*

Best wishes

Prof Liesel Ebersöhn
Chair: Ethics Committee
Faculty of Education

Addendum G: Ethics clearance letter for my study



Faculty of Education

Ethics Committee

23 March 2017

Ms S Schoeman

Dear Ms Schoeman

REFERENCE: UP 16/11/02 Theron 17-002

This letter serves to confirm that your application was carefully considered by the Faculty of Education Ethics Committee. The final decision of the Ethics Committee is that your application has been **approved** and you may now start with your data collection. The decision covers the entire research process, until completion of the study report, and not only the days that data will be collected.

The approval by the Ethics Committee is subject to the following conditions being met:

1. The research will be conducted as stipulated on the application form submitted to the Ethics Committee with the supporting documents.
2. Proof of how you adhered to the Department of Basic Education (DBE) policy for research must be submitted.
3. In the event that the research protocol changed for whatever reason the Ethics Committee must be notified thereof by submitting an amendment to the application (Section E), together with all the supporting documentation that will be used for data collection namely; questionnaires, interview schedules and observation schedules, for further approval before data can be collected. **Non-compliance implies that the Committee's approval is null and void.** The changes may include the following but are not limited to:
 - Change of investigator,
 - Research methods
 - Participants
 - Sites.

The Ethics Committee of the Faculty of Education does not accept any liability for research misconduct, of whatsoever nature, committed by the researcher(s) in the implementation of the approved protocol.

Upon completion of your research you will need to submit the following documentation to the Ethics Committee to apply for your Clearance Certificate:

- Integrated Declaration Form (Form D08),
- Initial Ethics Approval letter and,
- Approval of Title.

Please quote the reference number **UP 16/11/02 Theron 17-002** in any communication with the Ethics Committee.

Best wishes



Prof Liesel Ebersöhn
Chair: Ethics Committee
Faculty of Education

Faculty of Education
Fakulteit Opvoedkunde
Lefapha la Thuto

- 398 F: So, if you think of this time line, can you think of any time before 2014,
 399 maybe when you were younger, that you had experienced drought. Is
 400 there any time you can think of or not really?
- 401 P2: No, I don't remember anything.
- 402 F: Don't you remember anything? So, I want you to quickly elaborate on the
 403 2014 drought, because that seems as if it was quite severe for you, hey?
 404 Did any of you boys experience the same as what she had experienced?
- 405 P3: Yeah.
- 406 F: Maybe, if you think about it did you experience the same as what she
 407 experienced during that time?
- 408 P3: Yeah because I remember at my house, since there was no water we
 409 couldn't cook, like we spend much time eating bread and I don't think
 410 that's healthy, no, no.... like we had no water, yeah, we spend much time
 411 eating bread. I think somehow that affected us even though we didn't go
 412 to a doctor most of the time but no, it was no good because like we spend
 413 too much money, like a lot of money buying bread, buying bread and there
 414 was food at home that we couldn't cook so that affected our parents'
 415 pockets, and all those things.
- 416 F: And as a family how did you cope with there not being water during that
 417 time? You think of your house, your family, how did you cope with not
 418 having water during that time. What did you do to support each other?
- 419 H: Say that again a bit louder, say it again louder?
- 420 F: you don't have to be shy.
- 421 P5: Just like, save more water so that we can have ... like getting...
- 422 F: And how did you, how did you save the water?
- 423 P5: We bought some water, like have it in the kitchen in some other buckets,
 424 tea buckets so that we can cook with it, yes we have small water for bath
 425 we just used to warm up with a cloth and wash ourselves.
- 426 F: And how did your family feel during that, how did you, how did your
 427 family feel during that time?
- 428 P5: We felt that it was bad, yeah.
- 429 F: It was bad? And it's better now?
- 430 P5: Yeah, it's better.
- 431 F: That's good.

hab.

WB.

changing family
habits.

hab.

