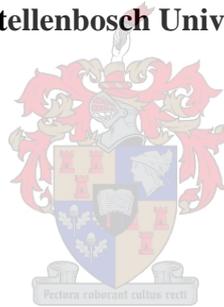


**RESILIENCE FACTORS IN SINGLE PARENT FAMILIES AFFECTED BY
HIV/AIDS**

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Doctor of Philosophy (Psychology)
at Stellenbosch University**



Promoter: Prof AP Greeff

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AUTHOR'S DECLARATION

By submitting this dissertation 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.

Summary

The aim of the current study was to investigate factors that help single-parent families cope with the news that a family member has been diagnosed with HIV. The theoretical model that underpinned the study is the Resiliency Model of Family Stress, Adjustment and Adaptation of McCubbin and McCubbin (1996). A salutogenic perspective offers a view of human suffering that moves away from pathology to focus on factors that support successful coping, hence the focus of the current study on resilience. A cross-sectional survey research design was used, incorporating a combination method inclusive of both a qualitative and quantitative component. A total of 109 families, represented by an adult and a child, answered a qualitative question about what they considered to have helped them cope, and completing a biographical questionnaire and five questionnaires based on the theoretical model. Analyses included the Grounded Theory Method, a qualitative analysis method of Strauss and Corbin (1994; 1998), Pearson correlations and ANOVAs (for a categorical independent variable – employment status) to compute the significance of correlations between a dependent variable and a number of independent variables, and regression analysis.

The results of the qualitative investigation revealed that families considered internal strength (or hardiness), social supports, communication, a sense of hope, using denial (both positive and negative behaviours to get on with life despite the presence of hardship), changing or reframing thoughts about the stressor, and material support to have been helpful. The quantitative results supported the qualitative results and showed that family hardiness (working together, viewing stressors as challenges and having a belief in own coping abilities), the availability of social support, supportive communication, use of reframing, accepting help from others and spiritual support all contributed to families functioning well under adverse conditions. It was also shown that inflaming types of communication, such as fighting and doing nothing about a crisis situation, negatively influenced the family functioning. It was interesting to note that family size had a significant, positive correlation

with the parents' views of family functioning, and that the higher the children's level of education, the lower they rated their family functioning to be.

Recommendations for further studies include a focus on resilience in various family types, a focus on families successfully coping with HIV diagnoses in their families, and the development of intervention programmes, inclusive of Cognitive Behaviour Therapy and Acceptance and Commitment Therapy.

Opsomming

Die doel van die huidige studie was om ondersoek in te stel na faktore wat enkelouer gesinne met 'n MIV-geïdiagnooseerde gesinslid ondersteun het. Die studie is teoreties gebou op McCubbin en McCubbin (1996) se *Resiliency Model of Family Stress, Adjustment and Adaptation*. Salutogenese bied 'n siening of waardering van die manier waarop mense terugslae hanteer wat weg beweeg van die tradisionele fokus op patologie om te fokus op faktore wat suksesvolle aanpassing ondersteun ten spyte van die teenwoordigheid van genoemde krisis. Hierdie benadering bepaal dus die fokus op veerkrachtigheid of gesinsveerkrachtigheid wat hierdie studie rig. 'n Deursnee- steekproefontwerp is vir die navorsing gebruik en het 'n kwalitatiewe en kwantitatiewe komponent ingesluit. 'n Totaal van 109 gesinne is bestudeer, elk deur een volwassene en een kind verteenwoordig. Die deelnemers het 'n kwalitatiewe vraag beantwoord oor wat hulle as ondersteunend ten opsigte van hulle eie krisishantering beskou het, en het ook 'n biografiese vraelys en vyf vraelyste wat verskillende aspekte van die teoretiese model gemeet het, voltooi. Die deelnemers se response is ontleed deur middel van Strauss en Corbin (1994; 1998) se *Grounded Theory Method* vir die kwalitatiewe komponent; Pearson se korrelasies en ANOVA's (ten opsigte van 'n kategoriele onafhanklike veranderlike – werkstatus) is gebruik om die korrelasies tussen die afhanklike en 'n aantal onafhanklike veranderlikes te bereken en regressie-ontledings is gedoen.

Die kwalitatiewe resultate het aangedui dat die volgende faktore deur die gesinne beskou is as ondersteunend van hulle vermoë om krisisse te hanteer: innerlike sterkte, sosiale ondersteuning, kommunikasie, 'n gevoel van hoop, die gebruik van ontkenning (beide positiewe en negatiewe gedrag om met die lewe aan te gaan ten spyte van die swaarkry), verandering van of herbesinning oor die stressor, en materiële ondersteuning. Die kwantitatiewe bevindinge het die kwalitatiewe resultate ondersteun en getoon dat gesinsgehardheid (saamwerk, beskouing van stressors as uitdagings en 'n vertrouwe in eie

vermoëns), die beskikbaarheid van sosiale ondersteuning, ondersteunende kommunikasie, die gebruik van herbesinning, aanvaarding van hulp van ander en geestelike ondersteuning almal gehelp het om die gesin onder ongunstige toestande goed te laat funksioneer. Daar is ook gevind dat opruiende soorte kommunikasie, soos baklei en niks oor 'n krisissituasie te doen nie, 'n negatiewe invloed op gesinsfunksionering gehad het. Dit was interessant om te vind dat gesinsgrootte positief met die ouers se beskouing van gesinsfunksionering gekorreleer het, terwyl 'n hoër vlak van opvoeding onder die kinders gekorreleer het met 'n laer skatting van gesinsfunksionering.

Aanbevelings vir verdere navorsing sluit in 'n fokus op gesinsveerkragtigheid in verskillende gesinstipes, 'n fokus op gesinne wat 'n MIV-diagnose in die gesin suksesvol hanteer, en die ontwikkeling van ingrypingsprogramme gebaseer op die beginsels van Kognitiewe Gedragsterapie en *Acceptance and Commitment Therapy*.

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Chapter 1

Introduction, motivation for and objectives of the study

The *family* is generally viewed as an important, pivotal part of society (Moen & Forest, 1999) and as a basic social unit in the world (Burns & Scott, 1994; Leeder, 2004; Steel & Kidd, 2001).

Research on families in the past tended to focus on stability and order, on the one hand, and may have caused interesting and important aspects to be missed, for instance by avoiding focus on turmoil (Walsh, 1996). On the other hand, research on families in the past focused almost exclusively on pathology. Systems-based research has shifted the focus to competencies and strengths within families (Walsh). Walsh has highlighted the disintegration of families and is supported in this approach by Weeks (1999), who has indicated that single-parent families have become the norm for families.

As HIV/AIDS is viewed as a threat to all types of family life (Rolland, 1993; Thompson, 1999), it would seem prudent to investigate how families adapt to this risk factor (and in particular, how single-parent families adapt). Some families disintegrate when faced by crisis, while others seem to be more strengthened (post-crisis) (Walsh, 1996). Walsh further notes that *how* a family deals with challenges is important for individual and family recovery. According to Walsh, the processes that work well with one crisis might differ from those that work for another. Consequently, the infection of a family member with HIV is a unique crisis situation, which may in itself, therefore, necessitate a unique approach when dealing with it. The advantage of a family resilience framework over models of basic family functioning is that it views functioning in context, with processes linked to challenges; all in terms of an individual family's particular resources and challenges (Walsh).

A literature review revealed that, to date, no research has been published on resilience in single-parent families affected by HIV/AIDS in the South African context. Therefore, the focus of the present study is on variables associated with resilience factors in single-parent families affected by HIV/AIDS in the Western Cape region of South Africa.

1.1 Motivation for the study

The concept *family resilience* can be seen as a further development of traditional strengths-based approaches to family therapy and can have important clinical and research implications and applications. Conceiving of resilience as a family-level construct links family functioning to challenges, incorporating context and demands. A family-level view also incorporates a developmental instead of a cross-sectional view, with the emphasis on processes and time (Walsh, 1996).

In aiming to do justice to the complexity of individual family life, Walsh (1996) suggested a holistic assessment of families, as it would be impossible to construct models for every possible situation and family type, and perhaps even unwise to attempt this. Walsh further showed that “The concept of family resilience offers this flexible view that can encompass multiple variables, both similarities and differences, and both continuity and change over time” (p. 269).

1.1.1 Focus on families needed

Thompson (1999) showed that “families of origin, families of procreation/choice, significant others, friends, and communities” (p. 135) are all possible sources of social support, but that the effects of HIV/AIDS on families has largely been overlooked. Nel (1997) suggested that the focus of further investigations into therapeutic interventions for HIV/AIDS patients should be a family perspective. These interventions should, for instance, relate to orphaned children, the parents of affected children and the significant others of those infected. Furthermore, Thompson (1999) indicated that most research focused on the abandonment of

the infected family member, with little investigation of the effects on the family, or the family's experience of HIV/AIDS. Hawley (2000) showed that the clinical aspects relating to family resilience have been poorly investigated to date. A research focus on families would contribute to the body of knowledge concerning how human beings cope with adversity. A family strengths-based inquiry into this coping effort acknowledges the inherent strengths idiosyncratic to families, but will also contribute to helping others find their own strengths when the paths to such resources are uncovered by means of scientific inquiry. It is proposed that the approach used by the present investigation will contribute to the knowledge of a phenomenon described by Hawley and DeHaan (1996) as "...how families adapt to stress and bounce back from adversity" (p. 283). Studies of individual resilience abound and formed the initial foundation of the work on how individuals cope with stress (Rutter, 1985). Walsh (1996) showed that, although few studies have focused on the role of the family in individual coping, family survival contributes to the survival of individual members.

1.1.2 Limited research

Research is needed for a strong knowledge base from which to develop interventions (Gass-Sternas, 1995). McCubbin and McCubbin (1996) stated that knowledge about successful adaptation to stressful situations is important for treatment and proactive programmes, but that current research is still limited. Few studies have investigated the effects of the role of the family on individual resilience in stressful situations (Greeff & Aspeling, 2007; Greeff & De Villiers, 2008; Walsh, 1996). As mentioned, a literature review revealed that, to date, no research has been published on resilience in single-parent families affected by HIV/AIDS in the South African context. Limited research is to be found on single-parent widow families, particularly in black and other ethnic groups (Gass-Sternas, 1995). As indicated by Greeff and Human (2004), few studies have been published on resilience in single-parent families.

1.1.3 Ethnicity

The inclusion of ethnic groups and non-traditional families in research will greatly benefit the study of resilience frameworks (Greeff & Aspeling, 2007; McCubbin, Thompson & McCubbin, 1996). These two concepts feature significantly in the current study. Ethnicity and cultural diversity were addressed in research with the Resiliency Model in studies including Native American Indians and Native American Hawaiian families. McCubbin *et al.* (1996) reported on a study of 1 000 families that had relocated to foreign countries, indicating the extensive variation in contexts in which research based upon the Resiliency Model has been done and is possible. Cross-cultural studies by Dugan and Coles (in Walsh, 1996) in Brazilian shantytowns, South African migrant camps and American inner cities found that, in spite of negative outcome predictions by mental health professionals, indications of resilience were found under these very harsh living conditions.

1.1.4 Human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS)

Kalichman, Cherry and Browne-Sperling (1999) refer to an HIV/AIDS epidemic. At the time of their writing, more than 600 000 cases of AIDS had been diagnosed, with between 40 000 and 80 000 new HIV cases reported each year in the United States of America (USA). More recent publications support the notion of the presence of an epidemic. The AIDS epidemic update of the Joint United Nations Program on HIV/AIDS (UNAIDS, 2002) released a figure of 42 million people living with the virus. According to this report, sub-Saharan Africa, by far the worst-affected region in the world, has 29.4 million people living with HIV/AIDS. The progression and sustained changing nature of the epidemic shows that, by the end of 2007, it was reported that HIV prevalence had stabilised, and that by mid-2008 it was estimated that 33 million people were living with HIV (UNAIDS, 2008a). UNAIDS (2009) reports that the number of infected people continues to rise, and that prevalence rates are 20% higher than in 2000 and about threefold higher than in 1990. However, some success is reported, showing

that the incidence of HIV is declining, with less new infections at the statistically significant level in the Dominican Republic and the United Republic of Tanzania (UNAIDS, 2009).

The above scenario makes it quite obvious that, despite the effects of programmes aimed at the prevention and spread of the virus, the number of people infected and affected is staggering. This serves as motivation for research into effective coping and the development of programmes to assist victims; hence the motivation for the current study. The UNAIDS (2002) website further states that “HIV/AIDS is one of the biggest challenges Africa is facing. The implications of the epidemic are vast and potentially devastating” (AIDS in Africa: Scenarios for the future – link).

1.1.5 Single-parent families

Walsh (2003) devoted a whole chapter in the latest edition of her book, “Normal family processes”, to single-parent families. She reported a 58% increase in single-parent families in the USA since 1970. Kirby (2003) noted some of the difficulties associated with single parenthood to be poverty and having to cope alone with the responsibilities of childrearing. Walsh further reported that more than 71% of African-American families were headed by single parents, but that despite the high likelihood of low-income single-parent families being chaotic and particularly stressful, these families were able to learn positive coping strategies.

The present study focused specifically on resilience in single-parent families as a family type or form for a number of reasons. Single-parent families have to a large extent become the norm for families (Weeks, 1999), and there is an identified shortage of published studies on resilience in single-parent families (Greeff & Human, 2004). Related to the discussion in Section 2.4.5 on the challenges faced by single-parent families, such as poverty, finding adequate housing and stress, it was thought that this particular family group is particularly vulnerable when confronted by HIV/AIDS. It was also considered prudent to investigate

successful coping by this family group with a challenge as posed by HIV/AIDS, which has large social and economic impacts.

It will be noted in the description of the study population that inclusion and exclusion criteria needed to be considered carefully. The varying defining criteria made a focus on in- and exclusion criteria challenging; also challenging was the process of recruiting participants, considering the social stigma associated with HIV/AIDS (well-documented in the literature on HIV/AIDS and anecdotally noted by the counsellors). Note in Section 2.4.4 that the European Commission, for instance, uses strict criteria to define single-parent families, namely a parent living alone with his or her children. Other authors, however, still consider co-habitation as not necessarily excluding single parents. In the present study, participants were included who self-defined as single-parent families, even though they might have been in a form of relationship with another adult (cohabiting or otherwise). If the parents were unmarried, separated or divorced, they were considered as single-parent families in the present study.

1.1.6 The Resiliency Model of Family Stress, Adjustment and Adaptation

An emphasis on family strengths and coping, instead of the traditional approach comprising the study of pathological phenomena, stimulated the development of various family models. The current study was done within the theoretical framework of the Resiliency Model of Family Stress, Adjustment, and Adaptation (Figure 1), the most recent development of a number of earlier models (McCubbin & McCubbin, 1996). Regarding this model, Brown-Baatjies, Fouché and Greeff (2008, p. 78) write that it “has a long history dating back to 1946 and is substantiated by decades of research”, that “factors comprising this model have been empirically tested, and related measuring instruments have been developed”. The authors also show the relevance of the model for the South African context.

The Resiliency Model (see Figure 1), as it has become known, has its roots in the “landmark work of Reuben Hill (1949, 1958)” (McCubbin *et al.*, 1996, p. 5), the so-called ABCX Model. This model emphasises stressors (A), resources (B), meaning associated with the stressor (C), and the crisis situation (X). Developments from the initial ABCX Model include the Double ABCX Model, the FAAR (Family Adjustment and Adaptation Response) Model and the Typology Model of Family Adjustment and Adaptation (McCubbin *et al.*, 1996).

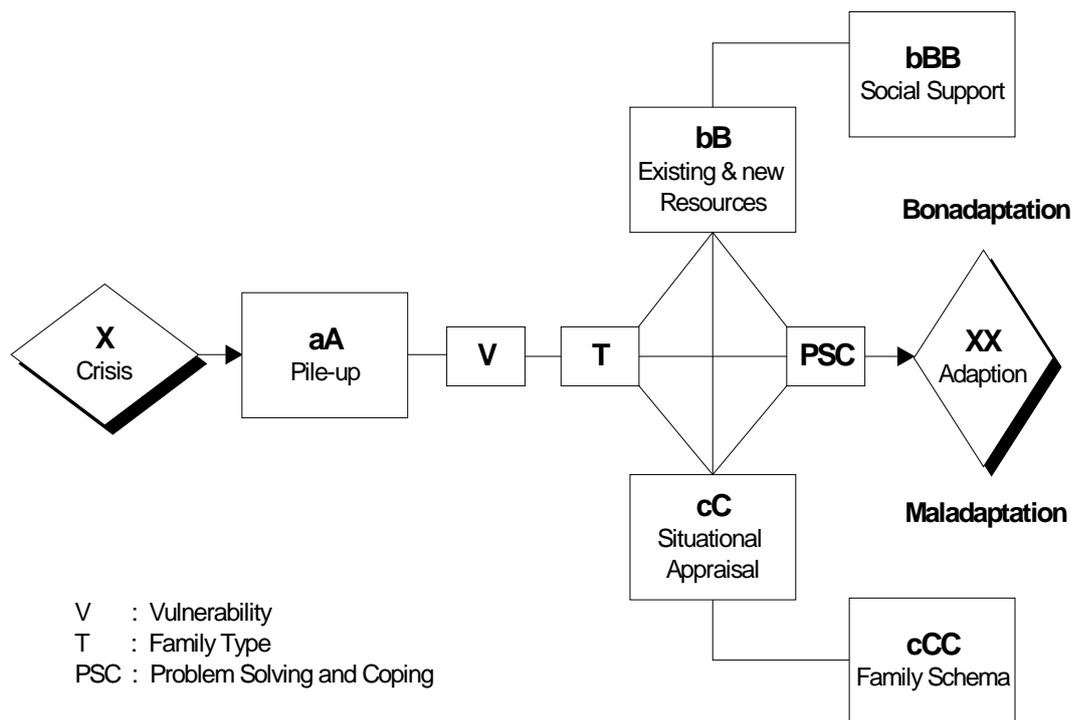


Figure 1. The Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996).

McCubbin and McCubbin (1996) illustrated the significance of the Resiliency Model to the field of family therapy, and its applicability to the current study is evident from the fact that it emphasises four areas of family functioning that are very important to recovery. It focuses on the creation of harmony despite prevalent crisis situations, incorporates five levels of crisis appraisal involved in the recovery process, and revolves around intra-familial relations during the processes of adjustment and adaptation to crises (Greeff & Aspelung, 2007). The significance of the Resiliency Model is further advocated in that it practically and schematically embodies Walsh’s (1996) description of relational resilience as “organizational

patterns, communication and problem-solving processes, community resources, and affirming belief systems” (p. 262).

The Resiliency Model distinguishes between two interrelated phases: the adjustment phase and the adaptation phase. The adjustment phase describes the family’s post-crisis adjustment and the influence of protective or resistance factors in the face of normative stressors, strains and transitions. The family makes minor changes and short-term adjustments to manage demands with as little disruption to family behaviour or structure as possible. Several components that make up the model interact to determine the outcome on a continuum from positive bonadjustment to negative maladjustment. Maladjustment moves the family back into crisis, whence the family moves into the adaptation phase of the Resiliency Model (McCubbin & McCubbin, 1996).

The adaptation phase describes what happens in families in a maladjusted crisis situation when adjustment fails to significantly incorporate a crisis situation into harmonious family functioning. Successful adaptation is referred to as bonadaptation. Unsuccessful adaptation (maladaptation) brings about the cyclical nature of the model in that the cycle starts again, with changes in patterns of functioning, and recycles through the family processes of adaptation.

Developments from the theoretical framework of the Resiliency Model include a number of questionnaires suitable for research and clinical practice (McCubbin *et al.*, 1996). The following five of these questionnaires were selected to be used in the current study (with the aspect(s) of the model which each of the questionnaires proposes to give a measure of given in brackets): (1) The Social Support Index (measuring community social support (bBB), part of the family resources (bB) aspect of the Resiliency Model), (2) the Family Hardiness Index (vulnerability (V) aspect of the Resiliency Model), (3) Family Crisis Oriented Personal Evaluation Scales (pile-up (aA), family resources (bB) and family schema (cCC) aspects of

the Resiliency Model), (4) the Family Problem Solving Communication Scale (family problem solving and coping (PSC) aspect of the Resiliency Model), and (5) the Family Attachment and Changeability Index 8 (representing the dependent variable, indicative of the level of family adaptation).

1.2 Objectives of the study

The goal of the current study was to identify and describe variables associated with resilience in single-parent South African families affected by HIV/AIDS. Through this endeavour it is hoped to contribute to the work of the international scientific community making an effort to address the identified lack of knowledge about family resilience as it relates to HIV/AIDS. In order to achieve this goal, the following research questions and goals were defined:

Primary research question. In terms of the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996), do the following factors, namely social support, family hardiness, the family orientation towards the crisis (including factors such as acquiring social support, reframing, spiritual support, mobilising and passive appraisal) and family communication styles, perform protective and recovery functions in single-parent families with an HIV-positive family member? On the basis of two qualitative questions, the participants were asked to write, in their own words, which factors or strengths they considered to have helped them cope with this stressful period; and also to rate the level of shock of the news of a family member being diagnosed positively with HIV/AIDS.

Secondary research question. What should the content of family intervention programmes for single-parent families affected by HIV/AIDS include, and how can the identified resilience variables be developed and strengthened?

Primary objective. The primary objective of the study was to determine and describe the inherent strengths employed by single-parent families of HIV-positive persons in terms of the Resiliency Model.

Secondary objective. The secondary objective of the study was to provide guidelines for the development of programmes intended to support and strengthen single-parent families of HIV/AIDS patients.

Alternative objective. Due to the implementation of the study, the capacity building of a non-governmental organisation and its members in the Helderberg area of the Western Cape in South Africa was made possible. This was specifically due to the fact that the researcher presented weekly workshops to lay counsellors at the Helderberg Aids Centre in Somerset West, Western Cape, South Africa.

Prologue

The significant theoretical constructs are discussed in Chapter 2. These include resilience, single parenthood, HIV/AIDS and the Resiliency Model of Family Stress, Adjustment and Adaptation of McCubbin and McCubbin (1996). Chapter 3 provides a literature review of recent investigations in terms of the mentioned theoretical constructs. In Chapter 4 the research problem and hypotheses are described, followed by a discussion of the research method in Chapter 5. The results of the current investigation are reported in Chapter 6. A discussion of the results, the conclusions drawn, the limitations of the current study, and guidelines and recommendations for the development of suitable intervention programmes and further study are documented in Chapter 7.

Chapter 2

Theoretical constructs

Introduction

The present study is based on a number of constructs that will be discussed in this chapter. The title of the dissertation alludes to the primary constructs included in, and on which, the current study is based. Resilience, and more specifically family resilience, is the pivotal construct of the study and will be discussed in Section 2.1. Flowing from the focus on family resilience is a discussion of the Resiliency Model of Family Stress, Adjustment and Adaptation of McCubbin and McCubbin (1996) in Section 2.2. Section 2.3 provides a discussion of the human immunodeficiency virus (HIV) and its accompanied acquired immunodeficiency syndrome (AIDS) as the primary source of adversity for families who participated in the current study. Single parenthood is discussed in Section 2.4 as a final major construct relevant to the current study.

2.1 Resilience

As will be noticed on the following pages, defining resilience remains a complex task (Hawley & DeHaan, 1996). It may, however, have to suffice for the moment to indicate that resilience implies the notion of sustained integration in the character and function of individuals and/or families despite being confronted by a crisis situation (Greeff & Aspeling, 2007). Resilience implies successful adaptation following confrontation with a stressor; hence the focus of the present study on those factors and characteristics that helped families cope with the news of a family member being diagnosed with HIV. This preliminary definition does not indicate how the construct may be operationalised as yet – a point noted in resilience literature as a challenge still posed to further research and development (Hawley & DeHaan, 1996).

During the last decade or two a growing interest (Greeff & Loubser, 2008; McCubbin *et al.*, 1996f; Rutter, 1999) in a relatively new (Anthony & Cohler, 1987; Hawley & DeHaan, 1996) construct (resilience) signifies a shift from a focus on pathology to an understanding of, and studies on, how human beings and in particular families react to adversity and indeed overcome obstacles. This shift relates to a focus on strengths as opposed to a focus on pathology or deficits (Anthony & Cohler; Antonovsky & Sourani, 1988; Greeff & Aspeling, 2007; Greeff & Human, 2004; Greeff & Loubser, 2008; Greeff & Van der Merwe, 2004; Hawley & DeHaan; Walsh, 2003) and is aimed at contributing to treatment and proactive interventions for humans at risk (McCubbin *et al.*) through a provision of what Walsh (1996) describes as psychosocial inoculation. Indeed, Wolin and Wolin (1993) indicate that it is unfortunate that the focus of the professions of psychology and psychiatry historically have been rather alarmist in their disproportionate views on vulnerability, with rarely a view expressed on resilience, until fairly recently. Antonovsky and Sourani (1988) developed a salutogenic model that maintains a world view of stress and adversity as normal parts of living to which it is necessary for individuals to develop a sense of coherence, a way of making sense or meaning out of setbacks, in order to survive (Greeff & Aspeling, 2007).

A review of resilience literature indeed highlights the complex and multifaceted nature of what Rutter (1999) describes as a “phenomenon of overcoming stress or adversity” (p. 119) that is “necessarily and appropriately broad” (p. 120), and in relation to which Hawley and DeHaan (1996) show that a clear definition and practical application still are to be developed. It is noted by Anthony and Cohler (1987) that much confusion reigns in the varied and unordered nature of the new knowledge that is being produced in a scattered fashion, with little connection among the various attempts at description of the phenomenon. In order to contribute to a better understanding of resilience, the concept will now be dissected and each of the identified central themes and significant parts will be discussed. Following this, an attempt will be made at a synthesis of a complex field rich with meaning; meaning that will

become clear as time progresses. This view is reflected in a work by de Beauvoir (1967/1984), “Chaque atome de silence est la chance d’un fruit mûr – unlooked-for fruit will come from this slow gestation” (p. 11). This sets the underlying philosophical tone of the present study, placing it squarely in a view that supports resilience as a relational process that manifests itself and is observable in a system (and over time) – a view supported by leading theorists in the family resilience field (Hawley & DeHaan, 1996; McCubbin & McCubbin, 1996; Walsh, 1996).

2.1.1 Nature of resilience

2.1.1.1 Habitat

An investigation into resilience necessarily needs to consider the varied nature of the phenomenon in that it presents differently in three distinct areas associated with, and quite idiosyncratic to, human life (and possibly also noted in primates). Cohler (1987, cited in McCubbin, McCubbin, Thompson, Han & Allen, 1997) indicates the importance of the intra- and interplay of processes within the individual (Greeff & Holtzkamp, 2007), the family and the social contexts that contribute to resilience. Silliman (1994, cited in Hawley & DeHaan, 1996) supports a focus on the interplay of the three contexts of presentation (individual, family and society) (Greeff & Holtzkamp, 2007; Jonker & Greeff, 2009), although Hawley and DeHaan focus primarily on presentation within and the interplay between individual resilience and family resilience, with hardly a mention of cultural and other social supports. The views of McCubbin and McCubbin (1996) form the main theoretical basis of the current investigation. The Resiliency Model (McCubbin & McCubbin) stems from the family stress and family resilience fields of study, with the primary focus of the model on the interactional processes within families with regard to resilient outcomes and family survival. The authors noted an increase in resilience studies with a focus on different ethnic groups and non-traditional family patterns. This increase in studies of family resilience in groups of varying ethnic and family types is not surprising, particularly as it is noted that the construct of family

schema (described as “the hub of the family’s appraisal process” by McCubbin and McCubbin, p. 48), is an important part of the Resiliency Model and that a family’s schema is embedded in culture and ethnicity.

The presentation and unique contributions of the three habitat aspects (individual, family and society) of resilience will be discussed separately in a later section. It is, however, necessary at this stage to take cognisance of two further concepts related to the habitat where resilience will be found: that is *vulnerability* and *crisis* (McCubbin *et al.*, 1997). Vulnerability relates to a susceptibility to deterioration due to confrontation with risks of varied nature (e.g. biological, economic, social, psychosocial), with a good possibility for a negative outcome. Crisis indicates continued disruption in the status quo, despite attempts at adjustment and adaptation. Indeed, Rutter (1999) says that the presence of negative experiences is vital for the development of resilience, and Wolin and Wolin (1993) indicate that resilience is a rebound from negative experiences in early life. The Resiliency Model of McCubbin and McCubbin (1996), the model that forms the basis of the current investigation, rests heavily upon the presence of a crisis and vulnerability, i.e. a pile-up of stressors. The presence of crisis and vulnerability highlight the processes that signify a person or family as resilient with good and satisfying outcomes when confronted by stressors.

Antonovsky and Sourani (1988) say that a measure of *fit* between the demands of stressors and the availability and use of resources to meet said demands is needed, in order to develop a sense of coherence (a sense of confidence in the ability to meet challenges posed by stressors). Confidence in the ability to successfully manage the effects of stressors appears to be related to the concept of resilience (Greeff & Van der Merwe, 2004). Hawley and DeHaan (1996) showed that in order for resilience to prevail, comprehensibility, manageability and meaningfulness of adversity is needed, which is related to the *fit* of resources to demands. The concept “underload-overload balance” (Antonovsky & Sourani, 1988, p. 80) describes the

concept of *fit* particularly well. Walsh (2003) developed the concept of *fit* further to include not only stressor demands on resources, but also the unique family situation and cultural orientation.

In order to focus further on where the phenomenon of resilience is to be found, it may be helpful to consider *outcomes* (of the production of resilience factors being stimulated due to confrontation with stressor variables) as an indication of what it is. Hawley and DeHaan (1996) relate this focus on outcomes as an indication of resilience to an attempt by McCubbin and McCubbin (1996) to use the concepts of family typologies and family schema in order to describe resilience. In terms of this view, the presence of central themes (family traditions, family celebrations, family time and routines, valuing family time and routines, family coherence, family hardiness, family satisfaction) denotes certain types of families that have been found to be resilient. Family types that were found to be more resilient were termed regenerative, versatile, rhythmic and traditionalistic (these will be discussed in more detail in a later section of the current investigation (see Section 2.1.3)). Family schema may be described as shared priorities, values, goals, expectations and worldview that emphasise how the family perceives the stressor and its effects (Hawley & DeHaan, 1996). This in itself may contribute significantly to a resilient reaction and consequently the manifestation of resilience factors. The notion of a family schema and its influence on how a stressor is perceived is related to the belief system domain of Walsh's (2003) family resilience framework (discussed in Section 2.1.4).

The presence of resilience is to be detected in association with certain factors upon which authors placed emphasis differently. Hawley and DeHaan (1996) and Rutter (1999) emphasise the presence of *risk factors*, while *protection factors* are highlighted by Hawley and DeHaan and McCubbin *et al.* (1997), and *recovery factors* are deemed important by McCubbin *et al.* (1996).

2.1.1.2 Risk, protection and recovery

Before the central components of resilience, elasticity and buoyancy are discussed, it is necessary to be alerted to the dual functional nature of resilience, namely protection and recovery (McCubbin *et al.*, 1997). It is further important to note the presence of the risk factors that are needed in order to give rise to the onset of the protective and recovery functions of resilience – risks such as socioeconomic circumstances, for instance financial difficulties, as well as interpersonal strains and substance misuse (Rutter, 1999). Indeed, McCubbin *et al.* (1997) indicate that the nature (in fact the dual functions of protection and recovery) of resilience can best be observed in the presence of risks, because a system (such as a family) is demanded to stretch and to make adjustments due to finding itself in a position of being in jeopardy. Although a shift in the focus of family studies, from deficits to strengths, has been noted (Anthony & Cohler, 1987; Antonovsky & Sourani, 1988; Hawley & DeHaan, 1996; Walsh, 2003), risks have remained a particular focus in order to identify the resilience processes and factors at work. Antonovsky and Sourani showed that the development to a focus on strengths still maintained crisis as an important factor, noted even in the classic work of Hill. The current study, which focuses on HIV/AIDS while investigating resilience factors, is a case in point of a search for the emergence of resilience factors where significant risks are present. Walsh (1993) shows various risks studied by noted researchers in those particular areas, such as the effects of divorce (Hetherington), immigration (Falicov), illness (Rolland) and problems associated with normal life-cycle challenges (McGoldrick). McCubbin *et al.* (1997) point out that it is important to consider that families experience risks over the entire family life cycle, and over time, and that these two aspects are important when considering variations in the use of protective and recovery factors. Although risks remain pivotal in the strengths-based studies of resilience, a focus on various factors and processes, such as resources, meanings attributed to the stressor and communication patterns, is a significant feature of further developments (Antonovsky & Sourani, 1988; McCubbin *et al.*, 1997; Walsh, 2003).

The protective function relates to the ability to endure or survive the onslaught of events that are normative and consequently related to normal life-cycle challenges. Protection is also needed for non-normative events, usually characterised by little preparation for or expectation of the occurrence of said event. Greeff and Van der Merwe (2004) indicate economic, family and community resources as sources of buffering agents. McCubbin *et al.* (1997) relate protective factors to the adjustment phase of the Resiliency Model of McCubbin and McCubbin (1996), in which minor adjustments are made in order to maintain the established way of functioning, characteristic of the family functioning prior to the onset of the stressor, and in fact minimising the effects of the stressor. According to McCubbin *et al.* (1997), it is important to consider life-cycle stages (couple and childbearing, school age/teenage, young adult/empty nest, retirement) and culture and ethnicity when protective factors are investigated, as the importance placed on various protective factors varies accordingly. The protective factors found to be most important over all the stages were family celebrations, family hardiness, family time and routines, and family traditions (McCubbin *et al.*, 1997).

