

Resilience factors in families who have lost their homes in a shack fire

by

Jennilee Lawrence

**Thesis presented in fulfilment of the requirements for the degree of
Master of Arts (Psychology) at the
University of Stellenbosch**



Supervisor: Prof A P Greeff

March 2009

DECLARATION

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

Date: 22 January 2009

SUMMARY

Informal settlements exist all over South Africa and are expanding and multiplying as people seek better jobs close to urban areas. The close proximity of the thousands of shacks has enabled the rapid spread of massive fires in informal settlements. The purpose of this study was to identify resilience characteristics in families who have lost their home in a shack fire. Family resilience refers to the family's ability to achieve normal family functioning despite having experienced a traumatic event. The focus of this study was on 38 families from an informal settlement just outside Stellenbosch in the Western Cape. The study was conducted from a mixed methods approach and made use of a cross-sectional survey research design. Data was collected through the use of a biographical questionnaire, an open-ended question, and self-report questionnaires based on the Resilience Model of Stress, Adjustment and Adaptation. The results from the qualitative data indicate that the families indicated working together as a family as being vital to resilience. Material support from the municipality and extended family, shelter provided by members of the extended family and financial support from the extended family were also indicated as essential in overcoming a crisis. The results from the quantitative data indicate a significant positive correlation between family adaptation and: (i) the quality of communication within the family, (ii) the fortitude and durability of the family unit, (iii) the family's sense of internal strengths, dependability, and ability to work together, and (iv) the family's sense of being in control of family life rather than being shaped by outside events and circumstances.

OPSOMMING

Talle informele nedersettings bestaan regoor Suid-Afrika en met die toename in individue wat naby stedelike gebiede werk soek, is informele nedersettings besig om te vergroot en te vermeerder. Informele wonings is dikwels naby aan mekaar en dit is juis hierdie verskynsel wat die vinnige verspreiding van brande bevorder. Die doel van hierdie ondersoek was om veerkragtigheidskenmerke van gesinne wat hulle wonings in sulke brande verloor het, te identifiseer. Gesinsveerkragtigheid verwys na die gesin se vermoë om ten spyte van 'n traumatiese ervaring normale funksionering te bereik en te handhaaf. Die fokus van hierdie ondersoek was op 38 gesinne woonagtig in 'n informele nedersetting net buite Stellenbosch in die Wes-Kaap. 'n Eenmalige deursnee opname-navorsingsontwerp is gebruik om faktore wat verband hou met gesinsveerkragtigheid te identifiseer en te beskryf. 'n Biografiese vraelys, selfbeskrywings-vraelyste gebaseer op die *Resilience Model of Stress, Adjustment and Adaptation* en 'n oopende vraag is deur 'n verteenwoordiger van die gesin voltooi. Die resultate van die kwalitatiewe data dui daarop dat die meerderheid van gesinne voel dat om as 'n gesin saam te werk integraal is tot die bereiking van veerkragtigheid. Konkrete hulp van die munisipaliteit en uitgebreide familie, en skooling en finansiële bystand van die uitgebreide familie is ook aangedui as noodsaaklik in die oorkoming van 'n krisis. Die resultate van die kwantitatiewe data dui op beduidend positiewe korrelasies tussen gesinsaanpassing en (i) die kwaliteit van kommunikasie binne die gesin; (ii) die duursaamheid en lewensmoed van die gesin as 'n eenheid; (iii) die gesin se bewussyn van interne kragte, betroubaarheid, en hulle vermoë om saam te werk; en (iv) die gesin se bewussyn van in beheer wees van hulle lewens eerder as om deur ervarings en uitdagings van buite beïnvloed en gevorm te word.

I hereby acknowledge financial support from the National Research Foundation (NRF) for this research project. Opinions expressed in this work are entirely those of the author and should not necessarily be regarded as that of the NRF.

ACKNOWLEDGEMENTS

I would like to express my gratitude and appreciation to:

Professor A. P. Greeff for his supervision, support and encouragement,

Dr M. Kidd for his guidance and work on the statistical analysis of the data,

The field workers who were of assistance during data gathering: Moses, Alicia, and Thando,

Mr Bertie Brandsen at the Stellenbosch fire department for always being open to my many queries,

Lucinda van Kerwel at the Stellenbosch Municipality for her data and personal insight on the Kayamandi Shack Fires,

The families of Zone A in Kayamandi, for welcoming our research team and for the time and effort they set aside for us to do our interviews,

and last but not least,

My parents, Basil and Madeleine Lawrence, for their continuing support and motivation.

CONTENTS

CHAPTER 1

Introduction, Motivation and Rationale of Study

1.1 Introduction	1
1.2 Motivation	2
1.3 Rationale of Study	4
1.4 Summary	5

CHAPTER 2

Theoretical Conceptualisation of Family Resilience

2.1 Introduction	6
2.2 Definition of Resilience	7
2.3 Models of Family Resilience	8
2.3.1 The Resiliency Model of Family Stress, Adjustment and Adaptation	
2.3.1.1 Adjustment phase	
2.3.1.2 Adaptation phase	
2.4 Other Resilience Models and Frameworks	16
2.4.1 Cognitive Appraisal Model	
2.4.2 The Circumplex Model	
2.4.3 A Process Model of Family Resilience	
2.5 Summary	22

CHAPTER 3

Literature Review

3.1 Introduction	23
3.2 Factors Contributing to Family Resilience	27
3.2.1 Belief Systems	
3.2.1.1 Cognitive appraisals	27
3.2.1.2 Spirituality	28
3.2.1.3 Optimism	29
3.2.1.4 Coping mechanisms	30
3.2.1.5 Humour	30
3.2.2 Organisational Patterns	
3.2.2.1 Social support	31
3.2.2.2 Hardiness	33
3.2.2.3 Socio-economic status (SES)	34
3.2.2.4 Culture/ethnicity	35
3.2.2.5 Nature of parental relationship and parenting skills	35
3.2.2.6 Family environment	37
3.2.3 Communication/Problem Solving	
3.2.3.1 Communication	37
3.3 Summary	38

CHAPTER 4

Methodology

4.1 Introduction	39
4.2 Research Design	39
4.3 Participants	39

4.4 Measuring Instruments	42
4.4.1 Biographical Questionnaire	
4.4.2 The Family Hardiness Index (FHI)	
4.4.3 The Social Support Index (SSI)	
4.4.4 The Relative and Friend Support Index (RFSI)	
4.4.5 The Family Crisis Oriented Personal Evaluation Scales (FCOPES)	
4.4.6 The Family Problem Solving and Communication Scale (FPSC)	
4.4.7 The Family Attachment Changeability Index 8 (FACI8)	
4.5 Procedure	48
4.5.1 Practical Data Gathering	
4.5.2 Scoring of Questionnaires	
4.6 Data Analysis	50
4.6.1 Qualitative Analysis	
4.6.2 Statistical Analysis	
4.7 Summary	52

CHAPTER 5

Results

5.1 Introduction	53
5.2 Results from Quantitative Data	53
5.2.1 Scatterplots	
5.2.2 Regression Analysis	
5.3 Results from Qualitative Data	63
5.4 Summary	65

CHAPTER 6

Discussion

6.1 Introduction	67
6.2 Discussion	67
6.3 Limitations and Recommendations	72
6.4 Conclusion	74
REFERENCES	75

LIST OF TABLES

Table 1.1 <i>Shack Fires in the Cape Metropole Area</i>	3
Table 1.2: <i>Shack Fires in Kayamandi in Stellenbosch</i>	3
Table 2.1: <i>Key Processes in Family Resilience</i>	19
Table 4.1: <i>Biographical Information of Participants in Study (N = 38)</i>	41
Table 5.1: <i>Spearman Correlations between Potential Resilience Variables and Family Adaptation (Family Attachment and Changeability Index 8 scores) (N = 38)</i>	54
Table 5.2: <i>Regression Analysis Summary Indicating which Combination of Variables Contributes to the Dependent Variable Family Adaptation (FACI8)</i>	62
Table 5.3: <i>Summary of Themes Identified in Qualitative Data as Given by the Family Representative (N = 38)</i>	64

LIST OF FIGURES

<i>Figure 2.1: The ABCX Model of Family Stress</i>	9
<i>Figure 2.2: The Double ABCX Model</i>	10
<i>Figure 2.3: The Resiliency Model of Family Stress, Adjustment and Adaptation</i>	13
<i>Figure 5.1: Correlation Between Family Adaptation Scores and Total Scores on the Family Problem Solving and Communication Scale (FPSC)</i>	56
<i>Figure 5.2: Correlation Between Family Adaptation and Affirming Communication Scores on the Family Problem Solving and Communication Scale (FPSC)</i>	57
<i>Figure 5.3: Correlation Between Family Adaptation and Incendiary Communication Scores on the Family Problem Solving and Communication Scale (FPSC)</i>	58
<i>Figure 5.4: Correlation Between Family Adaptation and Total Scores on the Family Hardiness Index (FHI), Representing the Fortitude and Durability of the Family Unit During a Crisis Situation</i>	59
<i>Figure 5.5: Correlation Between Family Adaptation and Commitment Scores on the Family Hardiness Index (FHI)</i>	60
<i>Figure 5.6: Correlation Between Family Adaptation and Control Scores on the Family Hardiness Index (FHI)</i>	61

CHAPTER 1

INTRODUCTION, MOTIVATION AND RATIONALE OF STUDY

1.1 INTRODUCTION

After South Africa's first democratic elections in 1994, many South African cities attracted thousands of rural people every year who were in search for work and a better life. The massive demand for houses, coupled with a shortage of housing subsidies, means that for many South Africans there is no alternative but to live in informal housing and shack settlements (Richards, O'Leary & Mutsonziwa, 2006). Huchzermeyer (2002) defines informal settlements as those structures developed through the illegal incursion of land and the erection of shelters considered to be informal in relation to conventional urban developmental norms.

According to the World Health Organization (WHO) informal dwellings lack such general infrastructure as clean water, sanitation, electricity, ventilation, food preparation and storage, thereby increasing the vulnerability of inhabitants to a variety of health risks including diarrhoeal and respiratory diseases, HIV/Aids and substance abuse (cited in Richards et al., 2006). Also prevalent in these areas are frequent occurrences of violence and other crimes (Richards et al., 2006).

In a study by Richards et al. (2006), the quality of life of informal dwellers was investigated. By using a scale from 0% (no satisfaction) to 100% (completely satisfied), it was found that the residents' satisfaction with their environments was very low and that the highest level of satisfaction was indicated at just over 10%. Access to water usually came from street taps, and the highest level of satisfaction experienced by informal dwellers with regard to this was just over 50% and the

lowest level of was less than 20%. Regarding sanitation, the dwellers mostly made use of sub-standard non-flushing toilets. The level of satisfaction experienced for this ranged from the mid-20s to less than 10%. Between 45% and 75% of the residents had access to once-weekly waste removal. The level of satisfaction pertaining to this ranged from just less than 40% to around 55%. Ten percent to 50% of informal dwellings had access to electricity. Generally, housing was considered inadequate and the service levels were low, as were satisfaction levels (Richards et al., 2006).

Along with these stressors, the hazards of fire in informal settlements have also been highlighted by researchers (Richards et al., 2006). When shacks are destroyed, it leaves the inhabitants homeless, without food and clothes and sometimes having lost irreplaceable objects of sentimental value and, in some severe cases, even loved ones (Internafrika, 2006).

Although there are families that are able to overcome these adverse situations, there are also others who do not. What distinguishes families who are able to adapt from those who are unable to do so is called resilience (Walsh, 1996).

1.2 MOTIVATION

The 2001 national census combines informal settlements and shacks on serviced sites into one category, namely 'informal housing/not in backyard' (Statistics South Africa, 2005). According to a 2007 report, the percentage of households in informal structures, commonly referred to as shacks, was 12.7% in 2002, rose to 15.9% in 2005 and declined slightly to 14.5% in 2006 (Statistics South Africa, 2007).

Shack fires happen quite frequently and affect thousands of people. For example, the data shown in Table 1.1 were collected on fires affecting various settlements in and around Cape Town. These data are only an approximation and do not represent every township located in the Cape Metropole area (Internafrica, 2006).

Table 1.1

Shack Fires in the Cape Metropole Area (Internafrica, 2006)

Period	No. of shacks	Deaths	Displaced	Burned
09/02/2004 to 31/12/2004	9 086	44	39 011	4
17/01/2005 to 29/12/2005	7 248	20	27 015	26

This study was conducted with inhabitants of the Kayamandi Township in Stellenbosch. The statistics for this specific settlement are presented in Table 1.2.

Table 1.2

Shack Fires in Kayamandi in Stellenbosch (L. Van Kerwel, personal communication, October 11, 2006)

Period	No of shacks	Deaths	Displaced
28/05/2004 to 28/12/2004	917	1	3 358
09/01/2005 to 10/11/2005	693	4	2 156

The dates represent the first fire and the last fire for 2004 and 2005 respectively. What leads to these fires is most often the use of candles, wood and paraffin to keep the household functioning. Although many municipalities have tried to provide electrical boxes in informal settlements, poor families still cannot afford to buy electricity. Nationally, the percentage of households using either paraffin or wood for cooking declined from 37.9% in 2002 to 31.6% in 2006. There are also

large provincial differences in the percentage of households that use either paraffin or wood for cooking, with Limpopo and the Eastern Cape having the highest proportions. Even in these provinces there was a decline from 63.7% and 58.4% in 2005 to 56.9% and 54.1% in 2006 respectively. In 2006, the Western Cape had the lowest percentage (7.5%) of households using paraffin or wood as a source of energy for cooking. These data were gathered from all South African households and not just those in informal settlements (Statistics South Africa, 2007).

Given the statistics in Tables 1.1, 1.2 and the preceding paragraph, along with the fact that there are so many informal settlements and that they are still expanding and multiplying as people seek better jobs, an estimated tens of thousands of families are affected by fires each year around the country.

1.3 RATIONALE OF STUDY

Given the many families that are affected by fires, the research question for this study is:

What family resilience characteristics are present within families who have lost their homes in a massive shack fire?

A massive shack fire spreads effortlessly through the tightly spaced shacks and its destructiveness is without a doubt a severe stressor. According to Walsh (2003), such a crisis may disrupt the functioning of a family, with the consequences affecting individual family members as well as their relationships with each other.

Patterson (2002) describes the family as fulfilling a variety of functions for its members and for society, such as (i) family formation and membership, (ii) economic support, (iii) nurturance and socialisation, and (iv) protection of

vulnerable members. If a family were experiencing a major stressor such as losing their home as a result of a fire, fulfilling these functions may be seen as an extra burden.

This study aims to identify resources families used or qualities they have that have helped them to recover after such a setback and stay fully functioning. Thus, this study will identify what qualities, resources and strategies families possess or use when affected by the loss of their homes due to fire. The results of this study could be used to formulate effective intervention plans that actively promote these qualities in other affected families.

1.4 SUMMARY

Informal settlements around the country are expanding rapidly, with no apparent improvement in the standard of living. This increases the risk of candle or paraffin fires raging effortlessly through hundreds of shacks packed tightly together. This study aims to explore the resilience characteristics utilised by families who have lost their homes to such fires.

In the next chapter, the focus is on the theoretical conceptualisation of family resilience, and in particular the Resiliency Model of Family Stress, Adjustment and Adaptation, as developed by McCubbin, Thompson and McCubbin (1996).

CHAPTER 2

THEORETICAL CONCEPTUALISATION OF FAMILY RESILIENCE

2.1 INTRODUCTION

Although the history of the development of the family resilience construct is fairly new (Patterson, 2002), three very significant shifts in paradigm can be highlighted as relevant in directing its development.

Firstly, the limited focus of the pathogenic paradigm – stating that a person is either in a state of health or of illness – became the main motivation point for many researchers wanting to create an approach that held less stigma and which focused more on the strengths within individuals than on the weaknesses which inhibit them. One of the forerunners in this field was Antonovsky (1979), who coined the term ‘salutogenesis’, literally meaning origins (‘genesis’) of health (‘saluto’). The concept of salutogenesis creates a multidimensional continuum, which runs between two poles – *perfect health* and *perfect illness*. From a salutogenic approach, looking at this continuum allows one to identify the factors inclining a person to one end of the continuum or the other (Antonovsky, 1979).

Secondly, during the 1970s, many social scientists began to ask the question: “What accounts for why some people stay healthy and do well in the face of risk and adversity, while others do not?” (Patterson, 2002). This type of questioning laid the groundwork for yet another shift in conceptualisation: the shift from a deficit model to a resiliency model, which focuses on the terms resilience and adaptation (Hawley & De Haan, 1996).