432 P3: Yeah it was very bad, because we had to sacrifice the hygiene for some
433 things we drink and some things to cope with it, yeah saving water can be
434 difficult sometimes

435 F: And how did your family deal with that?

436 P2: So like we didn't bath, we didn't bath so that we could have something to
437 drink during the day, and maybe cook with, yeah, during the night, so
438 yeah it was difficult ... but you see I believe in my mother, everything she
439 tells me like I believe will happen so she used to tell me that everything
440 was going to be OK, everything was going to be right but yoh, it was
441 difficult

442 F: And she, and the support that she gave you it helped you to get through?

443 P3: Yes, because it can be strong.

444 P2: Imagine not feeling free to go to the toilet. That's because it going to be
445 dirty. That's uncool!

446 F: And you experienced that?

447 P2: Yeah, we had to use every single drop of water wisely so..

448 F: So even that, sanitation, was a big issue for you guys hey?

449 P2: Yes

450 F: It's a theme that's coming up here the whole time, that you said you had to
451 sacrifice, either drinking water or having a bath, or going to the toilet.
452 And we can laugh about it now, but it is quite serious and difficult for the
453 family. So, if I may ask how did you guys, what did you do during the
454 periods of drought just to help keep going, like he said, his mom was a big
455 support, so what helped you during that time?

456 P3: Prayer.

457 F: Prayer?

458 P2: We had to wait for the truck that was supplying us with water hoping that
459 it will come so if it doesn't come, that's another story.

460 P3: I kept on wondering where they got the water because...

461 P2: Yeah, that's another thing...

462 P3: It didn't feel safe using that water because like, no...

463 F: For drinking?

464 P2: They might have took it from some dirty dams.

465 P3: Trust issues

WB

hab

Practically
method
pooring
+ supp.

- 691 F: Do you understand?
- 692 P6: Can you please repeat it.
- 693 F: Hey?
- 694 P (all): can you please repeat it.
- 695 F: So what does it mean for you as a young person to be okay when there's a drought so for you
696 to be okay does it mean you are able to go to school that you are able to eat everyday like
697 what does it mean for you to be okay when there's a drought, how do you cope?
- 698 F: Toni?
- 699 P1: Let me try.
- 700 F: Ja try it only what you think there's no wrong or right answers. hab.
- 701 P1: I think what it means to me to be ok when there's a drought it means that maybe at home
702 they've saved water, I've got a little water to drink and that's give me energy to go to school
703 and both ja.
- 704 F: Okay ja so you okay when there's a drought because you have saved some water. supp.
- 705 P1: Yes and I have an positive attitude towards myself and my family.
- 706 F: Okay anyone else whats that you can say it what does Zodwa want to say.
- 707 P5: Okay she said (unclear) there a situation that comes cause sometimes you can't solve those
708 things.
- 709 F: Yes that's lovely you see its just your opinion of what you think, that's lovely thank you, are
710 you guys good.
- 711 P(all): Yes
- 712 F: Thank you so much for participating.
- 713

108 P1 [5:37- 5:42]: Yes, and the fishes are going to die of drought because the
109 sea... or ya...

110 P2 [5:44- 7:35]: I'm a boy and I'm fifteen years old... I'm going to talk about
111 the points that, that human effect, that people can't go to school or work or
112 other places because if there's drought... where are they going to get
113 water to have, to cook, to wash their bodies before they go... They can't
114 go to school and work stinking... ok... People start getting sick, people
115 start getting sick and others die because of drought... and then animals
116 and plants also die because they need the grass, and the grass needs water
117 to grow and then they need water to drink and then there's no water...
118 they will die or others will be seriously, seriously sick... Ok and inflation
119 goes up in stores because where they buy there uhh... there uhh...
120 products, maybe fruit and vegetables and other stuff... they will grow the,
121 the price of selling because of the water, not water they get from nature
122 you see... and then, infection spreads faster during serious drought...
123 because you will drink maybe a certain water which is dirty because of
124 you don't have a choice, you have to drink it or die... so diseases and
125 other infections grow faster... and then trees will start losing their leaves
126 and they start shrinking, this is before the drought as you can see... Before
127 the drought it was more bigger than during the serious drought, it starts
128 shrinking and then maybe in more years, there'll be no trees... you see and
129 then, as you can see, as my fellow group member has said... Checkers will
130 maybe lose profit because they don't have vegetables to... to sell... that's
131 all for the...

hab.