The recovery function of resilience relates to the bounce-back ability to not only survive the onslaught of normative and non-normative events, but to be restored to former levels of functioning, characteristic of pre-crisis levels (Greeff & Human, 2004). It is also noted that the recovery function relates to post-crisis levels of functioning that may even surpass those of the pre-crisis situation (in other words, that the level of functioning is higher because of the stressful situation!) (Hawley & DeHaan, 1996; McCubbin *et al.*, 1997). It was found that, in the literature, a focus on recovery factors as distinct from protection factors was questioned, in response to which McCubbin *et al.* indicated that different processes were at play in order to bounce back, in comparison to the maintenance of familiar patterns of functioning. As such, it was indicated that recovery factors differed from protective factors, as shown by McCubbin *et al.* in families with chronically ill children (family integration, family support and esteem building, family recreation orientation, control and organisation, and family

optimism and mastery) and in families in a war situation (self-reliance and equality, family advocacy, family meanings, family schema). McCubbin *et al.* related recovery to the adaptation phase of the Resiliency Model of McCubbin and McCubbin (1996).

Once again, the term psychosocial inoculation (Walsh, 1996) denotes the dual, almost symbiotic, functionality of protection on the one hand and recovery on the other hand (related to adjustment and adaptation respectively), which constitutes resiliency.

2.1.1.3 Elasticity and buoyancy

McCubbin *et al.* (1997) quoted these central components of family resilience from a Random House Webster's Dictionary (1993) as:

1. The property of the family system that enables it to maintain its established patterns of functioning after being challenged and confronted by risk factors: **elasticity**, and 2. The family's ability to recover quickly from a misfortune, trauma, or transitional event causing or calling for changes in the family's patterns of functioning: **buoyancy**. (p. 1-2)

The terms elasticity and buoyancy relate to the nature of resilience, and are terms used in a metaphorical sense to describe basic properties of what has been observed in the literature about the phenomenon, whereas protection and recovery describe functions of resilience. It can be seen, however, how these descriptions of the basic properties of the nature of resilience relate to the functions of protection and recovery. Elasticity is related to protection in its quality of being able to bend to the effects of the winds of change brought on by confrontation with normative and non-normative changes and challenges over the life cycle, but also to the recovery function in providing answers to questions related to what makes some families adjust and adapt better than others (Greeff & Van der Merwe, 2004; McCubbin & McCubbin, 1996; Walsh, 2003). Buoyancy appears to be related more to the recovery function of resilience (even though it contributes to the protective functions of resistance and adjustment

to demands for change) in that it describes the processes involved in adapting and bouncing back to former (Hawley & DeHaan, 1996) or even better (Walsh, 2003) levels of functioning. The return to similar functioning after the stressful event has been linked to the Roller Coaster Model of Hill (in Hawley & DeHaan, 1996).

It is important, however, to bear in mind the notion that the descriptive constructs elasticity and buoyancy are not empirically derived factors of resilience, and should not be considered as such. These terms are not operationally defined and certainly do not pose as such in the literature. Even though the accuracy of description may be questioned when using metaphors to explain phenomena such as resilience, it may be conceded that some narrative value is brought to the qualitative appreciation of what it is that makes some humans cope better than others under certain adverse circumstances.

2.1.2 Key resilience factors

In support of the central components of resilience are a number of protective and recovery factors, 10 of which McCubbin *et al.* (1997) identify as important. These are family problem-solving communication, equality, spirituality, flexibility, truthfulness, hope, family hardiness, family time and routine, social support and health. Walsh (1996) indicates a number of factors, which she refers to as “keys to family resilience” (p. 273), including family paradigms (shared beliefs), spiritual values, community resources (and use thereof), and optimism and hope. Although Walsh presents a greater focus on transitional processes, and family resilience as a particular form of resilience, the focus is on similar essential elements or factors that contribute to the ways in which individuals and families cope with adversity. The similarity in views on what constitutes resilience is further demonstrated in Wolin and Wolin (1993), where seven resilience factors are described as insight, independence, relationships, initiative, creativity, humour and morality. Hawley and DeHaan (1996) believe

that “true resilience encompasses both short- and long-term coping styles” (p. 288), reflected in ongoing flexibility and adaptation.

As the current investigation builds on the Resiliency Model and work of McCubbin and McCubbin (1996), prominent resilience factors identified in their work will form the basis of an exploration of key resilience factors that have emerged. Over a period of about 25 years and through a process of “identification, conceptualization, measurement, and validation of the protective and recovery factors operative in family systems faced with family risk factors as well as crisis situations” (McCubbin *et al.*, 1997, p. 9) and of constant analysis and reanalysis of concepts identified through observation, McCubbin *et al.* identified the following ten general or key resiliency factors. The authors acknowledge that the generalisability of these factors is limited and that further verification and refinement of these general resiliency factors is needed. As such they encourage further research, measurement and theory building.

2.1.2.1 Family problem-solving communication

Family members do communicate. It is the instrument that families use to plan and implement strategies in order to cope with normative and non-normative challenges, to make sense of the chaos that characterises the effects of stressors, and to maintain harmony and balance (Greeff, 2000). McCubbin *et al.* (1997) identified two forms of problem-solving communication: affirming and incendiary. Affirming communication is calming and supportive, encouraging of talking until a solution is found, whereas incendiary communication is identified by yelling, screaming and fighting and basically makes the situation worse. It is important to bear in mind that both forms are idiosyncratic to all families. Crises create an environment where incendiary communication may dominate, promoting family deterioration and preventing adaptation. The potential for bonadaptation is increased greatly in the presence of the

affirmative type of problem-solving communication (Greeff & Du Toit, 2009; Greeff & Holtzkamp, 2007; Greeff & Wentworth, 2009; Jonker & Greeff, 2009).

2.1.2.2 Equality

Research on resilience in crisis situations has shown that a sense of self-reliance and independence in all members of the family contributes significantly to the adjustment and adaptation of the whole family system (McCubbin *et al.*, 1997). Wolin and Wolin (1993) support the notion of independence as a key resilience factor by incorporating the concept in their resilience mandala (a diagrammatic representation of resilience factors), which denotes that which deems some to be resilient as opposed to those who are not. Respect for individual family member differences and fairness to all members were shown to be as important as a measure of connectedness between family members (Greeff & Du Toit, 2009; Greeff & Human, 2004; Walsh, 2003). In essence, it was shown that families in which there was acknowledgement for individual differences in coping styles and the fact that all members are equally important to the family tend to have more resilient outcomes (Greeff, 2000; McCubbin *et al.*, 1997; Walsh, 2003; Wolin & Wolin, 1993).

2.1.2.3 Spirituality

Greeff and Joubert (2007) describe spirituality quite succinctly as “a non-traditional, non-institutionalized religiousness, or as the human quest for personal meaning and mutually fulfilling relationships with people, the nonhuman environment, and, for some, with God” (p. 897). Catastrophic events usually coincide with loss of life and/or material of significance. The situation and resultant pain and sense of loss cannot always be explained successfully by reason alone, although reframing crisis situations forms part of successful adaptation (McCubbin *et al.*, 1997). It is such times that spirituality enhances meaning and justification for the survivors (McCubbin *et al.*; Walsh, 1996). Wolin and Wolin (1993), however, focused on morality and responsibility as coping mechanisms, rather than on the consideration of a

superior force or transcendence of the worldly. The importance of religious or spiritual coping for family adaptation and a resilient outcome is shown in research (Greeff & Du Toit, 2009; Greeff & Fillis, 2009; Greeff & Human, 2004; Greeff & Joubert, 2007; Greeff & Loubser, 2008; Greeff & Van der Merwe, 2004). Greeff and Loubser (2008) in particular, from the results of a qualitative study, indicate six categories and subcategories related to spirituality. This finding highlights the fact that this source of protection and recovery (spirituality as a resilience factor) warrants further investigation. The finding that spirituality is a rather complex resilience factor may contribute to operationalising a definition of resilience by incorporating religious and spiritual practices as forms of family coping behaviours that prove to assist the management of distressing events. The results of a study of migrant families by Greeff and Holtzkamp (2007), however, did not support the importance of religion or spirituality as a resilience factor. It may be postulated that the stress of migration compared with a more life-threatening stressor, such as a terminal illness, may elicit different resilience factors. This observation may warrant further investigation, particularly in relation to comments by Jonker and Greeff (2009), who also did not find quantitative support for the value of religious or spiritual coping, despite the presence of qualitative evidence to the contrary, in their study. The authors further indicated that there is confusion in relation to some of the items purporting to measure religious coping (FCOPES - Spiritual support subscale).

2.1.2.4 Flexibility

McCubbin *et al.* (1997) quote a number of studies that support the notion of flexibility in the established roles, rules, meanings, lifestyles and general patterns of functioning in order to adjust and adapt successfully, in other words to achieve a family situation characterised by harmony and balance (Greeff, 2000; Greeff & Human, 2004). In a study of family types, McCubbin and McCubbin (1996) identified that flexible families, in addition to the mentioned attributes, have open communication, share in decision making, are able to

compromise and have experience in shifting or sharing of responsibilities. Walsh (2003) considered flexibility not only in family interaction patterns, but also in an appreciation of flexibility as descriptive of the nature of resilience itself. Flexibility and cohesion are considered important to be combined functionally and operationally in order to contribute to and facilitate successful coping (Greeff & Van der Merwe, 2004).

2.1.2.5 Truthfulness

A sense of ambiguity identifies and contributes to crises in the sense that, in the absence of what McCubbin *et al.* (1997) call blueprints for dealing with said crises, people and systems do not know what to do and how to react. Successful adaptation is dependent upon truthful facts from within the family, as well as from social structures outside the family such as medical support and support programmes. Walsh (2003) called for clarity of communication as significant for the proper assessment of crisis situations in order for appropriate allocation of resources to meet the associated demands (also referred to as open, honest communication by Greeff and Human (2004)). This is particularly important in terminal medical conditions, such as HIV/AIDS, which is the form of adversity central to the present investigation (Seki, Yamazaki, Mizota, & Inoue, 2009).

2.1.2.6 Hope

McCubbin *et al.* (1997) stress that the maintenance of a sense of hope is vital for a resilient outcome and successful adaptation. Stressful situations often bring about the converse, i.e. a sense of helplessness, which promotes a maladaptive outcome. Seligman (in Sarafino, 2006) uses the concept of *learned helplessness* to describe the phenomenon of giving up hope due to continued setbacks. The converse is shown to be true in Seligman's *learned optimism* construct, which relates to the positive effects of mastery for the development of a positive outlook amidst crises (Walsh, 2003). This sense of hope (McCubbin *et al.*, 1997) relates to a confidence in a positive outcome when faced with stressors, and is conceptualised quite well

by the sense-of-coherence construct of Antonovsky and Sourani (1988), which describes a view of life as comprehensible, manageable and meaningful, even in the throws of turmoil. Recent research confirms the hypothesis of optimism as an important aspect of successful coping (Greeff & De Villiers, 2008; Greeff & Fillis, 2009).

2.1.2.7 Hardiness

Hardiness refers to the quality of the resistance offered when presented with stressors. This quality has often been described as “steeling”, referring to the strength of the individual or family (Greeff & Holtzkamp, 2007; McCubbin *et al.*, 1997) as well as their capabilities (McCubbin & McCubbin, 1996). McCubbin and McCubbin (1996) highlight tangible (financial, material, support programmes) (Der Kinderen & Greeff, 2003; Greeff & Holtzkamp, 2007) and intangible (self-esteem, integrity, cultural heritage) aspects of hardiness, as well as the different qualities of hardiness as related to the individual and the family. Individual-level hardiness refers to qualities such as intelligence, knowledge and skills, personality traits, physical, spiritual and emotional health, self-esteem, ethnicity (Greeff & Holtzkamp, 2007; Greeff & Human, 2004), and Antonovsky and Sourani’s (1988) concept of sense of coherence and sense of mastery. With reference to the sense of mastery in particular, Anthony and Cohler (1987) describes a sense of personal competence as related to successfully meeting the challenges presented by stressors. A good sense of humour is thought to be an important quality of resilient individuals (Hawley & DeHaan, 1996; Wolin & Wolin, 1993), in particular with reference to hardy individuals. As noted before, and supported by a number of researchers (Hawley & DeHaan, 1996; Walsh, 1996, 2003), resilience is also a family-level construct characterised by what McCubbin and McCubbin (1996) describe as cohesion or bonding between family members and adaptability, which contribute to the sense of hardiness of the family (Greeff & Aspelting, 2007; Greeff & Du Toit, 2009; Greeff & Fillis, 2009; Greeff & Holtzkamp, 2007; Greeff & Human, 2004; Greeff & Van der Merwe, 2004; Greeff, Vansteenwegen, & De Mot, 2006; Greeff, Vansteenwegen,

& Ide, 2006; Greeff & Wentworth, 2009). It is of course timely to note that the family does not always present in a supportive fashion and, in certain circumstances, poses rather as a stressor in itself (Hawley & DeHaan, 1996; Wolin & Wolin, 1993).

Of note is Anthony and Cohler's (1987) interchangeable use of the terms invulnerability and resilience. It is thought that the concept of the hardy or invulnerable individual, seemingly unaffected by life's hardships, stimulated the salutogenic shift from research on pathology to strengths-based studies (Walsh, 2003). As such, it emerged that resilience is not synonymous with hardiness (resistance strength) (although hardiness and ability to endure are certainly an important part of resilience), but that resilience develops due to a process of being knocked over and then bouncing back, or recovering, again. Walsh describes this focus of family resilience as "strengths forged through adversity" (p. 399).

2.1.2.8 Family time and routine

The overarching and central theme of the Resiliency Model of McCubbin and McCubbin (1996) is the creation or attainment of harmony and balance in the face of adversity. This is achieved through the creation of a milieu of predictability and stability by cultivating practices and routines that have special meaning and value in family relationships (McCubbin *et al.*, 1997). Family time and routine and the valuing of such special practices as important factors contributing to a resilient outcome were highlighted in the research on family typologies (McCubbin & McCubbin, 1996). Evidence of the importance of family time and routines for family adaptation is found in research on families coping with medical conditions and is consequently of value for the present study (Greeff & Wentworth, 2009). It was reported that it is not merely the presence of regular and predictable practices and routines that is important for high levels of resilience, but also that families identified as rhythmic families placed a high value on said activities of sharing and caring. Walsh (2003) related family time and routines to a process of enhancing connectedness among family members.

Support for family time and routines as a family resilience factor is to be found in recent research (Greeff & Du Toit, 2009; Greeff & Holtzkamp, 2007).

2.1.2.9 Social support

Social support plays a vital role in both a protective and a recovery sense (Greeff & Aspelung, 2007; Greeff & Du Toit, 2009; Greeff & Fillis, 2009; Greeff & Holtzkamp, 2007; Greeff & Human, 2004; Greeff & Van der Merwe, 2004; Greeff, Vansteenwegen, & De Mot, 2006; Greeff, Vansteenwegen, & Ide, 2006; Greeff & Wentworth, 2009; Van der Merwe & Greeff, 2003) and relates to a network of relationships that aid survival (Greeff, 2000). According to McCubbin *et al.* (1997), not only are known resources utilised, but additional ones sometimes are employed in order to assist in the search for meaning, to develop coping strategies and, most importantly, to assist in the ability to change and adapt. McCubbin *et al.* identified five dimensions of social support. The first is *emotional support*, which relates mostly to a sense of caring, while *esteem support*, as a second dimension, relates to a sense of being valued and the activities of the person being valued as well (Greeff, Vansteenwegen, & Ide, 2006). A third dimension of social support is *network support*, which highlights and values the fact that people belong to groups to which they have responsibility, with reciprocal rewards implied. *Appraisal support*, the fourth dimension, relates to the sharing of information about the different family members' evaluations of the stressor in order to give a sense of boundary, or concept of finiteness to the threat. The fifth dimension of social support, *altruistic support*, implies giving for the benefit of others and experiencing a sense of self-worth and increase in self-esteem in return. Walsh (2003) highlights both social and economic resources as being important, whereas Wolin and Wolin (1993) focus on the value of loving relationships as a form of social support. Van der Merwe and Greeff (2003) show that economic resources represent the least most important coping resource.

2.1.2.10 Health

McCubbin *et al.* (1997) report that physical and emotional health, and wellbeing in general, are not predictors of positive outcomes, even though these indicators are often used as measures of resilient outcomes. These aspects, however, do play important protective and recovery roles as key resilience factors (Van der Merwe & Greeff, 2003). The absence of physical, emotional and interpersonal health certainly poses risks, and is related to the promotion of vulnerability and consequently gives rise to the development of resilience in some cases, and to dysfunction and deterioration in others.

Concluding remarks related to the preceding resilience factors identified by McCubbin *et al.* (1997) include a timely reminder of the limitations of these concepts, limitations related to empiricism and the verification of the accuracy and validity of the key resilience factors. With the value of previous research considered, it remains a challenge for future research to contribute to uncovering the mysteries that surround successful coping in individuals and families. The authors encourage further enquiry and development by reminding that “[i]t is this ability of the family to face life’s challenges and seemingly unfair hardships and endure and recover that will continue to inspire family scholars to pursue this line of inquiry in the future” (p. 13).

2.1.3 Family typologies

McCubbin and McCubbin (1996) identified patterns of functioning (both old and new) as very important influences on the development of the resilience processes of resisting, adjusting, accepting and finally adapting to the effects brought on by stressors. On the basis of studies of families, the researchers proposed a number of family typologies (defined as attributes that explain how a family appraises stressors and behaves in general). Family typologies appear to be vital constructs for family stress research, having both predictive value for resilient outcomes and offering important contributions to understanding resilience

processes in a family system. Walsh (2003), however, criticised the use of typologies in family assessment as being too static and out of context, because they result in a view of interaction patterns within a family without considering the resources that are available to meet the posed challenges, and neither do they take the effects of time into consideration. Walsh's views will be discussed in Section 2.1.4 in an overview of her resilience framework, after a consideration of the contribution of the notion of family typologies to a comprehensive understanding of family resilience. Studies such as that by Der Kinderen and Greeff (2003) also fail to find supporting evidence for the importance or relevance of family type to explain family crisis responses.

Four family typologies were identified on the basis of the important family attributes of integrity, unity, changeability, predictability and rituals that McCubbin and McCubbin (1996) consolidated from an overview of literature on family strengths. Bearing in mind the reciprocal (or even cyclical) nature of the presence of certain processes contributing to family strengths, and that family strengths promote the development and identification of certain family types, McCubbin and McCubbin (1996) propose regenerative, versatile, rhythmic and traditionalistic family typologies in an effort to contribute to the understanding of what makes some families survive adversity better than others. The researchers considered variations over the family life cycle, but it would suffice in terms of the goals of the present investigation to merely consider the significance of the presence of certain family types that have been found to contribute to resilience in general.

Regenerative families are described as having high levels of both family strengths, coherence (loyalty, pride, trust, respect) and hardiness (internal locus of control, sense of meaning, involvement in activities and openness for learning). These families are seen as being stable and flexible. In their study of regenerative family types, McCubbin and McCubbin (1996) conceded that families may be low or high in either or both of the dimensions of coherence

and hardiness. Vulnerable families are low in both dimensions, secure families have low coherence and high hardiness and durable families high coherence and low hardiness with consequent variation in resilience outcomes and general family satisfaction.

The description of versatile families is based on the circumplex model typology of Lavee, McCubbin and Olson (cited in McCubbin & McCubbin, 1996) and related to high levels of bonding (emotionally close and wanting to be close to other family members) and flexibility (ability to change rules, roles and boundaries, open communication and willingness to compromise). McCubbin and McCubbin (1996) use the versatile family typology model to describe other family types that differ in terms of being either low or high in the dimensions of family bonding or family flexibility. Fragile families are thought to be low in both dimensions, whereas bonded families are low in flexibility and high in bonding, with corresponding differences in how these families manage crises. Pliant families are high in flexibility and low in bonding.

The model of the rhythmic family typology (McCubbin & McCubbin, 1996) uses the dimensions of family time and routines (predictable activities and routines as a unit) and valuing family time and routines (meaning, value and importance of) to describe a sense of rhythmic togetherness as a family unit, with an accompanying valuing of said activities. This is seen as a description of a particular part of resilience and casts light on different outcomes for different families in crisis. Rhythmic families display high levels of both dimensions of family time and routines and a valuing of family time and routines. Unpatterned families are low in both dimensions. Structuralised families are high in family time and routines and low in the valuing of family time and routines. Intentional families are families that are low in actual family time and routines, but high in valuing of family time and routines. The dimensions of the model of the rhythmic family typology provide insight into the variation in families, in family satisfaction and variation in response to crises.

The fourth family system type of McCubbin and McCubbin (1996) differs slightly from the preceding. The presence of either high or low levels of the dimensions of family traditions (over time and from generation to generation) and family celebrations (e.g. special events such as Mothers' Day, Christmas) describe this particular view of a sense of togetherness as a family strength and capability. With the preceding three typologies it was found that high levels of family satisfaction and more resilient outcomes are associated with high levels of both dimensions on which the families were compared. It was found, however, that traditionalistic families (high in traditions, low in celebrations) present a higher sense of togetherness and predictability and have more predictive value for resilient outcomes than situational families (low traditions, low celebrations), celebratory families (low traditions, high celebrations) and ritualistic families (high traditions, high celebrations).

In summary, family typologies were used to describe how families appraise stressors and behave in general (McCubbin & McCubbin, 1996). Walsh (2003) criticises this as being too rigid a construct for understanding families' reactions to stress. The family types found to contribute more to resilience in general were identified as regenerative (coherent and hardy; stable and flexible), versatile (bonded and flexible), rhythmic (presence and valuing of family time and routines) and traditionalistic (high in traditions, low in celebrations) (McCubbin & McCubbin, 1996). It remains perhaps significant to bear in mind that, despite criticism to the contrary, resilience incorporates both individual and family-level processes (Greeff & Holtzkamp, 2007; Greeff & Loubser, 2008) and, as such, family types should still be considered as relevant.

2.1.4 Walsh's resilience framework

Walsh (2003) designed a resilience framework in order to provide a conceptual map in which key resilience processes (described as resilience factors by McCubbin *et al.* (1997) – described in Section 2.1.2) are grouped into three domains, i.e. belief systems, organisational

patterns and communication/problem solving. Although similar to the work of McCubbin and McCubbin (1996), Walsh's framework provides a slightly different view with a more dynamic focus on resilience processes, as opposed to a description of factors that could be interpreted as characteristics of resilient families (and not of the actual processes that make them resilient). This difference may seem semantic, even bordering on pedantic, but does offer a different philosophy of resilience with a subsequent broader conceptual appreciation of the phenomenon itself. Reference to the corresponding factors of McCubbin and McCubbin (1996) will be made throughout the discussion of Walsh's resilience framework. Note, however, that a major difference emerges through the different focus of Walsh on processes and McCubbin and McCubbin on factors, in the sense that Walsh appears not to consider the effects of individual hardiness on family resilience (for which evidence is presented in the results of the current study).

2.1.4.1 Belief systems

As mentioned, Walsh (2003) divides the resilience framework into three domains that encapsulate family resilience. These are belief systems, organisational patterns and communication/problem solving. Belief systems have a strong influence on how a stressor is interpreted, which in turn influences the resultant reaction to the posed threat. The belief system domain can be related to the schema/appraisal part of the Resiliency Model discussed in detail in Section 2.2. According to Walsh, belief systems incorporate processes such as making meaning of adversity, developing a positive outlook and maintaining a sense of spirituality and transcendence. Walsh focuses on the value and strength of relationships for making meaning of adversity and for coping. This view is essentially opposed to a view of a hardy individual, incorporated in the hardiness key resilience factor of McCubbin *et al.* (1997). However, Walsh does relate the process of making meaning to Antonovsky and Sourani's (1988) sense of coherence construct, which is incorporated into the description of the hardiness factor of McCubbin *et al.* (1997). It can, however, be conceded that the process

of how people make meaning of adversity will be influenced by the strength of their relationships with others, as well as by their innate strengths or hardiness; the latter which has a subsequent influence on the outcome of family resilience. A second process identified by Walsh in the belief system domain is that of maintaining a positive outlook, in relation to which she wrote extensively about the significance of the presence of hope and an optimistic bias. Needless to say, this relates to McCubbin *et al.*'s (1997) key resilience factor of hope. The presence of Seligman's concept of *learned optimism* (cited in Sarafino, 2006) holds significant value for understanding that which makes or contributes to resilience. In this light Sarafino considered the influence of Seligman's earlier concept of *learned helplessness*, which describes the effects of repeated setbacks and failures leading to subjects giving up the struggle against the onslaught of stressors. This effect is addressed by the pile-up of stressors aspect of the Resiliency Model of McCubbin and McCubbin (1996).

Walsh identified a third process in the belief systems domain, namely transcendence and spirituality, which relates to McCubbin *et al.*'s (1997) spirituality factor. Whether seen as a factor or process, the importance of religious rituals, belief in a higher power, inspiration and transcendence of the earthly realm of suffering for resilient outcomes in the face of adversity seems to have good support in the literature (Durie, 1994; Greeff & Loubser, 2008; McCubbin *et al.*, 1997; Tarakeshwar, Kahn, & Sikkema, 2006; Walsh, 2003). The effects of congregational support as a form of social support and the effects of faith on psychoneuroimmunology are not to be denied (Sarafino, 2006). Walsh (2003) further pointed to a unique resilience phenomenon in humans of blaming failure to overcome adversity on "insufficient spiritual piety" (p. 410).

2.1.4.2 Organisational patterns

Under the second resilience domain, of family organisational patterns, Walsh (2003) groups together three resilience processes, namely flexibility, connectedness and social and economic

resources. Flexibility was described as a resilience factor by McCubbin *et al.* (1997). Walsh developed this concept further by incorporating a view of flexibility as descriptive of the nature of resilience of bouncing back or even bouncing forward in recovery from setbacks. As such, Walsh confirmed that “firm yet flexible authoritative leadership is most effective for family functioning and the well-being of children” (p. 411). Connectedness, as the second resilience process under the organisation domain of Walsh’s resilience framework, resonates with McCubbin *et al.*’s (1997) family time and routine resilience factor, and with the equality factor (equal importance of all members and of their views). Walsh supports the importance of cohesion, mutual support and collaboration and commitment, which interestingly is encapsulated and operationalised in McCubbin *et al.*’s (1997) family time and routines factor. It is interesting in the sense that McCubbin *et al.*’s (1997) concept is more descriptive of processes than of characteristics, an aspect that is usually associated with Walsh’s work. Connectedness refers to strength in a team approach to challenges. A third resilience process under the organisational domain was identified by Walsh (2003) as the use of social and economic resources as manifest in extended families, community resources and financial or economic aspects. This process mirrors McCubbin *et al.*’s (1997) social support key resilience factor.

2.1.4.3 Communication/problem solving

Walsh (2003) identifies clarity, open emotional expression and collaborative problem solving as resilience processes that constitute the third domain of her family resilience framework. Clarity of information brings about a dissipation of anxiety caused by a lack of knowledge, especially in the case of stigma such as suicide (Walsh), or in the case of the theme of the present investigation - the effects of HIV/AIDS on family resilience. All three processes of clarity, open emotional expression and collaborative problem-solving processes in the third domain of Walsh’s resilience framework relate to McCubbin *et al.*’s (1997) family problem-solving communication factor, as well as to the truthful resilience factor. Walsh points to the

importance of open emotional expression, involving tolerance for differences, especially gender differences, and an ability to share a wide range of emotions (also descriptive of the equality factor of McCubbin *et al.*, 1997). The importance of humour for the development of resilience was also indicated. Collaborative problem solving and conflict management, through shared decision making based on fairness, tend to make families more resourceful, as pointed out by Walsh (2003), who says that joint family effort contributes to a more proactive approach to a future onslaught of stressors. A common thread between the work of Walsh (2003) and McCubbin *et al.* (1997) appears to exist within the associated family problem-solving communication factor of McCubbin *et al.* (1997), in that the problem-solving communication incorporates and describes processes in, rather than characteristics of, resilient families.

Leading to a definition of resilience, and in particular of family resilience, that incorporates McCubbin *et al.*'s (1997) key resilience factors (discussed in Section 2.1.2) and Walsh's (2003) family resilience processes as encapsulated in the family resilience framework (discussed in Section 2.1.3), Walsh suggests that "families must find their own pathways through adversity that fit their situation, their cultural orientation, and their personal strengths and resources" (p. 415). This view supports the reason for including a qualitative aspect in the current investigation (discussed in Chapter 5, research method) in order to contribute to an understanding of the multivariate nature of family resilience.

2.1.5 Definition

From the preceding it can be deduced that it is a formidable task to formulate a succinct definition of resilience. Patterson (2002) described resilience as "doing well in the face of adversity" (p. 350). Regarding the protective function of resilience, Pearlin and Schooler (1978), in a description of coping, asked of this complex phenomenon "which is more efficacious: what people do or what people are?" (p. 12). From the preceding it certainly is

clear that resilience refers to a multifaceted construct relating to coping with adversity, incorporating both individual and family characteristics and characteristic behaviours (Greeff & Holtzkamp, 2007), as well as to influences of a third dimension of social parameters (Rutter, 1999; Walsh, 1996). It remains important, however, to consider Hawley and DeHaan's (1996) opinion that a clear definition of resilience and how it may be operationalised have not been presented. It could be that a definition will remain elusive, possibly due to the validation of an observation by Walker (1985) that the very essence of the primary constructs of resilience are constantly changing, through changes in individuals, dyads, social networks and the broader social network. Considering a constantly changing phenomenon, it seems advantageous to consider resilience defined in terms of processes and factors that describe behaviours and attitudes reminiscent of resistance to psychosocial risks (Rutter, 1999), resisting and bouncing back from adversity (Walsh, 2003) and adapting to and bouncing back (Hawley & DeHaan, 1996; McCubbin *et al.*, 1997) to former or even better levels of functioning.

In the light of the above it remains fair to say that family resilience was not measured in the present investigation! Rather, as dependent variable, adaptive family functioning was measured to indicate how families coped. The FACI8 questionnaire was used to measure the level of family adaptation, according to the model, as an indication of the presence of resilience. Strictly speaking it is a measure of the level of family functioning! In the light of Walker's (1985) caution about constantly changing parameters, the contributions of a number of independent variables highlighting various aspects of family resilience were measured in order to contribute to a definition of a non-static construct – a definition that remains ever so slightly out of reach.

2.2 The Family Resiliency Model

McCubbin and McCubbin (1996, p. 5) developed the Resiliency Model of Family Stress, Adjustment and Adaptation (The Resiliency Model) on the basis of a definition of resilience as:

... positive behavioral 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.

Figure 1 (reproduced from Chapter 1) shows a schematic representation and overview of the Resiliency Model and the significant parts that constitute McCubbin and McCubbin's (1996) view of what makes some families adapt better to crises.

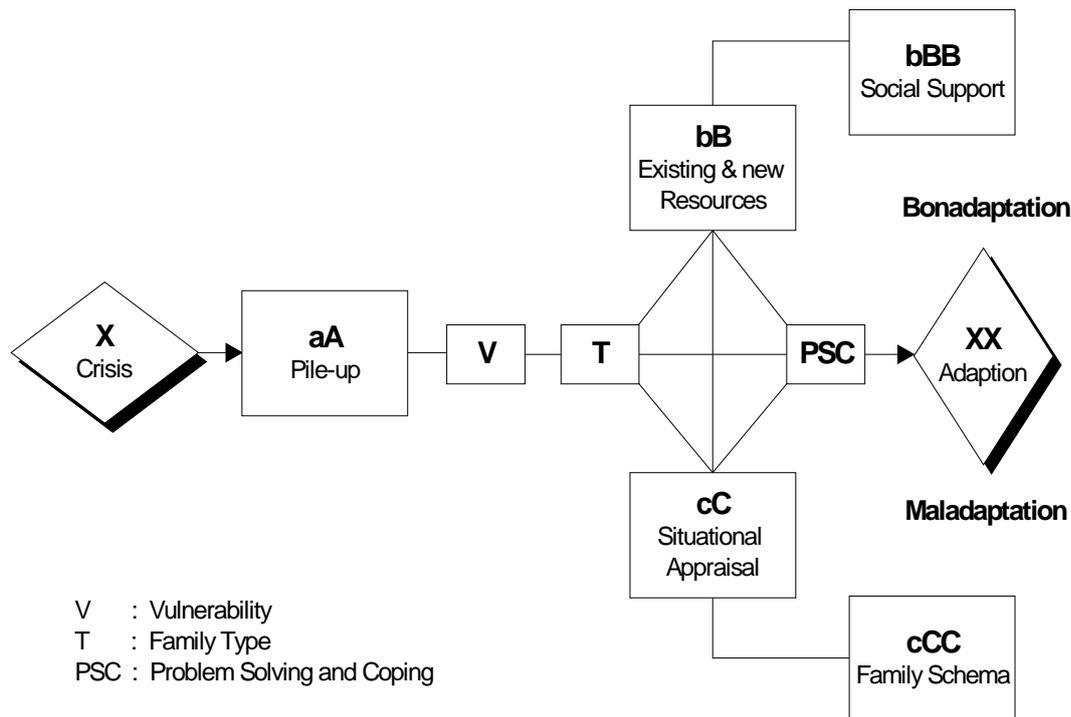


Figure 1. The Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996).

The Resiliency Model focuses on processes involved in the creation of harmony and balance, placing emphasis on four areas of family functioning vital to protection and recovery. The

Resiliency Model, as a contextual framework with a relational focus, places families within a larger social network, as well as bearing in mind a systemic connectedness with various parts of the family that has influences on the parts as well as the larger whole. The four areas highlighted in Figure 1 include vulnerability (V), type of family (T) (or typology, as described in Section 2.1.3), fit of resources to demands and influences on and by appraisal processes (B and C), and problem-solving communication styles (PSC). The focus of these four areas finds practical expression in interpersonal relationships, the structure of the family and the functions of its various parts, development, wellbeing and spirituality, and relationships with the larger community. A significant contribution of the Resiliency Model to an understanding of why some families perform better under adversity is its focus on five levels of crisis appraisal, which translates the seriousness attributed to the stressor and its related influence (discussed in Section 2.2.4.4) (Greeff & Aspeling, 2007).