Lastly, resilience theory initially focused primarily on the individual (Walsh, 2003). Resilience was seen as innate to individuals, and families were viewed as contributing to risk rather than to resilience. In the past two decades, however, the concept of resilience has been extended to include families and not just the individual (Walsh, 2003). This paradigm shift has led to the development of the term 'family resilience', defined by McCubbin, McCubbin and Thomson (1988, p. 247), as "characteristics, dimensions, and properties of families which help them to be resistant to disruption in the face of change and adaptive in the face of crisis situations".

Thus, the study of family resilience adopts a salutogenic approach in recognising that families hold the inherent capabilities to deal with any major crisis, and that these crises provide the chance for families to grow closer and to change in constructive ways (Marsh & Lefley, 1996).

2.2 DEFINITION OF RESILIENCE

Walsh (1996) explains the concept of resilience as "the ability to withstand and rebound from crisis and adversity" (p. 261). Green describes resilience as an ability to accept one's own weakness while embarking on "achievable ventures" (cited in Tedeschi & Calhoun, 1995, p. 50). Rutter (1999) refers to resilience as "the phenomenon of overcoming stress or adversity" (p. 119). According to Hawley and DeHaan (1996):

Family resilience describes the path a family follows as it adapts and prospers in the face of stress, both in the present and over time. Resilient families respond positively to these conditions in unique ways, depending on

the context, developmental level, the interactive combination of risk and protective factors, and the family's shared outlook. (p. 293)

According to McCubbin and McCubbin (1996):

Family resilience can be defined as the positive behavioural patterns and functional competence individuals and the family unit demonstrate under stressful or adverse circumstances, which determine the family's ability to recover by maintaining its integrity as a unit while insuring, and where necessary restoring, the well-being of family members and the family unit as a whole (p. 5).

Put together, these definitions entail that the family's adaptation to an adverse situation can be seen as a developmental process where the family follows a path to 'recovery', making use of various recourses within and outside of the family. Family resilience is influenced by the context of the family, including developmental factors, as well as risk and protective factors. It includes short- and long-term coping techniques and focuses on the family's continued ability to adapt and be flexible (Hawley & DeHaan, 1996).

2.3 MODELS OF FAMILY RESILIENCE

McCubbin et al. (1988) developed a cyclical model of family resilience, which aims to explain why, when faced with the same stressor, some families prevail while others do not. They named this model the Resiliency Model of Family Stress, Adjustment and Adaptation, and it is based on four earlier models, the first of these being Reuben Hill's ABCX model, proposed in 1949.

The ABCX model (see Figure 2.1) focuses on the pre-crisis functioning of the family and emphasises the interaction of three components in producing a crisis (X), namely: the stressor (A), the family's resources for dealing with the stressor (B), and the family's interpretation of the stressor (C) (McCubbin & McCubbin, 1996).

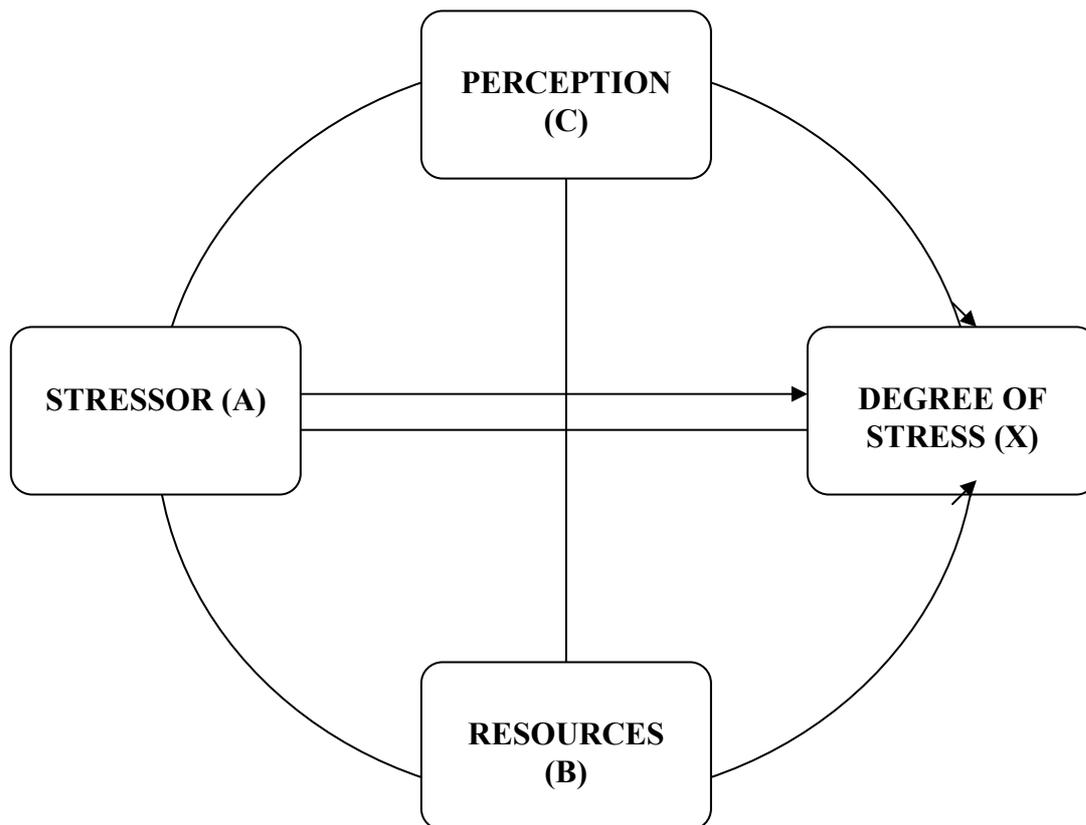


Figure 2.1. *The ABCX Model of Family Stress* (McKenry & Price, 1994).

The second and third models expanded on Hill's ABCX model to include a focus on both pre- and post-crisis factors and processes that enable a family to adjust to and prevail over adversity. The first of these two models is the Double ABCX Model (see Figure 2.2), proposed by McCubbin and Patterson in 1983, which focuses particularly on coping and social support, and emphasises that crisis

resolution is a process and not simply a once-off event (McCubbin & McCubbin, 1996).

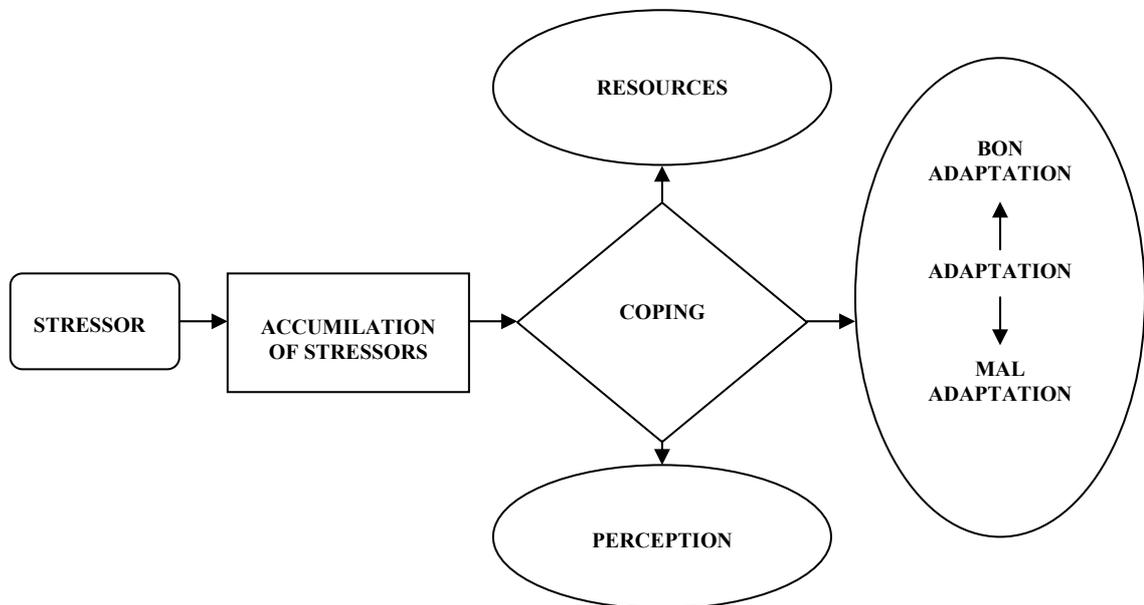


Figure 2.2. The Double ABCX Model (Plunkett, Sanchez, Henry & Robinson, 1997).

In the same year, McCubbin and Patterson extended the Double ABCX model to create the Family Adjustment and Adaptation Response (FAAR) model. The emphasis in the FAAR model is on meticulously describing the family processes involved in the efforts to equalise demands and resources (McCubbin & McCubbin, 1996).

In 1988, McCubbin and McCubbin (1996) developed the fourth and final model, referred to as the Resiliency Model of Family Stress, Adjustment and Adaptation. The important difference in this model, as opposed to previous models, is an emphasis on the family's post-crisis situations that have an impact on their long-term adjustment and adaptation.

2.3.1 The Resiliency Model of Family Stress, Adjustment and Adaptation

The main assumption of the Resiliency Model of Family Stress, Adjustment and Adaptation, or Resiliency Model (see Figure 2.3), is that change and adversity will challenge all families as a normal part of the life cycle. When a stressor occurs, the four key domains of family functioning are affected. These are: (i) interpersonal relationships; (ii) community relationships; (iii) development, wellbeing and spirituality; and (iv) structure and function. The main goals of the family during a crisis are to achieve harmony and balance. The family attempts to do this by developing unique competencies and functioning patterns to protect the individuals and the family as a unit, while encouraging both growth and development (McCubbin & McCubbin, 1996).

As indicated by its name, the Resiliency Model consists of two phases – adjustment and adaptation. The adjustment phase of the Resiliency Model includes a series of components that interact to determine family processes and outcomes (McCubbin et al., 1996). These outcomes can be represented on a continuum and vary from bonadjustment (whereby established patterns of functioning are retained) to maladjustment (in which the family must change their established patterns of functioning in order to achieve balance when confronted with debilitating situations). The adjustment phase deals with protective factors, which buffer the family from the impact of a stressor.

The adaptation phase has to do with the family in crisis, and recovery factors play a big role in enabling the family to ‘bounce back’ from the impact that the stressor has had (McCubbin & McCubbin, 1996). According to McCubbin et al. (1996), the process of adapting involves the process of transforming the environment, the community, as well as the family’s relationships to the community in order to re-

establish harmony, balance and family wellbeing. The difference between adaptation and adjustment, therefore, involves the changes a family undergoes when confronted with crisis. Adjustment involves changes in patterns of family functioning to utilise protective factors, while adaptation focuses on changes in external systems, as well as the family's relationships to these systems to utilise recovery factors. In the face of family stressors, the family first moves through the adjustment phase, which, according to the Resiliency Model, is followed by the adaptation phase (McCubbin et al., 1996).

A number of researchers have undertaken to identify which recovery and protective factors enable a family in crisis to adapt to or cope with the situation (Hawley, 2000; Hawley & DeHaan, 1996; Rutter, 1985). Protective factors are resources that buffer individuals from a stressor. They operate over time and directly and indirectly influence processes and interpersonal reactions (Hawley & DeHaan, 1996; Rutter, 1985). Recovery factors, on the other hand, are factors that help a family to restore effective family functioning after a crisis period. Together, protective and recovery factors may be referred to as resilience factors (McCubbin et al., 1996).

2.3.1.1 Adjustment phase

The adjustment phase involves a sequence of interacting elements, namely the stressor and its severity; family vulnerability; established patterns of family functioning or family typology; resistance resources; appraisal of the stressor; and family problem-solving and coping strategies that determine the outcome of the family's exposure to a stressor (McCubbin et al., 1996). A stressor interacts with the family's vulnerability, which in turn impacts on the family's established patterns of functioning. These components interact with both the family's resistance

resources and the family's appraisal of the stressor, which finally interact with the family's problem-solving and coping strategies to produce an outcome (McCubbin & McCubbin, 1996). This process is represented in Figure 2.3.

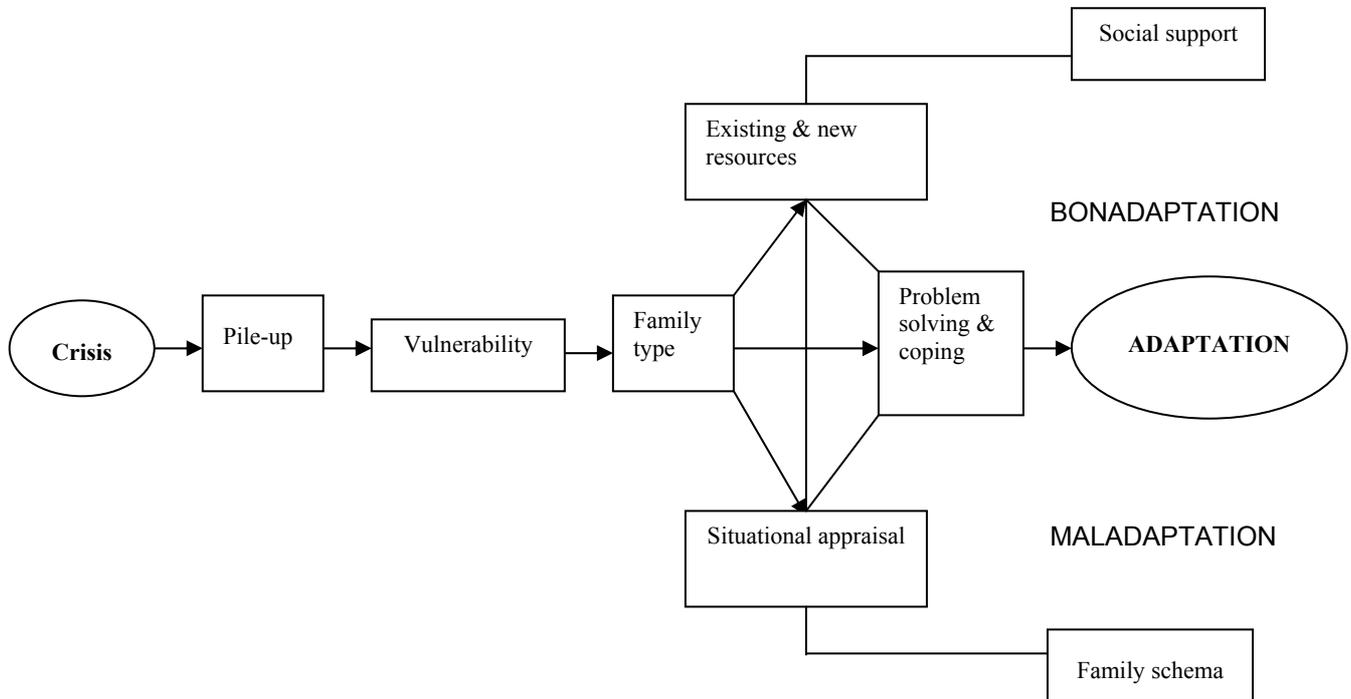


Figure 2.3. The Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin et al., 1996).

The outcome of this process ranges on a continuum from 'bonadaptation', which is the family's optimum level of functioning, to 'maladaptation', which implies the family is in a state of crisis. If the family achieves a state of bonadaptation, it maintains its current problem-solving and coping strategies and little or no change is required. However, should the family reach the level of maladaptation, it is necessary for the family to rethink their current strategies and plan on new functioning patterns to achieve a healthy balance. In the event of this crisis

situation occurring, the family moves into the adaptation phase (McCubbin & McCubbin, 1996).

2.3.1.2 Adaptation phase

Various complex elements interact to predict the family's level of adaptation to a crisis situation. The family crisis situation results from an inability to adequately adjust to a stressor in the adjustment phase, and is exacerbated by the pile-up of strains on the family. Strains may be related to the family's particular life stage, for instance having a new-born baby in the house; or be unexpected stressors, such as losing their home to a fire. This accumulated stress impacts on the family's patterns of functioning (McCubbin & McCubbin, 1996).

McCubbin and McCubbin (1996) define five fundamental levels of appraisal during a family crisis, all of which are influenced by the ethnicity and culture of a family. These levels are stressor appraisal, situational appraisal, paradigms, coherence and schema, which will be discussed subsequently.