132 P5 [7:37- 8:57]: Uhh... I'm a girl and I'm seventeen years old... Umm...
133 Uhh... I'll speak uhh... on these points, human effects... uhh... as we
134 know uhh... most of our parents are, like they're working as farmers...
135 and uhh... when they're like uhh... drought strikes uhh... we have the
136 problem that uhh... maybe like uhh... the crops are like, are starting to die
137 so our parents are... maybe they can lose jobs uhh... and they can lose
138 their money. And uhh... like we have indicated on factories, maybe like
139 factories that, that produce maize meal or something like that... or now
140 like, they won't be able to like to take it again like so umm... those things
141 like they like they already... like stuff like that... so like, many people
142 so... like many people lose their jobs and the money like, like in the shops
143 like, like they are increasing such as umm... meat, ya, relish, ok I can say
144 that relish like, like we have shortage of umm... like, like so in the shops,
145 like uhh... the money like is starting to increase... ya things like that, ya.

\$
job loss

146 Facilitator (F1) [8:58- 9:03]: So tell me, umm... when people lose their jobs
147 who work in factories... what happens?

148 P1 [9:04- 9:06]: Umm... it's going to have an effect on humans.

149 Facilitator (F1) [9:06- 9:19]: How? Think about yourself or like your
150 community, like what does that effect? What does... the drought... do

1381 we take care of each other, no one is sick and no one is dry hydrated, we
1382 save for another.

1383 P6: Even our parents they make sure that their children are safe.

1384 Simon: So it's more of like an obvious community support for people

1385 F: They have a concept for it, what do you call it in South Africa: the caring
1386 for each loving each other?

1387 P5: Ubuntu: the spirit of Ubuntu

1388 F: So it comes out when there is a drought, can someone like tell us details. Is
1389 someone writing please?

1390 P6: I want tell you something but I wana start by giving an example first.

1391 F: You can give example, maybe one

1392 P6: Eh hh, is it right If say drought is a disaster?

1393 F: Yes

1394 P6: So imagine you are encountering that disaster of drought, I thing every one
1395 of us has a parent or a family so obviously if there is something like of a
1396 drought, your mom or your dad will want you to to, not to be affected she
1397 will make sure that you stay by her side all the time, so that all I wanted to
1398 say.

1399 F: Anyone else on that? Who wants to comment? So this Ubuntu is it in the
1400 family or in the whole community?

1401 P6: It's in the whole community.

1402 F: So you also have community...

1403 P6: I doubt it's necessary to put a community and a home because in a
1404 community is the homes, I thinks one thing

1405 S: But at the same time is like when there is a drought the whole, not family or
1406 people who live but the whole community big big community, comes
1407 together, not just the people you live with every day like your neighbours
1408 and friends will come and support you as well? Is that what you saying?

1409 P6: Yah they all come together

1410 F: So like you are meeting people whom you don't meet every day?

1411 P6: Yes

1412 F: Can you think of those one ones, what will they be doing in your
1413 community? Think of like we saying someone was trying to clarify what
1414 someone was saying that it's not only support from the home it's from the
1415 whole community? So like everyone would be like everyone would be
1416 involved not people that you meet every day like you mom, your dad and

Emot
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Supp. - Ubuntu

Supp +
Connectees

Looking for volunteers

Are you:

- 15-24 years old,
- Living in the Secunda area, Mpumalanga, *and*
- OK talking, writing and reading English?

Do you want to spend one Saturday per month (March to July 2017) helping researchers learn about what helps young people in drought-affected communities to do OK in life?

**If you answered yes to all of the above,
please ask the person who gave you this advert
for more information about the research project.**

Addendum J: Phase 3 – 5 of data collection of the greater project

- **Phase 3: Data Collection by co-researchers (participants of the study)**

Co-researchers will interview an elder and obtain detailed information that they will later report back to the researcher

- **Phase 4: Focus Groups with co-researchers**

CO-researchers report what they have learnt to the researchers in focus groups. This phase includes audio recordings of the focus groups to be used as a source of data for this study.

- **Phase 5: Data Analysis and Co-produce Strategy to support resilience**

All of the data obtained will be analysed using thematic analysis, which will then be refined and checked by the youth researchers and community partners. All the researchers involved will also use the generated data in activities 1-4 to co-produce a strategy to support resilience of young people facing drought-related challenges. The data obtained by the co-researchers, including the audio recordings from the focus group in phase 4, will not be specifically used in this specific research but will serve as data for the larger study.