These four focus areas of the Resiliency Model interact in two related but distinct phases that describe how families react to stressors. When confronted by crises, the first reaction phase described by the Resiliency Model is the adjustment phase, in which a family makes minor changes with as little disruption as possible. Certain protective and resistance factors come into play during a time when several components that make up the model (see Figure 1), interact to determine the outcome on a continuum from positive bonadjustment (i.e. successful negotiation of demands associated with the stressor) to negative maladjustment (which relates to less than satisfying outcomes). An outcome described as maladjustment moves the family back into crisis (i.e. the problem is not resolved satisfactorily), after which the cyclical nature of the Resiliency Model is invoked, which refers to the family moving into the more complex adaptation phase of the Resiliency Model (McCubbin & McCubbin, 1996).

What follows is a brief overview of the development of the Resiliency Model with reference to its history, after which the adjustment and adaptation phases will be discussed in detail.

2.2.1 Historical development of the Family Resiliency Model

McCubbin and McCubbin's (1996) Resiliency Model of family stress, adjustment and adaptation has its origins in the 1949 landmark work of Reuben Hill, commonly known as the ABCX Model. Reuben Hill is regarded with such esteem that noted researchers in the field of family psychology, such as Olson *et al.* (1989), have dedicated their work to "our godfather" (p. i). The factors that make up the model and upon which the later models built include A (the stressor), B (resources), C (definition of the stressor) and X (the crisis situation). Four theory-building groupings evolved, of which the first, as expressed in the work of Reuben Hill (in McCubbin & McCubbin, 1996) initially focused on the pre-crisis situation. The second group focused on both pre- and post-crisis factors and processes. The Double ABCX Model of McCubbin and Patterson (cited in McCubbin & McCubbin, 1996) focused primarily on factors such as coping and social support that facilitate post-crisis adaptation. From the Double ABCX Model, a focus on the post-crisis processes involved in the balance of demands and resources evolved almost naturally and gave rise to the FAAR Model - the Family Adjustment and Adaptation Response Model of Lavee, McCubbin and Olson (cited in McCubbin & McCubbin, 1996). A third theory-building group evolved from the earlier models focusing on family patterns of functioning in the pre-crisis adjustment phase as well as in the post-crisis adaptation phase. Consequently, McCubbin and McCubbin (1996) developed the Typology Model of Family Adjustment and Adaptation, a description of which can be found in Section 2.1.3. The fourth theory-building group includes the most recent development of the earlier models, which resulted in the Resiliency Model, in an attempt to discover and test resilience factors and processes in families. As described briefly, the Resiliency Model places emphasis on four domains of family function that are important for recovery, focuses on harmony and balance, highlights five levels of appraisal (including culture and ethnicity) and places relational processes at the centre of the adjustment and adaptation of the family.

2.2.2 Adjustment and adaptation

The Resiliency Model proposes a view of what makes some families better able to adapt to a crisis (i.e. more resilient). In this sense the model consists of two interrelated phases which, although they are similar in certain respects, are distinctively unique in others. The adjustment phase describes what happens in a family pre-crisis, after being confronted by the demands associated with a certain stressor. Should adjustment fail, which is termed maladjustment by McCubbin and McCubbin (1996), a crisis situation arises that moves the family into the more complex adaptation phase.

An in-depth discussion of the adjustment and adaptation phases follows, but it is important to consider the following five assumptions upon which the Resiliency Model is built:

1. That hardships and setbacks are a part of normal life;
2. That families develop basic competencies to facilitate the growth of individual members and the family as a whole, as well as capabilities that serve to protect the family during normative transitions and changes;
3. That basic competencies are developed to protect the family from non-normative stressors and to facilitate recovery;
4. That there is a reciprocal interdependent relationship between a family and its wider community, inclusive of ethnicity and cultural aspects;
5. That families actively pursue the restoration of order and balance.

2.2.3 Adjustment phase

Figure 2 shows the adjustment phase of the Resiliency Model of McCubbin and McCubbin (1996).

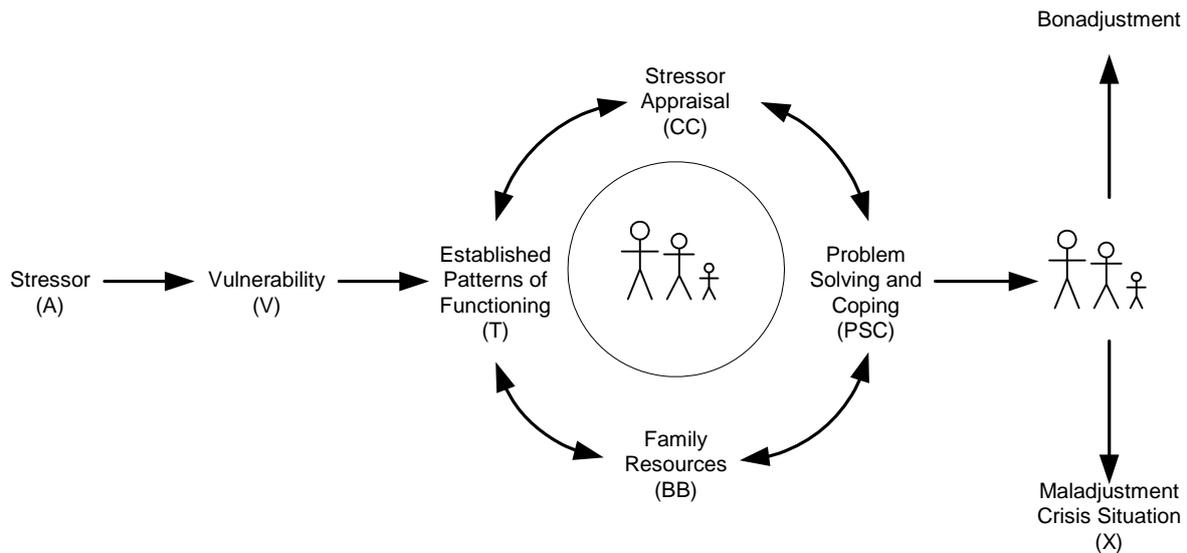


Figure 2. The adjustment phase of the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996).

When confronted by a stressor (A), certain factors within and outside a family interact over time to manifest in either successful adjustment (bonadjustment) or maladjustment (crisis situation leading to the onset of the adaptation phase). The stressor and its severity interact with vulnerability (V), which is determined by factors such as the pile-up of stressors that coincides with the time of the stressor. The vulnerability of the family influences the established patterns of functioning (T, described as typologies in Section 2.1.3). The build-up identified by factors A, V and T interacts with the family resources (B), all of which interact with how the family assesses the situation (family appraisal of the stressor, C), which in turn interacts with the problem-solving communication (PSC) styles of the family (McCubbin & McCubbin, 1996).

The outcome of the adjustment phase ranges from a situation of distress, in which the goal of balance and harmony is not achieved, to a situation of bonadjustment, with a bearable situation as the outcome. McCubbin and McCubbin (1996) use the concept of eustress to refer to a positive state despite the discomfort and challenge associated with the stressor. Indeed, Reuben Hill (cited in Olson *et al.*, 1989) indicated that “adaptation to stress rather than

freedom from problems is the key finding to account for survival” (p. 9). When adjustment fails the family moves into an adaptation phase that demand a more concerted effort from the family. The family coping processes that are characteristic of the adaptation phase are described in the following section.

2.2.4 Adaptation phase

Figure 3 provides an illustration of the adaptation phase of the Resiliency Model of McCubbin and McCubbin (1996).

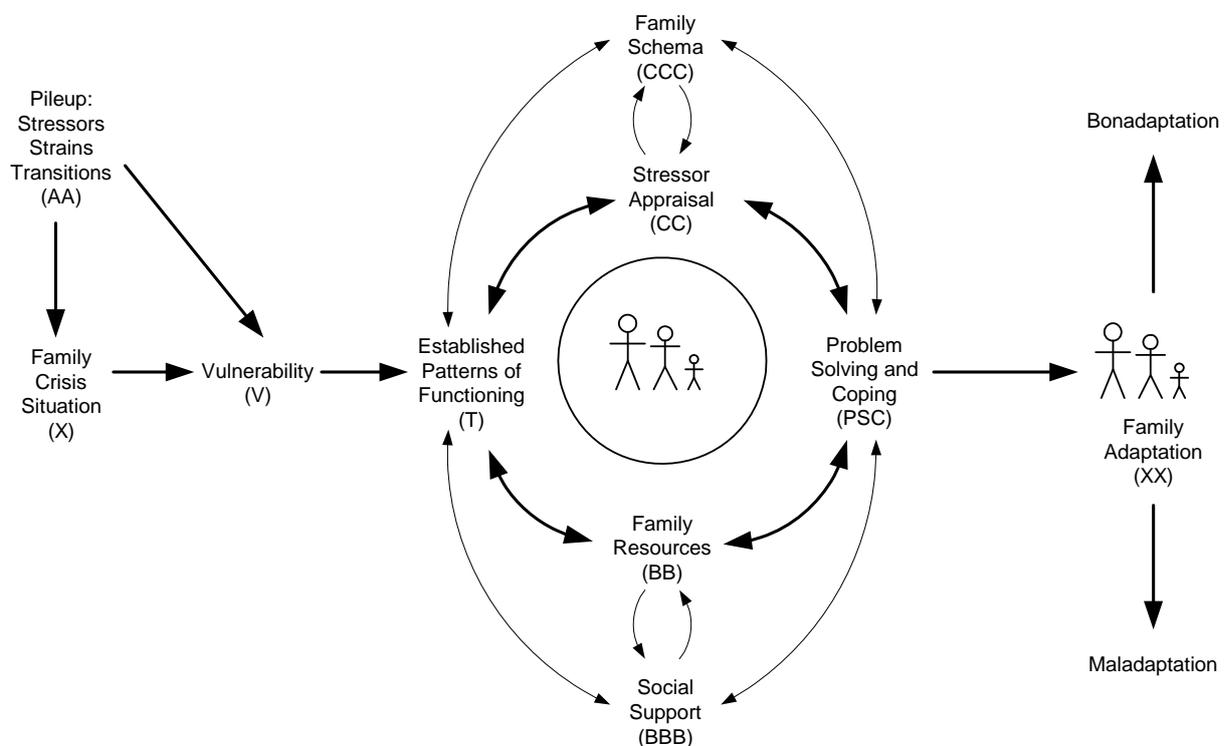


Figure 3. The adaptation phase of the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996).

Similar to the adjustment phase of the Resiliency Model, it is quite evident from Figure 3 that a more complex picture evolves in the adaptation phase due to continued imbalance and disharmony, which reflect deterioration in the established patterns of functioning (T), bringing about a crisis situation (X), identified by Burr (in McCubbin & McCubbin, 1996) as continued disruption, disorganisation and incapacitation. Family outcome, or the level of family adaptation (XX), will range on a continuum from favourable bonadaptation to

continued crisis situation, identified as maladaptation. Maladaptation introduces the cyclical nature of the model in that continued disruption brings the family back into a crisis situation (X), which starts the problem-solving process again. The level of family adaptation (XX) is determined by the interaction of three distinct but interacting factors, namely TT (new patterns of functioning), BB (family resources) and CC (family appraisal of the stressor). Take note that, in the more complex adaptation phase (stretching the family further), these three factors are in turn affected by a number of processes that will be reviewed in a more detailed discussion. For the moment, however, it is sufficient to be aware of changes in the patterns of functioning (TT), which see the family maintaining old patterns, reviving older ones and modifying its rules and ways of communicating. These are based on the combined influence of internal and external family resources (BB), and the influence of schema (CCCCC), coherence (CCCC), and paradigms (CCC) on the family's appraisal of the situation (CC) (inclusive of C, the definition of the stressor). Note that TT, CC and BB interact with and are influenced by the problem-solving and coping strategies (PSC) employed by the family, and subsequently determine the level of family adaptation (XX).

As the preceding may potentially be rather confusing due to the multi-faceted, multi-factored and complex nature of the adaptation phase of the Resiliency Model (as indeed the whole model may well seem to be), different parts will now be detailed.

2.2.4.1 Pile-up of demands (AA)

Families seldom deal with a single stressor. Normative and non-normative changes occur over the lifespan of a family, as well as within a constantly changing social context. McCubbin and McCubbin (1996) identified nine categories of stressors that contribute to a pile-up of demands and have an influence on family vulnerability. Note the slight shift in focus from the adjustment phase to the adaptation phase, where vulnerability (V) in the latter is included in the pile-up factor. The nine categories include (i) the initial stressor, (ii) normative transitions

such as adolescence, (iii) prior strains, (iv) situational demands, (v) consequences of coping efforts, such as increased rigidity, (vi) intrafamily and social ambiguity, such as coping with stigma and blaming, which are associated with the focus field of the current investigation (HIV/AIDS), (vii) changes associated with new patterns of functioning, (viii) conflict between new patterns of functioning and family schema (values) and paradigms (rules), and (ix) conflict between the old, established patterns of functioning and the new.

2.2.4.2 Newly instituted patterns of functioning (TT)

Note in Figure 3 that the established patterns of functioning are retained in the adaptation phase (from the adjustment phase) due to the fact that these patterns provide stability and harmony. New patterns may be needed for the family to cope and to share the load, and may well be the primary vehicle for the restoration of harmony and balance. The changes may, however, bring about added strains on the family. McCubbin and McCubbin (1996) listed changes in five domains related to new patterns of functioning. These are changes in (i) rules and boundaries, (ii) routines, relationships and roles, (iii) coalitions, (iv) communication patterns, and (v) community transactions and interactions. Note that, over time, the family's appraisal of the situation guides and legitimises the new patterns of functioning.

2.2.4.3 Family resources (BB)

McCubbin and McCubbin (1996) refer to strengths and capabilities as being synonymous with family resources (BB) in the sense that the three sources of demands (individual, family and community) also represent "sources of resources" (p. 32), that may be tangible, intangible and perhaps even infinite in number. Family sources include eight personal resources, identified as (i) intelligence, (ii) knowledge and skills, (iii) personality traits such as a sense of humour, (iv) physical, spiritual and emotional health, (v) sense of mastery, (vi) self-esteem, (vii) sense of coherence, and (viii) culture and ethnicity. Besides personal resources, family system resources include factors such as cohesion and adaptability, family hardiness, family

time together and family routines. Although not clearly identified in the schematic representation, McCubbin and McCubbin (1996) made a separate distinction of the value of social support (BBB), which includes all available persons and agencies, both formal and informal. It is noted that social support as a community resource receives the most attention in stress literature (Hawley & DeHaan, 1996; McCubbin *et al.*, 1997; Pearlin & Schooler, 1978; Walsh, 1996).

2.2.4.4 Situational appraisal (CC)

It is a rather daunting task to describe a dynamic process such as family appraisal because of the varying factors, such as a family unit with its idiosyncrasies and values, situated within a community with its own identity and made up of individual members acting in particular (sometimes peculiar) ways (McCubbin & McCubbin, 1996). Family appraisal, i.e. making meaning of the crisis situation, involves five levels, namely schema (CCCCC), coherence (CCCC), paradigms (CCC), situational appraisal (CC) (Figure 3) and stressor appraisal (C) (see Figure 2). Stressor appraisal (C) is viewed as important in the determination of the initial definition of the stressor, which is part of the adjustment phase in which the family only makes minor tweaks or adjustments to accommodate stressor demands. The adaptation phase of the Resiliency Model includes schema, coherence, paradigms and situational appraisal, with consideration of the influence of culture and ethnicity.

Schema (CCCCC) can be described as fundamental convictions, values and beliefs that are highly resistant to change and include aspects such as the maintenance of ethnic heritage. The family schema provides order and stability, and influences and legitimises patterns of functioning and problem-solving behaviours. In essence, the family schema appears to bind different aspects of operational processes of the Resiliency Model together. According to McCubbin and McCubbin (1996), the main function of the family schema is to facilitate the development of the meaning or understanding of adversity, which may include acceptance of

the situation and often relates to expressions such as “God’s will” (p. 39). Transcendence of the immediate stressor and its effects is a unique human capability and, in a family schema, sense includes functions such as (i) affirmation (positive aspects of the suffering), (ii) classification (framing adversity in terms of shared values), (iii) spiritualisation (framing adversity in terms of shared beliefs, inclusive of a cosmological view), (iv) temporalisation (framing adversity in terms of long-term consequences and optimising the positive nature of the present) and (v) contextualisation (in terms of both the natural order and relationships, where the needs of the whole are more than individual needs) (McCubbin & McCubbin, 1996).

Family coherence (CCCC) essentially refers to Antonovsky and Sourani’s (1988) sense of coherence construct that influences coping in the sense of a feeling of confidence in being able to overcome setbacks. This confidence incorporates a worldview of comprehensibility (internal and external milieus are structured and predictable; events can be explained), manageability (fit of resources to demands) and meaningfulness (demands are worth the effort of struggling) (McCubbin & McCubbin, 1996). It becomes clear how the presence or absence of a sense of coherence can contribute towards some families’ and individuals’ abilities to survive the onslaught of stressors, while others fail to do so.

Family paradigms (CCC) are the rules that families adopt to guide behaviours. McCubbin and McCubbin (1996) place strong emphasis on the presence and importance of paradigms, saying that “once a paradigm is shaped and adopted and used to interpret phenomena and to guide family behaviors, family functioning in the absence of any paradigm cannot occur” (p. 42). Cultural influences in particular are important in paradigm formation. McCubbin and McCubbin (1996) make special mention of the paradigms found in Native American Indian and Native American Hawaiian cultures and note distinct differences when the mentioned cultures were compared to Caucasian families. Brown-Baatjies *et al.* (2008) comment

specifically on the suitability of the Resiliency Model for research in South Africa because of the emphasis on cultural differences.

Situational appraisal (CC) relates to how families view the fit of stressor demands to family capabilities and adjust their patterns of functioning accordingly. The preceding appraisal factors influence the situational appraisal to such an extent that they have a moulding influence on the problem-solving and coping (PSC) behaviours. Appraisal of the stressor and its severity (C) forms part of the adjustment phase and, according to McCubbin and McCubbin (1996), is consistent with Reuben Hill's (cited in McCubbin & McCubbin, 1996) classic notion that family responses are shaped by the definition attributed to the stressor and its severity.

2.2.4.5 Family problem solving and coping (PSC)

Evolving from the influence of the preceding factors of the adaptation phase of the Resiliency Model is what McCubbin and McCubbin (1996) term a critical aspect of family stress, adjustment and adaptation, namely problem-solving and coping behaviours and strategies (PSC) (see Figure 3). Problem solving and coping include strategies such as (i) reduction of stresses, (ii) acquiring additional resources, (iii) managing tension and (iv) shaping situational and schema level appraisal.

In closing, it is timely to note that it is the constant change and interplay of various forces, such as the mental, physical, spiritual and contextual that account for resilience (McCubbin & McCubbin, 1996). It is particularly interesting that the Māori health model in New Zealand, the Whare Tapa Whā Model, incorporates the exact same forces although with a slight shift in emphasis. In this model, the forces are taha wairua (spiritual), taha hinengaro (mental), taha tinana (physical) and taha whānau (extended family), with the focus on the harmonious interaction of these forces for wellbeing (Durie, 1994).

2.2.5 Summary of Resiliency Model

The Resiliency Model of McCubbin and McCubbin (1996) describes the family processes involved in coping with adversity. Focused on the creation of harmony and interactional patterns, the model distinguishes four areas important for protection and recovery, i.e. vulnerability, family type, resources and appraisal, and problem-solving communication styles. These areas are viewed as different in two distinct phases, termed the adjustment and adaptation phases. The adjustment phase points to the family processes involved in making minor changes that lead to bonadjustment (successful coping) or maladjustment. A maladjusted outcome leads the family back into crisis and into a phase termed adaptation by McCubbin and McCubbin (1996). The adaptation phase is a much more complex one and involves similar processes to those noted in the adjustment phase, but with many more facets and factors that contribute to a successful outcome, called bonadaptation, which is seen as being representative of a resilient effect. Maladaptation refers to an outcome not seen as successful and illustrates the unique cyclical nature of the model by leading the family back to the crisis situation (X) and bringing about the family coping behaviours described in the model.

In the following section, HIV/AIDS will be discussed as the particular form of adversity investigated in the current study.

2.3 HIV/AIDS

Acquired immunodeficiency syndrome (AIDS) is caused by the human immunodeficiency virus (HIV) (Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009; UNAIDS, 2008b).

It is estimated that, in 2005, about 40.3 million people were living with HIV, that 4.9 million were newly infected in the same year and that 3.1 million AIDS deaths had occurred (UNAIDS, 2005). Fahmer and Romano (2004), however, noted that AIDS cases are significantly underreported in the USA and other parts of the world. According to the World

Health Organization (WHO) (World health report. <http://www.who.org>), the majority of deaths worldwide are due to heart disease (although deaths due to chronic heart disease have halved since 1970), cancer and stroke, in that order. Since about 1980, AIDS has developed into a major killer, although the death rate from AIDS is fairly low in developed countries. Due to developments in the medical field, HIV infection has become a chronic, treatable, life-threatening disease (Alozie, Bonham & Henry, 2009; Fahmer & Romano, 2004; Pinsky & Douglas, 2009).

2.3.1 A pandemic of global proportions

It appears that the HIV pandemic actually represents a series of mini-epidemics, having started at different times in different regions and in different risk groups (Phoolcharoen & Detels, 2004). These differences are reflected in varying social, cultural, geographic and behavioural characteristics, such as in Los Angeles, where the spread of HIV is predominantly among men who have sex with men, and in New York, where it is seen predominantly in intravenous drug users. It appears as if the epidemic has reached a peak in some areas and may even be declining, although this contrasts with the situation in subgroups such as African-Americans in the USA. Interestingly, the apparent decline in HIV infections is attributed to efforts by at-risk groups themselves, rather than an organised government approach, which appears to have played a minor role in the decline in HIV in the USA. It also seems that the decline preceded the introduction of highly active antiretroviral therapy (HAART) (Phoolcharoen & Detels, 2004; UNAIDS, 2008a).

Phoolcharoen and Detels (2004) point to the differentiation that is made between developed and developing countries, with 95% of all HIV infection being found in the latter (UNAIDS, 2008a; UNAIDS, 2009). Regional differences are apparent. In Africa it appears that the spread is almost exclusively due to heterosexual transmission. It is very interesting and concerning to note that stored sera from as early as 1959 contained HIV and that HIV became

widespread in about 1970. Cultural practices that may contaminate the blood, such as skin piercing, female infibulation and male circumcision, appear to have played a minor role in the spread of HIV in Africa. Eastern sub-Saharan African countries were the first to become involved and it was only fairly recently that HIV infection spread to countries such as South Africa, Botswana and Zimbabwe. It appears that 10 to 35% of the adult populations in these Southern African countries may be infected. Due to the effects of AIDS, the typical nuclear families in some sub-Saharan African regions now consist of grandparents and grandchildren only (Phoolcharoen & Detels, 2004). An editorial in *The Lancet* (2009) reports that South Africa has the highest number of HIV-positive people, numbering 5.7 million. This figure is staggering, considering that “79% of maternal deaths tested for HIV were HIV-positive” (p. 1867).

The identification of HIV in some Northern African and Eastern Mediterranean countries remains difficult due to poor reporting and cultural and religious taboos, casting a measure of doubt on the reportedly low prevalence rates. However, returning Filipino workers from these areas represent high HIV prevalence in the Philippines. In Latin America it appears to have been spread primarily by heterosexual means, but in Brazil it initially appears to have been spread mostly among men who have sex with men, bisexual men and intravenous drug users. In Southeast Asia, Thailand initially played a prominent role in the spread of HIV infection, specifically in relation to the Golden Triangle drug-producing region and the booming commercial sex industry. China and India collectively represent 38% of the world's population, yet still report relatively low numbers of infections, although they appear to be on the brink of an HIV explosion (Phoolcharoen & Detels, 2004; UNAIDS, 2007, 2008a, 2009).

2.3.2 History of the pandemic

The total number of deaths and expected deaths due to HIV already exceed the total number of people killed during the major wars of the 20th century, with 95% of occurrences are in

developing countries that generally are affected the most by the health and economic impact (Phoolcharoen & Detels, 2004; UNAIDS, 2008a, 2009). HIV-1 was described in 1983 and importantly (due to interspecies transfer origin theories of HIV), following was the discovery of the closely related simian immunodeficiency viruses (SIVs) in primates (Pinsky & Douglas, 2009; Swanstrom & Wehbie, 1999). The exact origin of HIV is unclear, although both biological and sociological factors are involved. Gao *et al.* (1999, cited in Phoolcharoen & Detels, 2004) report that HIV may have originated in chimpanzees and transferred to humans as a result of eating infected meat and keeping infected animals as pets – a theory that has been questioned because of the low infectivity of HIV (see Section 2.3.4.1 sexual transmission). Swanstrom and Wehbie (1999) point out that HIV-2 entered the human population through cross-species transmission and that the same probably occurred in the case of HIV-1. The authors provide evidence of linkages between SIV_{smm} and HIV-2, suggestive of multiple interspecies transfer, and point out that the cross-species transfer-originating theory regarding HIV-1 is less clear and that HIV-1 is most similar to SIV found in chimpanzees (SIV_{cpz}). The spread of HIV is rather attributed to major shifts in sexual behaviour (UNAIDS, 2009), including acceptance of multiple sexual partners and the invention of the contraceptive pill (Phoolcharoen & Detels, 2004). Swanstrom and Wehbie (1999) list factors that have contributed to the rapid spread of HIV, such as access to large population centres by those infected and the availability of good transportation (road transportation of goods). Van Dyk (2001) says that improved transportation routes (citing for example the well-documented use of prostitutes by lorry drivers), socioeconomic instability and the ravages of war and migration have all contributed to the unchecked spread of HIV (Chaturvedi *et al.*, 2006; Ferguson, 2008; Kulis, Chawla, Kozierekiewicz & Subata, 2004).

Initially, low immunity in homosexual men led to a belief that HIV was limited to men who had sex with men, while intravenous drug use was also noted (Phoolcharoen & Detels, 2004; UNAIDS, 2008a, 2009; Van Dyk, 2001), but the major spread was eventually found to be

through heterosexual intercourse. Initially, sub-Saharan Africa had the highest concentration of HIV and it continues to have the highest incidence (UNAIDS, 2005, 2008a, 2009), which rapidly spread to include Latin America and then South and Southeast Asia (second highest concentration at present). Although the spread of HIV in some countries has reduced, effective intervention strategies remain difficult to implement (Van Dyk, 2001; Walker, 1991).

A number of social, political and economic factors that have contributed to the phenomenal spread of HIV (UNAIDS, 2007, 2008a, 2009). A change in sexual behaviours and attitudes in particular has contributed to the rapid spread of the virus. Tolerance or acceptance of many sexual partners, and a high rate of sexual mixing in the homosexual population, have also promoted the spread. In Asia and Latin America it appears that the cultural expectation of men to have many sexual partners both before and after marriage supports the spread of HIV. A booming sex industry accounts for many women becoming infected with HIV within one year of entering the trade. As such, a reservoir of the virus has developed, with clientele forming the bridge population to the general population. In Mexico, for instance, Patterson *et al.* (2009) determined multiple correlates between sexually transmissible diseases, HIV infection and behaviour reminiscent of a bridging sample when they interviewed and tested 400 male clients (both Mexican and USA tourists) of female sex workers. Truck drivers and migrant workers contribute to the geographic spread (Chaturvedi *et al.*, 2006; Kulis *et al.*, 2004; Van Dyk, 2001). It was reported at the XVIIth International AIDS Conference in Mexico City that a study of the transport route between Mombasa in Kenya and Kampala in Uganda showed that about 2 400 trucks stop overnight at 39 highway stops, and that this attracts about 5 600 commercial sex workers (Ferguson, 2008). The relatively slower spread in the heterosexual population in developed countries appears to be due to a greater frequency of serial monogamy. Negative attitudes towards and stigmatisation of those with HIV prevent people from admitting to homosexual practices and submitting to voluntary testing. Knowing

a person's HIV status is important for the early treatment and protection of others, inclusive of family. It was shown that individuals usually change their behaviour after the identification of their HIV infection (Amirkhanian, Kelly & McAuliffe, 2003; Kalichman *et al.*, 1999; UNAIDS, 2008a, 2009). In a cross-sectional survey of HIV-positive women in Cameroon, Loubiere *et al.* (2009) found that, overall, the disclosure of HIV status contributed to a decrease in unsafe sex practices. However, the authors caution against a false optimism about the positive effects of antiretroviral therapy that may paradoxically bring about an increase in unsafe sex practices due to a belief that a cure for HIV is on hand. Increased unsafe sex practices since the advent of antiretroviral therapy is shown in an earlier study by Rice, Batterham and Rotheram-Borus (2006) of the sexual attitudes and behaviours of HIV-positive youth in the USA. Behaviour change as an effective way of combating HIV infection therefore remains a constant challenge, due to a reticence for sustained abstinence from high-risk sexual behaviours, as shown in numerous studies (Adam *et al.*, 2009; Crepaz *et al.*, 2009; Smith, Grierson, Pitts & Pattison, 2006; Turner *et al.*, 2009).

Poverty and the uneven distribution of resources worldwide contribute to the spread of HIV, as poor people turn to commercial sex work for survival (Ferguson, 2008), the affluent make use of commercial sex, there is limited health care intervention for the poor and limited education intervention for those segments of the population who cannot read or write. Government instability and war contribute to disinhibition and the absence of social restraints, for example among soldiers (Phoolcharoen & Detels, 2004; Van Dyk, 2001). It is significant that Uganda has reported some success with HIV control since the onset of peace.

Stigma presents one of the major difficulties in controlling HIV/AIDS (UNAIDS, 2007). One of the most effective ways of altering risky behaviour is for individuals to be aware of their HIV status (UNAIDS, 2009). Some health care providers, however, are reluctant to inform their patients about their status so as to prevent shame and stigma. Concerns about protecting

the rights of those infected raise concerns of risk for the healthy, fears of job loss, loss of family and other social ills. According to Phoolcharoen and Detels (2004), the history of the spread of HIV may change with the introduction of home-based test kits, as well as the normalisation of HIV, leading to it being viewed similarly to other chronic conditions such as diabetes and hypertension.

2.3.3 Natural evolution of HIV infection and AIDS

Fahmer and Romano (2004) explain that HIV perpetuates and “integrates itself into the genetic material of the organism it infects” through replication (p. 526). Contracting HIV causes a continuum of infection, the final stage of which is termed AIDS, of which the average time from infection to fully developed AIDS is 11 years (Fahmer & Romano, 2004; Pinsky & Douglas, 2009; UNAIDS, 2008b).

Phoolcharoen and Detels (2004) propose that, in order to develop a good and thorough understanding of HIV infection, the process may be viewed at its impact on various levels and as such will be discussed at cellular, host and community levels. As the focus of the present investigation is resilience and not the particular form of adversity, an attempt will be made to keep the discussion succinct.

2.3.3.1 Brief overview of HIV infection

Through a process called reverse transcriptase, type 1 HIV (HIV-1) of the lentivirus genus of the Retroviridae family of viruses has its viral RNA copied into the DNA of the host (Bell, 2009; Fahmer & Romano, 2004; UNAIDS, 2008b). Cells that become infected include T4 and CD4 T-helper/t-cell lymphocytes, monocytes, macrophages and glial cells that express CD4, as well as some cells that do not have detectable CD4 on the cell surface (Fahmer & Romano, 2004; Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009; Swanstrom & Wehbie, 1999). The virus persists and is prevented from eradication due to a DNA copy of the HIV-1 RNA genome being integrated into the host genome DNA (Fahmer & Romano, 2004). Destroying

CD4 cells and interfering with their function will impair both the cell-mediated immune system (T-cell) and the humoral immune system (B-cell), the latter which is responsible for the formation of functional antibodies. HIV also directly invades other major organs, such as the lungs, heart, kidneys and gastrointestinal tract, as well as systems such as the peripheral and central nervous system (Pinsky & Douglas, 2009). This gives rise to “lentiviral replication within a given tissue [that] may result in tissue-specific disease” (Swanstrom & Wehbie, 1999, p. 217).

2.3.3.2 Cellular level

As will be seen in this section, HIV infection is unusual (being a retrovirus), calling for detailed understanding in order for the development of suitable treatment and intervention strategies. It is therefore helpful to develop an understanding of both the virus and how it infects. Figure 4 provides a schematic presentation of HIV-1, which illustrates its relatively simple structure with two major components: the core and envelope.

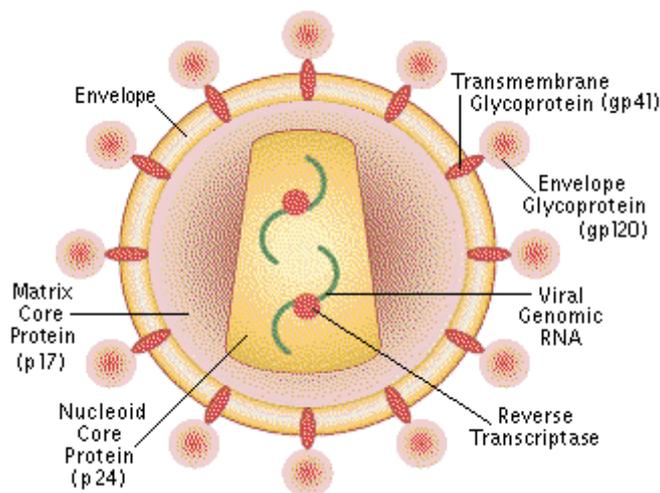


Figure 4. HIV-1 (Microsoft® Encarta® Online Encyclopedia, 2006).