In the adjustment phase, the family's stressor appraisal plays a role in the process of achieving resilience. The stressor appraisal is the family's definition of the stressor and how they foresee it impacting on them. In the adaptation phase, however, it is the family's situational appraisal that has an impact on the process. Situational appraisal is the relationship between the way the family views the stressor and the capabilities that they believe they have. Paradigms are the "expectations and rules that are shared and adopted by the family unit to guide the family's development of specific patterns of functioning in specific areas of family life" (McCubbin & McCubbin, 1996, p. 42).

Coherence is understood to be “the motivational and appraisal bases for transforming the family’s potential resources into actual resources, thereby facilitating changes in the family systems, coping, and promoting the health of family members and the well-being of the family unit” (McCubbin & McCubbin, 1996, p. 42). This is the family’s view of the world as being comprehensible, manageable and meaningful (Antonovsky, 1979). The family schema is “a structure of fundamental convictions, values, beliefs and expectations” (McCubbin & McCubbin, 1996, p. 39). The family’s situational appraisal has an impact on the type of problem-solving and coping mechanisms that the family will use, and how effectively the family is able to use them. The family engages in problem-solving and coping behaviours to manage tension, reduce or eliminate stressors and acquire new resources. These behaviours in turn affect and are affected by the way in which the family views, makes use of, and is able to obtain resources (McCubbin & McCubbin, 1996).

The last aspect to consider in the adaptation sequence is family resources, which emanate from three potential sources, namely individual family members, the family unit and the community. One of the most important resources is social support, which appears in numerous forms, namely family, kin, and social and community support (McCubbin & McCubbin, 1996).

Again, the outcomes fall on a continuum bound on the positive side by bonadaptation, and on the negative side by maladaptation. In the event of bonadaptation, established patterns of functioning are largely maintained. In the event of maladjustment, on the other hand, when a crisis situation results it requires change within the family’s established functioning patterns so as to achieve harmony and balance (McCubbin & McCubbin, 1996).

From the above it is clear that family resilience encompasses the maintenance of internal conditions conducive to communication; the positive growth of its members; the unification of family bonds; formation and maintenance of social support outside of the home; and an attempt to minimise the impact of a stressor on the family (McCubbin et al., 1996). The indication of the degree to which the family is successful in doing so is evident in their level of adaptation (Lee et al., 2003).

Although DeHaan, Hawley and Deal (2002) agree that a family progresses through a series of stages in response to major stressors, they emphasise on that not all families go through the same stages or follow the same path. Some will skip stages, while others might vacillate between stages. Due to the different structural, interpersonal, social, socioeconomic, cultural and religious factors that interact with family processes over time, resilience presents itself in a unique manner in each family (Hawley, 2000).

The advantages of a family resilience approach is that it recognises that healthy families do not, by definition, have to be problem free and, therefore, allows for the identification of variables that promote efficient adaptation in the context of adversity. The reparative potential of all families is affirmed and families are recognised as having the potential to foster resilience and master their life challenges (Walsh, 2003).

2.4 OTHER RESILIENCE MODELS AND FRAMEWORKS

2.4.1 Cognitive Appraisal Model

According to this contextual model of resilience, adaptation involves a complex and dynamic process emphasising interaction between the individual and his/her

environment and includes periods of evaluating and re-evaluating the crisis situation (Drapeau, Samson & Saint-Jacques, 1999). These features are evident in the following definition of coping by Lazarus and Folkman (1984): “The constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands that are appraised as taxing or exceeding the resources of the person.” (p. 141).

According to Drapeau et al. (1999), Lazarus and Folkman focused on two evaluation episodes: primary and secondary evaluation. During primary evaluation, the individual examines and evaluates the situation to determine whether it is stressful or not, and also questions his/her degree of control over the situation. During secondary evaluation, assessment of the availability of resources, both personal and social, takes place. It therefore involves the attempts and strategies used of by the individual to achieve balance after crisis. Thus, how a crisis is handled depends vastly on whether or not it is perceived as stressful, if a degree of control is believed, and on the availability and accessibility of resources.

2.4.2 The Circumplex Model

The Circumplex model was developed in 1979 by Olson, Russel and Sprenkle to try and depict family functioning during crises by exploring the dimensions of cohesion and adaptation. According to them, 16 family types can be differentiated and a balance between cohesion and adaptation would be essential for marital and family functioning. Too much cohesion has a suffocating effect and too little cohesion may lead to disintegration of the family unit. When looking at adaptation, too much of it can lead to chaos and too little of it can lead to stringency in the family (Greeff, 2000).

Family cohesion is defined as the emotional bonding family members have towards each other. Variables within the model, which are relevant to cohesion, include emotional bonding, coalitions, space, time, boundaries, friends, decision making, interests and leisure. Family adaptation is defined as the family's ability to change their power structures, role relationships and relationship rules to change with regard to stressful situations as a result of developments within individual members and the family as a whole. Variables such as assertiveness, discipline, control and negotiation styles are characteristic of adaptation within this model. Communication is seen as a facilitating variable in families, though it may also inhibit families as they move between the two dimensions discussed above. Positive communication techniques are empathy, reflection, listening and supportive comments, whilst negative communication techniques involve mixed messages, double binding and critique (Greeff, 2000).

The circumplex model is dynamic, as it leaves room for change over the family's life cycle. Cohesion, adaptation and communication are identifiable as the three main dimensions of family functioning (Olson, Sprenkle & Russel, 1988).

2.4.3 A Process Model of Family Resilience

Walsh (2003) developed a framework which draws together findings from numerous studies, identifying and synthesising key processes within three domains of family functioning: family belief systems, organisation patterns, and communication processes. Table 2.1 is a representation of these key processes and will serve as an outline by which different family resilience characteristics will be discussed in Chapter 3.

Table 2.1

Key Processes in Family Resilience (Walsh, 2003, p. 406)

Domain	Key processes
1. Belief systems	<ol style="list-style-type: none"> 1. Make Meaning of Adversity <ul style="list-style-type: none"> ▪ View resilience as relationally based – vs. “rugged individual”. ▪ Normalise, contextualise adversity and distress. ▪ Sense of coherence: crisis as meaningful, comprehensible, manageable and challenge. ▪ Causal/explanatory attributions: How could this happen? What can be done? 2. Positive Outlook <ul style="list-style-type: none"> ▪ Hope, optimistic bias; confidence in overcoming odds. ▪ Courage and <i>en-courage</i>-ment; affirm strengths and focus on potential. ▪ Active initiative and perseverance (can-do spirit). ▪ Master the possible; accept what can't be changed. 3. Transcendence and Spirituality <ul style="list-style-type: none"> ▪ Larger values, purpose. ▪ Spirituality: faith, congregational support, healing rituals. ▪ Inspiration: envision new possibilities; creative expression; social action. ▪ Transformation: learning, change, and growth from adversity.
2. Organisational patterns	<ol style="list-style-type: none"> 4. Flexibility <ul style="list-style-type: none"> ▪ Open to change: rebound, reorganise, adapt to fit new challenges. ▪ Stability through disruption: continuity, dependability, follow-through. ▪ Strong authoritative leadership: nurturance, protection, guidance. 5. Connectedness <ul style="list-style-type: none"> ▪ Mutual support, collaboration, and commitment. ▪ Respect individual needs, differences, and boundaries. ▪ Seek reconnection, reconciliation of wounded relationships 6. Social and Economic Resources <ul style="list-style-type: none"> ▪ Mobilise kin, social and community networks; seek models and mentors. ▪ Build financial security; balance work/family strains.
3. Communication/problem solving	<ol style="list-style-type: none"> 7. Clarity <ul style="list-style-type: none"> ▪ Clear, consistent messages (words and actions). ▪ Clarify ambiguous information; truth seeking/truth speaking. 8. Open Emotional Expression <ul style="list-style-type: none"> ▪ Share range of feelings (joy and pain; hopes and fears). ▪ Mutual empathy; tolerance for differences. ▪ Take responsibility for own feelings, behaviour; avoid blaming. ▪ Pleasurable interactions; humour. 9. Collaborative Problem Solving <ul style="list-style-type: none"> ▪ Creative brainstorming; resourcefulness. ▪ Shared decision making; conflict resolution: negotiation, fairness, reciprocity. ▪ Focus on goals; take concrete steps; build on success; learn from failure. ▪ Proactive stance: prevent problems; avert crises; prepare for future challenges

In Table 2.1, three domains of family functioning are shown. The first domain centres on the family's belief systems. "Resilience is fostered by shared facilitative beliefs, which increase options for problem resolution, healing, and growth" (Walsh, 2003, p. 407). Walsh (2003) further explains and states that families view adversity as a shared challenge, and that by normalising and contextualising the stressful situation, families try and make meaning of their obstacles. Families, thus, try to gain a sense of coherence by redefining a situation as comprehensible, manageable, and meaningful to tackle. Walsh (2003) also advocates the importance of having a positive outlook the face of adversity, and states: "Hope is to the spirit what oxygen is to the lungs: It fuels energy and efforts to rise above adversity" (p. 408). Lastly, in relation to this first domain, Walsh emphasises the importance of transcendent beliefs in becoming resilient. She quotes studies by Werner and Smith, among others, who have found that spiritual resources such as deep faith, rituals and ceremonies, practices such as prayer and meditation, and religious/congregational affiliation are an integral part of families overcoming their adversity.

The second domain illustrated in Table 2.1 is family organisational patterns. Walsh (2003) states that, in modern-day society with its diverse forms and challenges, resilience is fostered by flexible structures, connectedness (cohesion), and economic resources. Looking at the core of the meaning of resilience, to "bounce back" or, more appropriately, "bounce forward" after crisis, being flexible is seen as essential to family functioning, as it allows the family to change as their environment changes around them. Resilience is also strengthened by mutual support, collaboration and commitment and, at the same time, by family members who respect each other's differences, separateness, and boundaries. Walsh

(2003) refers to this as the family's connectedness. Furthermore, kin and social networks are vital during crisis situations, as they offer practical and emotional support. This includes role models and mentors for the youth, strong friendships, involvement in community groups and religious congregations, and also financial security.

The last domain shown in Table 2.1 is communication/problem-solving processes. Walsh (2003) believes these processes foster resilience by bringing clarity to crisis situations, encouraging open emotional expression and fostering collaborative problem solving. As different people tend to view things differently, especially during a crisis, clarifying and sharing crucial information about the crisis situation is seen as essential to eradicate ambiguity, secrecy and misunderstandings, which may block effective problem-solving behaviour (Walsh, 2003). Sharing of emotions during a time of crisis provides an outlet for intense feelings that may also block productive family functioning and lead to chronic stress. Lastly, collaborative problem solving and conflict management are vital in achieving family resilience. Creative brainstorming, shared decision making and conflict resolution encourage families to find their own way through adversity that fits the situation, their cultural orientation, and their personal strengths and resources (Walsh, 2003).

In conclusion, Table 2.1 highlights a need for adjustment in three domains when a family strives for resilience after a crisis: (i) the family's belief system; (ii) the way the family organises itself to seek various resources; and (iii) the family's patterns of communication and their problem-solving abilities.

2.5 SUMMARY

Family resilience represents a salutogenic approach, emphasising a family's strengths rather than its weaknesses (Antonovsky, 1979). It can be defined as a family that is responding positively and prospering in the face of adversity in order to adapt and adjust to a crisis situation (Hawley & De Haan, 1996). Although different models have been developed in an attempt to focus on why some families prosper and others do not, the Resiliency Model of Family Stress, Adjustment and Adaptation, developed by McCubbin & McCubbin (1996), is used in this study to explain the process families go through during crises and highlights the various factors associated with a positive or negative outcome. In the next chapter, the focus will be on research conducted to investigate various family resilience characteristics.

CHAPTER 3

LITERATURE REVIEW

3.1 INTRODUCTION

Not much research has been conducted on family resilience and its relation to the impact of a devastating fire on the family's adaptation thereafter. However, some authors have written extensively on community, social and individual resilience and the relationship of this aspect to normative as well as non-normative stressors. Amongst the topics explored include that of resilience in single-parent families (Greeff & Ritman, 2005), adolescent drug abuse, parental substance abuse (Sandau-Beckler, Devall & De la Rosa, 2002), and death in the family (Greeff & Human, 2004).

Literature also exists on resilience and chronic illness within the family (Shapiro, 2002), after the birth of a first child with disabilities (Hartshorne, 2002), domestic violence (Kragh & Huber, 2002), work and family conflict (Bass & Grzywacz, 2003) as well as poverty, economic hardship and inequality (Seccombe, 2002). Parenting skills (Schwartz, 2002), a member of the family changing religion (Roer-Strier & Sands, 2001) and resilience within lesbian and gay couples (Green, 2004), have also been focused on.

In these and other similar studies, researchers have identified a number of resiliency characteristics that were present in families who overcame their adversity. According to Cole, Clark and Gable (2001), the ability to adapt, appreciation, clear roles, attachment to the family, communication, family and community ties, motivation and shared time are the determining factors in family

resilience. A study by Greeff (2000) also revealed that pride in the family, trust in the family and loyalty towards each other within the family unit helped in dealing with developmental changes and crises successfully.

Studies on family relocation and resilience may perhaps offer the closest commonalities with families who have lost their homes in a shack fire. A study by Kemp (2000), focusing on the relocation of American families and the resilience factors present in those families, found that the following six resilience characteristics helped the families to adapt to their new environment: (i) humour; (ii) creativity; (iii) tolerance for change; (iv) progress perspective; (v) understanding expectations; and (vi) family support.

A qualitative study based on the perception of Israeli women in families who had experienced a crisis in that specific year reveals components underlying the concept family resilience (Cohen, Slonim, Finzi & Leichtenritt, 2002). The types of crises varied and included sudden death, death in hostile acts, illness, work accident, and divorce. The study was based on the analysis of 15 semi-structured interviews using grounded theory methods. All informants were mothers of children younger than 18 years. The interviews took place at the participants' homes, and were conducted in Hebrew. The informants were asked to describe the process of how they overcame their crisis and their perception of their family resilience. The participants defined the concept of family resilience in terms of interpersonal relationships. These interpersonal relationships were characterised by the participants' aptitude to share painful feelings, their ability to provide a sense of caring and their ability to undergo a transition from focusing on "myself" to focusing on the "other". Five main categories were identified as capturing the women's perspectives and definitions of the resilience concept: (i) expressiveness

– self-disclosure; (ii) connectedness; (iii) flexibility; (iv) optimism – positive outlook; and (v) family values in interpersonal interactions. The women indicated expressiveness and self-disclosure as empowering features of their families (Cohen et al., 2002).

A study by Greeff and Holtzkamp (2007) investigated the prevalence of resilience in migrant families. They used a combined cross-sectional survey research design and qualitative analysis to identify and describe family resilience factors. A total of 68 White middle and upper socioeconomic South African families completed self-report questionnaires. A parent and an adolescent child were the family representatives. They found (i) traits and abilities of individual family members, (ii) the family system's internal resources and support, (iii) familial integration and stability, (iv) the family unit's utilisation of its internal strengths and durability to manage problems outside of its boundaries, (v) social support, and (vi) a passive appraisal coping style in the midst of the crisis as important resilience-enhancing resources. Intrafamilial assistance, such as emotional and practical support among the family members, was reported as the primary resource that helped the families cope with relocation (Greeff & Holtzkamp, 2007).

Silberberg (2001) describes a study that took place, under the guidance of John DeFrain of the Family Action Centre, who initiated the first Australian Family Strengths Research Project in 1999. The aim of this project was to determine which qualities Australian families perceived as family strengths, and the language families used to describe these qualities. The Australian Inventory of Family Strengths and a Family Strengths Survey were developed that consisted of 85 strength statements to which the respondent indicated the degree to which he or she agreed with the statement. The survey included 14 open-ended questions

inviting the respondents to write stories and provide their views on a range of issues relating to family strengths. The participants were asked to fill out the inventory and/or survey, or alternatively to participate in an interview: 605 volunteers filled out the Australian Inventory of Family Strengths, 177 completed the Family Strengths Survey, and 33 families participated in an interview. The majority of the respondents (60% to 100%) agreed with the 85 statements. As many as 98 to 100% agreed with 33 of the 85 statements. Examples of these statements were: *We feel strongly connected to each other; We allow each other to be ourselves; We enjoy simple inexpensive family activities; It is easy to share our values and ideas with each other; We love one another; We often laugh with each other; We enjoy helping each other.* Both quantitative and qualitative findings (inventories and interviews) were integrated into a framework, named the Australian Family Strengths Template, which is founded on eight qualities. These qualities are communication, togetherness, sharing activities, affection, support, acceptance, commitment, and resilience (Silberberg, 2001).