HIV-1 is a retrovirus with ribonucleic acid (RNA) as genetic material (Bell, 2009; Phoolcharoen & Detels, 2004; Swanstrom & Wehbie, 1999). Within the protein core are RNA and enzymes, collectively known as reverse transcriptase. The envelope of lipid material

contains glycoproteins, some inserted and some loosely attached. The latter forms the part of the virus that attaches itself to the target cell that it attacks. Usually, genetic information flows from DNA to DNA, or from DNA to RNA, but in the retroviruses this process is reversed, hence the identification as retroviruses (Swanstrom & Wehbie, 1999). As noted, HIV is a lentivirus within the family of retroviruses. Lentiviruses differ from other Retroviridae in the sense that they do not cause cancer, but do establish chronic infections that result in a long period of incubation, followed by a chronic symptomatic disease (Swanstrom & Wehbie, 1999). New viruses are still being discovered, but of note is that simian immunodeficiency viruses (SIVs) in monkeys and, more recently, feline lentivirus (FIV) in cats have been described following the discovery of HIV-1 in 1983. Despite the diversity in human and non-human lentiviruses, virus-host interactions follow similar pathways, giving rise to renewed interest and research on the latter (Swanstrom & Wehbie, 1999).

HIV primarily targets CD4 T-lymphocyte cells (AIDS Infonet Factsheet 124, 2009; Bell, 2009; Pinsky & Douglas, 2009), which are major immune system cells that support cellular immunity and influence antibody production. Swanstrom and Wehbie (1999) point out that immunosuppression is the principal clinical manifestation of the lentivirus focus on lymphocytes.

Once successfully attached, the HIV core is intruded into the cytoplasm of the cell, where the viral RNA is transcribed into viral deoxyribonucleic acid (DNA) by the enzymes known as reverse transcriptase. Note, however, that the transcription of the viral code is imperfect and that at least one mutation occurs in a replication cycle. This 'copy error' is very important in order to understand the efficacy of HIV, because the human immune response is absolutely specific. The mutations make identification of the virus difficult. Consequently, a new immune response is mounted (a process that may take several weeks, during which HIV continues to infect more cells and produce more mutations) (Bell, 2009).

When viral RNA has been transcribed into viral DNA, the viral DNA is integrated into the host-cell DNA (assisted by the viral enzyme known as integrase), after which it becomes indistinguishable from the host DNA. Whenever the host cell divides, the viral DNA is also passed on to the progeny cells, a stage known as the latent stage of HIV infection. This may last for many years. Note that following this full integration of the virus, a CD4 cell may produce hundreds of new HIV offspring. In response to the virus, the immune system produces increased numbers of CD4 cells that actually provide an opportunity for more HIV viruses to be produced as well. A huge production of HIV ensues, eventuating in a race that sees HIV production eventually outnumbering immune-system production. Factors such as infection with other viruses play havoc with the equilibrium between HIV and immune system production, allowing HIV to eventually destroy the immune system, particularly due to lymphocyte depletion (Bell, 2009; Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009; Swanstrom & Wehbie, 1999).

2.3.3.3 Host level

Lentiviral infection responses vary among individuals (Swanstrom & Wehbie, 1999). According to Phoolcharoen and Detels (2004), successful HIV infection occurs rarely (certainly not at a community level with demographics in mind, as will be discussed) and only in about one per 1 000 episodes of vaginal intercourse (see Table 1). Indeed, Phoolcharoen and Detels (2004) pointed to the low infectivity associated with HIV in a reference to the alleged interspecies transfer from primates to humans. The type of intercourse and the presence of other (especially sexually transmitted) infections increase the probability of infection. Once infection is established, a huge production of HIV occurs for several weeks until the immune system is mobilised. The main artillery in the immune system defence consists of CD8 cytotoxic cells, which kill HIV-infected cells, although it may take weeks or even months to develop sufficient numbers. At the time that the immune system is responding, hosts may develop an influenza-like illness that lasts for about two weeks (AIDS

Infonet Factsheet 124, 2009; Phoolcharoen & Detels, 2004; Swanstrom & Wehbie, 1999). When the immune system is firmly established, HIV antibodies may be detected by standard HIV tests. Note that standardised testing measures the presence of antibodies and does not test for the virus itself. This period between infection and the detection of antibodies is known as the window period and is a major concern for screening blood supply (and for further spread) (UNAIDS, 2008b).

Following the immune response and positive antibody test result, the host may remain asymptomatic for an average of eight to nine years, with variations ranging from one year to several decades. This complicates the identification and control of the epidemic. During this period, infection is only confirmed through positive tests for the presence of antibodies or of the virus itself. Approximately one year before a diagnosis of AIDS, symptoms such as weight loss, low-grade fever, night sweats and fungal infections begin to appear (AIDS Infonet Factsheet 500, 2009; Phoolcharoen & Detels, 2004; Swanstrom & Wehbie, 1999; Van Dyk, 2001). Eventually an opportunistic infection or malignancy that is diagnostic of AIDS, or other AIDS-specific illnesses such as AIDS dementia and wasting syndrome, occur. A CD4 cell count of less than 200 is usually used as a diagnostic criterion for AIDS, as indicated by the United States Centers for Disease Control and Prevention, and indicates the need for medical intervention (Pinsky & Douglas, 2009; UNAIDS, 2008b). Without treatment, death occurs within six months to two years. It is reported that more than 90% of HIV-infected humans will eventually develop AIDS (Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009). Swanstrom and Wehbie (1999) showed that normal levels of CD4+ T cells are 1 000/uL and that a host will usually survive until the level drops to 50/uL.

2.3.3.4 Community level

A number of factors contribute to the complexity of the illness and consequent epidemic ensuing at a community level. The long incubation period during which HIV infection is not

detected makes it difficult to control and, by the time that the first AIDS cases are identified, the virus is already firmly established in a community. A further complication is that, although the majority of infections are of HIV-1, a number of strains have been identified (HIV-0 and HIV-2), as well as subtypes A, B and C in the HIV-1 group (Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009).

Through phylogenetic analysis, Swanstrom and Wehbie (1999) and Sharp, Bailes, Robertson, Gao and Hahn (1999) have shown relatedness between primate and human lentiviruses. Primate lentiviruses show five distinct lineages present in different primate species (sooty mangabeys, mandrills, African green monkeys, Sykes monkeys and chimpanzees) and provide evidence for the interspecies transfer-origin theory of HIV. With regard to HIV subtypes, most are reported to coexist in sub-Saharan Africa. Subtype B is found almost exclusively in Western Europe and the USA, whereas subtypes B and E have been found to co-circulate in Thailand. It appears as if the subtypes have adapted to modes of transmission (a theory that is questioned), as subtype E is found in groups where infection is spread through heterosexual contact, and in particular in the group of commercial sex workers, and subtype B is found in intravenous drug users.

Smith, Srinivasan, Schochetman, Marcus and Myers (1988) have indicated that, although the phylogenetic history of HIV is important for an understanding of the epidemiology of AIDS, two problems inhibit an accurate reconstruction, namely high variation in nucleotide sequence between the known HIV isolates and a lack of unequivocal time calibration points (related to a sparse fossil record of HIV and limited historical epidemiological data). According to Van Dyk (2001), a number of far-fetched theories about the origin of HIV have complicated the HIV/AIDS issue because of this limited historical data.

2.3.4 HIV transmission

Lentivirus transmission occurs exclusively via body fluids (Swanstrom & Wehbie, 1999). HIV is transmitted in a variety of methods (Fahmer & Romano, 2004), although HIV can only be transmitted through exposure to infected blood and genital secretions, and vertically from mother to infant (Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009). According to Phoolcharoen and Detels (2004) HIV is not highly infective, as shown in Table 1. Swanstrom and Wehbie's (1999) views support the general consensus that HIV is largely transmitted through vaginal intercourse, quite commonly via maternal-foetal transmission and infrequently through breast milk.

Table 1

HIV infectivity Related to Transmission Method (Phoolcharoen & Detels, 2004, p. 1459)

Viral transmission method	Infection rate by transmission method
Receptive anal intercourse with infected partner	5 to 30 infections per 1 000 acts
Intravenous drug use	10 to 20 per 1 000 needle uses
Accidental needle-stick injury	3 per 1 000 needle sticks
Vaginal sexual intercourse with infected partner	1 per 1 000 acts
Transfusion of screened blood	1 per 450 000 to 660 000 donations

2.3.4.1 Sexual transmission

Most HIV infections occur through sexual transmission (Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009; UNAIDS, 2007, 2008a, 2009). In developed countries, male-to-male transmission predominates. Transmission is influenced by factors including type of intercourse (vaginal, anal, oral-genital), HIV subtype, presence of other STDs, stage of infection and whether the male is circumcised. Swanstrom and Wehbie (1999) report that

macrophage tropic HIV is the phenotype most commonly transmitted sexually, and that the presence of other sexually transmitted diseases that cause inflammation enhances transmission.

2.3.4.2 Transmission through blood

The implementation of blood donation screening and the treatment of blood products have contributed to blood donation not being as major a contributing factor as during the early stages of the epidemic. Blood-borne transmission still occurs frequently through the sharing of needles, syringes and drug paraphernalia among the injecting drug fraternity, despite efforts at their education. Accidents among health and laboratory personnel account for some HIV infections (Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009; Van Dyk, 2001; UNAIDS, 2009).

2.3.4.3 Vertical transmission

Swanstrom and Wehbie (1999) report that vertical transmission can occur across mucous membranes. Interestingly, monocytes are resistant to *in vitro* lentiviral infection, and macrophages may play an important part in *in utero* infection. Vertical transmission may occur antepartum or during delivery. About 33% of infants born to HIV-infected mothers will be infected if no medical treatment is available. Transmission depends on the stage of HIV disease in the mother, the duration of labour, the viral load of the mother, the level of CD4 cells and the HIV phenotype, among others (Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009). Periods of high viral load (shortly after infection and after becoming symptomatic) have the highest transmission probability. The most recent treatment using drugs may reduce vertical transmission to as low as two percent. It is important to consider the case when there is an absence of such treatment in developing countries, and it has been reported that monotherapy at the onset of labour and immediately after delivery of the infant

may reduce transmission to about 50% (Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009).

2.3.5 Presentation/transmission differences between adults and children

Fahmer and Romano (2004) say that significant differences have been found between presentation and transmission in children and adults. “In fact, the young of all susceptible species and breeds (including human infants) are more prone to lentiviral disease and often manifest degrees of disease that do not occur in adults” (Swanstrom & Wehbie, 1999, p. 216). The onset of symptoms occurs earlier in children. In children, 91% contract HIV perinatally, transplacentally in utero, during delivery and through infected breast milk. Perinatal transmission is reduced by two thirds when AZT (an antiretroviral drug) is administered to the mother during pregnancy and delivery. A small number of children contract HIV from sexual abuse, although rarely in household and day-care settings. A concern for HIV transmission is the particular risk at the onset of adolescent risk-taking behaviour (Fahmer & Romano, 2004). Immature nervous systems appear to be more susceptible to lentiviral infection and damage as a result of the infection. Swanstrom and Wehbie (1999) have indicated that, in adults, neurological disease usually is gradually progressive, in comparison to children and young people, who appear to be prone to severe lentiviral encephalitis. In adults it seems that central nervous system disease appears in a late phase of immunosuppression.

2.3.6 Treatment

The Centers for Disease Control and Prevention in the USA published a list of AIDS-defining conditions that include viral, bacterial and fungal infections (Phoolcharoen & Detels, 2004; Pinsky & Douglas, 2009; UNAIDS, 2008b). Only two conditions are caused by HIV, i.e. AIDS dementia and wasting syndrome. It seems almost impossible to find a cure, as there are thousands of variations of the virus, which in part are related to the transcription error that was described in Section 2.3.3.2. Because reverse transcriptase represents an essential protein

for viral replication, initial antiviral therapy was focused on it (Swanstrom & Wehbie, 1999). The first antiretroviral drugs (azidothymidine, or zidovudine as is commonly known) interrupted the transcription of viral RNA into viral DNA, had no effect on already infected cells and consequently was not a cure (Alozie *et al.*, 2009). Further drug developments continued, and combinations of drugs were prescribed, with constant concerns about side-effects and resistance. In 1995 a breakthrough came in the form of protease inhibitors, followed by combination therapy with three different drugs representing a treatment regimen known as highly active antiretroviral therapy (HAART), which can prevent the onset of AIDS or death. Because of HAART, death due to AIDS in men aged 25 to 44 years dropped from the number one cause in the 1980s to the number five cause in 1997. Compliance remains a problem due to various constraints, such as having to take 15 pills or more per day, with different time schedules and restrictions (Alozie *et al.*, 2009; Bell, 2009; Phoolcharoen & Detels, 2004; UNAIDS, 2008a, 2009). The replication rates of HIV imply a turnover of HIV-infected cells to two days, relating to about 300 replication cycles per year and about one billion infectious events per day in the host body. The mentioned viral DNA polymerase error contributes to viral genetic diversity being HIV's primary defence against host immunity and the anti-viral medication suppression of replication, bringing about a pool of genetic variants, also known as a swarm (Swanstrom & Wehbie, 1999). Swanstrom and Wehbie (1999) have also noted that a confounding feature of HIV is that, despite genetic variations due to replication errors, and despite new mutations continuously being produced, previous genetic combinations are not lost. This feature of HIV complicates the treatment options considerably, and it is important to consider the fact of high rates of recombination in retroviruses in general. Swanstrom and Wehbie (1999) have pointed out that the development of an effective vaccine against HIV is a formidable task, but that a measure of success in lentiviral vaccines in animals provides hope (Alozie *et al.*, 2009; Bell, 2009).

In the light of the preceding it may be noted that in time, the number of people needing intervention will increase dramatically (Phoolcharoen & Detels, 2004; UNAIDS, 2008a, 2009). In particular, home-based care and the support of women to relieve their care-giving burden were proposed and it is noted that the economic and social impact is huge. Detels and Breslow (2004) showed that a change in behaviour is needed. Due to multiple infections often being present in one family, Fahmer and Romano (2004) view HIV infection as a family disease and say that the most significant psychosocial stressor is social stigmatisation, i.e. a fear of rejection and retaliation, but include lack of other resources as significant to consider as well. Complementary treatments such as massage, diet, acupuncture and exercise need to be considered in addition to antiretroviral treatment.

2.3.7 HIV/AIDS in summary

HIV/AIDS presents a phenomenal challenge as a particular form of adversity for families. From the preceding it is clear that families affected by HIV/AIDS are dealing with a chronic illness that usually is fatal and for which a cure probably will not be discovered in the too near future. Besides the immense numbers of and the grim outlook for those infected, a number of socioeconomic features confound the picture and have been shown to have effects on the clinical presentation and course of the illness. Among these are the neuropsychimmunological effects associated with stigma. In the light of the fact that a cure is unlikely and vaccine trials are only in the beginning phases, the implications of research such as the current investigation, with a focus on assisting families to cope where there is no hope, are far reaching. While colleagues in the medical sciences continue to struggle in search of a cure, it remains the duty of the paramedical fraternity to contribute to science in ways that may support resilience through adversity, and not despite of it, as described by Walsh (1996). The Lancet (2009) quoted South African President Jacob Zuma's commitment to supporting treatment for HIV/AIDS and the eradication of stigma, showing the level of political engagement required for the phenomenal task of combating HIV/AIDS.

The following section provides a discussion of single-parent families as the fourth theoretical construct of the current study (after resilience, the Resiliency Model and HIV/AIDS).

2.4 Single-parent families

2.4.1 History

The word family is derived from the Latin word *familia*, which denotes a source of identity, reassurance and safety (Leeder, 2004; Steel & Kidd, 2001). It includes “slaves, servants, boarders and others” (Leeder, 2004, p. 26) and incorporates the term household, inclusive of the sharing of resources and common residence.

In the 1950s and 1960s, a functionalist perspective (providing for the needs of the family) dominated views of the family. Subsequent changes in the general acceptance of the traditional family form as the gold standard, or even as the only acceptable family form, are related to influences from the changing position of women (feminist approach), generational differences (hippies, Goths, ravers), the increase in diversity of family forms, and globalisation (Steel & Kidd, 2001). Torremocha (2002) describes a phenomenon termed the Second Demographic Transition, characterised by decreased fertility and marriage, increased divorce rates and cohabitation, and low significance of marriage. Included in this could also be what Baca Zinn and Eitzen (2005) describe as family boundaries that have become diverse, and the rise in cohabitation as one of the more important changes in family life.

The term lone-parent family appeared in the United Kingdom (UK) in the 1960s, when the Finer Committee reported on the state of such families (Torremocha, 2002). Scandal used to be associated with single-parenthood, as well as a stereotype of irresponsibility (Jeter, 1995).

Herlth (2002) says that the significant and serious change in family situations in the last century, as well as a change in the status of women (Torremocha, 2002), has played an

important role in weakening the status of marriage. Beck-Gernsheim (1998/2002) indicates that younger people tend to have more relationships, but also more separations.

2.4.2 Philosophical viewpoints

The ideology (values, beliefs, knowledge) (incorporated into the Resiliency Model of McCubbin and McCubbin, 1996) linked to phenomena supports views, assumptions and hypotheses and drives research and policy that have a direct bearing on those phenomena as they act on the everyday lives of people. As such, a number of ideologies are discussed as a means of highlighting a number of essential components for understanding families. It should be noted that the following discussions are brief in the sense that inclusion aims to serve the purpose of mentioning and creating awareness of different philosophical perspectives on families. Pryor and Trinder (2004) warn about the influence of the researcher's own moral and political views upon research questions posed and investigated.

Burns and Scott (1994) found that changes in family composition and the rise in single-parent families were explained mostly by demographically-oriented theory that gives insight into family structures and values and its corresponding influence on the prevalence of mother-headed families. They also found, however, that little has been published on the individual psychological processing of events that influence life, like the more psychologically-oriented theories such as feminism and decomplementary theory.

Jeter (1995) attempted to elevate single-parenthood from a stereotype of victimisation to a responsible archetype, based on ancient history as interpreted by Jung, as cited by Jeter (1995, p. 536):

Linage, predicated on mythology and delineated by heritage, tells us about the spiritual and historical foundation of a human group along with all family and social relationships. Lineages are often pictured as living trees with ever expanding branches, such as the Tree of Jesse, a popular theme of art in the Middle Ages. Rituals elicit and

re-vitalize memories of ancestors. Kin strength is available at any time, by recitation, recollecting the past glories. Stories in Greek mythology as well as the Hebrew and Christian scriptures provide varied characters, role models, and prototype options for living. Immersed in the depths of the human psyche is the universal, primordial, collective unconscious inhabited by archetypes, internal forces of energy which seek to organize the psyche's varied interactions and to sustain the ego consciousness. These archetypes are spontaneously expressed cross-culturally as vital life forces and archetypal images in art, fantasies, dreams, fairy tales, and myths. It is through the archetypal images that the human being reveals profound unconscious longings and yearnings.

In about 730 to 700 BC, the Greek poet Hesiod recorded the lineage of Greek deities and showed many of the 300 gods and goddesses to be single mothers and that there were many references to family violence and murder within families. It has also been shown that in 42 generations of male progenitors in the lineage of Jesus, four female ones are named, of whom three were single parents at some point (Jeter, 1995).

Gibbens (cited in Steel & Kidd, 2001) says that New Action Theory (or structural sociology) states that humans have, "...as an inherent aspect of what they do, the capacity to understand what they do while they do it" (p. 167). Scanzoni (cited in Steel & Kidd, 2001), in explaining features of family life, says that "families are not 'objectively real'" (p. 168), not able to be measured, and "...are not 'things' that exist around, above and beyond the individuals involved, but are made by them, by their choices, decisions and actions" (p. 168). According to Steel and Kidd the structural view provides the best understanding of family diversity due to "meaningful and creative actions initiated by ordinary people to help them figure out and make sense of the world they live in, their place in this world, their relationships and their own self" (p. 168). Torremocha (2002) describes the structural-

functionalist paradigm of a traditional or nuclear family as one where the husband is responsible for economic functions and the wife for home and nurturing roles.

The traditional two-parent family, often held to be normal, natural and consequently desirable (Steel & Kidd, 2001), is described by Herlth (2002) as the “Parsonian normal family ... grounded on the complementarity of instrumental and expressive gender functions” (p. 300) and exemplifies the complimentary family structure founded in the functionality of roles. Pryor and Trinder (2004) describe this family form as the gold standard for family forms, based in a *deficit-comparison* approach, which denigrates other family forms as deviant or pathological and focuses on their difficulties rather than strengths. This is exactly where the current investigation may make a significant contribution by linking a salutogenic approach with a focus on strengths rather than deficits to a family form that varies from the traditional.

New Right conservative politicians support the traditional patriarchal family as important and disapprove of other lifestyles, cohabitation, homosexuality, or single-parenthood, particularly because of the assumption that the breakdown of the traditional family form is the cause of social ills such as crime and violence (Steel & Kidd, 2001). The fact that much family violence occurs within the traditional nuclear family (Kaiser Daily HIV/AIDS Report, 2007; Kaufman & Henrich, 2000), however, does little to support the value of this particular family form as a standard to be strived for. Leeder (2004) highlights the fact that the *dark side* of family life, such as the increase in divorce rate, child abuse, wife battering and neglect of the elderly, is seldom considered when the traditional family form is proposed as salvation for social ills. Torremocha (2002) comments on the conservative, discriminatory view of single parenthood based on a perception of an acquired rather than ascribed status (almost as if it is something bad that could have been avoided, and that it was brought on due to the woman’s behaviours, rather than something happening by accident and may therefore perhaps be excused). This discriminatory view includes a consideration of the moral right of a woman to

an independent professional and personal life and to raise children alone. The condemnatory comments by former US Vice-President Dan Quayle about the lifestyle of the fictional television character Murphy Brown, who chose to raise a child alone, is an example of the powerful impact of political voices in the shaping of prejudice and discriminatory practices (Torremocha, 2002). Included in the view of single parenthood as a social threat or social problem are a drain on public funds, a threat to stability and order, concern for social order, fathers seen as uncommitted and anti-social, and the offspring of single-parent families being viewed as lower achievers who in turn perpetuate the single-parent lifestyle (Kiernan, Land & Lewis, 1998).

In a Marxist view, family is seen as an instrument of oppression that serves the ruling class and maintain the capitalist system. Zaretsky (1976, cited in Steel & Kidd, 2001) raises the view that *The System* (bureaucracy or government) rears and socialises docile workers with a motivation to work, a sense of responsibility and a disincentive to rebel (perpetuated in micro systems such as families). This relates to a move away from individuation and self-responsibility, which in themselves condone and probably stimulate new family forms. Zaretsky (1976, cited in Leeder, 2004) also comments on the family form as being socially determined and relating to specific social conditions at specific times.

In feminism, women are viewed as being doubly exploited by capitalism and by men, which view them as providing cheap labour at home and an additional, inexpensive workforce when needed. From a feminist perspective, this ideology of the traditional two-parent family maintains the exploitive position of men over women (Steel & Kidd, 2001). According to Burns and Scott (1994), feminist theory is based on the idea that, practically and basically, nothing is the same for women and men and that Shorter's theory of two sexual revolutions overlooks the very different outcomes for males and females. In their critique of the family Burns and Scott (1994) referred to the traditional male and female roles and the *myth of the*

dependent wife. In order to address the stigma attached to single parenthood, feminist sociologists in France changed the descriptive terms “*familles privées de père* [family deprived of a father] and *familles dissociées* [broken family] to *parent isolée* [isolated parent] and *famille monoparentales*” [single parent family] (Torremocha, 2002, p. 176). Burns and Scott (1994), however, criticised feminism for its anti-male focus, saying that “oppressive social conditions, rather than men in general, are the main enemy” (p. 181). They also criticised it for its lack of focus on explanations of “motivations of men in family formation and dissolution” (p. 181) and for its white, Anglo-American focus.

From a post-modern sociological perspective, Cheal (cited in Steel & Kidd, 2001) proposes the view that nothing is seen as fixed or certain. Reference is made to *families* rather than *the family*, reflecting a dynamic, fluid and changing situation where individuals have become freer to choose lifestyles that give meaning to life. Post-modern relativism, indeed its fragmentation of reality, does not indicate a single family type as being right or good or better. A post-modern reflection on life events in general leads to views such as that “... one thing is certain after divorce, namely that everything will become uncertain and fluid; nothing will be the same as before” (Beck-Gernsheim, 1998/2002, p. 33). In his death song before he died, White Antelope (in Brown, 1975) sang eternal words that perhaps reflect on a post-modern view in pre-post-modern times: “nothing lives long, only the earth and the mountains” (p. 72).

Sinha (1998) describes culture in an anthropological sense as a way of life handed on from generation to generation. Membership of a culture is based on belonging and not on accomplishment. Historically, racial and ethnic families, that is other than white middle class Western, (as were any family form that deviated from the two-parent norm) were seen as different from the norm. A structural diversity approach, however, leads to an appreciation of racial and ethnic families as not merely cultural artefacts and curiosities, but entities shaped

through interaction with social structures (Baca Zinn & Eitzen, 2005). Aginsky (1940, cited in Leeder, 2004) illustrates the importance and contributions of cultural diversity to the field of family research by quoting a Native American elder who is more than 100 years old on the importance of family: “A man is nothing. Without his family he is of less importance than a bug ... the family is important. In the white ways of doing things the family is not so important” (p. 68).

Wallerstein’s (cited in Leeder, 2004) world systems theory contributes to an understanding of families and things that affect them on a global scale. As such, the world is divided into three areas, core (USA, England, France, Russia, Germany, Japan and sometimes Italy), semi-peripheral (Spain, Portugal, Brazil, Mexico and oil-producing Middle East countries) and peripheral (Africa, Asia, Latin America). Core and semi-peripheral areas dominate through economic advantage, whereas the peripheral countries provide labour and resources for the core and semi-peripheral areas. The dependency of the periphery relates to the core becoming wealthy through exploitation, initially through slavery, then colonisation, followed by pillage and later the assumption of control over the destinies of said areas. Leeder (2004) further uses the Dependency Theory to show the ever deepening divide brought on by poverty. The author showed this poverty division by accounting facts such as that in 1995 there were 187 countries with almost 6 billion people in the world, of which three quarters live in poverty and that 800 million people faced starvation by 2001. Global poverty is an important factor influencing family structure and function (Leeder, 2004).

2.4.3 End of the family?

Single-parent families are not a new phenomenon (Kiernan *et al.*, 1998; Torremocha, 2002; Walshe, 1994). Torremocha (2002), for instance, says that the appearance of family forms other than the standard two parents and children was noted from about the mid-1960s. These new family forms are characterised by a high probability of divorce, low fertility and low

significance of marriage as an institution. Historically, family structures and relationships have always been subject to change. The loss of a parent in earlier times could usually be attributed to death, but more lately it is usually attributed to divorce (Pryor & Trinder, 2004). Societies do not remain stable and static and, according to Leeder (2004), social change is dynamic and takes place at three levels, namely society's norms and values, laws and institutions, and in the popular culture.

The increase in single-parent families and alternatives to the traditional family form has given rise to the notion that the end of family is in sight (Kiernan *et al.*, 1998), although Steel and Kidd (2001) have indicated that most divorcees remarry and their children marry and form families of their own. There are more disadvantages than advantages to single parenthood, according to Walshe (1994), which may further negate the catastrophic view of the demise of the family.

Beck-Gernsheim (1998/2002), however, has raised concerns about what is termed the "generation effect" or "social heredity" (p. 28), with reference to the fact that people from broken families have a higher likelihood for divorce. This would then provide evidence of a learning model of behaviour that is anchored in the work of B.F. Skinner (Möller, 1980), who is famous for the expression, "a person does not act upon the world, the world acts upon him" (Kaplan & Sadock, 1998, p. 148), and that may be quite relevant during an observation of major paradigm shifts in culture. The experience of divorce fosters the learning of an individualist notion that leads to an increase in divorces in the next generation. Burns and Scott (1994) and Kiernan *et al.* (1998) emphasise this important link of inter-generational transmission of marital dissolution and poverty where it appears that at least in part that the mother legitimises the single-parent lifestyle (even though this may coincide with problems such as difficulty controlling children's behaviour as a sole parent). It is thought that because of the parents divorce, children learn through modelling that divorce and single-parenthood is

an acceptable form of social conduct. Even though single-parenthood is thus associated with difficulties such as raising children and poverty, children accept this family form and perpetuate the single-parent lifestyle when they in turn marry and divorce.

Baca Zinn and Eitzen (2005) report remarriage rates of 75% for females and 60% for males, and say that a high divorce rate does not mean the end of the institution of marriage, as about half of marriages do not end in divorce, most people still want to marry, and the majority who do divorce, remarry. It would appear that we are not seeing the demise of marriage and the family, but rather that serial monogamy has replaced lifelong unions (Steel & Kidd, 2001). Torremocha (2002), however, notes a fear of lone-parent families due to their perceived challenge to the established, traditional nuclear family form. It is predicted that high levels of the dissolution of relationships between men and women will continue, with women and children struggling economically as a consequence (Burns & Scott, 1994).

The socio-political and economic crisis of an ideal welfare state (as indicated by a questioning of the value of such an ideal in Sweden for instance), and increased participation by women in the workforce, have strongly influenced a weakening of the idea of the traditional family ideal (and possible demise of). According to a structural-functionalist paradigm this traditional family ideal determines that the husband is responsible for economic functions and the wife for home and nurturing roles (Pryor & Trinder, 2004; Torremocha, 2002). Social and economic changes in Western countries have inevitably undermined traditional marriage, as is evident, for example, in the increased economic independence of females. This is held to be the central cause of the movement from traditional family forms or roles to an increase in divorce, out-of-wedlock births and mother-headed households (Burns & Scott, 1994; Kiernan *et al.*, 1998; Pryor & Trinder, 2004) and children spending more time in child-care arrangements (Pryor & Trinder, 2004). Burns and Scott (1994) noted a call for change in social policy in Sweden because of the economic burden associated with a welfare state.

Home is no longer the site of economic activity and, consequently, “its *raison d’être* as a source of income ceases to exist” (Pryor & Trinder, 2004, p. 324).

Divorce rates have tended to increase over the past 100 years (Baca Zinn & Eitzen, 2005), with an all-time high in 1981, although this has subsequently declined (Bianchi, 1995). In 1995, the USA Centers for Disease Control reported divorce rates of 4.6 divorces per 1 000 population (Leeder, 2004). The incidence of divorce has increased to such an extent that it has become “the logical element of marriage” (Torremocha, 2002, p. 176). According to Minamikata (1993), the divorce rate in Japan increased by 220% from 1978 to 1988 and mothers usually retained custody, although Leeder (2004) points out that divorce rates in Japan still are of the lowest in the world.

Pryor and Trinder (2004) reported a twenty-fold increase in divorce in the United Kingdom between 1911 and 1960, although a recent slowing of divorce rates was noted. Divorce rates in the USA are two to three times as high as in the United Kingdom, Australia and New Zealand (Pryor & Trinder, 2004). Schneider (cited in Beck-Gernsheim, 1998/2002) thought the increase in divorce not to be that dramatic and pointed out that it decreased in West Germany between 1984 and 1992. According to Beck-Gernsheim, however, the larger historical picture shows that there has been a dramatic increase in divorce rates since 1992. The South African Government reported a decrease in divorce rates, from 582 per 100 000 married couples in 2001 to 526 in 2002 (Statsonline, 2005). The online encyclopaedia, Microsoft Encarta (2007), reported South African divorce rates as .85 per 1 000 population. Independent statistics from the Eighty20 Consumer Information Portal, which provides online access to up-to-date statistics on the South African consumer market, indicate that 55% of South Africans aged 25 or older are married or living together, while 4% are divorced or separated and 10% are widowed (Markettree Consultancy, 2007).

The increase in divorce is related to a paradigm shift in the sense that marital happiness has become an important value, in contrast to the importance of procreation associated with marriage in earlier times (Torremocha, 2002). An increase in divorce rate may be attributed to the normalisation of divorce, in part due to a greater sense of free choice in individuals and the lifting of barriers such as legal restraints. Self-protective strategies may have a dual effect of increased the divorce rate, but also assisting in recovery, as divorce does not promote the stability of relations, but the individuality of couples (Beck-Gernsheim, 1998/2002). According to Burns and Scott (1994), the social forces compelling women and men to complement each other within marriage have declined, as that personal fulfilment in relationships has become more important and loyalty to the institution of marriage has become less important. This development appears to find favour because of the increase in personal freedom, even though it does cause an increase in mother-headed households. Burguière, Klapisch-Zuber, Segalen and Zonabend (1986/1996) are of the opinion that the crisis of married couples does not signify the death of the family, but rather appears to strengthen kinship networks based on family lines, which become female lines due to children being raised mostly by mothers. Burns and Scott (1994) have linked the increased economic independence of women to a corresponding increase in choice and less dependence on having to stay in an unhappy marriage. In the 1970s, divorce became the major contributor to mother-headed families because of the decrease in barriers to leaving marriages, and not necessarily because of a decrease in the quality of marriages, and also because of increased alternatives open to females.

The increase in single-parent families, according to Burns and Scott (1994), is due to more couples living in consensual unions, which are characterised by a high break-up rate (related to the serial monogamy of Steel and Kidd (2001)). Baca Zinn and Eitzen (2005) say that family boundaries have become diverse and the rise in cohabitation is one of more important changes in family life. There are many different types of diversity (organisational, cultural,

class or economic, life-course (also incorporated in the life phases aspect of the Resiliency Model of McCubbin and McCubbin (1996) and cohort diversity) that are important for understanding families (Steel & Kidd, 2001). Thirteen family types have been identified by Steel and Kidd (2001), namely local extended, dispersed extended, attenuated extended (little contact), nuclear, neoconventional, reconstituted, lone/single parent, *cornflake packet*, symmetrical, dual-worker, cohabitation, same-sex and mother households. Torremocha (2002) describes different single-parent types originating from very different situations, relating to widows, divorced people, separated people and single parents. Beck-Gernsheim (1998/2002) describes families as representative of “conjugal succession and elective affinities” (p. 33), where conjugal succession implies greater fluidity and uncertainty in kinship relations (also see the postmodern viewpoint in Section 2.4.2). According to Leeder (2004), conjugal families, which are characterised by intimate bonds and a marital-like relationship, are fragile and easily affected by divorce, separation and, of course, death. Conjugal dyads present an interesting paradox, according to Widmer (2004), in being the most prominent of all interpersonal relationships and, at the same time, extremely unstable, yet providing psychological support, cognitive significance, and sociability.