Walsh (1996) promotes a systematic view of resilience, in accordance with many studies that have proven that strong relationships strengthen resilience. According to her, the basic elements of resilience are the following: flexibility, cohesion, open communication, problem solving and belief systems. Factors contributing to family resilience will now be discussed, using Walsh's Framework of Key Processes in Family Resilience as a guideline (see Table 2.1).

3.2 FACTORS CONTRIBUTING TO FAMILY RESILIENCE

3.2.1 Belief Systems

According to Walsh (2003, p.407), “Resilience is fostered by shared facilitative beliefs that increase options for problem resolution, healing, and growth. They help members make meaning of crisis situations, facilitate a hopeful, positive outlook, and offer transcendent or spiritual connections”. The following resilience characteristics describe various studies and findings on the importance of belief systems during the process of resilience.

3.2.1.1 Cognitive appraisals

As mentioned before, Antonovsky (1979) pointed to a sense of coherence as being essential to coping with stressful situations. A family’s sense of coherence may be defined by that family’s view of life as understandable, controllable and meaningful. According to Antonovsky and Sourani (1988), a strong sense of coherence in families establishes a trust in their ability to clarify a crisis. It promotes stability and helps families to reach higher levels of family organisation and adaptation during a crisis.

Hawley (2000) states that the way a family defines a crisis could have a significant influence on how they deal with it. A negative evaluation of circumstances could lead to self-loathing and emotions such as anger, sadness, and anxiety, whilst positive evaluations could result in personal growth and the acquisition of good coping skills (Rotenburg, Kim & Herman-Stahl, 1998).

Rutter (1985) explains that the coping strategy a person makes use of is not as important as the fact that they act proactively instead of simply reacting to or taking a passive stance towards the problem. According to Walsh (2003), merely

having a proactive approach to dealing with the crisis serves as a protective factor in itself. Lazarus and Folkman (1984) described cognitive appraisal as a mediating factor within the stress response process. They suggested that the two main components of the cognitive process during times of crisis are primary appraisal (evaluation of the stressful situation) and secondary appraisal (evaluating resources in the environment).

Drapeau et al. (1999) identified family members' perception of control over a crisis situation as one of the main factors to come to the fore in resilience research. They define perception of control as the belief family members have that they are capable of determining their own emotional state and behaviour and that they have an effect on the environment surrounding them, just as that environment has an effect on them. Thus, an individual's belief in his/her ability to handle a crisis situation also leads to a proactive strategy for efficient problem solving (Mazur & Wolchik, 1999).

3.2.1.2 Spirituality

Religion is organised religious orientations with mixed values and beliefs and affiliation to religious communities (Wright, Watson & Bell, 1996). Walsh (2003) describes spirituality as "spiritual nourishment outside formal religion, such as through deep personal connection with nature, music, or a higher power" (p. 410). According to Hawley (2000), spirituality is an important factor in the resiliency of families. It is a common predictor of resiliency and adaptation throughout the family's life cycle (Parrot, 1999; Reed & Sherkat, 1992). Religion or spirituality is an essential form of resilience, as it provides families with the aptitude to understand or to grasp, and in so doing prevail over stressful situations (Angell, Dennis & Dumain, 1998).

Support from the congregation may especially be of help during a crisis. Reed and Sherkat (1992) report that attending church services significantly lowers depression, as it increases the self-esteem of individuals. As these results were only found when church attendance increased social integration between congregation members, it is questioned whether social support may also be identified as a resilience factor in this instance.

Park and Cohen (1992) reported that religion as a coping mechanism resulted in a decrease in the level of stress of respondents. In agreement with this is a study by Frantz, Trolley and Johll (1996) that reported that 77% of participants communicated that their religious and spiritual beliefs played a significant role in relation to positive coping and that it was an immense help throughout the bereavement process.

A study by Greeff and Loubser (2008) with Xhosa-speaking families shows spirituality to be a vital coping resource that contributes to the resilience of the families in times of crises. The core theme of spirituality consists of six relating categories, which facilitate the successful adaptation of the participating families after a crisis. These categories are gifts from God; God and the Holy Spirit as the pointers of direction; God's works; God's plan; prayer; and faith (Greeff & Loubser, 2008).

3.2.1.3 Optimism

Carver (1998) states that acceptance of a problem and the restructuring thereof in positive ways may lead to favourable coping strategies during a crisis situation. Horwitz (1998) says that having a positive view of experiences is relational to having future positive experiences where it may have been absent as a result of

the dimness caused by the crisis. According to Morrison (1995), families who see themselves as happy, are happy. These families tend to talk openly about negative experiences and feelings and concentrate on growth and development, with a shared outlook towards the future.

3.2.1.4 Coping mechanisms

Pearlin and Schooler (1978) define coping as the behaviour (or mechanism) that individuals exhibit in order to impede the damage caused by stressors. It is thus a means to prevent any emotional discomfort caused by crisis in order to feel more in control of the situation. According to Carver (1998), coping mechanisms may be either personal or contextual. Lazarus and Folkman (1984) view coping as cognitive and behavioural efforts that give family members the opportunity to cope with, escape and decrease stress.

Problem-solving coping mechanisms focus on changing the situation (approach-withdrawal model), whereas coping strategies that incorporate negative emotions focus on decreasing psychological discomfort and avoiding the situation (problem-emotion model). Strategies for problem solving are integral to decreasing stress and promoting resilience (Lazarus & Folkman, 1984). Effective coping mechanisms may thus serve as a buffer against the effects of stress.

3.2.1.5 Humour

Hawley and DeHaan (1996) state that humour may also be considered as having a buffering effect on stressful situations. As mentioned previously, studies by Kemp (2000) have identified the importance of humour, as it leads to a release of stress during crisis. Tommasone and Tommasone (2000), in their study on the effects of autism on family functioning, report that families who maintain a sense of

humour in order to mediate stress, also maintain a sense of perspective with regard to the disorder of their child.

3.2.2 Organisational Patterns

Walsh 2003 states that “in family organisation, resilience is bolstered by a flexible structure, connectedness (cohesion), and social and economic resources” (p.410)

The following six resilience factors fall under this domain and examples of research are given for each.

3.2.2.1 Social support

A large amount of research focuses on the social support received while dealing with a traumatic experience and the role that social support plays in the ability of families to survive trauma (Carver, 1998; Rutter, 1985). Mothers who have an extensive network of friends appear to cope more successfully and to be more effective in parenting (Wahler, cited in Harris & Powers, 1984).

Isolation and a lack of social support and community ties make coping with a crisis harder to deal with, as family members, good friends and social networks are able to provide both practical aid and community services. Community services provide information, services, support and, most importantly, a sense of security and solidarity (Picard, Lee & Hunsley, 1997; Walsh, 1998). Community activities such as taking part in leisure clubs, outreach programmes, and church activities foster individual and family wellbeing (Reed & Sherkat, 1992).

Studies by Reed and Sherkat (1992) found that the opportunity for the use and the quality of social understanding could increase self-esteem significantly and lower the possibility of depressive feelings. According to Dumont and Provost (1998), social support is a multidimensional concept, and a distinction can be made

between receiving support (instrumental, informative, emotional) and supportive resources (friends, family, strangers). Cohen and Willis (cited in Dumont & Provost, 1998) suggested two models to explain social support as a protective factor during a crisis

- (i) *Principal effect model*: Social support that gives a general positive context to individuals and family, without considering the real experience of the crisis.
- (ii) *Stress-buffering effect*: Social support that buffers the impact of the stressful situation on the individuals and the family.

Valentine and Feinauer (1993) found that relationships outside of the family are critical to overcoming stressful situations. Extended family members are an important post-traumatic coping mechanism and the availability of adequate social support, e.g. friends, neighbours, teachers or mentors, has an important stress-buffering effect. Studies by Kincaid and Caldwell (1995) on the causes, consequences and ways of coping with regard to adaptation reveal that social support is definitely related to a decrease in stress as well as the way the stress is manifested.

Barrera (1986) was one of the first authors to suggest that there is increasing evidence that social support is a complex entity and not always positive for the recipient. In agreement with this, Todd and Worell (2000) mention that social networks sometimes may be something of a double-edged sword, especially in the case of impoverished women. Even though a social network provides vital aid and emotional support, it can also be associated with worry and frustration. They explain that women with a low income often do not have freedom of choice with

regard to whom they socialise with, and that most of the members of their social network probably also lead stressful lifestyles.

3.2.2.2 Hardiness

McCubbin and McCubbin (1996) see hardiness as a source of adaptation. According to them, hardiness refers to the family unit's internal strengths and ability to handle a crisis. Hardiness is characterised by a feeling of control over life events and seeing change as a positive challenge, and it is an active rather than passive orientation with regard to adjusting to and coping with stressful situations. This highlights the family's commitment to being active and to persevere in times of crisis.

Hardiness is strongly linked to family coherence. As Lazarus and Folkman (1984) state, when in crisis, the family's resilience is strongly influenced by the family's sense of control over the situation. Walsh (1998) describes resilience as a process and states that, although families may not be able to control the outcome of their actions, they can actively work towards solving their problems and find meaningful ways to achieve resilience. This is characteristic of families who show commitment during crisis.

Walsh (1998) also describes resilient families as those who see their mistakes and failures as experiences to learn from, rather than letting these experiences hold them back. They view their mistakes as a result of their shortcomings and believe that these shortcomings can be overcome. This is in contrast to non-resilient families, who believe that they cannot overcome their faults. This is strongly linked to the challenge component of the concept of hardiness.

3.2.2.3 Socio-economic status (SES)

The assumption of many scholars and laymen is that, when a family's environment is healthy and ideal, that family will prosper (DeHaan & MacDermitt, 1998). More often than not, the environments of families who stay in informal settlements are far from ideal. According to Mohamed (2006, p. 36):

Informal settlements normally experience low levels of services and infrastructure such as water, sanitation, electricity, roads, drainage, schools, health centers, market places, etc. Water supply, for example, to individual households in informal settlements may be absent completely, or available from few public or community standpipes. In addition, the informal nature of these settlements does not only deprive communities living in them from their fair share of the urban services and amenities, but also affects the political status of these communities.

A study by Murry and Brody (1999) has found that children with parents of low socio-economic status perform poorer at school and have more social and cognitive problems than children from working and higher classes. Families with low income also tend to experience more stressful life events and social isolation. These circumstances may lead to parental depression, which in turn may result in the parents' heightened conflict with and estrangement from their children (Murry & Brody, 1999).

Although SES can be caused by a variety of factors, the most evident of these is education (Coleman, 1998). The parents' level of education greatly determines the type of social support and friendships acquired, as the family's support network usually comprises those with the same educational and socio-economic status as themselves (Baer, 1999).

According to Luthar and Zigler (1991), socio-economic status is not related with low resiliency. It has been found that children from a low SES background have the ability to adapt to their circumstances and do not seem to be any different from their advantaged peer group (Garmezy, cited in Luthar & Zigler, 1991).

According to Conger and Elder (1994), family structure and socio-economic status are important determining factors in resilience, as they are linked to the family's ability to control and support the children and other family members during times of crisis and developmental changes.

3.2.2.4 Culture/ethnicity

In a study by Baer (1999) on ethnic differences within family processes, the family's ability to monitor and control an adolescent was investigated. It was found that more similarities than differences existed in the family processes (family conflict, communication and family cohesion) that were identified in the three ethnic groups. As mentioned in Chapter 2, McCubbin and McCubbin (1996) defined five fundamental levels of appraisal that are influenced by an individual's culture and ethnicity during a crisis: stressor appraisal, situational appraisal, paradigms, coherence and schema. Mvududu and McFadden (2001) also list culture and ethnicity as among the factors that have an influence on how people perceive their environment and consequently what they identify as resources.

3.2.2.5 Nature of parental relationship and parenting skills

Children prosper in families where good relationships with both parents are fostered. During divorce, the children who adapt better are those who are not exposed to parental conflict, whose parents do not badmouth each other and where a good relationship exists with at least one parent (Barnes, 1999).

The administration of rules, high levels of parental control and good, balanced discipline serve as protective factors for families and promote parents' views of their efficacy as caregivers (Murry & Brody, 1999). Good parent-child relationships serve as a buffer during stressful situations, as this social skill learnt at home may be used at school and in the community to help gain social support (Shaw, Winslow & Flanagan, 1999).

Braithwaite and Gordon (cited in Luthar & Zigler, 1991) found that children's aptitudes were influenced more by what their parents did in their interaction with them rather than what these parents did in terms of occupation, income and other sociodemographic variables.

Whiteside (1998) points out the importance of the nature of parental relationships on the development of their children's consequential functioning within the family. An important aspect that is highlighted in his work is the influence of conflict between parents on their children. Families with high co-operation and low conflict between the parents show the best adaptation. Walsh (1996) agrees with Whiteside on the importance of the nature of parental relationships as a resilience factor. She mentions key elements of the parental relationship that may be highlighted for family resilience after a crisis: (i) admitting and sharing the consequences of the results of loss, (ii) open communication for sharing experiences, (iii) admitting that the family is still an existing structure, and (iv) the family's ability to invest in other relationships and life goals (Walsh & McGoldrick, cited in Walsh, 1998).

3.2.2.6 Family environment

Families with a supportive home environment, a high degree of cohesion and expressiveness, as well as a dynamic recreational orientation, are more likely to adapt successfully to a crisis and foster more accepting and competent relationships with both children and spouses (Bristol, 1984). In addition, Dyson, Edgar and Crnic (1989) reported that such families are characterised by less behavioural problems and greater social competence.

3.2.3 Communication/Problem Solving

According to Walsh (2003, p.413), "Communication processes foster resilience by bringing clarity to crisis situations, encouraging open emotional expression and fostering collaborative problem solving". Research depicting the impact of communication on family functioning will now be discussed.

3.2.3.1 Communication

Sharing traumatic experiences enhances both immediate as well as long-term adaptation for family members and strengthens the family unit (Walsh, 1998). Walsh is further of the opinion that clear, open and direct communication between family members, empathy for every member's position, conflict tolerance and readiness to deal with differences that may arise, are all important factors that promote family resilience and strengthens the family as a supportive network for its members (Walsh, 1998).

Werner and Smith (cited in Murry & Brody, 1999) found that a differentiation could be made between resilient and less resilient children on account of healthy family communication, in other words, communication that is clear, accurate and thorough, combined with positive relationships between children and parents.

According to Barnes et al. (1989), healthy family communication indeed promotes and fosters healthy family functioning in itself, which reflects the interpersonal situation of the family and which is significantly related to the family's success in dealing with stress and crises during developmental changes.

Boss (1992) states that “[w]hen family members cannot obtain clear facts surrounding their loss, the system is frozen ... structural reorganisation is blocked; systemic boundaries cannot be maintained” (p. 159). Open and clear communication during stressful times is thus vital in order to eliminate doubt and misperceptions, which lead to stunted growth in achieving healthy family functioning.

3.3 SUMMARY

The abovementioned characteristics highlight how families make use of various resources, both within the family unit, as well as in their environments. These resources include the family's belief systems, organisation patterns, and communication processes. Some of the resiliency characteristics mentioned are: spirituality, hardiness, social support, a positive outlook, open communication and the availability of resources. As the aim of this study is to determine whether or not families who have lost their homes in a shack fire also utilise these resilience factors, the next chapter will look at the methodology employed to reach the objectives set for the project.

CHAPTER 4

METHODOLOGY

4.1 INTRODUCTION

This chapter focuses on the methods employed during the course of this study. The discussion will centre on the research design, a description of the participants who took part, the measuring instruments used, the procedures followed, as well as the types of data and statistical analyses utilised.

4.2 RESEARCH DESIGN

This study was conducted from a mixed methods approach and made use of a cross-sectional survey research design. Neuman (2003) explains that when multiple measures are used to explore the same phenomena in social research, the design is referred to as triangulation. Quantitative data were collected through the use of various existing measuring instruments based on the Resiliency Model of Stress Adjustment and Adaptation (McCubbin et al., 1996). Qualitatively data were obtained by asking an open-ended question.