An increase in cohabitation as a prelude and alternative to marriage, as well as relaxed legal restraints on divorce, is partly blamed for the rates of marital breakdown (Pryor & Trinder, 2004). Sugarman (2003) has pointed to a shift in the stigma associated with unmarried parents. Torremocha (2002) highlights an inversion of the relationship between widows and divorced/separated single-parent groups, indicating the rise of the latter in recent years. Torremocha (2002) thought that the receding influence of the Roman Catholic Church on divorce laws and the acceptance of single-parent families have played an important role in the rise of the prevalence of single-parent families. According to Bianchi (1995), by 1990 about one in five single-parent families were father-child families.

The dominant position of the traditional two-parent family form among family forms has been challenged by changes in widely-held beliefs about children and the roles they play in families and society in general (Pryor & Trinder, 2004). Social changes, such as the removal of children from the workforce, compulsory state education, and children gaining higher levels of education than their parents and duly challenging parental views, are examples of changing beliefs about children. Children are viewed as sources of emotional gratification for their parents, which represents a social shift from the earlier view of children as a contributing economic force in families (Pryor & Trinder). This is a further shift away from the traditional two-parent family form.

Herlth (2002) shows that not only have family boundaries changed, but also that women's role has changed in the last three decades. This has led to the assumption of a significant and serious change in family situations, with fathers becoming more involved in family life. More involvement by fathers in family life has benefits regarding high marital satisfaction, but potentially has negative effects, such as women questioning their importance in families. Higher levels of involvement by the father in the family predominantly has an indirect effect on the children's development through an influence on the mother's psychological wellbeing and marital satisfaction when men become more family-oriented (Herlth). The emotional and psychological development of partnerships from economic to emotional grounds has been described as a movement from *positional* families (hierarchy, rules and obedience) to *personal* families (egalitarian roles) (Pryor & Trinder, 2004). In this regard, consider McCubbin *et al.*'s (1997) key resilience factor of *equality* in Section 2.1.2.2. The responsibility for stability in relationships "rests predominantly on individuals themselves rather than factors outside themselves such as community or church-based constraints" (Pryor & Trinder, p. 324).

An increase in births outside of marriage is attributed to a corresponding increase in single-parent families (Torremocha, 2002). Bianchi (1995) thought that the growth in single-parent families of late can rather be attributed to mothers deciding to have children and not marry, whereas earlier it came from married family disruptions through divorce, separation and death. Burguière *et al.* (1986/1996) have questioned the future of the institution of the family when children can be procreated without parents. According to Burns and Scott (1994), the increased economic independence of females has contributed significantly to women's decisions to have children outside of the traditional family forms.

Domestic violence, "the beating of loved ones" (p. 237) and even the killing of family members contributes to the decline of the predominance of traditional family forms (Leeder, 2004). The true rates of family violence are underreported, and statistics should be interpreted with caution, but even so, about 1 million substantiated reports of and 1 000 child fatalities related to child abuse were reported by the American Department of Health and Human Services in 1997 (Kaufman & Henrich, 2000).

Kiernan *et al.* (1998) think it unlikely that the traditional two-parent family will be restored as the main family type. Changes in family circumstances are perhaps not so bad when continuity and stability are viewed as parts of process of change itself; that continuity and stability are not only found in enduring family life and -relationships (Beck-Gernsheim, 1998/2002). When single parenting is viewed not merely from biological reproductive motivations, this particular family form will be viewed less as pathological and more as increased diversity (Burns & Scott, 1994). Connections between families and local communities vary considerably. Crow and Maclean (2004) are critical of the view that links are being eroded by geographical mobility as affluent and individualistic lifestyles and technology improve the ability to maintain relations over vast distances.

According to Pryor and Trinder (2004, p. 326), “demographic trends can be read as evidence of family decline or of family adaptation, depending upon one’s perspective”, in relation to views of family change as a *symptom* of societal decline and inevitably being harmful to children, or as a reflection of broad social forces and attempts by families to adapt. Pryor and Trinder support the view that “family transitions, including divorce, can be seen as responses to changes in the nature of families and family relationships, and to social and economic factors ... family *processes*, rather than legal and biological considerations” (p. 326).

2.4.4 Definition of family and single-parent family

Family is not easily defined (Beck-Gernsheim, 1998/2002; Leeder, 2004). Indeed, Beck-Gernsheim feels that it is no longer possible to give one single definition for families. In the words of Leeder (p. 22), “family is a simple word, yet it means so much” and “has many meanings”.

Family is regarded as the basic social unit in the world that fulfils functions essential for the successful continuance of society (Burns & Scott, 1994; Leeder, 2004; Steel & Kidd, 2001). It is described by Leeder (p. 25) as “a group of people who have intimate social relationships and have a history together”. The functions fulfilled by family are related to the biological ties between mother and child, and the mother’s needs during pregnancy and birth. Family offers a context for the fulfilment of sexual needs and includes the sexual, reproductive, educational and economic areas of human life (Steel & Kidd, 2001). The functions of family include procreation, socialisation, the division of labour, the regulation of sexual behaviour, care and economic provision for family members, and providing in the emotional needs of affection and social status of the family members (Leeder, 2004).

Defining the concept of family necessitates a sense of elasticity, or pliability, to allow for the varied family forms (Beck-Gernsheim, 1998/2002). Vaskovics indicates that most people strive to form some sort of bond or family or connection with others, related to the human

need for a sense of security and belonging that is reminiscent of Maslow's (in Strauss, 1993) hierarchy of needs. Crow and Maclean (2004) point out that a sense of community is still valued by people. Tönnies's (1887, cited in Crow & Maclean, 2004) concept of *Gemeinschaft* interprets communities as large families and relates well to Beck-Gernsheim who summarises the concept of family quite well by indicating that all individuals belong to a family and are responsible for one another, resonating well with Leeder's (2004) notion that families are indeed embedded in communities.

The difference between concepts of kinship and household needs to be considered in an appreciation of varying family forms (Steel & Kidd, 2001). Burguière *et al.* (1986/1996) think society is rediscovering the advantages of kinship networks, and Crow and Maclean (2004) highlight family and kinship as useful resources. Leeder (2004) describes kinship as people who consider themselves related.

Leeder (2004, p. 25) notes that Murdoch's factor of a "socially approved sexual relationship" as a definition for family is no longer applicable. Rawlings (1992, cited in Bianchi, 1995, p. 73) provides a USA Census Bureau definition of family as "a group of two persons or more (one of whom is the householder) related by birth, marriage, or adoption *and residing together*". Burguière *et al.* (1986/1996, p. 537) describe a family as:

The family is a flexible institution, that it can assume multiple forms, which combine social and biological elements in different ways, depending on place and period. Whether consanguineous or matrifocal, extended or nuclear, elementary or complex, irrespective of its form the family is still a family so long as humanity does not destroy the ideological edifice on which it is based, in other words, so long as people do not challenge the ban on incest or the marital exchange which ensues from it, or, over and above this, the explicit functions which the family is intended to fulfill in our world: raising children, sexual division of tasks and exercise of sexuality.

The European Commission defines single parents as parents who are not living as a couple (neither married nor cohabiting), that they may or may not be living with others (e.g. friends or own parents), and that this parent is living with at least one child who is younger than 18 years old (Steel & Kidd, 2001; Torremocha, 2002). Kiernan *et al.* (1998) define single-mother families as mothers living without a spouse or partner and with her never-married dependent children.

It is important, however, to consider Bianchi's (1995) view that demographic and socioeconomic characteristics of single-parent families have changed dramatically in the past three decades. Sugarman (2003), for instance, thinks that a single parent in a two-adult household as a form of cohabitation should still be considered a single-parent setup. Cohabitation does, however, complicate the data, as in the case of a male being a casual boyfriend, a de facto spouse or a stepparent, or something in between.

Zaretsky (1976, cited in Leeder, 2004) reminds us of the importance of the fact that family structures are socially determined due to the influence of structures outside of the family, and that particular family forms develop due to specific social conditions.

Pryor and Trinder (2004) say:

Morgan suggests that family is properly regarded as a verb; we 'do' family as a set of social practices, rather than being family in a static sense. By considering families in this way, we can begin to identify what leads to optimal adaptation ... without resorting to structure as the default independent variable. (p. 336)

2.4.4.1 Family structure

In consideration of family and family structure, it is important to bear in mind that, in order for children to thrive, they should have access to at least one secure relationship (Horowitz, 1995). Pryor and Trinder (2004) identified 21 different marital status classifications. *Nuclear*

families are proposed to consist of a mother, father and children (Steel & Kidd, 2001) and are defined by Leeder (2004) as comprising one or two adults, possibly with children, living together. Although nuclear family is seen as the gold standard for family structures, it is a mid-twentieth century phenomenon and, before that time, children were raised by a variety of adults (Pryor & Trinder, 2004). *Extended families* are thought to consist of a nuclear family and one or more relatives living together; a concept developed further by Steel and Kidd (2001) to incorporate family living in close proximity and having regular contact. Leeder (2004) contributes to the concept of extended families the notion of lineage, which may include three or more generations. According to Leeder (2004), an extended family lives forever and includes a geographical spread, characterised by immigration, money sent home, phone calls and visits.

In consideration of the concept of family it is necessary to appreciate the difference between family of origin and family of procreation. Single-parent families (or lone-parent families) are defined as consisting of only one adult raising the children – due to death, divorce or the mother never having married. In reconstituted families, at least one of the pair has been married before (Steel & Kidd, 2001).

Gass-Sternas (1995) points out that limited research has been done on single-parent widow families, and particularly not on single-parent widows from black and other ethnic groups. In a study of 565 societies, Murdoch (1949, cited in Steel & Kidd, 2001) reported that polygamy was permitted in 80% of the societies, incorporating polygyny (a man with more than one wife) and polyandry (a woman with more than one man), citing as an example the Nyimba people in Nepal, where it is common practice for a woman to marry all the brothers as a practice to increase family stability.

Pryor and Trinder (2004) have shown that many diverse structures work well to nurture family members: “our task, then, is to understand those aspects of families that, regardless of structure, promote resilience and adaptability” (p. 336).

2.4.4.2 Types of single-parent families

Divorced or separated single-parent families form the largest group. Pryor and Trinder (2004) state that instability in family life is caused by parental separation and divorce and that according to Kiernan *et al.* (1998,) an increase in lone-motherhood is mostly due to marital breakdown. Pathways out of lone-motherhood include remarriage and re-partnering (Kiernan *et al.*, 1998), which are associated with an improvement in financial wellbeing. It is paradoxical, however, that the increased economic independence of women is thought to be primarily responsible for a corresponding increase in single-parent families (Burns & Scott, 1994; Kiernan *et al.*, 1998; Pryor & Trinder, 2004).

As a specific group, high-risk single-parent widow families are characterised by multiple stressors, intense grieving, the appraisal of bereavement as a threat, the use of less adaptive coping, limited use of resources and poor health. Single-parent widows experience numerous stressors, such as the dual roles of mother and father, their own grief issues, limited time for family-building activities, limited own social activities and dating, inadequate housing and income, unemployment, parenting worries and a high risk for depression. Successful coping of the single-parent widow depends on the resources available, although it has been reported that teenagers in such families did not find the help of other family members, relatives, clergy, social workers and friends to be helpful. Older teens spend more time with their peers, while younger teens appear to be more isolative in their grief response (Gass-Sternas, 1995).

As a group, unmarried mothers are fewer than divorced or widowed single parents, even though Sugarman (2003) indicates a shift away from the negative stigma of unmarried parents that contributed to the subsequent growth in this family form. The avoidance of stigma and

discrimination relating to unmarried motherhood often led to infanticide, referred to in the *Argus* (Melbourne) of 21 December 1870 as “a very army of murderesses within our midst” (p. 91, cited in Swain & Howe, 1995). This was the view at the time of unwed mothers who killed their babies in order to avoid societal discrimination. Walshe (1994) shows that the rate of teenage births more than halved from 1971 (55.5 per 1 000 population) to 1992 (21.9 per 1 000 population). An increase in births outside of marriage (Torremocha, 2002) and the increasing economic independence of women (Bianchi, 1995; Burns & Scott, 1994) may have contributed to a corresponding increase in this family form. Kiernan *et al.* (1998) state that the never-married are the poorest of the single-parent families.

According to Sugarman (2003), the phenomenon of the homosexual households needs further investigation and should be considered as a single-parent and general family form.

2.4.4.3 Frequency

According to Bianchi (1995), it is difficult to accurately assess the number of single-parent households, partly because census data do not distinguish between step, adoptive and biological family ties. Globally however it is thought that one-quarter to one-third of all families are headed by single mothers (Marriage and Family Encyclopedia, 2007). The 1990 USA Census data show 7.4 million single-parent households: an increase of 26% over the previous decade (Bianchi, 1995). Bianchi further states that about half of the children born in the early 1980s will spend time in a single-parent family and that about half of the mothers of those children would become single parents. Sugarman (2003) showed an increase in father-headed single-parent families and said that more than 2 million children lived in such households by 2000. The prevalence of and status of female-headed households in a community is directly linked to the value or the threat of female fertility and the nature of access to resources (Burns & Scott, 1994). According to Minamikata (1993), lone-parent families are quite rare in Japan, forming only 1.7% of the population in 1989. Pryor and

Trinder (2004) estimated that 18 to 20% of children lived in one-parent homes in the UK, Canada, Australia and New Zealand, mostly with the mother.

In the UK in 1973, lone mothers made up 8% of all families with dependent children; by 1993, this percentage had increased to 19% (Kiernan *et al.*, 1998). Kiernan *et al.* also reported that 7% of all lone mothers in 1973 had educational qualifications of A levels or higher, compared to 71% who had no education. By 1993, 16% had A levels or higher and only 38% had no education.

In a South African Central Statistical Service publication, Budlender (1997) stated that “the simple single nuclear family is far from being the South African norm!” (p. 10). Of South Africans aged 25 years and older, four percent are divorced or separated and ten percent are widowed. It is reported that, of South Africans aged 25 to 34 years, 67% of white people are married or living together, compared to 31% of black people (Markettree Consultancy, 2007).

2.4.4.4 Demographics

Boyce, Miller, White and Godfrey (1995) say that gross differences between single- and two-parent mothers tend to become insignificant when maternal education and income are taken into account, and that stress levels and adaptation are not very different when socioeconomic variables were controlled for. Boyce *et al.* (1995) further comment that single mothers with children with disabilities tend to be younger, have less education and lower incomes, and that few studies have considered these demographic variables. McCubbin (cited in Boyce *et al.*, 1995) report similar levels of coping and adaptation in single mothers and those from two-parent families, but point out that single mothers show more problems with family integration. It would then appear that stress levels might be influenced more strongly by internal factors such as beliefs and personality, or perceptions about the family functioning. In this light, it should be noted that perception and appraisal form significant parts of the Resiliency Model of McCubbin and McCubbin (1996). Ferri (1976) supports the notion that

statistical differences between single-parent and two-parent families with regard to demographic and social variables, such as stress and hardship experienced, are quite insignificant.

2.4.4.5 Racial differences

Bianchi (1995) reports that two-thirds of white children in the USA live with both parents, while only one-quarter of black children do so. According to Bianchi, 80% of black children are projected to spend time in single-parent families and only 23% are expected to exit such a situation within a five-year period, compared with white children projected at 36% in single-parent families, of which 44% are expected to exit within five years. Horowitz (1995) reports that the majority of black/African-American children live in single-parent homes, and that the USA statistics figures of 1992 showed that, of white families, 78% lived in two-parent households and 22% in single-parent families, while it was 43% and 57% respectively in black/African-American families and 69% and 31% respectively in Hispanic families. A comparison of Hindu, Muslim and Sikh groups in London found that Asian females felt that the loss of marital status caused them more problems than for their British counterparts, due to Asian culture being more conservative and patriarchal (Sinha, 1998).

In South Africa, 4 136 more marriages were recorded in 2005 (180 657) than in 2004 (176 521) (Lehohla, 2005b). The total number of recorded divorces in 2005 was higher (32 484) than in 2004 (31 768), representing 528.2 per 100 000 married couples. Lehohla (2002b) further reports that whites recorded the highest divorce rate (1 156.9 per 100 000 married couples), followed by the Indian/Asian (672.5 per 100 000 married couples) and coloured (633.2 per 100 000 married couples) population groups. Blacks recorded the lowest divorce rate (203.7 per 100 000 married couples). Most divorces occurred around the ages of 30 to 44 years for all population groups (Lehohla, 2005b). The author further reported that in 2005, 32

394 minor children were involved in divorce, of which 10 278 were white, 9 609 were black, 4 308 were coloured, 1 699 were Indian/Asian and 432 were 'mixed'.

2.4.5 Socioeconomic and psychosocial concerns

Viewed from the perspective of "good enough parenting" (Horowitz, 1995, p. 61), it is evident that single-parents face many challenges. Critical components and characteristics of effective parenting were shown to be tasks, roles definition, rules, communication, resources (financial, social support, time) and relationships. Single-parent families are associated with socioeconomic and psychosocial problems, with the risk of poverty being the main concern (Torremocha, 2002). In addition to poverty, other problems include poor housing and recreation, social isolation and even geographic isolation with regard to cheaper accommodation (Walshe, 1994).

Reactions to separation and divorce include separation distress, but also euphoria and recovery, according to Davidson and Moore (1992), who also mention that special issues for single parents include financial problems, maintenance of contact with the non-custodial parent and sexual involvement. In Japan, problems include financial difficulties, social isolation, poor health and legal discrimination against lone fathers (Minamikata, 1993). The financial situation is better for the divorced father, although in a Japanese business setting, no promotion is likely following divorce. Japanese fathers are generally poor at domestic jobs due to gender roles in traditional family settings (Minamikata, 1993). Government assistance discriminates against lone fathers (Minamikata, 1993; Swain & Howe, 1995). Bowen, Desimone and McKay (1995) indicate that single mothers and their children represent the single largest group to receive social welfare assistance. According to Bianchi (1995), single-parent families are disadvantaged in terms of socioeconomic status, health and housing, and children living with never-married mothers are most disadvantaged economically. Poverty or the risk of poverty differs according to country and type of lone parent. It also differs with

regard to temporary and chronic poverty, is usually due to a lack of opportunities for women and is influenced by race and class (Torremocha, 2002). Torremocha (2002) notes further that lone parenthood tends to worsen the disadvantaged position of some.

Global economic changes, such as a decline in productivity, international competitiveness, a surge in service-related activities and a change in income distribution, have a disparate impact on single mothers in particular. This presents a vicious cycle due to the vulnerability of this very needy group (Bowen *et al.*, 1995). Burns and Scott (1994) describe extremes of social welfare, with Scandinavia and the USA at opposing ends. The “public family” (p. 197) notion in Scandinavian countries, and Sweden in particular, is characterised by high taxes and high benefits for the needy; although of late economic pressure has given rise to a call for change.

The South African Statistician-General reported the urgency posed by a failure to meet President Mbeki’s millennium development goals of upliftment of the plight of the poor, referring to. eradication of extreme poverty and hunger, among other pressing needs such as education, housing, HIV/AIDS and child mortality. These socioeconomic ills present a major challenge for singular governments, and the author called for global partnership to support not only poor single-parent families in South Africa, but worldwide (Lehohla, 2004).

Gelles (1989, cited in Horowitz, 1995) raises the concern of the high risk of abuse and maltreatment in single-parent families, necessitating the development of treatment and policy programmes to support single-parent families and protect their children. Kiernan *et al.* (1998) include in the view of single parenthood as a social threat or social problem, a drain on public funds, a threat to stability and order, concern for social order, fathers seen as uncommitted and anti-social, and the offspring of single-parent families as lower achievers who in turn perpetuate the single-parent lifestyle, causing all manner of social concerns.

There is a need for a policy shift from single parents to the children living in such households, and a focus on the fact that the need includes more than merely money, but also education and health (Sugarman, 2003). Swain and Howe (1995) refuted the myths about young mothers abusing the welfare system in the face of a need for support to get back on their feet, adding that single parents experience discrimination in policy and hurdles in the administration of the welfare system. Walshe (1994) indicated that the social concern that government support actually encourages single parenthood is a myth not supported by statistics. It is only since the 1970s that single mothers have received some form of government assistance, while single fathers have only received this since 1977. Single mothers may also be the neediest of communities, and at the same time they do not receive much support from the rest of the population. Despite this, sole parents are willing to help themselves (Walshe, 1994). Anger and prejudice are rarely aimed at fathers, but often against single mothers. Criticism of single parents is often preceded by *it's a well-known fact that ...* followed by inaccurate and emotive statements (Walshe, 1994).

Pryor and Trinder (2004) say that the research appears to be preoccupied with consequences, focusing less on causes and even less on the processes and meanings of family transitions, reflecting moral concerns about the decline of the family. The nuclear family is held as the gold standard as if other family structures are deviant or pathological. Focusing on difficulties rather than strengths, a deficit-comparison approach raises four areas of concern in non-traditional family forms: parenting, conflict with spouse, loss of emotional support and economic decline. Concerns about living conditions include employment, income (transport, worry about finances), housing and physical health (Sinha, 1998). Relating to the plight in South Africa, Lehlola (2004) quotes the South African Minister of Finance, indicating President Mbeki's urgent concern about the alleviation of poverty. In South Africa, challenges faced by families that threaten the integrity of households include a lack of basic needs fulfilment. This was conceptualised in the Millennium Developmental Goals, which aim to

eradicate extreme poverty and hunger, provide at least primary level education for all children, address gender inequality, reduce child mortality, increase maternal health and provide safe drinking water. This gives an indication of the harsh conditions under which a large part of South African families struggle to exist (Lehohla, 2004). Lehohla (2005a) notes that “the conventional idea that two parents and their children live together as a household in a nuclear family does not apply in South Africa” (p. 181). Lehohla (2005a) reports that, in 2001, infants made up almost 10% of the South African population, and that only 42.8% of them lived in the same household as both of their parents.

2.4.5.1 Poverty

Poverty is a serious problem for single-parent families (Greeff & Van der Merwe, 2004; Horowitz, 1995; Swain & Howe, 1995; Walshe, 1994), evidenced by the exceptionally low standard of living of single-parent families reported in the 1974 Finer Committee Report in the UK (Sinha, 1998).

Torremocha (2002) refers to “new poverty” and the “feminisation of poverty” (p. 184) in order to conceptualise the phenomena of the fate or struggle of female-headed single-parent households trying to adapt to events such as divorce, without adequate social resources and personal capacities to cope. According to Lino (1995), single-parent families typically have of the lowest incomes of all family groups, and a substantial percentage of single-parent families function below the poverty threshold. Ferri (1976) says that the absence of a parent brings about a serious economic threat, and that poverty affects every part of the lives of single-parent families, accentuating their isolation so much that poverty and single parenthood cannot be considered separately. According to Ferri, single parents and their children feel troubled or worried about finances even if their income is similar to that of two-parent families. Ferri’s observation that “the burden of continuing financial hardship and the inability to maintain a standard of living comparable to that of other families are likely to

produce feelings of frustration and resentment in parents and children alike” (p. 57) links the stressor (poverty) and effects of the stressor to the appraisal factor of the Resiliency Model of McCubbin and McCubbin (1996).

In earlier times it was particularly challenging for single mothers to manage scarce childcare facilities with lower paid jobs. Poverty and not the lone-parent situation is seen as the major determinant of the health of such families (Torremocha, 2002), even though poverty may be appreciated as a state not lasting a lifetime, but as temporary (Beck-Gernsheim, 1998/2002). Female-headed households have a six times higher likelihood for poverty than married-couple families (Bowen *et al.*, 1995). Boyce *et al.* (1995) and Terremocha support the notion of the “feminization of poverty” (p. 401) with the fact that, in the USA in 1991, 48.9% of poor families were headed by female householders with children under 18 years of age. Historically, employers show bias against hiring single mothers, even though research has shown no employment difference in absenteeism between single and married mothers (Davidson & Moore, 1992; Ferri, 1976). Employment figures in the USA in 1988 showed that 46% of single parents were in full-time employment, 9% were in part-time employment and 8% were unemployed (Lino, 1995).

Kiernan *et al.* (1998) reports that employment trends for lone mothers in the UK tends to unemployment. In 1973, 51% of lone mothers were in paid employment as opposed to 48% of married mothers. This changed in 1993, when the employment rates were 39% of lone mothers and 62% of married mothers. The downward employment trend for single mothers as opposed to a rising trend for married-with-children mothers is a particularly concerning statistic. It is further disconcerting given the propensity for poverty when, of those lone mothers in employment in the 1990s, six out of ten were in part-time employment (Kiernan *et al.*). The lower employment of lone mothers is reportedly due to their sole responsibility for childcare, pointing to the availability of childcare as an important feature.

Kiernan *et al.* (1998) showed that, in 1993, 5% of two-parent families in the UK had an income of lower than £100 per week, compared to 46% of lone-mother families. Kiernan *et al.* also showed that the poorest of lone-mother groups are the never-married (60%). Generally, family income decreases steeply post-divorce for single mothers, while the decline is less severe for men (Kiernan *et al.*). After divorce, men were found to have a higher quality of life in general. Child maintenance support from fathers is a minor source of income for lone-mother households, with less than 30% of lone mothers receiving regular payment in 1993 (Kiernan *et al.*). Working lone mothers tend to be likelier to receive maintenance support. Public-funded social support is a major source of income for British lone-mother families (Kiernan *et al.*). Walshe (1994) described a “poverty trap” (p. 68) for single parents not able to earn above a certain income when on social welfare benefits and consequently not being able to lift themselves above a certain economic level. Improved economic wellbeing for lone-mother families is very dependent on remarriage. An increase in cohabitation and unemployment shows that new unions are often fragile, do not last long and often are the start of further difficulties. International studies show similarities in the plight of lone-mother families (Kiernan *et al.*, 1998).

In the South African context, it is clear from the reports of the Statistician-General (Lehohla, 2004, 2005a, 2005b) that poverty is a daily reality for most South Africans. The millennium plan of then-President Mbeki, to provide in the most basic needs such as access to housing and safe drinking water, testifies to the plight of and indeed challenge for the new South Africa.

2.4.5.2 Housing

“Finding and keeping suitable accommodation is a recurring theme” (Ferri, 1976, p. 70), related to the type of accommodation, availability of basic amenities, length of tenure, overcrowding, bed-sharing, number of moves, number of schools attended and feelings about

the accommodation. A comment by the 1974 Finer Committee in the UK noted that “...second only to financial difficulties and to a considerable extent exacerbated by them, housing is the largest single problem of one parent families” (Kiernan *et al.*, p. 130).

In the UK in the 1990s, 74% of never-married lone-mother families lived in local authority housing, in contrast to 78% of married-couple families living in owner-occupied dwellings (Kiernan *et al.*, 1998). As far as living arrangements are concerned, the trend is to live in single-family units, away from sharing. In 1973, 72% of single-parent families lived alone, 18% lived with parents and 10% with others, while the statistics had changed to 86%, 9% and 5% respectively in 1993. Kiernan *et al.* further indicate that a change in the 1977 Housing and Homeless Persons Act in the UK forced local authorities to provide housing for homeless and those threatened with homelessness, in fact stimulating the trend and of course ability to live alone.

The South African housing dilemma is clearly described in the reports by the Statistician-General, where reference is made to South Africans living in backyard accommodation and makeshift dwellings, and a large number of them being homeless (Lehohla, 2004, 2005a, 2005b).

2.4.5.3 Stress

According to Torremocha (2002), it is almost a given that lone-parent families are under more stress than two-parent families. Boyce *et al.* (1995) reported mixed results in stress levels between single mothers and two-parent mothers, from more stress to no difference, or inconsistent results. It was also reported in a large multi-site study by Boyce (1992, cited in Boyce *et al.*) that single mothers only experienced more stress when the analysis did not control for age, education and income. Boyce *et al.* concluded that single mothers might be more stressed, but that education and income resources appeared to mediate the effects of the stress. To Boyce *et al.* it appeared that the number of parents in the home was not a significant

predictor of stress levels. Single mothers have less education and/or income and consequently less socioeconomic resources, and it was shown that income and other socioeconomic measures were associated with maternal stress. It was further shown by Boyce *et al.* that the social and economic problems that face single mothers complicate the effects of having a child with disabilities. Davidson and Moore (1992) reported that increased stress in female-headed households appeared to be due to negative self-images and negative views regarding the future, due to a lack of social support and also because of more child behaviour problems. Appraisal and social support are important factors incorporated in the Resiliency Model of McCubbin and McCubbin (1996). McLanahan (1983, cited in Davidson & Moore, 1992), however, report levels of stress to be similar in single- and two-parent households. According to Horowitz (1995), parent-child and behaviour difficulties are twice as common in single-parent families and highest in never-married mothers. Bowlby (1951, cited in Kiernan *et al.*, 1998) wrote that “if a community values its children it must cherish their parents” (p. 295). Beck-Gernsheim (1998/2002) raised concerns relating to separation and divorce, namely their effect of causing lasting problems with trust in relationships and with the ability to constructively solve problems. The effects of family violence on family stress were indicated earlier. A further complication of the break-up of relationships is what Reich (1991, cited in Beck-Gernsheim) refers to as a vicious cycle of dread of separation, leading to a clinging partner who paradoxically pushes the other partner away, causing divorce.

2.4.5.4 Is it really so bad?

Single parenthood in itself does not indicate an at-risk situation (Horowitz, 1995). Moore and Beazley (1996) challenge the many myths about the disadvantages of living in a split family, querying this as a second best option and highlighting the danger of assuming difficulties. Strengths in split family life include a wide range of supports, and a robust sense of belonging to a family unit despite the parents living apart. Children are able to identify resources, are resourceful and mindful of their support to their parents, as well as being aware of financial

difficulties. Without submitting to the doctrine of flawed family life, Moore and Beazley see positives such as belonging to a family, family enjoyment and appreciation for others' perspectives, despite the usual bias towards negative images of a split family life. It is necessary for an observance of children's own experiences (Moore & Beazley, 1996; Pryor & Trinder, 2004) and ways of making meaning, as "adults often invest children with problems that they do not actually have" (Moore & Beazley, p. 70). Pryor and Trinder showed protective factors to include material and emotional resources, perception and appraisal of the breakdown, being able to let go and move on, and that, on average, females tend to fare better emotionally. The formation of new emotional relationships and remarriage improve recovery.

On average, six years post-divorce, 80% of females and males have significantly improved lifestyles and the large majority of children do not suffer long-term distress (Baca Zinn & Eitzen, 2005). Davidson and Moore (1992) report that the relationships of single fathers with their children were equal to or better than those in two-parent families, and that three quarters of fathers believed that single-parenthood did not inhibit the achievement of their own life goals in father-headed single-parent households. Although coming from single-parent families poses a higher risk for adversity (one and a half to two times more likely), most children do not go on to experience difficulties and, over time, their distress lessens (Pryor & Trinder, 2004). According to Sinha (1998), lone motherhood does not lead to greater social isolation and the overall outlook is positive, often bringing confidence and independence post-divorce.

2.4.6 Conclusion

Boyce *et al.* (1995, p. 390) say that:

Further study is needed on factors on two levels; task demands and emotional responses, the diversity among mothers, their life situations, and their task demands must be recognized, and socioeconomic conditions and participation by other adults in

care-giving. Positive adaptation by single mothers of children who have disabilities is a reasonable expectation; services should build upon family strengths and competencies.

The views expressed by Boyce *et al.* (1995), namely that “stress and adaptation are complex, interrelated phenomena that exist in the person-environment relationship and involve the environmental stressor, as well as the person’s appraisal, beliefs, and resources” (p. 397), link with the parameters and factors set out in the Resiliency Model of McCubbin and McCubbin (1996) and correspondingly support the thrust of the current investigation. The influence of additional adult caregivers, individual characteristics and task-demand distribution need to be investigated (Boyce *et al.*, 1995).

Research is needed for a strong knowledge base on which to develop interventions. Among the considerations for future research are the fact that single-parent families should not be treated as a homogenous group, as various types of single-parent families have been identified. To date, little attention has been paid to groups other than Caucasians. Gass-Sternas (1995) says further that the kinds of social support available and utilised, and those found to be helpful, as well as the roles of children, need to be investigated further. For widowed single-parent groups in particular, “longitudinal research which investigates changes in stressors, appraisal, coping, resources, grieving process and health after the spouse’s death for the different family types is needed” (Gass-Sternas, 1995, p .436). Important themes for further investigation identified by Gass-Sternas include the grieving process, roles and responsibilities in the family, employment, loneliness, dating and remarriage and caregiver stress.

In the following chapter is a discussion of the results of a literature review related to the theoretical constructs discussed in Chapter 2.

Chapter 3

Review of the empirical research

Introduction

The present investigator's search of the OVID internet databases and Sage Publications online, using the keywords *Resiliency Model* and *single-parent families* and *HIV/AIDS*, presented zero matches. As the goal of the present investigation was to investigate factors that promote family strengths in single-parent families affected by HIV/AIDS, and since no similar research could be found, the parameters of the search were extended to include research that investigated the impact of HIV/AIDS on various aspects of family life and on factors associated with family resilience. What follows is a discussion of HIV/AIDS-related research, research on family level responses to and coping with chronic illness, research on chronic illness and coping as related to poor, single and ethnically diverse groups, and finally a discussion of previously published reviews of resilience research.

3.1 AIDS-related research with a psychosocial focus

What follows is a discussion of recent AIDS-related research on the effects of HIV/AIDS on families (Section 3.1.1), on family adjustment and adaptation (Section 3.1.2), and on the relationship between resilience factors, social support, and coping and HIV (Section 3.1.3). Section 3.1.4 provides a discussion of recent publications on the effects of HIV on individual psychological wellbeing.

3.1.1 The effects of HIV/AIDS on families

The current investigation aims to identify resilience factors in single-parent families affected by HIV/AIDS. It was thought reasonable that a review of studies of families affected by HIV/AIDS would highlight the plight of said families, as well as elicit some thoughts and ideas for further investigation and to direct the current investigation. What follows is a discussion of four studies. One study investigated families as sources of both support and

stress in African-American women living with HIV/AIDS. An investigation into adolescent adjustment before and after HIV-related parental death showed the need for support for the entire family when a member is diagnosed with HIV/AIDS. Another study showed intergenerational benefits of family-based interventions for families of parents with HIV, indicating further support for inclusion of families as potential resources. A psychoeducational group intervention for family members of persons living with AIDS is discussed to highlight the benefits of family-based interventions for families affected by HIV/AIDS.

Owens (2003) interviewed 18 African-American women living with HIV/AIDS with the aim of highlighting families as representative of both supportive roles and sources of stress in dealing with the issue of HIV/AIDS. This qualitative study was conducted at the New Jersey Women and AIDS Network (NJWAN) in two cities in that state. Nine of the original 27 women who agreed to participate were lost to the study due to hospitalisation, severe weather conditions and having second thoughts. The demographic characteristics of the participants included an average age of 40.2 years (range 31 to 49), average education of 8.8 years (range 7 to 16), lower socioeconomic status reflected in an average monthly income of \$614 (range \$140 to \$2097), and having known about their HIV status for an average of 7.8 years (range 1 to 14 years). In terms of living arrangements, four lived alone, one lived with a partner, ten lived with a relative and three were heads of households that included minor children. Owens used a modified version of the Coping of African American Women at Risk for AIDS semi-structured interview's open-ended questions. Owens reported that the family was indicated as being both the most and least helpful. Results from the Owens study include the family as a source of support represented by emotional support (inclusive of affective support, family commitment and family acceptance), concrete support, such as a place to live, and informational support, which includes information about how to cope with HIV/AIDS. Results relating to the family as a source of stress were reflected in themes such as difficulties

with HIV/AIDS, family members not listening, availability, family endurance and lack of resources, barriers to communication about HIV/AIDS, including family denial, the women's past and pre-HIV relationship with the family, problems in the family and the family's perception of the women's coping capabilities. Lack of information was reported as a source of stress. Owens concluded that interactive family patterns related to HIV/AIDS in racial, ethnic and gender contexts need to be investigated further.

The importance of consent and the right to withdraw consent for participation, as evident from the Owens (2003) study, serves as an ethical guideline for the present study. This right was emphasised to the participants in the present study. It is also significant to find evidence for the notion that families do not only present as sources of support, but also may serve as stressors (Leeder, 2004). The results reported by Owens support the theoretical constructs of McCubbin *et al.* (1997) that highlight the importance of the presence of affirming types of communication for a resilient outcome, and of the negative effects of incendiary types of communication and lack of support. The importance of the theoretical postulation of social support as a resilience factor (McCubbin *et al.*, 1997; Walsh, 2003; Wolin & Wolin, 1993) is further highlighted by Owens. Owens further makes the mentioned resilience factors relevant to the context of the present study of HIV/AIDS as a family level stressor. A limitation of the Owens study may be the lack of using some form of quantitative verification of the resilience and stress factors found in the qualitative investigation. This observation is founded in the fact that other studies (Jonker & Greeff, 2009), using a mixed method of qualitative and quantitative investigation, failed to find support for some of their qualitative discoveries. Care is indicated in the generalisation of results.

Rotheram-Borus, Weiss, Alber and Lester (2005) investigated adolescent adjustment in 414 adolescents before and after HIV-related parental death over a period of six years at the New York City Division of AIDS Services. Of 429 parents with HIV (PWH) who met the inclusion

criteria, 307 (71.6%) were recruited, 65 (15.2%) were untraceable, 46 (10.7%) refused to participate and 11 (2.6%) were too ill or were incarcerated. The average number of adolescents per family was 1.5 (SD = 0.7, range 1 to 5). Of the parents in this study, 83% were mothers, 45% were Latina and 35% were African-American, with a mean age of 38 years. All came from lower socioeconomic backgrounds and 52% died during the study period. Of the parents, 27% were living with an adult partner, 53% had completed high school, but fewer than 10% had a regular job. Virtually all the participants received social support grants. The mean age of the adolescents was 15 years, with half being female. Half had experienced parental death and only one in five was living with two parents. These authors conducted baseline interviews and collected demographic data with each PWH and each adolescent.

Rotheram-Borus *et al.* (2005) used the Brief Symptom Inventory (BSI), adapted the Dealing-With-Illness Questionnaire, and used five subscales, namely positive action, spiritual hope, passive problem solving, social support and self-destructive escape in order to measure the adolescents' coping styles. They monitored problem behaviours with four indices, namely smoking, alcohol and drug use; engaging in unprotected, casual sex; contact with the criminal justice system; and having school problems such as truancy and falling grades. In order to measure stressful life events, Rotheram-Borus *et al.* adapted a measure developed by Olson *et al.* (1982, cited in Rotheram-Borus *et al.*) to give a sum total of 10 stressful family events. Only 7% of the adolescents reported BSI scores above gender-appropriate clinical cut-off scores. The authors found no significant effects due to the intervention programme that the parents were subjected to six years before the reported investigation of intergenerational benefits. The adolescents reported significantly higher distress levels for most of the BSI subscales before bereavement, with lower levels following bereavement; except for the BSI subscales for depression and for passive problem-solving coping style, which both showed an increase in the year following parental death. Both returned to baseline levels one year later.

Rotheram-Borus *et al.* (2005) reported a surprising result that showed no significant increase in anxiety in the adolescents. With regard to problem behaviours, bereaved adolescents were more likely to have had contact with the criminal justice system prior to parental death. The number of unprotected sex acts by bereaved adolescents were significantly higher following bereavement, but compared with the non-bereaved did not differ significantly across the study period. Another surprising result was that no differences were found between bereaved and non-bereaved adolescents and no differences between pre- and post-bereavement with regard to substance use and school problems. The highest levels of stressful life events were reported in the year prior to parental death, declining during the time of death and the bereavement period. Rotheram-Borus *et al.* concluded that the entire family needs support and information about the illness when a parent is diagnosed with HIV. Particular emphasis was placed on the importance of parental bonds and adaptive coping styles, inclusive of positive action, social support and spiritual coping styles.

Rotheram-Borus *et al.* (2005) may be commended for a thorough, critical review of the efficacy of treatment interventions, as is to be expected from the utilisation of a scientist-practitioner model. It therefore is significant to note from this study that reliance purely on the intergenerational benefits of an intervention programme six years previously should not be assumed. The authors offer a good sample size and show the benefits of a longitudinal study design, which fit well with the recommendations for the review of resilience as a phenomenon that change over time (Hawley & DeHaan, 1996; McCubbin & McCubbin, 1996; Walsh, 1996). Rotheram-Borus *et al.* (2005) highlight the ethical right of participants to refuse continued involvement in research, which is an important aspect of the present study. The Rotheram-Borus *et al.* (2005) study links well with the present study, due to the fact that 52% of the participants died during the period of their study, highlighting the recognition of the nature of the stress and of particular resilience variables that may be at play in families under stress.

Rotheram-Borus *et al.* (2006a) investigated intergenerational benefits of family-based interventions for families of parents with HIV (PWH) by assessing granddaughters in families who participated in an earlier intervention programme. Included in the study were 36 grandchildren of a PWH who had died and 37 grandchildren of whom the PWH was still alive. Rotheram-Borus *et al.* assessed three generations. Generation 1, the grandparents (PWH), were assessed for ethnicity, age, age at first pregnancy, HIV stage (asymptomatic, symptomatic or AIDS), hard drug use and emotional distress, using the Brief Symptom Inventory (BSI). Generation 2, the daughters of PWH, reported ethnicity, age and age at the grandchildren's births. The daughters were assessed for depression three to six months after their children's births. Generation 3, the grandchildren, were assessed at the age of 12, 24 and 36 months. Mothers reported low birth weight ($\leq 2\ 500\text{g}$) if applicable. The mothers' use of drugs or alcohol was assessed with the Revised Addiction Severity Index Drug and Alcohol Use Scale. For the assessment of the grandchildren, Rotheram-Borus *et al.* used the Child Behaviour Checklist/2-3 (CBCL/2-3) to measure behaviour and emotional symptoms, the Mental Development Index (MDI) of the Bayley Scales of Infant Development to assess cognitive development, and assessed the home environment with the Home Observation for Measurement of the Environment (HOME).

The results from the Rotheram-Borus *et al.* (2006a) study show that few children had low birth weights, and parental alcohol use during pregnancy was minimal. The CBCL showed relatively normal behaviour, the Bayley MDI means showed low cognitive development and the HOME scores were within normative ranges for multiple-risk, low-socioeconomic groups. Granddaughters whose mothers showed more symptoms of depression had significantly higher CBCL scores. Rotheram-Borus *et al.* showed that, several years after the PWHs and their daughters had been subjected to family-based, skill-focused intervention, the grandchildren exhibited fewer behavioural problems and experienced more enriched home environments than grandchildren in families coping with HIV without intervention.

Contrary to the results of an earlier study (Rotheram-Borus *et al.*, 2005), Rotheram-Borus *et al.* (2006a) show the long-term benefits of family interventions and the positive correlation between maternal mental health and that of the rest of the family. This fact serves to raise awareness of the importance of interventions and of research into family coping in general, family coping in relation to HIV/AIDS, and of the verification of earlier findings, inclusive of a reticence to leap to conclusions based on limited research. In their report, Rotheram-Borus *et al.* (2006a) did not include information relating to the nature of their family skills-based intervention, but, to their credit, provided references.

Pomeroy, Rubin and Walker (1996) described a psychoeducational group intervention for family members of persons living with AIDS (PLWA). The authors described an eight-week quasi-experimental evaluation of the emotional and social impacts on family members of persons living with HIV. Themes such as stigma associated with HIV/AIDS, stress management, group support, medical aspects, home health care and financial concerns were addressed and discussed in groups. The family members were mostly mothers or siblings, aged from 18 to 68 years, 79% were Caucasian and 61% were in full-time employment. They represented 29 male and three female PLWA. Qualitative feedback about the intervention was consistent with quantitative efficacy measurement and proved to alleviate depression, anxiety, stress and stigma in the family members. Pomeroy *et al.* indicated that stigma and consequent secrecy around HIV/AIDS inhibit the utilisation of potential sources of social support and that intervention groups serve to provide in informational needs and assist in distinguishing between myth and reality surrounding the illness.

A limitation of the Pomeroy *et al.* (1996) study is a predominantly Caucasian, male sample that was not very big. To its credit, however, the study provides useful information for inclusion in a time-limited group intervention for family members. Very important aspects of HIV infection, such as stigma and factual information, are addressed and highlighted, which

link very well with the present investigation. The importance of the availability of factual and accurate information as resilience factors is shown in the literature (Greeff & Human, 2004; McCubbin *et al.*, 1997; Walsh, 2003). The relevance of the presence of stigma related to HIV infection and its management is well documented (Loubiere *et al.*, 2009; The Lancet, 2009; UNAIDS, 2007) and makes the Pomeroy *et al.* (1996) study all the more relevant to the present investigation.

Concluding remarks relating to the four studies discussed include the relevance of all four studies showing the negative and high impact of HIV/AIDS on families, the importance of the consideration of ethics in research (such as the right of refusal to participate and the right to withdraw consent), of raising awareness of the careful consideration of the research findings, and of the significance of stigma. All four studies support further research regarding family-level coping with HIV infection, effectively guiding and promoting the present study.

3.1.2 The effects of HIV/AIDS on family adjustment and adaptation

Four brief reports about various aspects related to HIV infection in families are discussed. Psychosocial difficulties of bereaved families of HIV-infected haemophiliacs in Japan highlighted the unique stressors associated with HIV/AIDS, while a report on adolescent adjustment to parental HIV infection identified key risk factors for maladjustment. Two further brief reports indicate the relevance of spirituality as a resilience resource for the management of potentially fatal illnesses, and highlight the stigma associated with HIV infection, which constitutes a large part of the illness-related stressor. Note that at the time of the literature review, the present investigator could not locate any studies in a South African context.

Mizota, Ozawa, Yamazaki and Inoue (2006) investigated the psychosocial difficulties of bereaved families of HIV-infected haemophiliacs in Japan by interviewing 46 members from 36 families and conducting a written survey of 225 families that included the Impact of Event

Scale-Revised and General Health Questionnaire-12. Mizota *et al.* found posttraumatic stress disorder-like symptoms even seven to nine years after the family members' death. It was found that family members restricted their daily activities due to anxiety related to stigma and discrimination and harboured strong feelings of resentment, anger and loneliness.

Mizota *et al.* (2006) highlight awareness of cultural differences in coping and in the residual effects of chronic or terminal illnesses, showing long-term effects such as PTSD-like symptoms, stigma and family-level psychosocial difficulties. These findings are important and relevant to the present study in terms of the source of adversity being HIV-related stigma and social discrimination, and of raising awareness of cultural significance (McCubbin *et al.*, 1996) in developing an understanding of the resilience processes at work. The study by Mizota *et al.* perhaps appears somewhat lacking in brevity (which may be a positive aspect, given the competition for attention in the published media), as it proposes to investigate an area as wide and complex as the field of psychosocial problems of families affected by HIV. As such, it might have been better if more than two brief questionnaires had been used in their study. To their credit, the authors published further qualitative investigations of the disclosure of HIV infection in Japanese culture in a later study (Seki *et al.*, 2009).

Rotheram-Borus, Stein and Lester (2006b) investigated the adjustment of 288 parents with HIV (PWH) and their adolescent children using structural equation modelling to correlate indicators of adolescent adjustment with certain demographics, prior behaviours and parental bonds. Rotheram-Borus *et al.* reported participation in an intervention programme as a protective factor, particularly in addition to positive parental bonds, evidenced by decreased emotional distress and increased positive future expectations. The authors indicated that risk factors related to substance use correlated with sexual risk behaviours and less positive future expectations. The risk factors were exacerbated by factors such as the participants being Latino and having experienced early emotional distress and parental death. Rotheram-Borus

et al. identified the key risk factors for maladjustment and concluded that a time-limited, family-based intervention with adolescents of PWH offered long-lasting benefits.

The Rotheram-Borus *et al.* (2006b) study provides a thorough, systematic analysis of the effects of a family-based cognitive behaviour intervention over a six-year period. It has a fairly large sample, and the retention rate for multiple assessment (annual) is 90%. The study forms part of a larger, longitudinal study of the effects of HIV on families and the long-term efficacy of intervention. A brief description of the content of the intervention is provided, with reference provided to the website (<http://chipts.ucla.edu>) of the Center for HIV Identification, Prevention and Treatment Services, where the complete intervention, along with detailed session-by-session guidelines, may be downloaded for free. The use of a structural equation model is a strength of the study that may serve to guide future research. Confirmatory factor analysis was performed and, once the factors had been confirmed, a longitudinal predictive model was tested at baseline, three and six years. The study is relevant to the present study because of its emphasis on family intervention, for providing strong evidence of the efficacy of such intervention, and for providing a manualised intervention. The study does not provide a clear picture regarding the mechanisms involved in establishing the identified, longer-term benefits, such as a decrease in sexual risk-taking behaviour and a decrease in substance use by youth. This, however, directs further research to establishing and maintaining the benefits of family-level interventions.

Tarakeshwar *et al.* (2006) interviewed 10 male and 10 female HIV-positive individuals and developed a relationship-based framework of spirituality for individuals with HIV that extended the notion of spiritual support from mere church attendance, reading the Bible or prayer to include a relationship with God or a Higher Power, a renewed engagement with life and relationships with the family. Deducing from the themes and sub-themes identified in their interviews, Tarakeshwar *et al.* suggested that spirituality-based or characterised

relationships developed in response to a diagnosis of HIV. Positive aspects of a relationship with God or a Higher Power included participants reporting that they formed a closer relationship with their identified spiritual figure, and that they became more conscious of and grateful for the benevolent nature of that relationship. Renewed engagement with life as a consequence of being diagnosed with a terminal illness included improved self-care, a change in life goals and an acceptance of their own mortality. The authors showed that families could represent sources of support as well as sources of strain. However, it was found that the participants discovered or became aware of a renewed sense of purpose in being a part of a family and of the roles played since being diagnosed with HIV.

Being a qualitative study, that of Tarakeshwar *et al.* (2006) offers unique insights into people with HIV and their use of spirituality as a resilience resource. The study forms part of a long list of publications representative of continued research into coping with HIV/AIDS. In this sense the reported findings are relevant to the present study. A further benefit of the inclusion of the authors' work in the present study is their reference to other resilience aspects, such as the contributions of family, as not always being supportive and helpful (as reported by Owens, 2003).

In a qualitative study of the experiences of 20 families caring for a relative living with HIV/AIDS in India, Krishna, Bhatti, Chandra and Juvva (2005) recruited participants from a HIV-counselling clinic at the National Institute for Mental Health and Neuro-Sciences and a respite home in Bangalore City in southern India. Results from the analyses of the themes in the narratives indicated that families affected by HIV/AIDS indeed are confronted with stigma and discrimination, disclosure, changes in family functioning, financial difficulties, fears of the family and helplessness.

The qualitative study by Krishna *et al.* (2005) is relevant to the present study for raising awareness of the global effects of HIV, such as the associated stigma, and for its association

with a large, highly regarded institution in India with international co-research programmes. The qualitative nature of the study highlights factors relevant to families affected by HIV, although these findings are not substantiated by quantitative methods that may offer further insights.

The preceding four studies show the effects on family adjustment and adaptation of a family member diagnosed with HIV, and are therefore relevant to the present study. Two of the studies were qualitative designs only, and three had fairly small sample sizes (although adequate in terms of qualitative designs), effectively limiting the generalisation of their findings. This observation links these studies with those reviewed in the section on the effects of HIV on families, where awareness was raised of the careful and considerate use of research results. All four studies formed part of much larger study programmes, and one in particular included reference to internet resources that are freely available to for use by the scientific and medical community, and that can be replicated and even altered to suit local conditions. In the preceding studies the negative and pervasive effects of stigma on family adjustment and adaptation are highlighted as important factors for consideration. Families as potential sources of stress were discussed. Further research into family adjustment and adaptation was consistently promoted in the studies, thus serving as a further motivation for the present study.

3.1.3 The relationship between social support, coping and HIV

What follows are discussions of two HIV-specific investigations that report on the use of social support and coping strategies by gay men in adjustment to HIV, and on distress and coping with HIV infection in a multi-ethnic sample of women. These two studies are relevant to the present investigation, particularly due to the focus on resilience factors in a HIV context.

Pakenham, Dadds and Terry (1994) interviewed 96 gay or bisexual men with HIV with the aim to investigate the influence of HIV stage, social support and coping strategies on their

adjustment to HIV. The participants were white Australians in Queensland with an age range of 35 to 39 years, of which 42% were in full-time employment and the remainder were receiving an invalid pension. The mean number of months since diagnosis was 26.91. Pakenham *et al.* (1994) used a problem checklist to identify everyday problems, the Social Support Resources Scale (SSRS), the coping strategies device, the Brief Symptom Inventory (BSI) and the Psychosocial Adjustment to Illness Scale Self-Report (PAIS-SR) as measuring instruments. The authors also collected information such as CD4 count, a global health rating and the number of physical symptoms. Of six social support variables measured with the SSRS, Pakenham *et al.* reported only one with a significant difference ($F(2, 124) = 9.87, p < .001$) between the interviewees and a comparison group, namely the proportion of close friends. This result confirmed the hypothesis that HIV-infected people experience isolation. The authors found no significant differences in the use of coping strategies. Pakenham *et al.* (1994) showed that the independent variables social support and coping strategies did not really have a buffering effect on adjustment, in that only the level of education had a significant ($p < .01$) correlation with adjustment. The authors found that they were unable to determine the direction of causality (did the two independent variables play a causal role in adjustment or were they merely responses to an HIV diagnosis?), but that it was most probably bidirectional. They did show that coping strategies and social support are related to adjustment and that this tends to be quite specific to various domains of adjustment, in particular the use of problem-focused coping strategies and emotional regulation. Sources of unhelpful support include over-protectiveness, as well as the psychoneuroimmunological effects of stress, which tend to lower CD4 counts. For further research, Pakenham *et al.* suggested an exploration of a wider range of adjustment variables, a longitudinal research design, and a coping strategies measure that more directly assesses the coping strategies actually used.

Pakenham *et al.* (1994) show the complex nature of social support, raises awareness of social isolation that links their study with those indicating stigma as a major challenge for HIV-infected persons. The study is significant for the present study due to its description of the difficulties and challenges concerning the measurement of coping and social support and, basically, of resilience. The study is well executed, including a wide range of parameters that impact on coping, such as medical and psychosocial aspects. The use of a comparison group is a strength of the study, although the inclusion of a qualitative measure could have contributed towards a more complete study.

Kaplan, Marks and Mertens (1997) investigated distress and coping among women with HIV infection in a multi-ethnic sample of 53 women with HIV that were recruited from two social-service agencies in a large Midwestern city in the USA. The sample consisted of 39.6% white, 32.1% African-American, 24.5% Latina and 3.8% Native American women, of whom 56.6% were aged 30 to 39 years, 43.4% had never been married, 43.3% had an education level less than high school, and 43.4% reported an annual income of \$7 000 to \$14 000, while 39.6% had more than three children and 26.4% had none. Of those with children, 48.6% had at least one child who was HIV positive. Only 15.1% knew of their HIV diagnosis for less than 12 months. In their cross-sectional survey, Kaplan *et al.* used the UCLA Loneliness Scale, Brief Symptom Inventory and Ways of Coping Questionnaire (WCQ), as well as a brief open-ended section as measurement devices. The authors reported that the majority of the sample showed minimal symptoms of depression and that, compared with a female psychiatric outpatient norm, only 2% could be classified as possibly depressed and 6% with possible anxiety disorders. With regard to coping, most used positive coping behaviour: 76% used praying as the most prevalent form of coping, followed by attempting to rediscover what is important in life (74%), and more than 50% resorting to a form of wishful thinking. Blaming self was significantly lower ($t = 2.33, p < .05$) among African-American women than among whites, and keeping feelings to oneself was significantly higher ($t = -3.15, p < .05$) among African-

Americans than among whites. Comments by Kaplan *et al.* include consideration of the social support effects of participation in research, which may taint findings – also indicated by Rotheram-Borus *et al.* (2006b). Similarly to Tarakeshwar *et al.* (2006), Kaplan *et al.* cautioned that the importance of spiritual faith in coping with HIV/AIDS should not be overlooked.

Despite some limitations, the study by Kaplan *et al.* (1997) offers valuable insights into coping, and also dispels possible myths about coping and the notion that the experience of setbacks necessarily leads to distress. The study made use of only a few measures and may have benefited from a wider range of measurement as well as more in-depth investigation into the pathology investigated. Race distribution was not spread evenly over the four groups identified, although it may be said that the distribution between white and African-American women is quite good in the sense that these two groups represent 60% of the sample. A further limitation relates to the shortcomings associated with cross-sectional survey research, but, as with the present study, there are benefits associated with this research method. The fact that Kaplan *et al.* offer multi-ethnic representation from two sites is commendable. The sample displays good age distribution. Overall, the study impresses by showing the reality of poor families with low levels of education and multiple members infected with HIV, and links well with the present study sample, which shows similar characteristics. What is really heartening to find is that low levels of depression and anxiety are reported, despite hard living conditions, perhaps offering a notion of the subject of the present study, namely that of resilience. Important contributions of Kaplan *et al.* include evidence of the benefits of using positive coping behaviours, and the importance of religious coping. The importance of considering racial, or perhaps rather cultural, differences is highlighted. This particular study is interesting and important due to the fact that it focuses on how women cope. The women participating in the study had known about their HIV diagnosis for a long period of time. The length of time that people knew about their HIV diagnosis in the Kaplan *et al.* study was

different to that of the participants in the present study. This difference in time is related to the differences in the nature of the services where the two studies were conducted. The participants in the present study were recruited immediately following their diagnosis with HIV. In this manner, early coping with distress was investigated as opposed to longer term coping as presented in the Kaplan *et al.* study.

In conclusion it may be said that the preceding two studies (Pakenham *et al.*, 1994 and Kaplan *et al.*, 1997) guide the present investigation further into an investigation of the complexities of human coping behaviours. The first two sections reviewed studies related to the effects of HIV on families and on family-level coping behaviours. This third section examines more specific coping behaviours and shows the importance of a focus on specific resilience factors, such as social support. The complexities and difficulties of investigating successful coping as described in these two studies further guided the present study. The importance of the use of positive coping behaviour and religiosity was highlighted in the studies reviewed. The use of a cross-sectional survey study design is supported by the previous studies, and the design is taken further to make use of a mixed quantitative and qualitative study in order to lean on the strengths of both methods.

3.1.4 The effects of HIV on individual psychological wellbeing

In this section there is a discussion of four investigations into individual psychological wellbeing related to HIV infection. This is relevant to the current investigation because of the contributions of individual family members to family functioning and family resilience in the face of adversity. A study, probably closest to the aim of the current study, assessed the effects of family variables on child resilience in inner-city families affected by HIV. This is followed by a discussion of a study of psychosocial needs, mental health and the risk behaviour for the transmission of HIV in Russia, highlighting the worldwide nature of the pandemic that HIV infection represents. An investigation into a construct described as

posttraumatic growth (PTG, perceiving positive changes since diagnosis) as related to HIV in fact describes a resilient outcome following a traumatic event. A discussion of a study of interpersonal predictors of depression trajectories in women with HIV is an example of the kind of setbacks associated with HIV and to which families attempt to respond with resilience – the focus of the present investigation.

Dutra *et al.* (2000) investigated the influence of family variables on child resilience in inner-city families affected by HIV. Although not a study of family resilience, the Dutra *et al.* study is relevant in the sense that it offers insight into resilience in family members, which in turn has an influence on family variance in resilience (Hawley & DeHaan, 1996; Walsh, 1996). Dutra *et al.* assessed 82 HIV-positive African-American women in inner-city New Orleans, of whom 49% were asymptomatic, 23% were symptomatic and 28% had AIDS. For each of the women, Dutra *et al.* also assessed one non-infected child aged six to eleven years, 45% of whom were male. Assessments used in the Dutra *et al.* study included the Child Behaviour Check List (CBCL), the Aggressive Behaviour Subscale of the Youth Self-Report of the CBCL, the Children's Depression Inventory (CDI), the Parent's Rating Scale of Child's Actual Competence (PRS), Brief Symptom Inventory (BSI), Parenting Convergence Scale (PC), Interaction Behaviour Questionnaire (IBQ), the Monitoring and Control Questionnaire and the Family Routines Inventory (FRI). The participants also reported on family structure, maternal and parenting variables. Dutra *et al.* reported that child resilience was associated with only three parenting variables, namely parent-child relationship, parental monitoring and parental structure, that parenting variables potentiate each other and that the parent-child relationship was the only significant individual predictor of child resilience.

Dutra *et al.* (2000) show the bidirectionality of individual and family-level resilience. Theirs is a thorough investigation using multiple measurement instruments, some representing industry standard measurements of child mental health, for example the use of the CBCL, BSI

and CDI. The use of multiple family members is a strength, not only in research but also in keeping with best practice guidelines in clinical work. The use of a parent and a child in investigating family resilience variables by Dutra *et al.* guided the present investigation's adoption of a similar study design using multiple informants. The sample is of suitable size to inform science. A cross-sectional research design, with its associated shortcomings, informed the design of the present study. A difference from the present study is a highlight in the Dutra *et al.* study, where subdivisions of HIV infection offer further insights, such as whether knowing about one's HIV infection presents as a different kind of stressor to having become symptomatic of disease progression to AIDS, for instance. Although this is interesting material for further investigation, the focus of the present study rests on the manner in which families cope, and not the form of adversity per se.

In a cross-sectional quantitative study, Amirkhanian *et al.* (2003) investigated psychosocial needs, mental health and HIV transmission risk behaviour in a sample of 470 people living with HIV/AIDS in St. Petersburg, Russia. The sample consisted of 275 males and 194 females, with a mean age in the mid-20s and with 86% being unmarried. Most did not have any children, most did not have education beyond high school and less than half were employed. With regard to becoming infected, 60% attributed it to the sharing of needles. The mean time since discovering their HIV status was 25.0 months. Social implications noted were that 77% disclosed their HIV status to close family members and that, because of the disclosure, 30% had been refused general medical care and 10% had lost their jobs. Amirkhanian *et al.* used the Center for Epidemiological Studies of Depression Scale (CES-D), State-Trait Anxiety Inventory Form Y-1 (STAI), the Social Provisions Scale (SPS), and a questionnaire to determine sexual behaviour and other demographic features. The results of this study include that 36.5% of the sample showed CES-D scores indicating probable clinical depression, 42% had a STAI anxiety score comparable with psychiatric inpatients, and the mean SPS score was similar to that of HIV-positive people seeking mental health services in

the USA. The STAI scores of the women were significantly ($p = .04$) higher than that of the males. Regarding the number of sexual partners, the sample had a mean of about 40 opposite-gender partners, and men who have sex with men (MSM) who were not intravenous drug users (IDU) had a mean of more than 150 male partners. After learning of their HIV-positive status, the means dropped to about 6 and 36 respectively. Of the sample, 56% had sex with serodiscordant (HIV-negative with HIV-positive) partners, 55% of which was unprotected, and about one third of all the respondents reported unprotected sex acts. A significant ($p = .05$) difference was noted between females (63%) and males (48%) who had unprotected sex with serodiscordant partners.

Amirkhanian *et al.* (2003) reported that almost 30% of the IDU in the sample continued to share needles. The authors suggested that discrimination against HIV-positive people, e.g. in relation to employment and health care benefits, should be addressed, probably through campaigns and raised awareness of the evidence of continued high-risk behaviours among those infected.

In an important study of reasonably large size, Amirkhanian *et al.* (2003) reported important sexual risk-taking behaviours among intravenous drug users, as well as what may appear to be shocking numbers of sexual partners. A difference in this study compared to previous ones, such as that of Kaplan *et al.* (1997), is evidence for high levels of mental health difficulties such as depression and anxiety amongst those infected with HIV. The sample of the Amirkhanian *et al.* study compares with that of the present study on the basis of demographic variables, such as low levels of education, low employment levels and the negative effects of stigma. However, the study population in the Amirkhanian *et al.* study differs from the present sample in that the former study investigated intravenous drug users and in terms of the length of time that the participants had known of their HIV status. The findings of the Amirkhanian *et al.* study make important contributions to a comprehensive view and wider

appreciation of the parameters associated with human sexual behaviour despite the availability of knowledge of the risk of HIV transmission. Amirkhanian *et al.* further showed that sexual risk-taking behaviour decreased significantly following knowledge of HIV status, a fact that continues to guide further research into understanding HIV-related contexts, such as human sexual risk-taking behaviour, and the development of intervention programmes. The limitations of a cross-sectional research design considered, including those associated with quantitative measurement, the Amirkhanian *et al.* (2003) study could have benefitted from a qualitative investigation into understanding human sexual risk-taking behaviour, as well as from a longitudinal view.

Milam (2006) investigated the construct posttraumatic growth (perceiving positive changes since diagnosis) and HIV disease progression. This study is included in the present investigation due to the fact that posttraumatic growth is viewed as a positive psychological strength that may buffer the person against the effects of physical illness. In this study, Milam included 412 people living with HIV in California, of whom 88.1% were males aged on average 39.0 years ($SD = 7.9$), 67% were identified as homosexual and more than half had an annual income of less than \$10 000. The participants were ethnically diverse (40.3% Hispanic, 38.8% white, 14.8% African-American) and had known of their HIV status for an average of 6.4 years. Milam utilised the Posttraumatic Growth Inventory (PTG), the Life Orientation Test to measure levels of optimism and pessimism, and the Center for Epidemiological Studies Depression Scale (CES-D), and collected demographic and health-related information. The results of the Milam investigation show, surprisingly, that between the baseline and follow-up ($M = 19.59$ months) the mean CD4 counts rose from 434.6 to 472.8 and the mean viral load decreased from 5.1 to 4.3! Mean PTG scores indicated moderately positive change since diagnosis. Milam reported that 75% of the participants reported at follow-up that they were more than 95% adherent to their antiretroviral therapy (ART) treatment. Low levels of both optimism and pessimism were correlated with high PTG

scores, and this relationship was particularly noticeable in Hispanics, a phenomenon that Milam thought was related to this ethnic group's apparent likeliness to turn to religion more readily than whites or African-Americans. Milam recommended the consideration of religiosity and religious coping related to posttraumatic growth, as well as the effects of optimism and pessimism in coping with adversity.

In a study of a construct related to resilience, namely posttraumatic growth, Milam (2006) showed how individuals may in fact respond with physically measureable benefits despite being confronted by adversity. Tedeschi and Calhoun (2004a, 2004b) describe the construct quite clearly and it may be seen that the similarity with resilience lies in the presence of some adverse experience. However, it differs from the present study in that it focuses on individual experience and reaction formation, even though it has been shown that individual resilience (or posttraumatic growth) may contribute to family-level resilience outcomes. Milam's study has a good sample size, although it consists mainly of poor homosexual males, limiting the generalisability of the findings. Good ethnic diversity is noted, except in the case of Native American-Indians, of who there were lower numbers of participants. The fact that the participants knew about their HIV status for a long period of time is an added bonus for the observation and measurement of a construct that may take time to develop and that may also be worn down over time. It is particularly heartening to note increased adherence to medication regimes, decreased viral counts and an increase in CD4 cell count as benefits associated with a psychosocial construct such as posttraumatic growth. This finding further supports the present study in its endeavour to contribute to practical programmes for the nurturing of posttraumatic growth and of resilience, particularly should such psychosocial interventions prove to effect somatic changes (even more so in cases such as HIV, with very real, very measurable effects related to prolonged and/or increased quality of life in terminal or chronic medical conditions). Adherence to medication regimes is a very important aspect of treatment for HIV and of ensuring longer survival times.