4.3 PARTICIPANTS

The area identified for the study was in the Kayamandi township just outside of Stellenbosch in the Western Cape. Zone A, as the area is referred to by locals, burnt down on 10 November 2005 in a fire known to rescue workers as “Die Groot Brand” (the Big Fire) (B Brandsen, personal communication, 8 May 2007). After having lost their homes in this fire, the families rebuilt their shacks at the same location. These residents served as the study population. The criteria followed for the selection of participants were as follows:

- Families should have lost their homes in the fire on 10 November 2005
- Families should have at least one child living with them

Forty datasets were collected, of which two were excluded from the analysis because they did not fit the selection criteria. Table 4.1 provides a representation of the demographics of the families that took part in this study.

Table 4.1*Biographical Information of Participants in Study (N = 38)*

Variable	Classification	Frequency	Percentage
Gender	Male	7	18%
	Female	31	82%
Education level of family representative	None	2	5%
	Grade 1 to 6	8	21%
	Grade 7 to 9	12	32%
	Grade 10 to 12	16	42%
Employment status of family representative	None/homemaker	28	73%
	Part time	1	3%
	Employed	9	25%
Marital status	Single	8	21%
	In relationship	20	53%
	Married	10	26%
Number of people in dwelling	Three	8	21%
	Four	19	50%
	Five	4	11%
	Six	6	16%
	Seven	1	3%
Number of children in dwelling	One	14	37%
	Two	16	42%
	Three	4	11%
	Four	4	11%
Combined family income per month	Less than R500	5	13%
	R501 – R1000	26	68%
	R1001 – R1500	3	8%
	R1501 – R2000	1	3%
	R2001 – R2500	1	3%
	R2501 – R3000	0	0%
	R3001 – R3500	2	5%
Home language	Xhosa	36	95%
	Sesotho	2	5%

From Table 4.1 it follows that most of the family representatives were female (82%). Forty-two percent of the participants had reached Grades 10 to 12. Given the time of the day that data gathering took place (early mornings until mid-

afternoon), a great majority of the representatives were homemakers (73%). Three percent were employed part time and 25% full time. Fifty-three percent were in a relationship, 26% were married and 21% indicated that they were single.

Fifty percent of the participating families had four members. With regard to the number of children living in the home, 42% of the households had two children and 37% had one child. Most families earned between R501 and R1000 per month (68%), and 13% earned less than R500. Ninety-five percent of the participants were Xhosa speaking and 5% were Sesotho speaking, although they were also fluent in IsiXhosa.

4.4 MEASURING INSTRUMENTS

A stressor interacts with family vulnerability, which in turn impacts on the family's functioning (see Figure 2.3, Chapter 2). The family's resources and the family's appraisal of the stressor interact with the family's problem-solving and coping strategies to produce an outcome (maladaptation or bonadaptation). As a family strives for adaptation, one of the most important resources that can be identified is support, which appears in numerous forms, namely family, kin, and social and community support (McCubbin & McCubbin, 1996). The degree to which the family is resilient is evident in their level of adaptation. Therefore, when administering the following quantitative measures, the Family Attachment Changeability Index 8 (FACI8), which measures family adaptation, was used to measure the dependent variable, and the other variables were considered to be independent variables. All the questionnaires had been used extensively in previous research projects in South Africa and were available in English, Afrikaans and Xhosa.

4.4.1 Biographical Questionnaire

A biographical questionnaire was designed to collect information on family composition, marital status, duration of the parental relationship, age and gender of family members, level of education, employment, income and home language. An open-ended question was also included in the biographical questionnaire. The question was: "What has/had helped your family survive and rebuild your lives after having lost your home in the fire?"

4.4.2 The Family Hardiness Index (FHI)

The Family Hardiness Index (FHI), which was developed by McCubbin, McCubbin and Thompson, was used to measure the characteristic of hardiness, which specifically refers to the internal strengths and durability of the family unit. Family hardiness is further characterised by a sense of control over various events and difficulties. The FHI is a five-point Likert-type scale consisting of 20 items, which are divided into three subscales, namely commitment, challenge and control. The commitment subscale measures the family's sense of dependability, their internal strengths and their ability to work together. The challenge subscale assesses the family's attempts to experience new things and to learn, to be innovative and active. Finally, the control subscale measures the family's view of being in control of their family life as opposed to being shaped by outside events and circumstances (McCubbin et al., 1996). The overall internal reliability of the scale is .82 (Cronbach's alpha), while the internal reliabilities for the three subscales (commitment, challenge and control) are .81, .80, and .65 respectively. The validity coefficients range from .20 to .23 with regard to the variables of family satisfaction, time and routines, and flexibility (McCubbin et al., 1996). The Cronbach alpha

values obtained in this study were .67 for the total scale, and .62, .34 and .82 for the challenge, control and commitment subscales respectively.

4.3.3 The Social Support Index (SSI)

The Social Support Index (SSI) was developed by McCubbin, Patterson and Glynn to determine the extent to which families find support in the communities in which they live (McCubbin et al., 1996). The SSI is a 17-item scale, which makes use of a five-point Likert scale, and was included to measure community integration, as well as the family's utilisation of community resources for emotional support, esteem support and network support. This instrument has an internal reliability of .82, a test-retest reliability of .83, and a validity coefficient of .40 with the criterion of family wellbeing (McCubbin et al., 1996). A reliability analysis of the data in this study yielded a Cronbach alpha value of .91.

4.4.4 The Relative and Friend Support Index (RFSI)

The Relative and Friend Support Index (RFSI) was developed by McCubbin, Larsen and Olson and was used to measure the degree to which families use relative and friend support as a coping strategy to manage stressors and strains (McCubbin et al., 1996). This scale consists of eight items relating to sharing problems or seeking advice from neighbours or relatives, each requiring a response on a five-point Likert rating scale (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree). The scale has a validity coefficient (correlation with the original Family Crisis Oriented Personal Evaluation Scales (F-COPES)) of .99 (McCubbin et al., 1996), and the Cronbach alpha reliability measured in the present study was .79 (Cronbach's alpha). The internal reliability (Cronbach's alpha) of the RFSI is .82.

4.4.5 The Family Crisis Oriented Personal Evaluation Scales (F-COPES)

The Family Crisis Oriented Personal Evaluation Scales (F-COPES) was developed by McCubbin, Olson and Larsen to distinguish problem-solving and behavioural strategies used by families during times of hardship. F-COPES draws upon the coping dimensions outlined in the Resiliency Model of Family Stress Adjustment and Adaptation, which integrates the factors of pile-up, family resources and meaning/perception. It comprises 30 items centred around coping behaviour and focuses on two systemic levels of interaction. These levels include (i) the individual and the family system, or ways in which the family handles difficulties among its members internally, and (ii) the family and the social environment, which includes the ways in which the family manages crises that affect the family unit and its members, but emerge outside its boundaries. It is assumed that when families possess coping behaviours that focus on both levels of interaction, they will adapt more successfully to stressful situations.

The F-COPES is a five-point Likert-type scale (Never = 1, Seldom = 2, Sometimes = 3, Frequently = 4, Always = 5) consisting of five subscales grouped into two dimensions, namely internal and external family coping strategies. Internal coping strategies refer to the way in which individual family members use resources within the family to manage difficulties. Such strategies consist of (i) redefining or reformulating the problem in terms of the meaning it has for the family in order to make it more manageable (Cronbach's alpha = .64) and (ii) passive evaluation, which involves passively accepting the problem and doing nothing about it (Cronbach's alpha = .66). External coping strategies are the behaviours the family engages in to obtain resources outside the family system. These strategies include (i) spiritual support, including the family's ideology in dealing with hardships, its

involvement in religious activities, as well as its ability to acquire such support (Cronbach's alpha = .87); (ii) the family's ability to acquire social support in terms of friends (Cronbach's alpha = .74), extended family (Cronbach's alpha = .86) and neighbours (Cronbach's alpha = .79) and (iii) mobilising the family to acquire community resources and accept help from others (Cronbach's alpha = .70). The F-COPES total scale has an internal reliability coefficient (Cronbach's alpha) of .77 and a test-retest reliability (Cronbach's alpha) of .71 (McCubbin et al., 1996). The internal reliability coefficients derived from the data in this study are .50 (passive evaluation), .72 (redefining the problem), .66 (spiritual support), .70 (social support), and .53 (mobilising community resources).

4.3.6 The Family Problem Solving and Communication Scale (FPSC)

The Family Problem Solving and Communication Scale (FPSC), developed by McCubbin, McCubbin and Thompson, was employed to evaluate the two predominant family communication patterns that play an important role in a family's coping (McCubbin et al., 1996). Due to the fact that all families have both positive and negative communication patterns, it is essential to measure both patterns as important factors in family problem solving and resiliency. It is assumed that the quality of the communication within the family provides a good indication of the degree to which families manage tension and strain and obtain a satisfactory level of family functioning, adaptation and adjustment (McCubbin et al., 1996). The FPSC is a 10-item scale with a Likert-type format. It consists of two subscales, namely incendiary communication and affirming communication. The positive communication subscale, affirming communication, refers to the type of communication that diffuses a situation by conveying caring. For example: "When our family struggles with a conflict which upsets us, we try to stay calm and talk

things through.” The negative communication subscale, incendiary communication, focuses on communication that exacerbates a conflict situation. For example: “When our family struggles with a conflict which upsets us we scream at each other.” The alpha reliability of the total scale is .89, with alpha reliabilities of .78 and .86 for incendiary communication and affirming communication respectively. The test-retest reliability for the subscales, as well as for the overall FPSC, is .86 (McCubbin et al., 1996). The reliability coefficients obtained for this study are .83 for incendiary communication, .87 for affirming communication, and .90 for the total scale.

4.3.8 The Family Attachment Changeability Index 8 (FACI8)

The Family Attachment Changeability Index 8 (FACI8) was adapted by McCubbin, Thompson and Elver. This instrument is an ethnically-sensitive measure of family adaptation and functioning. The scale was used to measure the degree to which the family has adapted. It represents the dependent variable against which all other independent variables were correlated in order to determine whether they can be identified as resilience factors (McCubbin et al., 1996).

The FACI8 is a 16-item Likert-type scale consisting of two subscales, namely attachment and changeability. The attachment subscale measures the strength of the family members’ attachment to one another, while the changeability subscale determines the degree to which family members are flexible in their relationships with each other. The internal reliability of the scale as well as the two subscales (Cronbach’s alpha) varies between .73 and .80 (McCubbin et al., 1996), while the obtained alpha values for the total scale, attachment subscale and changeability subscale in this study were .75, .79 and .85 respectively.

4.5 PROCEDURE

4.5.1 Practical Data Gathering

Members of the Kayamandi community were incorporated as fieldworkers (two males who are fluent in English, Xhosa and Sesotho and who are both students at tertiary level) to identify participants and establish rapport with the families. After obtaining informed consent from the families, the data-gathering process started. These fieldworkers, along with one research assistant (Honours Psychology student), took part in work sessions that provided training and information on the study, the questionnaires, interviewing skills and the culture of the participants. The sessions were held prior to data gathering and the feedback and suggestions of the two Xhosa-speaking fieldworkers were very valuable. The fieldworkers were especially valuable in translating information and communication from the participants, for example, responses recorded to the open-ended question. The fieldworkers also served as a resource for families during the interviewing process to clear up any vagueness or uncertainty.

The data-collection team consisted of two pairs: a Xhosa-speaking fieldworker and a fieldworker with a BPsych degree. They introduced themselves to each of the families living in the identified area. After introduction, a detailed description was provided of the purpose of the study and how the interview would be conducted. The families were given the opportunity to ask questions if they had any. Ethical issues were discussed during this time. These ethical issues were:

- At all times and during all aspects of this study, the participants would be guaranteed confidentiality and privacy
- They retained the right to anonymity with regard to their identities and all information they provided

- Informed consent would be a prerequisite to participation in the study
- All participants would take part on a voluntary basis and were not being forced to do so

The participants were also informed they may quit the study at any time, should they feel the need to do so.

Where families were unable to complete the questionnaires at a particular time, an appointment was made with the family for a date and time that best suited them. The questionnaires were completed by the individual elected by the family to do so. In most cases, this individual was a mother who identified herself as a homemaker.

The first step in gathering the data involved the completion of the biographical questionnaire. Secondly, the qualitative aspect of the study, consisting of an open-ended question, was undertaken. The qualitative question and the participant's response to it were recorded in the language the participant was most comfortable in. Finally, the participants were requested to complete the questionnaires in order to complete the quantitative data-collection phase of the study. Each family received a gift voucher for participating in the study. The completion of the questionnaires took approximately 40 to 60 minutes.

4.5.2 Scoring of Questionnaires

Once the data had been collected from the various participants, scoring of the questionnaires began. Firstly, all the questionnaires, along with the biographical data, were checked for completeness. In the scoring of the biographical data, it was decided to convert the answers provided by the participants to numbers. This

was done in order to make the process of entering the data into the Microsoft Excel spreadsheet easier and to facilitate the statistical analysis of the data. Following this, all the data were entered into a Microsoft Excel spreadsheet. The responses to all items of the other questionnaires were entered into an Excel spreadsheet, where the questionnaires were scored according to already established formulae. Once the data had been recorded in the data files, the statistical analyses could be undertaken.

4.6 DATA ANALYSIS

4.6.1 Qualitative Analysis

Before the data were analysed, the two Xhosa-speaking fieldworkers used in the interviews converted the digital recordings into text format (pen on paper), and this was later typed in a Microsoft Word document.

Content analysis of the data then took place. According to Henning, Van Rensburg and Smit (2005, p. 102), data

are divided into small units of meaning, which are then systematically 'named' per unit (coded according to what a unit of meaning signifies for the researcher) and then grouped together in categories that contain related codes. Each category then contains codes that are semantically related.

The present study made use of manifest coding to draw up a coding system to identify terms or actions that were located in the transcripts of the interviews. In contrast to latent coding, which looks for the implicit meaning in the content of the text, manifest coding focuses on the visible, surface content (Neuman, 2003). The data were analysed using three types of coding. Firstly, open coding was done. The researcher visually scanned (read) through the data to assign initial codes

and search for themes. During the second examination of the data, axial coding was done, according to which the researcher focused on the initial coded themes and examined whether categories should be added or collapsed to provide a complete coding system for the final analysis. Lastly, selective coding was done, which involved working through the previous codes and data to identify themes and contrasts in specific cases (Henning et al., 2004). This enabled the researcher to organise raw data into themes and concepts (Neuman, 2003).

4.6.2 Statistical Analysis

With regard to the quantitative data, the Excel files on which all the individual responses of the participants had been entered were used in conjunction with the statistical package Statistica 7.1 (StatSoft Inc., 2006) to analyse the data. In order to identify possible independent variables that may be associated with the dependent variable (family adaptation), Spearman correlation coefficients were calculated. In order to visually depict the relationships that were identified between variables, scatterplots were produced using Statistica 7.1 (StatSoft Inc., 2006). Finally, best-sets multiple regression analysis was carried out in order to identify which combinations of independent variables (or predictor variables) best predicted the dependent variable (or outcome, or criterion variable) (Graziano & Raulin, 2000). In the context of this study, the multiple regression analysis aimed to identify possible combinations of resilience characteristics of the participating families that were best able to predict family adaptation. The outcome variable, namely family adaptation, was measured using the FACI8, while the remainder of the instruments described in the previous section were used to measure the predictor variables.

4.7 SUMMARY

The participants in this study all reside in the Kayamandi informal settlement on the outskirts of Stellenbosch. They live in an area identified as Zone A, which burnt down entirely on 10 November 2005. The families all rebuilt their homes at the same locale. This study aimed to identify resilience factors that facilitate adaptation in families who have lost their homes in a massive shack fire. This was done by making use of a mixed methods approach that gathered data via questionnaires and an open-ended question. The Family Attachment Changeability Index 8 (FACI8), which measures family adaptation, was used to measure the dependent variable, and the other variables were considered to be independent variables. The qualitative data were analysed using content analysis, while Spearman correlations and multiple regression analysis were used to analyse the quantitative data. The results are reported in the next chapter.

CHAPTER 5

RESULTS

5.1 INTRODUCTION

This chapter reports the results of the analyses of the data collected concerning the factors contributing to resilience in families who had lost their home in a massive shack fire. Firstly, the results of the quantitative data analyses will be reported in Table 5.1, representing Spearman correlations between the potential resilience variables and family adaptation, and in scatterplots. Then a summary of a regression analysis, indicating which combination of variables contributes to the dependent variable, family adaptation, will be reported. Secondly, the results of the qualitative data analysis will be shown in Table 5.3, providing a summary of categories and codes identified on the basis of the responses of the family representatives to the open-ended question.

5.2 RESULTS FROM QUANTITATIVE DATA

Spearman correlations were calculated between all the potential resilience variables measured with the questionnaires, and the dependent variable family adaptation (FACI8). The results are shown in Table 5.1.

Table 5.1

Spearman Correlations between Potential Resilience Variables and Family Adaptation (Family Attachment and Changeability Index 8 scores) (N = 38)

Variable	r	p
Degree to which family seek emotional, esteem, and network support in their community (SSI)	0.07	0.67
Family's use of friends and relatives as a coping mechanism during crises (RFS)	-0.26	0.11
Quality of communication within family (FPSC)	0.46	0.00*
– positive communication patterns conveys support and caring and exerts a calming influence (FPSC <i>Affirming</i>)	0.21	0.21
– negative communication patterns, inflammatory in nature and tends to exacerbate a stressful situation (FPSC <i>Incendiary</i>)	-0.43	0.01*
Fortitude and durability of family unit (FHI)	0.38	0.02*
– family's sense of internal strengths, dependability, and ability to work together (FHI <i>Commitment</i>)	0.33	0.04*
– family's efforts to be innovative, active, to experience new things and to learn (FHI <i>Challenge</i>)	0.08	0.63
– family's sense of being in control of family life rather than being shaped by outside events and circumstances (FHI <i>Control</i>)	0.30	0.07**
Problem-solving behaviour used during crises (FCOPES)		
– family's ability to actively engage in acquiring support from relatives, friends, neighbours and extended family (FCOPES <i>Social support</i>)	-0.10	0.55
– family's capability to redefine stressful events in order to make them more manageable (FCOPES <i>Redefining</i>)	0.14	0.41
– family's ability to actively seek spiritual support (FCOPES <i>Spiritual support</i>)	0.00	0.98
– family's ability to acquire community resources and accept help from others (FCOPES <i>Family mobilisation</i>)	0.24	0.15
– family's ability to accept problematic issues, minimising reactivity (FCOPES <i>Passive appraisal</i>)	0.21	0.20

* $p < 0.05$

** p not statistically significant, although there is a strong tendency towards a significant relationship.

The results indicate that family adaptation (FACI8 total score) was significantly positively correlated with the following variables: (i) the quality of communication within the family, (ii) the fortitude and durability of the family unit, (iii) *commitment* – the family’s sense of internal strengths, dependability, and ability to work together, and (iv) *control* – the family’s sense of being in control of family life rather than being shaped by outside events and circumstances. Furthermore, family adaptation was found to be significantly negatively correlated with communication patterns that were negative, inflammatory in nature and which tended to exacerbate a stressful situation. As there were a few outliers present in the data, Spearman correlations were used, as these correlations are not that sensitive to outliers. The biographical data were too homogenous to find any significant relationships between possible biographical variables and family adaptation.

5.2.1 Scatterplots

As mentioned above, in order to determine which independent variables were correlated with family adaptation, Spearman correlation coefficients were calculated. The six scatterplots that follow are graphic representations of the correlations that showed statistical significance, or a strong tendency towards statistical significance, and can be corroborated with the data in Table 5.1.

In the following three figures, a correlation between Family Adaptation and various types of communication patterns are shown.

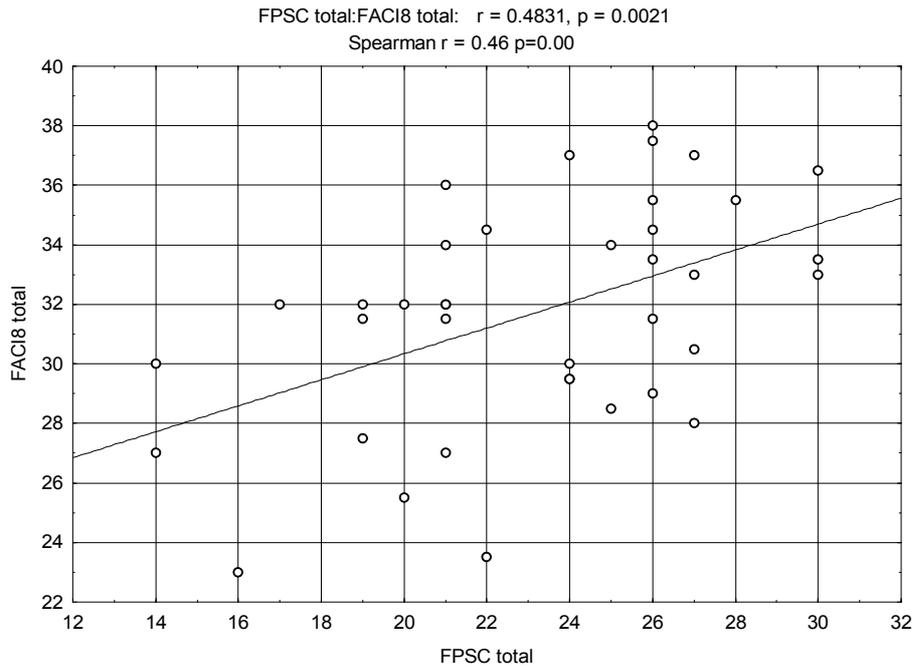


Figure 5.1. Correlation Between Family Adaptation Scores and Total Scores on the Family Problem Solving and Communication Scale (FPSC).

In Figure 5.1, a statistically significant positive correlation ($r = 0.46$, $p < .01$) can be noted between family adaptation and the quality of communication within the family.

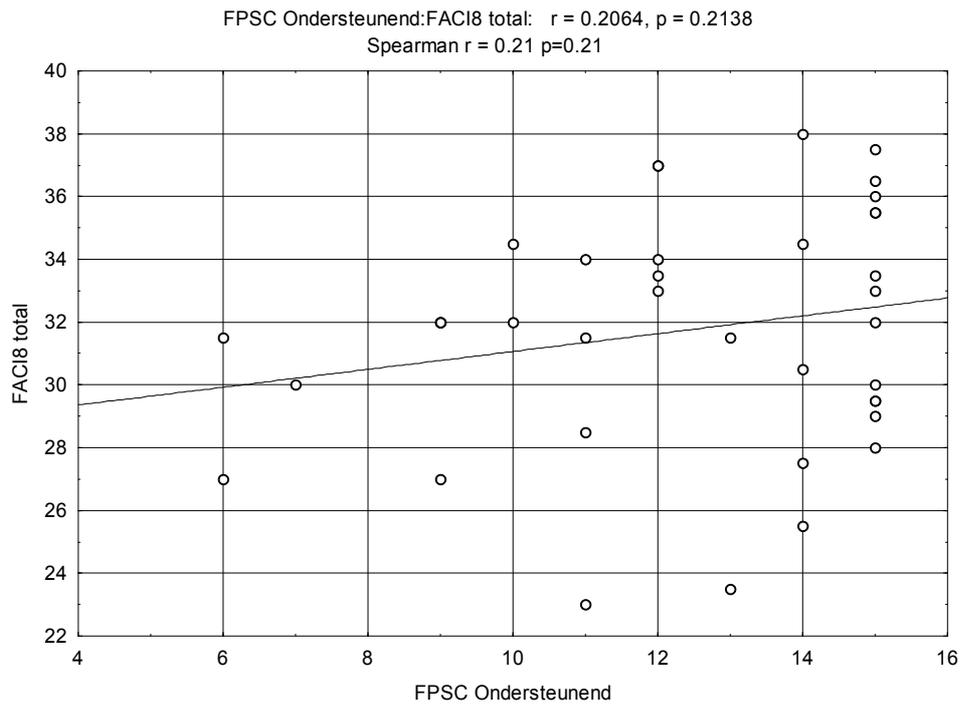


Figure 5.2. Correlation Between Family Adaptation and Affirming Communication Scores on the Family Problem Solving and Communication Scale (FPSC).

From Figure 5.2, it is clear that a slightly positive, though not statistically significant, correlation ($r = 0.21$, $p = 0.21$) exists between the level of family adaptation and affirming communication patterns.

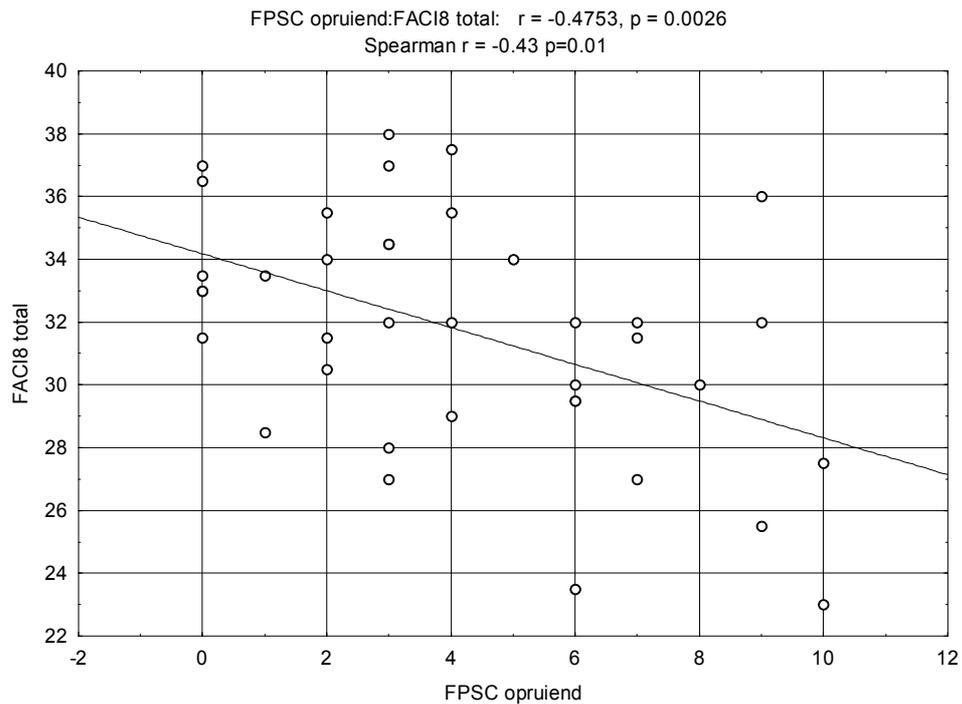


Figure 5.3. Correlation Between Family Adaptation and Incendiary Communication Scores on the Family Problem Solving and Communication Scale (FPSC).

In Figure 5.3, a statistically significant negative correlation is shown to exist ($r = -0.43$, $p = 0.01$) between family adaptation and incendiary communication patterns.

In the next three figures that follow, correlations will be shown between Family Adaptation and scores achieved on the Family Hardiness Index (FHI).

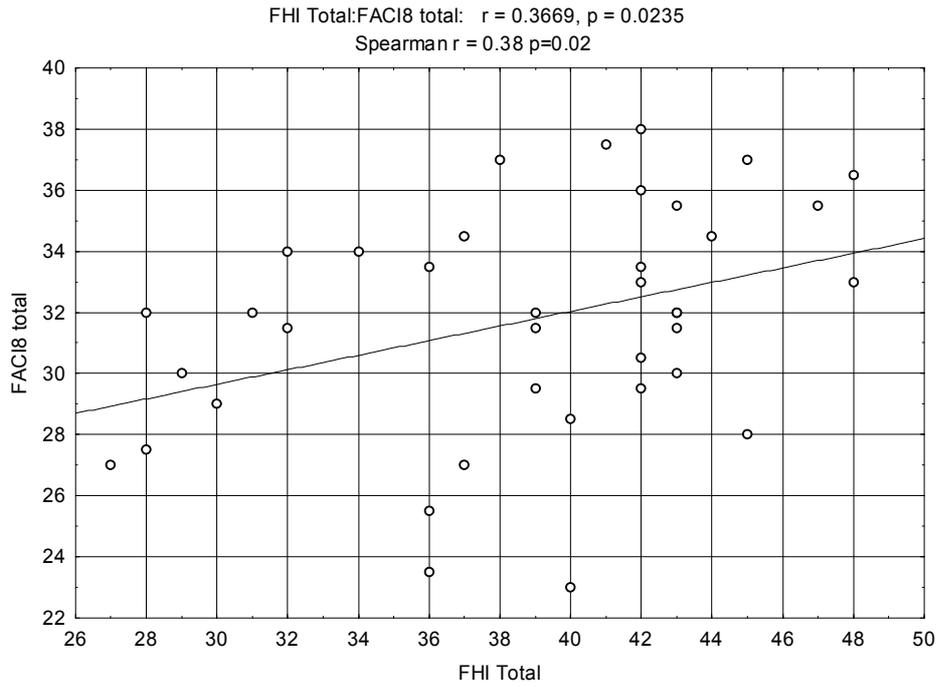


Figure 5.4. Correlation Between Family Adaptation and Total Scores on the Family Hardiness Index (FHI), Representing the Fortitude and Durability of the Family Unit During a Crisis Situation.

As seen in Figure 5.4, there is a positive correlation ($r = 0.38$, $p = 0.02$) between the family’s level of adaptation and family hardiness.

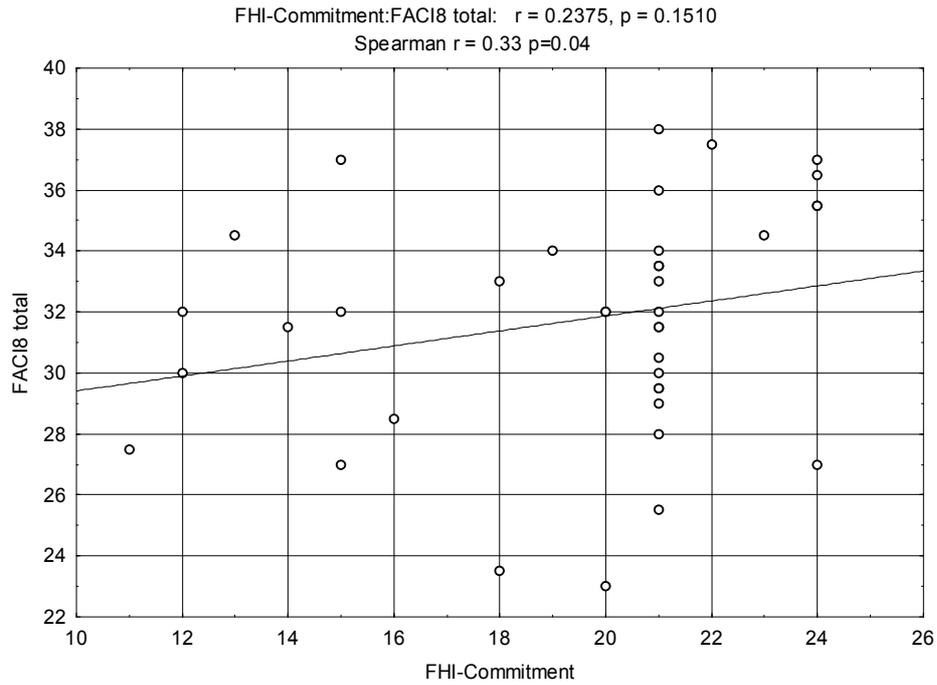


Figure 5.5. Correlation Between Family Adaptation and Commitment Scores on the Family Hardiness Index (FHI).

In Figure 5.5, it is evident that a positive relationship exists ($r = 0.33$, $p = 0.04$) between family adaptation and the family's ability to depend on each other, work together and the internal strengths utilised during crises.

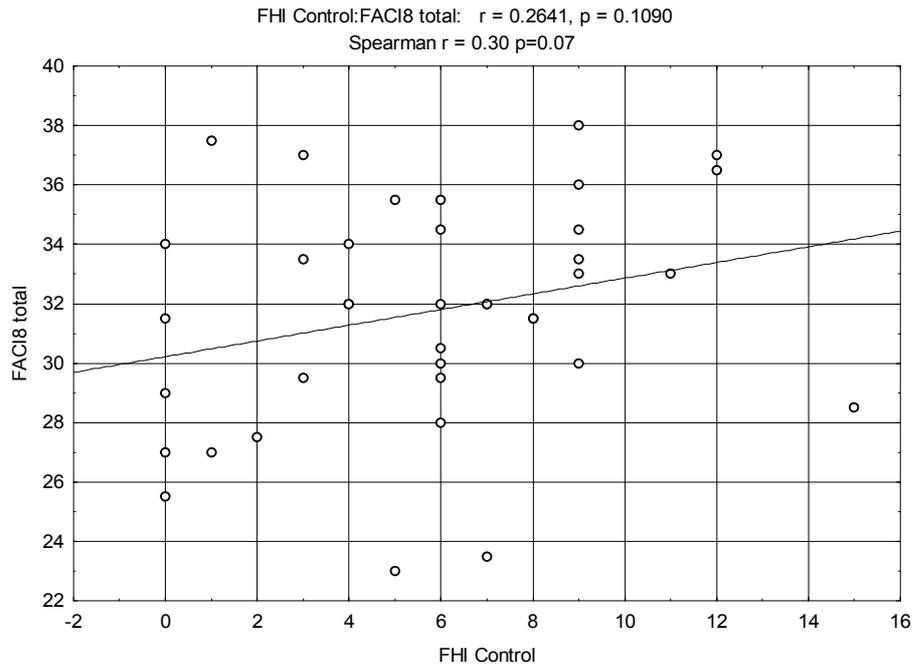


Figure 5.6. Correlation Between Family Adaptation and Control Scores on the Family Hardiness Index (FHI)

In Figure 5.6, though there is no statistically significant correlation, there is a strong tendency towards a positive correlation ($r = 0.30$, $p = 0.07$) between family adaptation and the family’s sense of being in control of family life rather than being shaped by outside events and circumstances.