Milan *et al.* (2005) examined interpersonal predictors of depression trajectories over five years in 761 women with HIV. Participants were part of the HIV Epidemiology Research Study (HERS) from four study sites in Baltimore, New York, Rhode Island and Michigan. The average age of the participants was 35.47 years and they were ethnically represented by 60% African-Americans, 20% Latina/Hispanics and 15% whites. Socioeconomic disadvantage indicators included 74% having an income of less than \$1 000 per month, 65% receiving public assistance, 83% being unemployed and 45% not having completed high school. Milan *et al.* used the CES-D to measure depression. The authors developed questionnaires to assess maternal role difficulty, social isolation, recent drug use and relationship conflict with the partner. Information collected included demographic variables, bereavement, use of antiretroviral therapy, CD4 count, antidepressant medication and HIV-related physical symptoms. The results indicated higher levels of depression than in the general population. Milan *et al.* reported that maternal role difficulties, social isolation associated with HIV and partner conflict additively contributed to the initial depression, but that partner conflict was the only independent variable that predicted change in depressive symptoms over time. Milan *et al.* considered the fact that HIV may alter the nature of partnerships and that some HIV-positive women may choose to remain in conflict-filled relationships due to perceived limitations because of HIV, real or otherwise. The current investigation aims to show factors that contribute to family-level coping with HIV and the findings of Milan *et al.* highlight the fragile nature of families confronted with HIV.

In a study of women with HIV, using a very sizable sample, Milan *et al.* (2005) demonstrate characteristics of a good research design, namely a good sample size and, as part of a larger study, the use of good measuring instruments and participants from multiple sources. The study links well with the present study due to the fact that the participants were also from low socioeconomic areas, had a low education and were mostly unemployed. It is important to note the findings of high levels of depression and to bear in mind that an investigation into a

family-level construct should not overlook the presence of individual family members' psychopathology.

Hawley and DeHaan (1996) and Walsh (1996) show that individual resilience has an effect on family resilience. In this sense it may be concluded that the preceding four studies contribute to the present investigation as a result of their focus on factors that influence individual resilience, such as the influence of family characteristics on child resilience, the presence of mental health concerns (such as depression) in HIV-infected family members, family contributions to suffering (such as rejection of the infected family members), the negative influence of stigma, and a wider appreciation of factors that contribute to sexual risk-taking behaviours (a factor that is particularly significant in the development of intervention programmes for the HIV pandemic). A study that would be particularly significant is that of individual posttraumatic growth as a construct warranting further investigation into what a resilient outcome might actually look like; how it presents and what behaviours would characterise a growth outcome. This is relevant for operationalising family resilience and is also relevant to the present study. The importance of attention to detail in research design and of a focus on studies regarding the health of women is highlighted in the preceding studies discussed in section 3.1, guiding the design of the present study.

3.2 Research on family-level responses to and coping with chronic illness

Due to HIV infection presenting as a chronic, treatable, life-threatening disease (Fahmer & Romano, 2004), the literature review of the current investigation into family-level resilience variables associated with HIV is extended to include studies on family resilience in the context of chronic medical conditions. Consequently, what follows is a discussion of four quantitative and four qualitative studies, as well as one with a combined research method. The reason for the above grouping of studies into two groups, showing different study designs and then including a combined study design, is to highlight in a practical manner the positive and

negative aspects of each, to show the benefits associated with a combined study method, and to indicate how this approach guided the present study to include both qualitative and quantitative components.

3.2.1 Quantitative investigations into family-level coping with chronic medical conditions

The first of the four examples of quantitative research into chronic medical conditions and family coping is a study that used the Resiliency Model (also used in the current investigation) to investigate the relationship between family stress, perceived social support and coping in families with a child with congenital heart disease. The next is a discussion of a study of family survivorship and quality of life following a cancer diagnosis, followed by a discussion of a study that investigated hardiness and resilience in families with or without a child with Down Syndrome in Australia and New Zealand. The last study in the quantitative section is one that investigated positive affect as a source of resilience for women in chronic pain.

Tak and McCubbin (2002) used the Resiliency Model of Family Stress, Adjustment and Adaptation to investigate the relationship between family stress, perceived social support and coping in 92 families following the diagnosis of a child under the age of 12 with congenital heart disease. The participants were recruited from paediatric cardiology clinics at a mid-western teaching hospital in the USA. The mothers' ages ranged from 19 to 42 years, and that of the fathers from 19 to 46 years. The education of the mothers ranged from eight to 21 years and that of the fathers from eight to 22 years, with the mean annual income ranging from \$30 000 to \$35 000. The authors reported that 79% of the children were under one year of age and that 51% were boys. In order to measure family stress, Tak and McCubbin used the Family Inventory of Life Events (FILE), the self-report Personal Resources Questionnaire (PRQ-85) to measure social support, and the Coping Health Inventory for Parents (CHIP) to measure

parental coping. Tak and McCubbin (2002) reported that family characteristics had no significant influence on the independent variables family stress, perceived social support and coping, and that, interestingly, perceived social support did not have a mediating or moderating effect on parental coping. Tak and McCubbin (2002) did show that the level of family stress significantly influenced perceived social support and coping. The authors concluded that coping was indeed a complex phenomenon that was not fully understood. They further suggested an investigation into the multiple dimensions of perceived social support and distinguishing between the effects on overall coping and on patterns of coping.

The study by Tak and McCubbin (2002) is constructed well and shows the importance of continued research into coping, as well as that coping is a complex phenomenon. The study has a good sample size and good distribution over demographic variables, uses good measuring instruments and reports findings that are significant for the present study. Important findings for the present study include that family characteristics play a minor to negligible role in family coping and that perceived social support is not as important as is rendered in the literature in general. Further investigation is definitely indicated by these controversial findings.

Mellon and Northouse (2001) investigated family survivorship and quality of life following a cancer diagnosis in 123 families in the south-eastern lower peninsula of Michigan one to five years after treatment had ended. The importance of illness-related stressors, family resources and family meaning of the illness was stressed in this quantitative cross-sectional study. The participants ranged in age from 52 to 75 years, while 63.4% were female, 50.4% were white and 49.6% were African-American. Education ranged from four to 20 years, the participants were well distributed across income levels and, on average, the patients had lived 3.39 years since diagnosis. Mellon and Northouse measured both individual- and family-level indicators with the Family Pressures Index (FPI), the Distress subscale of the Family Inventory of Life

Events (FILE; later developed as the Family Pressures Scale), the Fear of Recurrence Questionnaire, the physical wellbeing subscale of the Functional Assessment of Cancer Therapy Scale (Fact G), the Family Hardiness Index (FHI), the Social Support Index (SSI), the Constructed Meaning Scale and the Quality of Life – Parent Form. Mellon and Northouse reported that family income ($r = .32, p < .001$), marital status ($r = -.41, p < .001$) and family member age ($r = .40, p < .001$) had significant relationships with quality of life. The authors also reported that being retired was correlated significantly with a higher quality of life ($F(2, 120) = 5.20, p < .01$). The independent variables employment status ($\beta = .19$), concurrent family stressors ($\beta = -.25$), family fear of recurrence ($\beta = -.19$), family social support ($\beta = .25$) and family meaning ($\beta = .24$) made what was referred to by Mellon and Northouse as unique contributions to family quality of life. The authors also showed the unique contributions of the patients' fear of recurrence ($\beta = .24$) and family hardiness ($\beta = .31$) to family meaning of the illness. Mellon and Northouse concluded by indicating that family hardiness and social support are important family-level resources for developing the positive meaning of illness and that, in turn, family meaning of illness is an important factor in overall quality of life.

Contrary to the findings reported by Tak and McCubbin (2002), Mellon and Northouse (2001) show the importance of family characteristics and demographic variables such as family income for successful coping. The study links with the present study because of its use of measurements based on the Resiliency Model (also used in the present study) and the reported finding of the importance of stressor appraisal (a factor on which the Resiliency Model leans heavily) for successful coping. The study represents a good study design, such as a good sample size, good distribution over demographic variables and the use of extensive measurements, resulting in valuable and useful information. The associated shortcomings (and of course strengths) of a cross-sectional survey considered, the study does measure the effects of the complex construct of coping as it developed over a long period of time. This last factor is helpful in contributing to knowledge about a phenomenon that is proven to be

complex, varying over time from what may be viewed as successful coping, to less than successful coping.

As part of a longitudinal study at the University of Queensland in Australia, Bower, Chant and Chant (1998) investigated hardiness and resilience in families with or without a child with Down Syndrome in Brisbane, Australia and Auckland, New Zealand. The participants came from 304 families and the children were aged between five and 16 years. Bower *et al.* used the Family Hardiness Index (FHI) to assess the four hardiness characteristics of coordinated commitment, confidence, challenge and control. The results showed marginal differences between the groups from the two countries and no significant differences between families with or without a child with Down Syndrome, indicating that the presence of disability can provide families with a sense of hardiness and contribute to family resilience. Bower *et al.* suggested that family resilience be investigated further, taking into consideration the use of a range of suitable instruments and incorporating the views of different family members.

The Bower *et al.* (1998) study is included in the present study due to its focus on hardiness as a resilience factor, with an in-depth investigation of the factor. The study may be commended for its good sample size and its longitudinal design. The authors recommend a range of instruments to be used and in this manner guided the present study. It may, however, be conceded that a study such as that by Bower *et al.* represents scientific inquiry into singular aspects or factors of resilience in order to contribute to a more comprehensive, in-depth view of what is proving to be a rather complex, multi-dimensional phenomenon.

Zautra, Johnson and Davis (2005) studied positive affect as a source of resilience for women in chronic pain diagnosed with osteoarthritis, fibromyalgia, or both. Most of the 124 participants were Caucasian (96%) and aged between 35 and 72 years, 80% had post-high school level education with an annual income above \$50 000, and 62% were employed full time. Zautra *et al.* used the Inventory of Small Life Events (ISLE) and the Positive and

Negative Affect Scale (PANAS-X), and measured levels of neuroticism with John, Donahue and Kentle's (1991, cited in Zautra *et al.*) "Big Five" Inventory – Versions 4a and 54. Significant pain and moderately high negative affect were reported. Negative affect was correlated with high levels of pain, high interpersonal stress and low levels of positive affect. An increase in negative affect predicted greater pain, but should be interpreted with caution, as greater pain tends to lead to higher levels of negative affect (Zautra *et al.*). The authors aimed to show the role of positive affect in adaptation to pain and of the moderating effects of interpersonal stress and pain on negative affect. Zautra *et al.* showed that higher than average positive affect buffers against negative affect during times of high pain and during high levels of interpersonal conflict (the converse was also shown). Zautra *et al.* concluded that the presence of positive affect can be seen as a resilience resource and urged further inquiry. The authors concluded that the findings probably could not be generalised *per se*, but that important information was gained regarding the effects of positive affect on resilience and affect regulation, and that the findings could be generalised to how people cope with pain.

The study of positive affect as a resilience factor makes an important contribution to coping literature. Although the sample size in the study by Zautra *et al.* (2005) was acceptable, the authors noted limitations associated with the generalisability of their findings as concerns the representativeness of this demographic variable. The study contributes to understanding how positive affect supports successful coping (and the converse) in a particular population (women of higher socioeconomic standing with chronic pain). It is a strength of the study, which investigates coping in multiple illnesses.

Concluding comments on the preceding quantitative studies of family coping with chronic illness include the notion that coping is complex. Coping varies and it is important that studies are conducted to contribute to our understanding of what appears to be helpful for families to successfully manage setbacks (and of course what is found to be unhelpful). It is shown that

quantitative study designs support scientific inquiry based on theory. It is further shown that the task of scientific inquiry is not complete once a study has been completed, due to variances in the findings reported, indicating the need for replication and further studies to be conducted.

3.2.2 Qualitative investigations into family-level coping with chronic medical conditions

The next section discusses four qualitative studies in the context of the present investigation into family-level resilience factors associated with the management of a chronic, life-threatening illness. The discussions focus on investigations into family goals as indicants of adaptation, an inquiry into the possibility of thriving after trauma (related to murder victims, but relevant due to the focus on resilience outcomes), support systems, resources and tactics used by white families with a member on haemodialysis and, lastly, on the influence of chronic and potentially fatal illnesses on care-giving, focusing on the phenomenon of care-giving burden.

Stetz, Lewis and Houck (1994) investigated family goals as indicants of adaptation during chronic illness in a qualitative study of families in which the mother had been diagnosed with breast cancer, diabetes or fibrocystic breast disease. The authors used the Problem-Centred Family Coping Inventory to generate the data in this 15-month, five-occasion longitudinal study. The sample consisted of 128 families in which the mothers' diagnoses were known for more than one year. The mothers with breast cancer knew about their condition for 3.98 years on average, those with fibrocystic breast disease for an average of 3.5 years, and those with diabetes for an average of 10.5 years. Of the 128 families, 24 were single-parent families, and the mean number of children was 2.4 in the predominantly Caucasian (93%), middle to upper-middleclass families, with an average annual income above \$30 000 and average levels of education being about two years of college. The five most frequently reported family goals

were, in order, cohesion, viability of children, financial stability, adaptation and health maintenance. Stetz *et al.* further reported that family goals appeared to be relatively enduring and were in general not impeded by the mothers' illnesses. The authors indicated that family goals may be viewed as an internal resource that contributes to family resilience, to be appreciated in the context of the subordination of personal ambitions to family goals.

In the context of the present study, the inclusion of the Stetz *et al.* (1994) study may be questioned because it is a study of white families from the upper socioeconomic classes and only a few families were single parent ones, bringing into question its relevance for the present study. To its credit, however, the study is of quite a large size for one having a qualitative study design. This study offers valuable insight into the notion of reasons to bother rallying coping strategies. The mothers' goals of ensuring the survival or wellbeing of their children is shown as an example of a resilience factor in the individual. On the other hand, Stetz *et al.* showed the significance of the subordination of personal goals to that of the family for family resilience to occur and prevail. Although not investigated in the present study in such minute detail of individual and family factors, the aspects highlighted by the Stetz *et al.* study serve to raise awareness of the complexity of resilience and to encourage further and future research endeavours.

Parapully, Rosenbaum, Van den Daele and Nzewi (2002) studied the possibility of thriving after trauma through a phenomenological inquiry into the experience of 16 parents of murdered children. The participants included 13 females and three males, of whom 12 were Caucasian. The participants ranged in age from 35 to 75 years. Ten of them had an education of at least high school, with the rest having further education. Ten had an annual income in excess of \$50 000 and 10 lived with a partner. Information from in-depth, semi-structured interviews was analysed qualitatively using the Miles and Huberman method of data reduction, display, conclusion drawing and verification. Parapully *et al.* designed and used a

questionnaire entitled “Human Tragedy and Parental Suffering” with which to evaluate signs of positive change in feelings, thought and behaviour. The results showed that four processes (acceptance, finding meaning, personal decision making and reaching out to others in compassion) and six resources (personal qualities, spirituality, continuing bond with the victim, social support, previous coping experience and self-care) contributed to a positive outcome. Personal qualities identified by Parapully *et al.* to be helpful included characteristics described as strength of character, goodness of heart, sense of spirituality, determination, leadership, a positive outlook and compassion.

The Parapully *et al.* (2002) study is particularly relevant to the present study and to the study of human coping behaviour in general due to its contributions on a number of levels. The authors offer valuable insights into human coping by showing evidence for processes and resources found to be helpful in coping. This aspect links the two main theories upon which the present study is built, namely that of McCubbin and McCubbin, and that of Walsh. The study further offers insight into individual-level coping, which offers an in-depth view of family-level coping at the micro-level, namely of how individual family members cope with tragedy. The study offers much to the understanding of human coping, links well with the present study and offers an alternative method of qualitative investigation. A number of limitations of the study include a rather small sample, although this is not uncommon for qualitative study designs (study designs that may include case studies, where $n = 1$), and the observation that the distribution of the sample appears to be rather skewed, including in its representation of gender, socio-economic factors (such as income) and race.

White, Richter, Koeckeritz, Munch and Walter (2004) investigated support systems, resources and tactics used by 15 white families with a member on haemodialysis treatment for end-stage renal disease. The patients ranged from middle-aged to elderly and had been on a treatment regimen from two to five years. White *et al.* used a naturalistic inquiry method to investigate

family resilience and reported that strategies and resources for successful coping included social support, maintaining a sense of normalcy and having a positive life view. A positive life view included, for instance, hope for the future, a love of life, a sense of humour and a spiritual sense. The authors indicated that the findings of their study were congruent with the key concepts of the family Resiliency Model of McCubbin and McCubbin (1996). They concluded that resilience behaviours can be identified, taught and reinforced and that family-focused interventions were needed for the management of chronic medical conditions, and suggested future research to include different cultures to complement their initial work.

White *et al.* (2004) guide the present study in a number of ways. Their study links well with the Resiliency Model and proposes the notion that resilience factors can be taught, paving the way for operationalising a definition of resilience and for the development of interventions. The authors show a process of qualitative analysis that contributes to the present study, not in the way that it was executed but in its consideration of alternative and perhaps future follow-up, and in terms of the further development of the present study. White *et al.* offer new insight into resilience by showing the importance of factors such as social support and, more importantly, the importance of adopting normalcy and a positive view despite the presence of distress surrounding the imminent death of a loved one (as in the subject of their study). Of particular salience are the authors' contributions to a detailed exploration of what entails a *positive view*. The generalisability of the findings of the White *et al.* study may be questioned due to its small sample size and limited geographic variables, but this criticism also includes an appreciation of a small sample as not being unusual in qualitative studies, and of the fact that an investigation of older populations offers insights into that particular group.

Brown and Stetz (1999) investigated the influence of chronic and potentially fatal illnesses on care-giving, using in-depth interviews with 26 family caregivers of people with AIDS or advanced cancer. Participants were from two cancer caregiver groups (n = 11) and two AIDS

caregiver groups (n = 15), from which qualitative data was collected two weeks prior and two and six weeks after an intervention. The mean age of the caregivers was 44.3 years (range from 28 to 83 years), 88% resided with the ill person and 11 of the caregivers were the spouses. By the third and final data-collection point, about 50% of the care receivers had died. Brown and Stetz used the Caregiver Outreach Project Interview Guide to collect the information and used the constant comparative analysis method of Strauss and Corbin (1990, cited in Brown & Stetz) for interpretation. The results of the Brown and Stetz study highlight the contributions that caregivers make to the lives of ill people through factors such as meaning of loss, completing unfinished business and the importance of the death surroundings. The authors showed that the caregivers had a relational and active involvement in the illness trajectory and found the death to be an intense and exhausting experience. Brown and Stetz suggested policy changes to health care to include family caregivers, as caregivers play a valuable role, particularly in orchestrating a “good death” (p. 196) experience. Awareness of the needs of caregivers during the course of chronic and fatal illness was raised by the results of the Brown and Stetz study.

Although the Brown and Stetz (1999) study is a relatively small one, it compares favourably with qualitative studies in general and offers unique insights into coping behaviours. Even though the sample is small, there was good representation of two terminal illnesses (cancer and AIDS), while the participants were recruited from four sites. The study is comprehensive and shows a novel approach for a qualitative study when compared with cross-sectional studies (such as the present study design) by having a pre-intervention and two post-intervention data collection time points. A semi-structured data collection procedure contributes to improved data validity and comparability among participants. The qualitative data analysis method is the same as used in the present study, namely that of Strauss and Corbin (1990). The study furthermore makes a valuable contribution to knowledge of family-level stress experiences and the recommendations made at policy level.

In conclusion, the preceding qualitative studies of family coping with chronic illness include the notion that coping is complex. The four studies reviewed consistently show that qualitative investigations have much to offer in contributing to a more comprehensive view of family coping. Further research is consistently indicated in all the studies reviewed. A variety of study designs and procedural variation guided the design of the present study, including a consideration to extend the present study to include further research into family-level coping with HIV/AIDS, to operationalise definitions of resilience and to guide the future design of interventions and their implementation.

3.2.3 A combined qualitative and quantitative study of family-level coping with a chronic medical condition

As part of a larger study, Knafl and Zoeller (2000) did a secondary analysis of qualitative and quantitative data of 43 couples and seven wives (whose husbands did not participate) in a study of family responses to having a child with a chronic illness. The children were aged between seven and 14 years, with equal numbers of boys and girls. The majority of the participants were Caucasian, while 10 were African-Americans. The participants were representative of a broad range of educational and income levels and a variety of chronic illnesses. Knafl and Zoeller used the Feetham Family Functioning Survey (FFFS) and the Profile of Mood States (POMS) in their study. The results included the finding that parents in the same family were likely to have shared views of the illness, its management and its impact on family life. Shared views of individual and family functioning, as well as shared views of the five qualitative themes identified in the study, were also reported. The authors also reported that couples were more likely to minimise than emphasise the impact of the illness. Knafl and Zoeller indicated specific areas of strength, such as confidence in managing the illness, but in particular highlighted the shared view of parents as a particularly important family strength, especially in the joint approach to identifying coping strategies. Knafl and Zoeller found a subgroup of parents who had an individual rather than shared experience of

the illness, and it was in these couples that, consistent with other studies, it usually was the mother who emphasised the negative aspects of the illness. Knafl and Zoeller indicated, however, that parental differences need not be viewed as problematic, and that they may indeed serve a purpose or function in assisting a child with a chronic medical condition to lead a full and normal life. It was interesting to note that very few couples reported shared negative views. The authors suggested further investigation into the phenomenon of differing parental views, as well as including multiple family members in family research and of being aware of different roles and of caregiver burden.

Although different to the present study, the Knafl and Zoeller (2000) study guides the notion of the complementarity of qualitative and quantitative approaches to study designs. A limitation of the abovementioned study is its small sample and mostly one race that is represented. Its distribution over demographic and sociological variables appears to be sufficient. The study forms part of a larger investigation and offer good insights into shared family views of adversity. It also offers supportive evidence for Antonovsky and Sourani's (1988) conceptualisation of the idea that confidence in managing adversity is an important resilience factor. Supportive evidence for the family hardiness construct of McCubbin and McCubbin (1996) as a resilience factor is found in the Knafl and Zoeller (2000) study and is therefore important for the present study.

3.3 Studies of chronic illness and coping as related to poor, single and ethnically diverse groups

What follows is a discussion of five investigations related to the characteristics of the majority of the participants of the current investigation, namely being poor, a single parent and ethnically diverse, and being affected by a chronic, life-threatening illness. The first study investigated stress in black low-income single-parent families. Social support and coping as resilience indicators in low-income, African-American and white adolescents are reported in

the second study. The third study investigated family stress and family strengths in single- and two-parent families with a child with cerebral palsy. In the fourth study, parental metabolic control of children with diabetes in single-parent and two-parent families was compared. The fifth study investigated family characteristics, ethnicity and chronic disease management behaviours in patients with Type 2 diabetes.

Lindblad-Goldberg, Dukes and Lasley (1988) explored stress in 126 black, low-income, single-parent families who were divided into dysfunctional ($n = 50$, clinic referred) and functional ($n = 76$, non-clinic) groups. The participants were urban Philadelphian families represented by the mothers, who were in their early thirties, with on average three children (mostly pre-adolescent, and an equal number of boys and girls). Half of the mothers had been teenage mothers and the single-parenthood status ranged from one to 25 years, 50% of whom had been single for more than nine years. Most of the mothers were semi-skilled workers with on average 12 years' education, and their annual incomes mostly were below \$6 000. Lindblad-Goldberg *et al.* used the Pattison Psychosocial Kinship Inventory and developed a vulnerability profile for use in their single parent project. The authors did say that the results of their study should be interpreted with caution due to the interdependency of the measures used. Lindblad-Goldberg *et al.* reported that the dysfunctional families in their study experienced more stress, that social network characteristics were not significant mediators and that internal resources may be the most important buffer against stress. A critical factor according to these authors is the family's perception of events. They reported that healthy families emphasised positive events more and placed much less focus on negative events.

Inclusion of the Lindblad-Goldberg *et al.* (1988) study in this review may be questioned, considering limitations such as using only one measuring instrument, and it could also be argued that their study is quite dated in relation to the present investigation. However, the study is included for a number of reasons that make it relevant to the present study, including

a focus on poor, single-parent black families. It is also a valuable study due to it being part of a much larger project dedicated to the study of single parents. The study has an acceptable sample size. The findings reported are relevant to the present study, including the finding that social support, which was previously thought to be an important resilience factor, did not have a mediating effect on the stress experienced by the families studied. Valuable information from the Lindblad-Goldberg *et al.* (1988) study guided the present study, namely that relating to internal family resources, an emphasis on positivity, a linking with the Resiliency Model and the importance of an appraisal of the stressor.

Markstrom, Marshall and Tyron (2000) investigated social support and coping as resilience indicators in low-income, African-American (n = 53) and white (n = 60) adolescents from a rural Appalachian region in Virginia, USA. The participants were 76 females and 37 males, with a mean age of 15.2 years. They completed the Psychosocial Inventory of Ego Strengths (PIES), the Perceived Social Support Scale for Family and Friends (PSS-Family and PSS-Friends) and a shortened version of the Ways of Coping Checklist. Markstrom *et al.* reported that problem-focused, avoidance and wishful-thinking coping strategies significantly predicted resilience, as did family social support. Race and gender distinctions were minimal, with the only significant difference being that the white respondents scored higher than African-Americans in social support from friends, although perceived social support from friends did not predict resilience. Problem-focused coping was a strong predictor of resilience. The negative coping styles wishful thinking and avoidance, which Markstrom *et al.* found to be significantly negatively correlated with resilience, only predicted resilience for African-American adolescents, while wishful thinking predicted lower resilience only in males and avoidance only in females. The recommendations of Markstrom *et al.* include longitudinal study designs, a variety of sampling methods and investigations in rural communities, as well as utilisation of a resilience measure rather than measurement by proxy.

The quantitative study by Markstrom *et al.* (2000) shows a number of limitations, as well as strengths. Their study makes use of suitable measurement instruments and the sample is of an acceptable size, although not very large. Distribution according to racial representation is good, although the gender representation is skewed to include mostly female participants. The study of resilience in the remote Appalachian region is commendable, given the challenges associated with support in remote regions. Although minimal differences are reported between the male and female participants, further investigation is indicated. The Markstrom *et al.* study guided the present study in terms of its focus on the development of a direct measure of resilience and subtleties associated with individual appraisal and behaviour in a resilience-enhancing direction.

McCubbin (1989) compared the family stress and family strengths of 27 single- and 27 two-parent families with a child with cerebral palsy in five states in the upper Midwest, USA. The children with cerebral palsy were rated as 40% mildly, 40% moderately and 20% severely impaired. The parents in both groups had a mean age of 38.8 years and an average education of 11.9 years. The single-parent group consisted of 26 mothers and one father. In the single-parent group, 45% of the parents were widowed and 30% were divorced. The average annual income ranged between \$10 000 and \$15 000. Only one parent was in full-time employment. The families had two children on average and 74% of the sample was Caucasian. In the two-parent group, 89% were first marriages, the average annual income was between \$15 000 and \$20 000, 63% of the mothers were at home, the average number of children per family was three and ethnically 85% were Caucasian and 15% were Native American Indian. McCubbin used the Family Inventory of Life Events (FILE), the Family Inventory of Resources for Management (FIRM), the Coping Health Inventory for Parents (CHIP) and the Family Adaptability and Cohesion Evaluation Scales (FACES I). Results showed no significant differences in family stress between single- and two-parent families, and the mean stress level was assessed as moderate. McCubbin also reported that more than 25% of single parents

reported difficulties with former spouses. No significant differences were found in cohesion, extended family support, esteem or mastery. A significant difference was reported in financial wellbeing, with single parents being lower in this resource. Coping by the single mothers showed significantly more struggling with regard to maintaining family integration, cooperation and optimism. Single parents scored significantly higher on family adaptability. McCubbin recommended further research on other samples of single parents.

The McCubbin (1989) study is an example of a good research design. Good paring of groups regarding representation is noted, as is a good distribution over illness severity. Biographic variables are well presented, although it may be questioned why a single male participant was included in the single-parent group. Differences are noted between the single- and two-parent groups, not unlike those reported in the literature in general, with higher education, income and employment figures for the two-parent families in general. Racial representation is skewed in favour of a greater number of Caucasian families. Good and sufficient measurement instruments were used. Both positive and negative findings are reported in relation to single parents, offering a balanced view. The study links with the present study in that it demonstrates how one of the original authors of the Resiliency Model conducted research into family coping. A difference, however, is in the inclusion of a qualitative aspect in the present study.

Thompson, Auslander and White (2001) compared the parental metabolic control of children with diabetes in single-mother (33.5%) and two-parent families (66.5%) and found that children in single-parent families were at risk for poorer metabolic control and, more importantly, that single-parent families faced more challenges in raising a child with a chronic illness. The study was completed at an outpatient diabetes clinic at St. Louis Children's Hospital in St. Louis, USA. The participants included 49.7% female children aged 12.5 years on average. The mothers' ages averaged 39.4 years, with 65% having completed high school.

Socio-economically they came from middleclass backgrounds. The assessment measures used by Thompson *et al.* included measurement of demographic detail, using the Hollingshead Four-Factor Index of Social Status, the Adherence and IDDM Questionnaire-R, a measurement of the extent to which children followed medical advice, the Family Inventory of Life Events and Changes, the Family Inventory of Resources for Management, the Family Environment Scale, eight items from Dressler's Survey Interview Schedule for the measurement of neighbourhood stressors, and the *racism* section of the Dressler Survey Interview Schedule for the measurement of the perception of community treatment. Thompson *et al.* reported that the children of single mothers had significantly poorer metabolic control and lower levels of adherence to treatment regimes, that family stress was significantly higher and that resources were reportedly lower. The authors showed that single mothers perceived significantly greater neighbourhood stressors and more unfair treatment. The authors further indicated that adolescence was associated with poor diabetes management. In this light it is important to note the finding that African-American youths missed more clinic visits than their Caucasian counterparts, a finding that was supported for two-parent families as well. It may therefore be concluded that, although chronic illness management brings about certain stressors, these appear to be exacerbated in single-parent families with additional stressors, as indicated in the study by Thompson *et al.*

A limitation of the Thompson *et al.* (2001) study is the fact that their sample is not evenly distributed between single- and two-parent families. However, even representation is found over other demographic variables, such as gender. The study focused mainly on middle-class families, limiting the generalisability of its findings, therefore raising awareness of caution in the interpretation of the reported results. The study shows evidence of the use of good measurement instruments and a good number of instruments, consequently offering valuable information about family coping variables. Being a quantitative design only, the study could have been improved by the inclusion of a qualitative aspect. The Thompson *et al.* study is

pertinent to the present study because of the finding that single-parent families struggled to maintain their adherence to medical advice and medical management, inclusive of medication adherence. This latter point is particularly important in HIV/AIDS treatment, in relation to which it was shown that adherence to HAART increased the likelihood of improved quality of life and longevity. A further important and relevant finding is the notion that adolescence was found to be associated with poor medical control. Racial differences in practical aspects of medical management were reported and warrant further investigation, thereby guiding not only the present study, but indicating areas for future research that build on the present study.

Fisher (2005) investigated relationships between family characteristics, ethnicity and chronic disease management behaviours in 500 patients with Type 2 diabetes. The participants represented four ethnic groups in the USA and were adults between the ages of 25 and 70 who had known about their diagnoses for more than a year. Fisher used seven family and seven disease-management scales covering different domains. Fisher measured the *family worldview domain* of family characteristics with the Family Coherence Scale and the Sex Role Traditionalism Scale, the *family problem-solving domain* with the Negative Conflict Resolution Scale, the *emotion management domain* using the Relationship Satisfaction and Spouse Empathy scales, and the *family structure domain* using the Separate Spouse Activities and Togetherness scales. Fisher evaluated three disease management domains. In the *behavioural domain*, the average fat consumed per day (AVFAT), body-mass index (BMI) and physical activity were measured. In the *emotional domain*, the Center for Epidemiological Studies – Depression Scale (CES-D), Diabetes Quality of Life 1 – Satisfaction and Diabetes Quality of Life 2 – Impact (DQOL1 and DQOL2) were used, and in the *biological domain* tested glycosylated haemoglobin (HbA1C), a glucose control index. Fisher (2005) reported no variation across ethnic groups for family characteristics and chronic disease management. What is important for the current investigation are Fisher's findings and comments relating to

family risk indicators, which include a pessimistic belief in the world as not being meaningful or unmanageable, family inability to resolve disease-related problems, general dissatisfaction with spouse or partner relations, and a tendency to not often do things with other family members.

The Fisher (2005) study is a very thorough investigation of factors impacting on families managing chronic illnesses. The study has a large sample and investigates the effects of an illness with a significant impact on world health, namely type 2 diabetes. Fisher used many and varying measurement instruments to bring to light many factors that are important to consider in relation to how families manage chronic illness. The Fisher study is relevant to the present investigation due to a focus on a chronic illness, of which HIV/AIDS is an example. It is heartening to find that factors that affect families were found to be similar across cultural and racial groupings. The findings reported direct the present study in a sense that it was shown that psychological factors are important to consider in the development of family interventions.