5.2.2 Regression Analysis

In order to identify which combination of independent variables would best predict the dependent variable (family adaptation), a best-subsets multiple regression analysis was done. Table 5.2 summarises the results of the multiple regression analysis.

Table 5.2

Regression Analysis Summary Indicating which Combination of Variables Contributes to the Dependent Variable Family Adaptation (FACI8)

Variable	B	t(32)	(N = 38) p level
Family problem solving communication (FPSC)			
(Affirming communication (positive communication patterns convey support and caring and exert a calming influence)	0.2834	2.2968	0.0283
Family Crises Oriented Personal Evaluation Scale (FCOPES)			
Mobilisation (family's ability to acquire community resources and accept help from others)	0.5820	3.5825	0.0011
Passive appraisal (family's ability to accept problematic issues, minimising reactivity)	0.3937	2.2347	0.0325
Social support (family's ability to actively engage in acquiring support from relatives, friends, neighbours and extended family)	-0.1706	-2.5277	0.0166
Redefining (family's capability to redefine stressful events in order to make them more manageable)	0.3784	2.9205	0.0064

The combination of independent variables that were identified as being the best predictors of family adaptation were the pattern of family communication that conveyed support and care (Affirming subscale on the FPSC) and the family's ability to acquire community resources and accept help from others (Mobilisation subscale of F-COPES), the family's ability to accept problematic issues, minimising reactivity (Passive appraisal subscale of F-COPES), the family's ability to actively engage in acquiring support from relatives, friends, neighbours and extended family (Social support subscale of F-COPES) and the family's ability to

redefine stressful events in order to make them more manageable (Reframing subscale of F-COPES).

By examining the calculated R value ($R = .7096$; $F(5,32) = 6.4898$, $p < .00029$), it becomes apparent that there is a strong positive correlation between the true FACI8 scores and the estimated FACI8 scores, using the five independent variables indicated in Table 5.2. Furthermore, by looking at the R squared value ($R^2 = .5035$), it is evident that the five independent variables listed above account for approximately 50% of the variation in FACI8 scores.

From the above results it may be deduced that the three most significant predictor variables of family adaptation are the family's ability to acquire community resources and accept help from others; the family's ability to redefine stressful events in order to make them more manageable; and the family's ability to acquire community resources and accept help from others as a coping style. A negative sign in front of the beta value, as is the case for the acquiring of social support (F-COPES subscale Social support), indicates that an increased use of the family's ability to actively engage in acquiring support from relatives, friends, neighbours and extended family as a coping style will result in a decrease in family adaptation.

5.3 RESULTS FROM THE QUALITATIVE DATA

In order to obtain qualitative data from the families participating in the study, the families were asked to answer the following open-ended question: "What has/had helped your family survive and rebuild your lives after having lost your home in the fire?" Thirty-eight participants responded to the question and their responses were analysed in order to identify common themes, as well as the prevalence of these themes. The data were analysed through a process of coding and categorising.

Inductive reasoning was used to identify potential categories and themes from the data. A summary of the identified themes and their prevalence is given in Table 5.3.

Table 5.3

Summary of Themes Identified in Qualitative Data as Given by the Family Representative (N = 38)

Categories and codes	Frequency	Percentage
Material support (e.g. providing material, such as poles, asbestos, etc., to help with rebuilding of homes):		
From extended family (in-laws, parents, siblings, cousins, uncles, etc.)	15	39.5*
From community (people living in the Kayamandi area)	9	23.7
From municipality (municipality initiative to provide material)	18	47.4*
From others (church; friends; employers)	4	10.5
Support in the form of providing shelter:		
From extended family	12	31.6*
From community	1	2.6
From municipality	1	2.6
Financial support (e.g. giving money to families):		
From extended family	10	26.3
Emotional support (e.g. encouragement, motivation, listen, etc.)		
From extended family	6	15.8
From others (e.g. friends and church)	2	5.3
Tangible support (e.g. going to buy material; help build homes):		
From extended family	2	5.3
Seeking counselling from municipality (e.g. speaking to social workers and counsellors)	3	7.9
Working together as a family (e.g. organising family members and designating tasks in order to rebuild their homes)	18	47.4*
Acceptance of circumstances	8	21.1
Communication (e.g. talking about the situation and feelings, ways to move forward)	5	13.2

As seen in Table 5.2, those factors most frequently reported by the parents as best contributing to family adaptation were: working together as a family (47.4%); material support from municipality (municipality initiative to provide material to those affected) (47.4%); material support from extended family (in-laws, parents, siblings, cousins, aunts and uncles, etc.) (39,5%); and shelter provided by extended family members (31.6%). Other factors that were also mentioned are: financial support from family (26.3%); material support from the people living in the Kayamandi area (23.7%) and other sources such as church, friends and employers (10.5%); acceptance of circumstances (21.1%); emotional support from extended family, e.g. motivation and encouragement (15.8%); and talking about the situation (13.2%). Less frequent responses included factors such as: seeking counselling from municipality (7.9%); emotional support from friends and church (5.3%); tangible support from extended family (5.3%); and support from community (2.%) and municipality (2.6%).

5.4 SUMMARY

The data obtained with the questionnaires were statistically analysed and the responses to an open-ended question were digitally recorded, transcribed and coded. These analyses produced the qualitative and quantitative results, as well as those results obtained through best-sets multiple regression analysis. Quantitatively it was found that family adaptation was positively correlated with the quality of communication and family hardiness, as well as negatively correlated with communication patterns that were negative and inflammatory in nature. The multiple regression analysis identified a combination of independent variables that were the best predictors of family adaptation. These were: a pattern of family communication which conveys support and care, *the* family's ability to acquire

community resources and accept help from others, *the* family's ability to accept problematic issues, minimising reactivity, the family's ability to actively engage in acquiring support from relatives, friends, neighbours and extended family, and the family's ability to redefine stressful events in order to make them more manageable.

Qualitatively it was found that the participants mentioned working together as a family as being vital to resilience, as well as that material support from the municipality and extended family, shelter provided by extended family members and financial support from extended family were essential during the crisis. These results will be discussed in the closing chapter of this document.

CHAPTER 6

DISCUSSION

6.1 INTRODUCTION

The aim of this study was to identify resilience factors in families who have lost their homes in a massive shack fire. Various resilience factors were identified both quantitatively and qualitatively that are associated with family adaptation. This chapter will firstly look at these identified factors in comparison with previous studies. Thereafter, the limitations of this study will be discussed and recommendations will be made for future research.

6.2 DISCUSSION

As mentioned in Chapter 1, a study by Richards et al. (2006) reported the quality of life of informal dwellers as very low. The highest level of satisfaction expressed by residents with regards to their circumstances was just over 10%. One could similarly describe the residents of Kayamandi, who gather and organise what very little they have in their dwellings to create homes for their spouses, children and relatives. Given this, one can only begin to imagine the loss sustained when a family loses the home they had built from scratch, containing all that they have, to a fire.

Given the abovementioned, it is not surprising to note that, according to the qualitative results, most of the participants (47.4%) indicated material support (usually wooden poles and asbestos) from their local municipality as the main factor contributing to the family's wellbeing (see Table 5.3). Material support from

their family was also indicated (39.5%) as very essential, as this enabled families to proactively start the process of rebuilding their lives in a very concrete way.

When asked what had helped them overcome the crisis after having lost their homes, the answers were generally as follows: “The family gave us a place to sleep, food, clothes and money to buy material”; “The main thing that hurts us, is the fact that we had to start all over again taking some of the money that we had to send to our parents in the Eastern Cape”; “My family helped me with food and clothes”; “We started by gathering material from people around and started building bit by bit”; “We talked to our uncle and he helped us with rebuilding and giving us clothes”; and “Municipality help us with blankets and food and give us some material”. These forms of social support are described by Dumont and Provost (1998) as ‘supportive resources’, defined as support from friends, family, and often strangers. They also describe the term as ‘receiving support’ (instrumental, informative, emotional support). The participants reported encouragement, motivation and listening (emotional support) from family (15.8%) and others, like the church and friends (5.3%), as integral to resilience (see Table 5.3). One of the participants described this kind of support by saying: “We went to our family and relatives and told them about the fire, they helped us emotionally and encouraged us spiritually to give us strength and also gave us one of their rooms to stay in. I also declared the problem at my work and they helped me by giving me a bungalow.”

The percentage of participants who reported emotional support from the extended family (15,8%) was considerably lower in relation to those indicating material support from the extended family (39,5%) and support from the family in the form of providing shelter (31,6%) as crucial to family adaptation (see Table 5.3). This

trend coincides with Maslow's hierarchy of needs, which states that humans have a number of needs that are 'instinctoid' (Hergenhahn & Olson, 2003, p.507). This means that, before one need is met, the individual cannot move on and attempt to satisfy needs higher up on the hierarchy. Physiological needs (food, water, sex, elimination and sleep) and safety needs (structure, order, security and predictability) are lowest on the needs hierarchy and these physiological needs are also those needs which are lacking when a family loses their home in a fire. The affected family thus primarily makes use of financial and material support from the municipality and extended family as a means to satisfy these needs and focuses on their emotional needs to a lesser extent. Maslow states that, should these lower needs not be met, an individual cannot move on to other needs higher on the hierarchy, such as the need to belong and feel love, esteem needs and the need for self-actualisation (Hergenhahn & Olson, 2003). This coincides with findings on the causes, consequences and ways of coping which reveal that social support (albeit emotional or tangible) relates to the decrease of stress and the way the stress manifested (Carver, 1998; Cohen et al., 2002; Garnezy, 1993; Hall, 2004; Kincaid & Caldwell, 1995; Lam et al., 1999; Marsh & Lefley, 1996; McCubbin & McCubbin, 1996; Reed & Sherkat, 1992; Rutter, 1985; Walsh, 1996).

Despite these qualitative responses, no significant quantitative results were found regarding a significant positive relationship between social support and family resilience. Even more surprising was that the best-sets multiple regression analysis indicated that an increase in the use of social support (as a coping style) results in a decrease in family adaptation (see Table 5.2). A possible explanation for this contradictory finding may be provided by Todd and Worell (2000), who mention that even though a social network provides essential support, it can also

be associated with worry and frustration for impoverished women. They explain that women with a low income often do not have freedom of choice with regard to whom they want to socialise with, and that most of the members of their social network probably also lead stressful lifestyles (Todd & Worell, 2000). A remark from one of the participants in this study, when asked if extended family members had aided them, supports Todd and Worrell's findings: "They were also in the same situation, as we were crying in the same breath."

In agreement with previous research (Barnes et al., 1989; Murry & Brody, 1999; Walsh, 1998), the data obtained with the Family Problem Solving and Communication Scale indicated that the quality of communication within the family was positively associated with better family adaptation and consequently with more family resilience (see Figures 5.1 and 5.3). According to Walsh (1998), (1) incorporating clear, open and direct communication among family members; (2) having empathy for every members' position; (3) tolerating conflicts, and (4) demonstrating a readiness to deal with differences that may arise, are all important factors that promote family resilience and strengthen the family as a supportive network for its members. One participant noted: "We were very much in pain and not knowing what to do, but I told them we need to talk about our pain. My father was the person we talked to."

Significant positive correlations were found between family adaptation and the family's sense of internal strengths (family hardiness, FHI total score), dependability and ability to work together (Commitment subscale of the FHI), and the family's sense of being in control of family life rather than being shaped by outside events and circumstances (Control subscale of the FHI). Family hardiness refers to the internal strengths of the family as a unit, characterised by a sense of

commitment, an active orientation towards managing stressful situations and having a sense of control over hardships in life (McCubbin et al., 1996). Coinciding with this are the qualitative responses from 47.7% of the participants stating that working together as a family, for example by organising family members and designating tasks and roles in order to rebuild their homes, was what helped them to be resilient after having lost their homes (see Table 5.3).

Carver (1998) states that acceptance of a problem and the restructuring thereof in positive ways may lead to favourable coping strategies during a crisis situation. In agreement with this, 21.1% of the participants indicated that acceptance of their circumstances was what had helped them to move on after their crisis. Some very clear and concise statements with regard to this resiliency characteristic were made during the interviews: “Being hurt, I was in pain, but I had to accept and be strong, which led me to start building my place”; “We didn’t go, neither saw no one about our pain. We just accepted it and started rebuilding”; “We were hurt because of our places burn and not having a place to stay. But eventually we had to go through that to try and find a place to stay”; and “Yes I was hurt having to lose everything, but I told myself I don’t have a choice, I have to build and start from scratch”.

Numerous authors have written about the positive relationship between spirituality and family resilience (Angell et al., 1998; Park & Cohen, 1992; Parrot, 1999; Reed & Sherkat, 1992; Smith, 1999; Walsh, 1998). A study by Greeff and Loubser (2008) indicates spirituality as an important coping resource contributing to the resilience of Xhosa-speaking families in periods of crisis. However, data obtained with the Spiritual Support subscale of the Family Crises Oriented Personal Evaluation Scale contrasts with this finding. No significant correlation was found

between family adaptation and the family's ability to actively seek spiritual support. Furthermore, fewer than 5% of the participants indicated that seeking help from the church during the crisis is what helped them (see Table 5.3).

Given the results that contradict the potential of religion and spirituality to enhance resilience, it is safe to say that there is a need for more extensive investigation into this aspect. Some of the discrepancies mentioned in this discussion may be explained by the limitations of this study, which are discussed in the next section.

6.3 LIMITATIONS AND RECOMMENDATIONS

A major limitation of this study was the fact that only one family member was interviewed as representative of the whole family's view. This may have allowed for the assessment of the perceptions of only one member of a family, as opposed to an assessment of the entire family unit. As a possible improvement to this design, multiple family representatives may be considered in future projects.

Also, this study only focused on the experience of one group of families affected by one particular fire (Inhabitants of Zone A who lost their homes on 10 November 2005). Comparative groups of families would be useful in potentially isolating resilience factors that are unique to a specific group of families. For example, comparing the experiences of participants from different neighbourhoods (e.g. Zone A with Zone J).

An important factor that was not taken into account when planning the research was the illiteracy of many of the participants. Of those interviewed, 58% had obtained an education level lower than Grade 10, with 26% of these below Grade 6 level. This aspect may specifically have had an impact on the completion of the questionnaires, where a higher level of education would have been preferred.

Religion and culture may also have impacted on the way that families adapt to the situation. A more thorough qualitative approach would allow participants more freedom to express their opinions and feelings in their own unique way.

Another limitation of this study may be the participants' level of motivation for taking part in the project. Vouchers worth R30 were given to the participants on completion of every interview. Given the low socio-economic status (82% earn less than R1 000 per month), and the close proximity and cohesiveness of the sample, word soon spread of this (limited) financial compensation. Consequently, people were lining up to take part in this study who did not necessarily have the time or interest in the research topic. In future, vouchers should be handed out on completion of all data gathering and not after each interview. In the present study, the data-gathering process took place as follows: (i) approach families; (ii) describe the process and aims of the study; (iii) obtain informed consent and (iv) immediately conduct the interview. It is proposed that future studies follow the following process: (i) approach families, (ii) describe the process and aims of the study, (iii) obtain informed consent, (iv) set up dates and times for interviews and (v) after identifying a complete target sample go back to conduct interviews with only those families who have already indicated interest in the project. Gift vouchers may then be provided after each interview.

Taking into account that, in many instances, the vouchers were the main motivation for participation, the number of items in the questionnaires caused some participants to become fatigued and frustrated and they lost concentration. Also, since all the datasets were completed by the fieldworker, social desirability on the part of the participant may also have influenced responses.

The integration of the quantitative and qualitative results suggests numerous possibilities for future research. The abovementioned limitations and suggestions can be implemented to improve future research designs. For example, a qualitative study using semi-structured interviews with a sample of female participants affected by shack fires from across the Western Cape might be conducted. The results may then be compared with those of similar studies done in other provinces in the country. Other studies may, for example, include the views of males and children who have lost their homes.

6.4 CONCLUSION

The findings of the present study suggest that, when the loss is both of a material and emotional nature, the primary tendency of families is towards fixing the physical loss, and only secondly to attend to emotional aspects in order to adapt to the situation. As one participant stated when asked what she did to deal with her emotions after losing her home: “Nothing, but when I was finished building my place, I went home [to the Eastern Cape Province].” There were many confirmations, but also contradictions, that came forth when the results of this study were compared with those of previous studies. This signifies that a great deal of research still needs to be done in order to identify and measure the concept of family resilience in different populations with unique crises.

REFERENCES

- Angell, G.B., Dennis, B.G., & Dumain, L.E. (1998). Spirituality, resilience, and narrative: coping with parental death. *Families in Society, 79*(6), 615-630.
- Antonovsky, A. (1979). *Health, stress and coping*. San Francisco, CA: Jossey-Bass Inc.
- Antonovsky, A., & Sourani, T. (1988). Family sense of coherence and family adaptation. *Journal of Marriage and the Family, 50*, 79-92.
- Baer, J. (1999). The effects of family structure and socio-economic status on family processes in early adolescence. *Journal of Adolescence, 22*, 341-354.
- Barnes, G.G. (1999). Divorce transition: identifying risk and promoting resilience for children and their parental relationships. *Journal of Marital and Family Therapy, 25*, 425-441.
- Barnes, H.L., Larsen, A.S., McCubbin, H.I, Muxen, M.J., Olson, D.H., & Wilson M.A. (1989). *Families. What makes them work*. Newbury Park, CA: Sage Publications.
- Barrera, M. (1986). Distinction between social support concepts, measures, and models. *American Journal of Community Psychology, 14*, 413-445.
- Bass, B.L. & Grzywacz, J.G. (2003). Work, family, and mental health: testing different models of work-family fit. *Journal of Marriage & Family, 65*(1), 248-261.
- Boss, P. (1992). Primacy of perception in family stress theory and measurement. In P. Boss (Ed.). *Family stress. Classic and contemporary readings* (pp. 158-165). Thousand Oaks, CA: Sage Publications.

- Bristol, M.M. (1984). Family resources and successful adaptation to autistic children. In E. Schopler & G.B. Mesibov (Eds.). *The effects of autism on the family* (pp. 289-310). New York: Plenum.
- Carver, C.S. (1998). Resilience and thriving: issues, models, and linkages. *Journal of Social Issues, 54*(2), 245-266.
- Cohen, O., Slonim, I., Finzi, R., & Leichtentritt, R.D. (2002). Family resilience: Israeli mothers' perspectives. *The American Journal of Family Therapy, 30*, 173-187.
- Cole, K.A., Clark, J.A., & Gable, S. (2001). *Promoting family strengths*. Columbia, MO: University of Missouri-Columbia Extension.
- Coleman, J.J. (1998). Social capital in the creation of human capital. *American Journal of Sociology, 94*, 95-120.
- Conger, R., & Elder, G. (1994). *Families in troubled times*. New York: Hawthorne.
- DeHaan, L., Hawley, D.R., & Deal, J.E. (2002). Operationalizing family resilience: a methodological strategy. *The American Journal of Family Therapy, 30*, 275-291.
- DeHaan, L.G., & MacDermid, S. (1998). The relationship of individual and family factors to the psychological well-being of junior high-school students living in urban poverty. *Adolescence, 33*(12), 73-89.
- Drapeau, S., Samson, C., & Saint-Jacques, M. (1999). The coping process among children of separated parents. *Journal of Divorce and Remarriage, 31*(1/2), 15-35.

- Dumont, M., & Provost, M.A. (1998). Resilience in adolescents: protective role of social support, coping strategies, self-esteem, and social activities on experience of stress and depression. *Journal of Youth and Adolescence*, 28(3), 343-363.
- Dyson, L.L., Edgar, E., & Crnic, K. (1989). Psychological predictors of adjustment by siblings of developmentally disabled children. *American Journal on Mental Retardation*, 94(3), 292-302.
- Frantz, T.T., Trolley, B.C., & Johll, M.P. (1996). Religious aspects of bereavement. *Pastoral Psychology*, 44, 151-163.
- Garnezy, N. (1993). Children in poverty: resilience despite risk. *Psychiatry*, 56, 127-136.
- Graziano, A.M., & Raulin, M.L. (2000). *Research methods: a process of enquiry*. Needham Heights, MA: Allyn & Bacon.
- Greeff, A.P. (2000). Characteristics of families that function well. *Journal of Family Issues*, 21(8), 948-962.
- Greeff, A.P., & Holtzkamp, J. (2007). The prevalence of resilience in migrant families. *Family & Community Health*, 30(3), 189-200.
- Greeff, A.P., & Human, B. (2004). Resilience in families in which a parent has died. *The American Journal of Family Therapy*, 32, 27-42.
- Greeff, A.P., & Loubser, K. (2008). Spirituality as a resiliency quality in Xhosa-speaking families in South Africa. *Journal of Religion and Health*, 47(3), 288-301.
- Greeff, A.P., & Ritman, J.N. (2005). Individual characteristics associated with resilience in single-parent families. *Psychological Reports*, 96, 36-42.

- Green, R. (2004). Risk and resilience in lesbian and gay couples: comment on Solomon, Rothblum, Balsam. *Journal of Family Psychology, 18*(2), 290-292.
- Hall, A. (2004). Parental psychiatric disorder and the developing child. In M. Göpfert, J. Webster, & M.V. Seeman (Eds.). *Parental psychiatric disorder: distressed parents and their families* (pp. 22-49). Cambridge: Cambridge University Press.
- Harris, S.L., & Powers, M.D. (1984). Behaviour therapists look at the impact of an autistic child on the family system. In E. Schopler & G.B. Mesibov (Eds.). *The effects of autism on the family* (pp. 207-224). New York: Plenum.
- Hartshorne, T.S. (2002). Mistaking courage for denial. Family resilience after the birth of a child with severe disabilities. *Journal of Individual Psychology, 58*(3), 263-279.
- Hawley, D.R. (2000). Clinical implications of family resilience. *The American Journal of Family Therapy, 28*(2), 101-116.
- Hawley, D.R., & DeHaan, L. (1996). Towards a definition of family resilience: integrating life span and family perspectives. *Family Process, 35*(3), 283-298.
- Henning, E., Van Rensburg, W., & Smit, B. (2005). *Finding your way in qualitative research*. Pretoria: Van Schaik Publishers.
- Hergenhahn, B.R., & Olson, M.H. (2003). *An Introduction to Theories of Personality*. New Jersey Pearson: Education International
- Horwitz, M.H. (1998). Social work trauma: building resilience in child protection social workers. *Smith College Studies in Social Work, 68*(3), 363-377.
- Huchzermeyer, M. (2002). Informal settlements: production and intervention in twentieth-century Brazil and South Africa. *Latin American Perspectives, 29*(1):83-105.

- Internafrica. (2006). Statistics on shack fires in the Cape metropole area. Retrieved May 27, 2006 from the World Wide Web: www.internafrica.org
- Kemp, J.M. (2000). *Relocation resilience*. Washington D.C.: American Psychological Association. Retrieved September 19, 2007 from the "World Wide Web": <http://www.janakemp.com/article2.htm>
- Kincaid, S.B., & Caldwell, R.A. (1995). Marital separation: causes, coping and consequences. *Journal of Divorce and Remarriage*, 22(3/4), 109-128.
- Kragh, J.R. & Huber, C.H. (2002). Family resilience and domestic violence: panacea or pragmatic therapeutic perspective? *Journal of Individual Psychology*, 58(3), 290-305.
- Lam, J.N., Grossman, F.K., Cook, A.B., Kepkep, S.S., Culhane, K., Moore, R.P., Paniesin, R., & Koenen, K.C. (1999). Resiliency. In F.K. Grossman, A.B. Cook, S.S. Kepkep, & K.C. Koenen (Eds.). *With the phoenix rising: lessons from ten resilient women who overcame the trauma of childhood sexual abuse* (pp. 3-21). San Francisco, CA: Jossey-Bass Inc. Publishers.
- Lazarus, R., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lee, I., Lee, E., Kim, H.S., Park, Y.S., Song, M., & Park, Y.H. (2003). Concept development of family resilience: A study of Korean families with a chronically ill child. *Journal of Clinical Nursing*, 13, 636 – 645.
- Luthar, S., & Zigler, E. (1991). Vulnerability and competence: a review of research on resilience in childhood. *American Journal of Orthopsychiatry*, 61(1), 6-22.
- Marsh, D.T., & Lefley, H.P. (1996). The family experience of mental illness: evidence for resilience. *Psychiatric Rehabilitation Journal*, 20(2), 3-12.
- Mazur, E., & Wolchik, A. (1999). Cognitive moderators of children's adjustment to stressful divorce events. *Child Development*, 70(1), 231-245.

- McCubbin, M.A., & McCubbin, H.I. (1996). Resiliency in families: a conceptual model of family adjustment and adaptation in response to stress and crises. In H.I. McCubbin, A.I. Thompson & M.A. McCubbin (1996). *Family assessment: resiliency, coping and adaptation – inventories for research and practice* (pp. 1-64). Madison: University of Wisconsin System.
- McCubbin, M.A., McCubbin, H.I., & Thompson, A.I. (1988). Family Problem Solving Communication (FPSC). In H.I. McCubbin, A.I. Thompson, & M.A. McCubbin (1996). *Family assessment: resiliency, coping and adaptation – inventories for research and practice* (pp. 639 - 686). Madison, WI: University of Wisconsin System.
- McCubbin, H.I., Thompson, A.I., & McCubbin, M.A. (1996). *Family assessment: resiliency, coping and adaptation –inventories for research and practice*. Madison, WI: University of Wisconsin System.
- McKenry, P.C., & Price, S.J. (Eds.) (1994). Families and change. Coping with stressful events. Thousand Oaks, CA: Sage Publications.
- Morrison, N.C. (1995). Successful single-parent families. *Journal of Divorce and Remarriage*, 22(3/4), 205-219.
- Mohamed, S.E. (2006). From ideas to practice: the involvement of informal settlement communities in policy-making at city level in South Africa. *South African Review of Sociology* 37(1), 35-47
- Murry, V.M., & Brody, G.H. (1999). Self-regulation and self-worth of black children reared in economically stressed, rural, single mother-headed families. *Journal of Family Issues*, 20(4), 458-484.

- Mvududu, S., & McFadden, P. (2001). *Reconceptualising the family in a changing Southern African environment*. Zimbabwe: Women and Law in Southern Africa Research Trust.
- Neuman, L. (2003). *Social research methods: qualitative and quantitative approaches* (5th ed.). Boston, MA: Allyn and Bacon.
- Olson, D.H., Sprenkle, D.H., & Russel, C.S. (1988). *Circumplex model: systemic assessment and treatment of families*. New York: The Haworth Press.
- Park, C.L., & Cohen, L.H. (1992). Religious beliefs and practices and the coping process. In: B. Carpenter (Ed.). *Personal coping: theory, research, and application*. New York: Praeger.
- Parrot, L. (1999). Grieving the death of a spouse. *Journal of Psychology and Christianity, 18*(4), 330-337.
- Patterson, J.M. (2002). Understanding family resilience. *Journal of Clinical Psychology, 58*(3), 233-246.
- Pearlin, L.J., & Schooler, C. (1978). The structure of coping. *Journal of Health and Social Behavior, 19*, 2-21.
- Picard, M., Lee, C.M., & Hunsley, J. (1997). Social supports received and desired: the experiences of recently divorced parents with their parents and parents-in-law. *Journal of Divorce and Remarriage, 27*(1/2), 57-69.
- Plunkett, S.W., Sanchez, M.G., Henry, C.S., & Robinson, L.C. (1997). The Double ABCX Model and children's post-divorce adaptation. *Journal of Divorce and Remarriage, 27*(3/4), 17-36.
- Reed, M.D., & Sherkat, D.E. (1992). The effects of religion and social support on self-esteem and depression on the suddenly bereaved. *Social Indicators Research, 26*, 259-257.

- Richards, R., O'Leary, B., & Mutsonziwa, K. (2006). Measuring quality of life in informal settlements in South Africa. *Social Indicators Research*, 81(1), 375-388.
- Roer-Strier, D., & Sands, R.G. (2001). The impact of religious intensification on family relationships: a South African example. *Journal of Marriage & Family*, 63(3), 868-971.
- Rotenburg, K.J., Kim, L.S., & Herman-Stahl, M. (1998). The role of primary and secondary appraisals in the negative emotions and psychological maladjustment of children of divorce. *Journal of Divorce and Remarriage*, 29(1/2), 43-63.
- Rutter, M. (1985). Resilience in the face of adversity: protective factors and resistance to psychiatric disorder. *British Journal of Psychiatry*, 147, 598-611.
- Rutter, M. (1999). Resilience concepts and findings: impacts for family therapy. *The Association for Family Therapy*, 29, 119-144.
- Sandau-Beckler, P.A., Devall, E. & De la Rosa, I.A. (2002). Strengthening family resilience: prevention and treatment for high-risk substance-affected families. *Journal of Individual Psychology*, 58(3), 305-328.
- Schwartz, J.P. (2002). Family resilience and pragmatic parent education. *Journal of Individual Psychology*, 58(3), 250-263.
- Secombe, K. (2002). 'Beating the odds' versus 'Changing the odds': poverty, resilience and family policy. *Journal of Marriage & Family*, 64(2), 384-394.
- Shapiro, E.R. (2002). Chronic illness as a family process: a social developmental approach to promoting resilience. *Journal of Clinical Psychology*, 58(11), 1375-1384.

- Shaw, D.S., Winslow, E.B., & Flanagan, C. (1999). A prospective study of the effects of marital status and family relations on young children's adjustment among African-American and European American families. *Child Development, 70*(3), 742-755.
- Silberberg, S. (2001). Searching for family resilience [Electronic version]. *Family Matters, 58*, 52-64. Retrieved April 5, 2006 from the World Wide Web: www.newcastle.edu.au/departments/fac
- Smith, G. (1999). Resilience concept and findings: implications for family therapy. *Journal of Family Therapy, 21*, 154-158.
- Statistics South Africa. (2005). Achieving a better life for all: progress between Census 96 and Census 2001. Retrieved May 27, 2006 from the World Wide Web: <http://www.statssa.gov.za/Publications>
- Statistics South Africa (2007). General household survey July 2006. Retrieved September 19, 2007 from the World Wide Web: www.statssa.gov.za/Publications
- StatSoft Inc. (2006). STATISTICA (data analysis software system), version 7.1. www.statsoft.com.
- Tedeschi, R.G., & Calhoun, L.G. (1995). Trauma & transformation: growing in the aftermath of suffering. Los Angeles, CA: Sage Publications.
- Todd, J.L., & Worell, J. (2000). Resilience in low-income, employed, African American women. *Psychology of Women Quarterly, 24*, 119-128.
- Tommasone, L., & Tommasone, J. (2000). Adjusting to your child's diagnosis. In M.D. Powers (Ed.). *Children with autism: a parents' guide* (pp. 45-66). Rockville, MD: Woodbine House.

- Valentine, L., & Feinauer, L.L. (1993). Resilience factors associated with female survivors of childhood sexual abuse. *American Journal of Family Therapy*, 21(3), 216-224.
- Walsh, F. (1996). The concept of family resilience: crisis and challenge. *Family Process*, 35, 261-281.
- Walsh, F. (1998). *Beliefs, spirituality, and transcendence: keys to family resilience*. New York: Guilford Press.
- Walsh, F. (2003). Family resilience: strengths forged through adversity. In F. Walsh (Ed.), *Normal family processes* (3rd ed.) (pp. 399-423). New York: Guilford Press.
- Whiteside, M.F. (1998). The parental alliance following divorce: an overview. *Journal of Marital and Family Therapy*, 24(1), 3-24.
- Wright, L., Watson, W.L., & Bell, J.M. (1996). *Beliefs: the heart of healing in families and illness*. New York: Basic Books.