The discussion of the preceding five studies, being relevant to the present investigation with their foci on lower socio-economic representation and chronic, life-threatening illness as the family stressor, raises interesting factors that serve to guide the present investigation. Variable findings show that, in some studies, resilience factors such as social support are not as important as previously reported, while the opposite is reported in other studies. The importance of optimism as a resilience factor appears to be quite consistent across the various studies. The similarity of resilience factors across race and culture is a refreshing finding. The uniqueness of race, culture and gender in relation to resilience and of the appraisal of stressful life events was also highlighted by these five studies, further supporting the present investigation. Racial differences in the management of chronic disease were highlighted, as were the difficulties encountered by single-parent families that appear to outweigh those

encountered by two-parent families. The latter is perhaps related to more resources available to the latter families in general. Of note is the significance of optimism as a resilience factor, the important role that psychological factors play in intervention programmes, and an appreciation of the complexities associated with having a family member with a chronic illness.

3.4 Previous reviews of resilience research

A number of reviews have been done of previous research on families and on families and chronic illness. Of note is Hill's (1964) review of 30 years of development in the field of family studies. This review highlights the difficulties in the development of a suitable framework for the study of families; obstacles mostly due to theoretical diversity in developing systems to understand risk factors and protective mechanisms. Hill's review led to the development of his ABCX Model, the prototype on which the current investigation is based. Romer, Barkmann, Schulte-Markwort, Thomalla and Riedesser (2002) completed a very thorough and methodological review of 15 years of research on children of somatically ill parents. The authors' extensive review included 50 articles and book sections published between 1983 and 1998, five previous reviews, three theoretical articles, five case studies and 39 sample studies. Interestingly, Romer *et al.* discovered that protective mechanisms have not yet been identified clearly. They suggest the development of structures, including ethical standards and a profound theoretical framework, to guide studies of families, which is supported by Fisher (2005). Knafl and Gilliss (2002) commented that family research remains conceptually and methodologically diverse and it remains imperative not to lose the diversity of family models when attempts are made at a synthesis of previous understanding of family processes. Romer *et al.* made practical recommendations, such as a combination of qualitative and quantitative methods, integration of the child's experiences through semi-structured or open interviews, and consideration of coping as a process through the use of longitudinal study designs.

Knafl and Gilliss (2002) reviewed 73 articles on family research in the context of chronic illness and found two distinct clusters revolving firstly around descriptive studies of family responses to chronic illness, and secondly around explanatory studies of variables contributing to said family responses to chronic illness. Knafl and Gilliss concluded that, over time, families appear to not only master treatment regimens, but tend to make them part of everyday family life, find distinct patterns of adaptation and discover that the time around diagnosis is a particularly difficult one. They further reported the importance of the cognisance of build-up of stressors (also in the Resiliency Model of McCubbin and McCubbin, 1996) and the recognition that families contribute not only support and cohesiveness to adaptation to chronic illness; but also negative aspects such as conflict. Knafl and Gilliss found that very little is known about family processes and patterns and how these constructs relate to impeding or enhancing family functioning and adaptation. Knafl and Gilliss suggests that the Calgary family assessment and intervention model serves as a good example of the practical application of research findings to individualised interventions. They mention that a lack of cross-fertilisation between studies impede development in the family field.

The inclusion of the mentioned reviews of previous research on family coping with chronic illness is relevant to the present study because of an appreciation that arises for the temporal aspect of what it is that helps families cope with adversity. It was shown that such research has come a long way, that suitable frameworks were developed over time and that the field of family coping continues to develop. Recommendations for future research based upon the findings of these previous reviews guided the present study's research design of a combined qualitative and quantitative component and of including the views of children as informants.

3.5 In conclusion

It is clear from the preceding that HIV/AIDS has a sizeable and negative effect on families. It affects individuals and the family system and communities. Similarities were found in family adjustment to HIV/AIDS and to other chronic, potentially fatal illnesses. Although similarities were reported, it is also significant to note the emphasis placed in the literature on the negative effect of stigma on both family adjustment and on families seeking support.

This chapter has reviewed pertinent empirical literature and showed the links with the main constructs of the present study, and the importance of undertaking the present study for understanding how single-parent families cope with HIV/AIDS. This importance includes potentially offering helpful insights and suggestions for family-level intervention. The research goals and questions will be described in the following chapter.

Chapter 4

Research question

Introduction

Melville and Goddard (1996) indicated that a research question normally relates to questions about relationships between variables, is empirically testable, that its investigation will probably result in something useful and that the investigator needs to be interested in solving the stated research question or problem. The research question and goals of the present investigation may be described by incorporating theoretical grounding with insight gained from a literature survey (Smit, 1993). In the light of the preceding, what follows is a statement of the goals of the present investigation in terms of the research questions that pertain to family resilience variables in the context of coping with HIV/AIDS by single-parent families.

4.1 Primary goal

The primary goal of the present study was to investigate family-level resilience variables in single-parent families affected by HIV/AIDS, in terms of The Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996). Variables within and outside of the families in the present study were investigated in terms of contributing to a resilient outcome for them.

4.2 Secondary goal

The secondary goal of the investigation of family resilience variables in single-parent families affected by HIV/AIDS was to provide guidelines for the development of intervention programmes. The guidelines for intervention rest in factors associated with the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996), and in the cognitive and behaviour models of psychological interventions, including Cognitive-Behaviour Therapy (CBT) and Acceptance and Commitment Therapy (ACT).

4.3 Alternative goal

The empowerment of a non-governmental organisation assisting people living with HIV/AIDS and their families in the Helderberg Metropole in the Western Cape, South Africa was considered an alternative goal of the present investigation, arising due to the implementation of the study and the nature of the study design.

4.4 Primary research question

The present investigation concerns itself with answering the primary question arising out of the salutogenic perspective of the consideration of which factors are associated with resilience in single-parent families affected by HIV/AIDS. This question is: In terms of the Resiliency Model of Family Stress, Adjustment and Adaptation, do the following factors, namely social support, family hardiness, the family orientation towards the crisis (including factors such as acquiring social support, reframing, spiritual support, mobilising and passive appraisal) and family communication styles, perform protective and recovery functions in single-parent families with an HIV-positive family member. The quantitative findings were complemented with answers to two qualitative questions:

1. In your own words, what are the most important factors or strengths that helped your family through this stressful period?
2. On a scale of 1 (No shock) to 10 (Very bad), rate the impact of the news of your family's HIV status.

4.5 Secondary research question

The present investigation aimed to answer two secondary research questions:

What should the content of family intervention programmes for single-parent families affected by HIV/AIDS include?

How can the identified resilience variables be developed and strengthened?

In the following chapter, the way in which scientific inquiry underpinned and guided the method that was used to investigate the research problem is described in order to generate answers to the stated research questions. No fixed hypotheses were set due to the unique context of the present study being the first of resilience in single-parent families affected by HIV/AIDS in predominantly very low socio-economic groups in South Africa. Theory based on the Resiliency Model (McCubbin & McCubbin, 1996) guided the research questions, as outlined in Chapter 4.

Chapter 5

Method

Introduction

Conducting research is an important activity that needs to be conducted in a scientific, sensitive, ethical and responsible manner (Melville & Goddard, 1996; Strauss & Corbin, 1994). On the one hand rests the moral responsibility to search for truth and knowledge (which Mouton (2001, p. 239) calls the “epistemic imperative”). This responsibility, on the other hand, includes accountability to society that research will be conducted in a responsible way. It is further implied that scientific research will be responsive to the challenges posed by this search for truth and knowledge in order to assist society at large. The moral responsibility of the current investigation is based upon the preceding in order to investigate family resilience variables in single-parent families affected by the global pandemic (UNAIDS, 2005) of HIV/AIDS.

What follows is a description of the way in which the current investigator, consistent with the Resiliency Model (McCubbin & McCubbin, 1996) and the indicated moral and ethical aspects of conducting research, attempted to answer the research question: which resilience factors are present in single-parent families affected by HIV/AIDS? This was accomplished by an investigation of independent variables that correlate significantly with high levels of family adaptation, the dependent variable used as an indication of a resilient outcome (as in the Resiliency Model) in the face of adversity (Greeff & Aspeling, 2007; Jonker & Greeff, 2009). The research design will be discussed, followed by a description of the participants, and distinct descriptions of the qualitative and quantitative data-collection and data-processing procedures. Finally, adherence to and considerations of ethics will be discussed.

5.1 Research design

The current investigation had a cross-sectional survey design. Although this poses problems, such as threats to internal validity (Huysamen, 1994), it was deemed the most appropriate research design for the investigation of which family resilience variables correlate significantly with high levels of family adaptation in single-parent families affected by HIV/AIDS. Huysamen (1994) did, however, indicate the cross-sectional survey design to be appropriate for the investigation of relationships (correlational) between a number of variables in a single population. Threats to internal validity in a single group may have been addressed in the current investigation by what Smit (1983) refers to as between-group referencing, where the parents' and children's views of the dependent variable, family adaptation, were compared. However, it is important to heed the caution of Knafl and Gilliss (2002), who stated that when more than one family member is included in investigations, analytical challenges arise due to what they termed a lack of statistical independence. The benefits of the cross-sectional survey design of the current investigation is indicated by Smit (1983), who quoted Kazdin's view that optimal informative value of a study relates to predictability of interactive relationships among a number of variables. Smit also indicated that more variables systematically investigated will yield more comprehensive information, which is exactly what the current investigation had in mind! With regard to the use of children as respondents in research, Scott (1997) recommended that although data quality is always an issue, children appear to be better respondents than previously thought and that it is better to gather information from multiple sources.

For the current investigation, both quantitative and qualitative methods of data collection were used, since "... we should not settle only for substantive theories, no matter how stimulating or useful they are – for furthering theory development, for understanding phenomena, for *Verstehen* of people and actions, or for their practical use in guiding behavior or policy ..." (Strauss & Corbin, 1994, p. 282).

5.2 Participants

The participants were families of patients diagnosed with HIV at seven council health clinics in the Helderberg Metropole of the Western Cape Province, South Africa. In keeping with the research question of identifying resilience factors in single-parent families affected by HIV, single-parent families were represented by an adult and one child, and came from the black and coloured racial groupings. The participants mostly had a lower socioeconomic status and represented three of the eleven official languages of South Africa (Afrikaans, English and Xhosa). Demographic details will be described in Section 5.2.2.

5.2.1 Sampling

The 11 lay counsellors who collected the data at the seven health clinics identified the participating families. The families were told about the study and the proposed benefits of family intervention programmes, and were asked for their voluntary participation (consent to which could be withdrawn at any stage). The participants were sourced from two free government HIV/AIDS programmes that addressed information issues such as factual information about HIV/AIDS, safe sex practices and supportive counselling. The programmes were the Mother-to-Child-Transference (MTCT) and Voluntary Counselling and Testing Programmes. Follow-up appointments were made with those who agreed to participate. Inclusion criteria determined that the participants would be from single-parent families living in the Helderberg Metropole who had a family member diagnosed positively for HIV. Two family members (an adult and one child) representing each family had to consent to participate. Selection bias and representation of the study sample may have existed, given the geographical and socio-economic characteristics of the study population. The participants were recruited at local health clinics where free services are available, which are also the only places where the HIV programmes could be accessed. It is further evident from the description of the demographics in the following section that most of the participants were very poor, indicating the study population to be representative of the area. Selection bias was

addressed in the sense that every person who agreed to participate was included if they met the inclusion criteria. All persons who arrived at the health clinics in order to participate in the HIV/AIDS programmes also had to consent to pre- and post-HIV test counselling, and they were then offered the opportunity to participate in the present study.

It may be timely to consider a number of ethical dilemmas posed by the fact that the data was collected by lay counsellors and that the participants were requested to participate in the research by the persons whom they consulted about health issues. Firstly, the fact that the 11 lay counsellors conducted the data collection poses a number of difficulties. Some of the difficulties relate to control over the data collection, which had to be entrusted to someone other than the primary researcher. Control over data collection refers to factors such as data integrity and the manner in which the participants were asked to participate. The researcher could not control these influences directly, but could at least convey these concerns through weekly supervision and the training of the lay counsellors to work in line with the researcher's own strong views on the maintenance of ethical research standards. Due to the nature of the stigma surrounding the diagnosis of HIV in the communities where the research was conducted, it was agreed in consultation with the lay counsellors that the data collection approach adopted was indeed the most appropriate. It should be stated that the lay counsellors maintained high levels of respect within their respective communities, and were well known to the people visiting the municipal health clinics.

A second and equally important factor to consider is the extent to which perceived pressure may have been exercised upon the participants to enrol in the study. This latter factor was discussed rigorously during the training of the lay counsellors, and it was emphasised that the participants could refuse participation or withdraw from the study at any time. Nevertheless, it is necessary to consider the possibility that a number of participants may have agreed to participate not entirely because of their own internal desire to be a part of scientific study. The

fact that the lay counsellors were paid for the completed data collections adds to concerns regarding to what extent pressure to participate was exercised upon potential participants, even though such possible pressure may have been exercised inadvertently.

Both these concerns, namely about data being collected by someone other than the primary researcher and possible pressure to participate being exercised, reflect heavily on the trust that the researcher had in the lay counsellors. This latter fact pays testimony to the close, collaborative and mutually enriching and beneficial relationship that developed between the lay counsellors and the researcher during the time of the study.

5.2.2 Demographics

The sample consisted of 109 single-parent families from the Helderberg Metropole of the Western Cape Province, South Africa. Note that all the figures give the frequency, followed by the percentage. For some of the variables the frequencies do not add up to 109 due to incomplete demographic data. The families mostly had a lower socioeconomic status and were fairly evenly distributed throughout the Helderberg area, as shown in Figure 5.

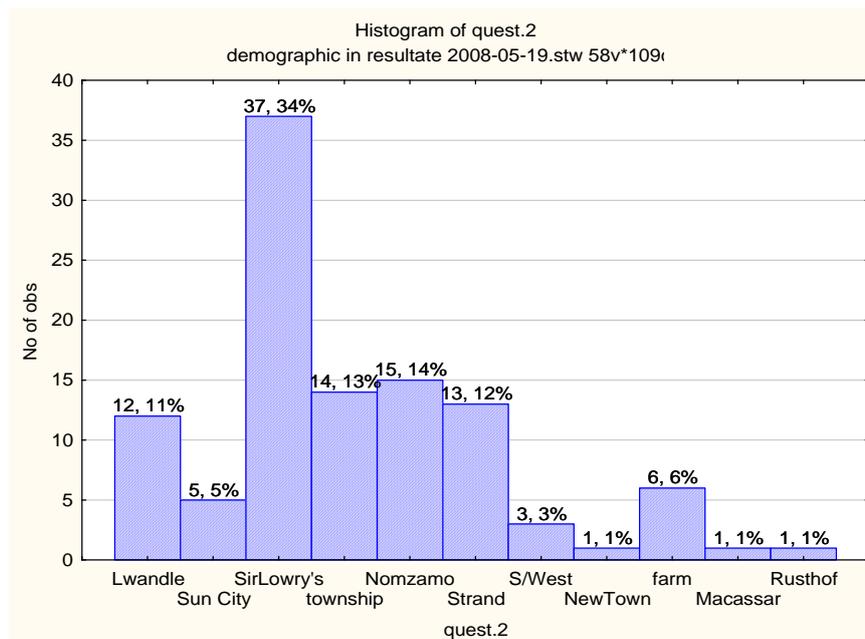


Figure 5. Suburb and township representation of the participants (n = 108).

The racial distribution was 80 black families (74%) and 28 coloured families (26%). The number of family members ranged from two to ten, with most families having four or three members, as can be seen in Figure 6.

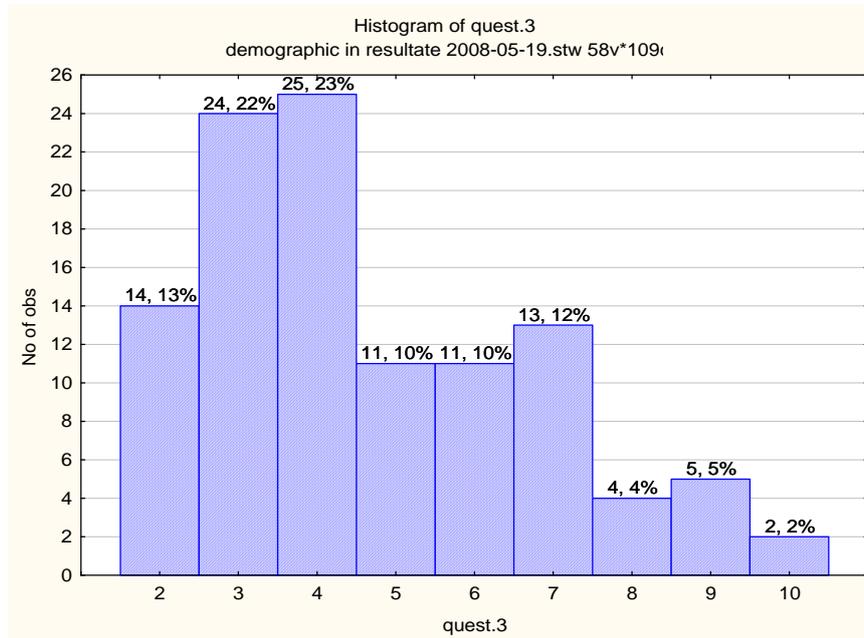


Figure 6. Number of family members per family (N = 109).

The distribution of family income is shown in Figure 7.

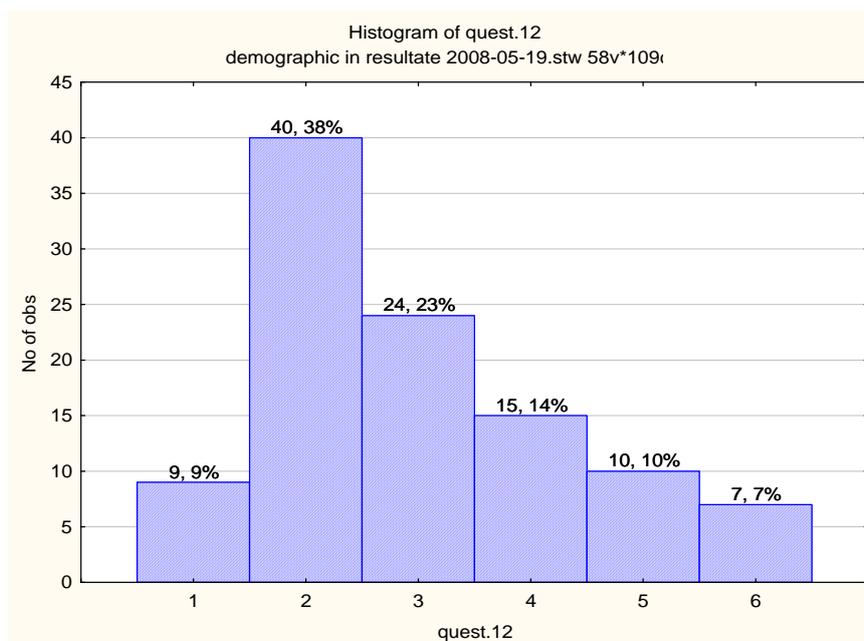


Figure 7. Family income distribution (n = 105) in R500 incremental levels, ranging from less than R500 per month in level 1 to more than R2 500 (level 6).

According to Figure 7, the monthly average household income ranged from less than R500 to more than R2 500, with the highest frequency found in the R500 to R1 000 bracket. This distribution includes the 70 parents (64%) that were employed.

The age distribution of the adults is shown in Figure 8, illustrating a mean age of 38.98 years (range 21 to 74 years; SD = 11 years). The children that took part in the project had a mean age of 16.29 years (range 6 to 30 years; SD = 5.9 years). Their age distribution is shown in Figure 9.

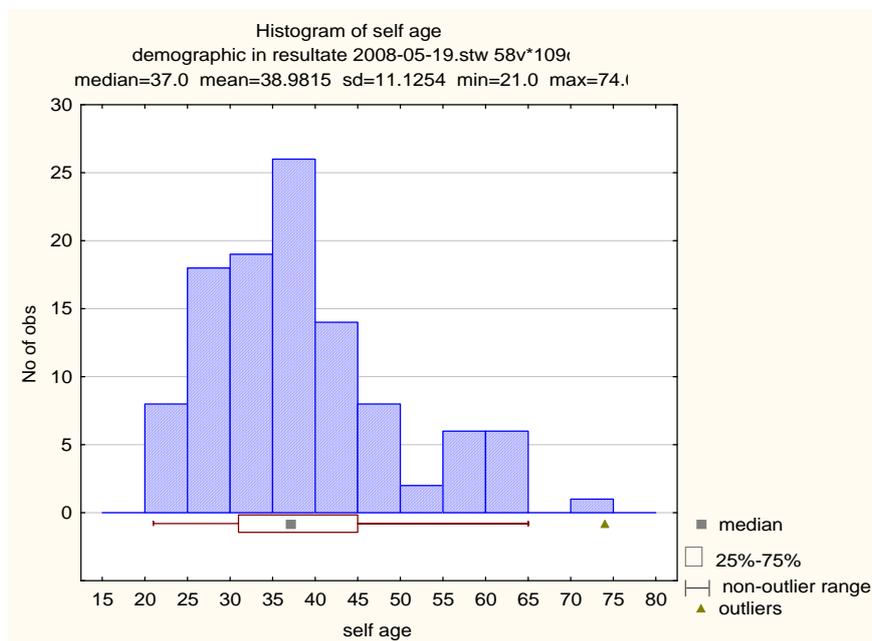


Figure 8. Age distribution of adults (n = 108).

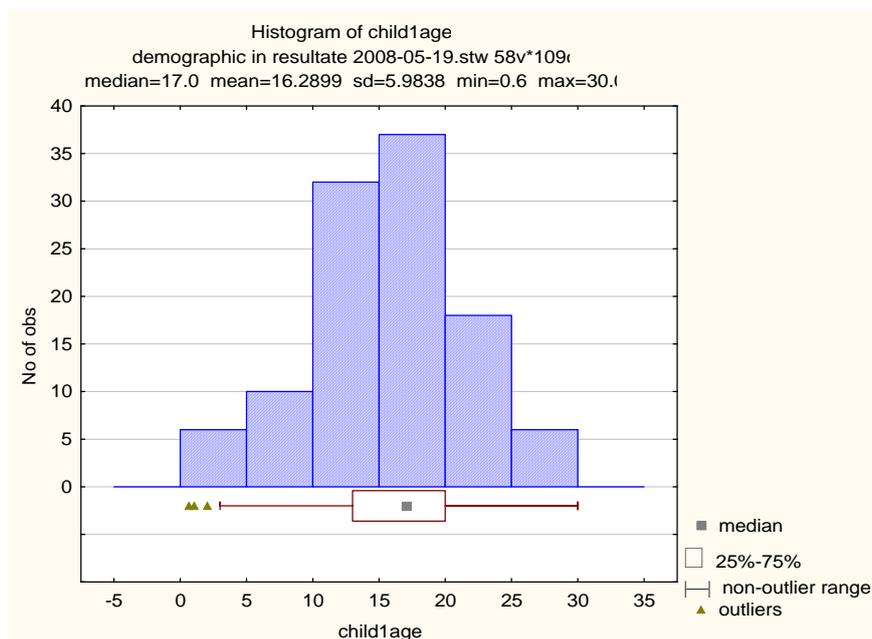


Figure 9. Age distribution of participating children (N = 109).

Of the parents, 80% (n = 87) were female, while 55% (n = 60) of the children were female.

The parent's HIV status is shown in Figure 10 and that of children in Figure 11.

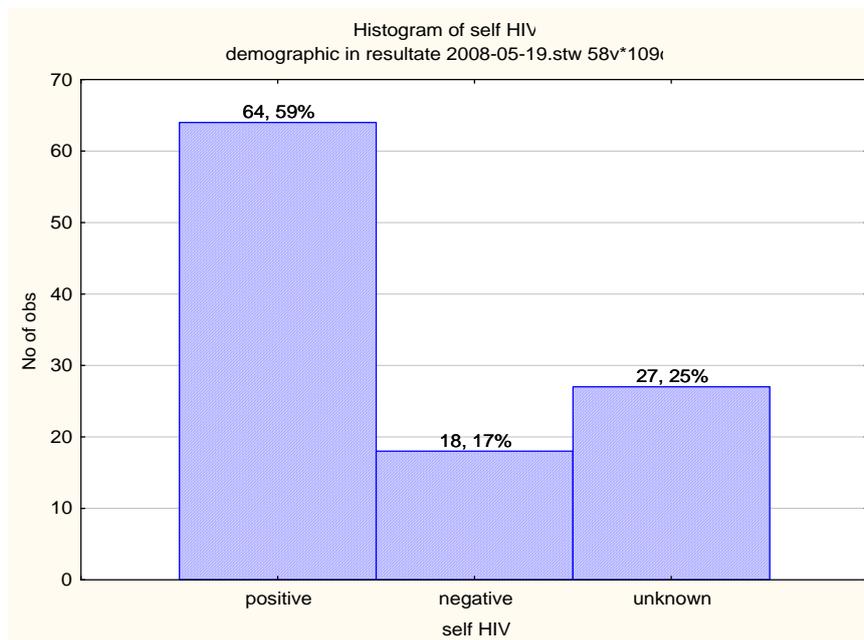


Figure 10. HIV status of parents (N = 109).

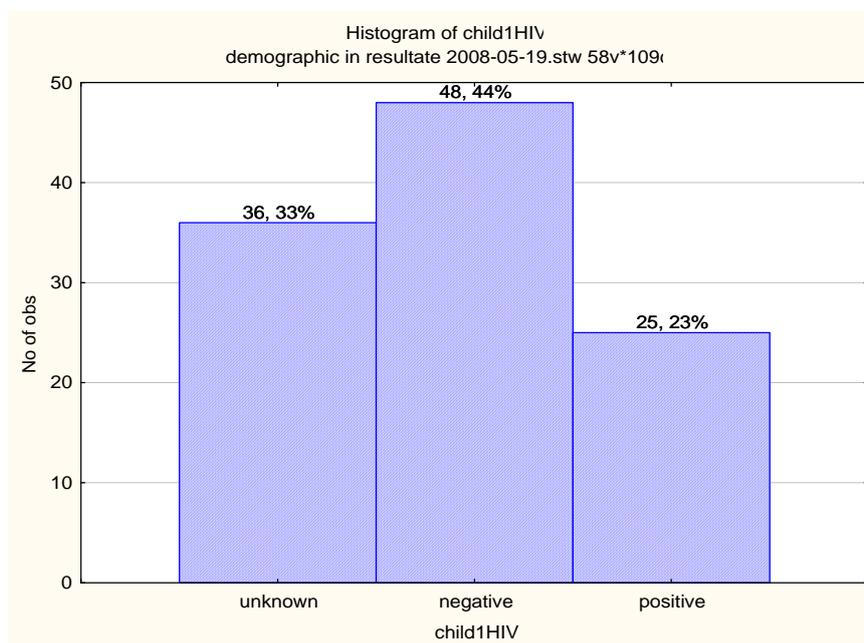


Figure 11. HIV status of children (N = 109).

It may be of interest to note the different single-parent family types, as was discussed in Chapter 2 (see Section 2.4.4.2 - types of single parents). The different single-parent family types represented in the current study are shown in Figure 12.

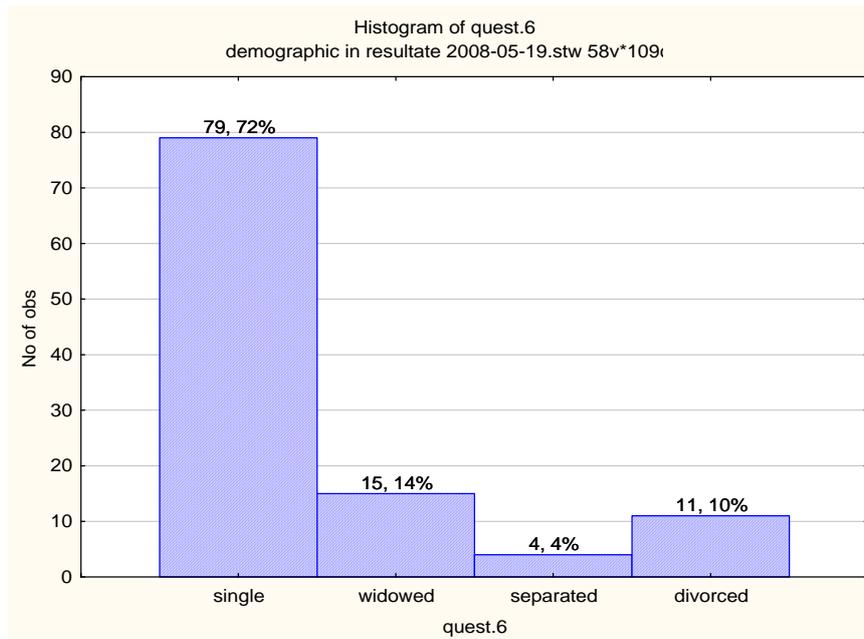


Figure 12. Single-parent family types in current study (N = 109).

The parent's level of education is presented in Figure 13.

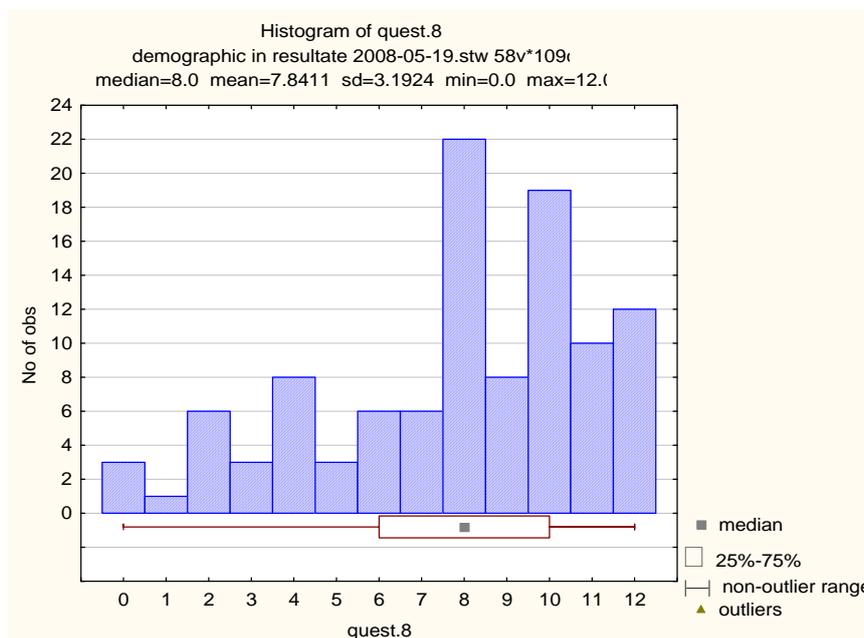


Figure 13. Parent's level of schooling.

It can be seen in Figure 13 that none of the parents had completed post-school programmes and that most of the parents had not finished 12 years of formal schooling. Four parents indicated that they had received some other form of training and/or qualification.

The demographic characteristics of the extended family members that made up the families who participated in the present study are shown in Table 2. Note that the table shows the characteristics of a second, third and fourth adult, as well as a second to fifth child. It is further described in terms of the number of black participants only, as by implication the rest were coloured. For instance, in the case where 78 families had a second adult living in the household, 70% were black and, by implication, 30% of the 78 were coloured. Gender should be read in much the same manner. In order to contribute to the interesting family variables, average ages with ranges and standard deviations are shown. It is interesting to note, for instance, that families described the ages of the third adult as ranging from age 12 to 82 years.

Table 2

Extended Family Compositions Inclusive of Number of Others Infected with HIV

	n	Black	Male	age (mean, range, SD)	HIV+ (n)	HIV-	Unknown
2 nd adult	78	70%	51%	40; 18-80; 12.44	38% (30)	35% (27)	27% (21)
3 rd adult	39	67%	41%	35; 12-82; 13.81	33% (13)	31% (12)	36% (14)
4 th adult	15	67%	20%	28; 21-42; 5.92	33% (5)	20% (3)	47% (7)
2 nd child	72	68%	51%	12; .5-25; 6.11	11% (8)	32% (23)	57% (41)
3 rd child	42	63%	57%	11; .5-25; 6.59	5% (2)	26% (11)	69% (29)
4 th child	29	61%	66%	8; 1-23; 6.66	17% (5)	21% (6)	62% (18)
5 th child	15	67%	60%	6; .3-30; 7.74	13% (2)	13% (2)	73% (11)

The family descriptions in Table 2 show interesting demographic, data particularly with reference to the extended level of HIV infection in the families. In some families, more than one member had been diagnosed with HIV. It may also be noted, for instance, that in the case of adults quite a high number of second or third adults living in the same household had been diagnosed with HIV, and that HIV was diagnosed at all levels of the families. This data highlights the phenomenal spread of HIV, as well as the extent of the stressor –it is not merely a minor setback for families to deal with. In the present study, the effect of who or how many members were diagnosed with HIV/AIDS on the level of family functioning was not investigated, and this may offer an area for future investigation. The focus of the present

study remains the manner in which families cope with adversity (including the family perception of the stressor as related to the Resiliency Model of McCubbin and McCubbin, 1996), and not the level of particular stressors.

The relationship of a second adult living in the family home with the adult representing the family in the study was usually described as either a boyfriend, sibling or parent, as is shown in Figure 14. Note, however, that in the present study families were considered single-parent families even when there were relationships with someone such as a boyfriend who cohabited with the family. This inclusion criterion allowed families that were not married but considered themselves as single-parent families to be included in the study. In the interest of clarifying the nature of family composition further, the descriptions of the family member will be described as follows. A third and fourth adult were usually either a sibling or child. In families with more than one child, the second child was usually described as being either another child (76%) or grandchild (13%). A third child was mostly described as a child (57%) or grandchild in 26% of the cases, and a fourth child as a grandchild in 52% of cases and as a child in 41% of cases. In the case of a fifth child in the family, the child was described as a grandchild in 67% of cases and as a child in 27% of cases.

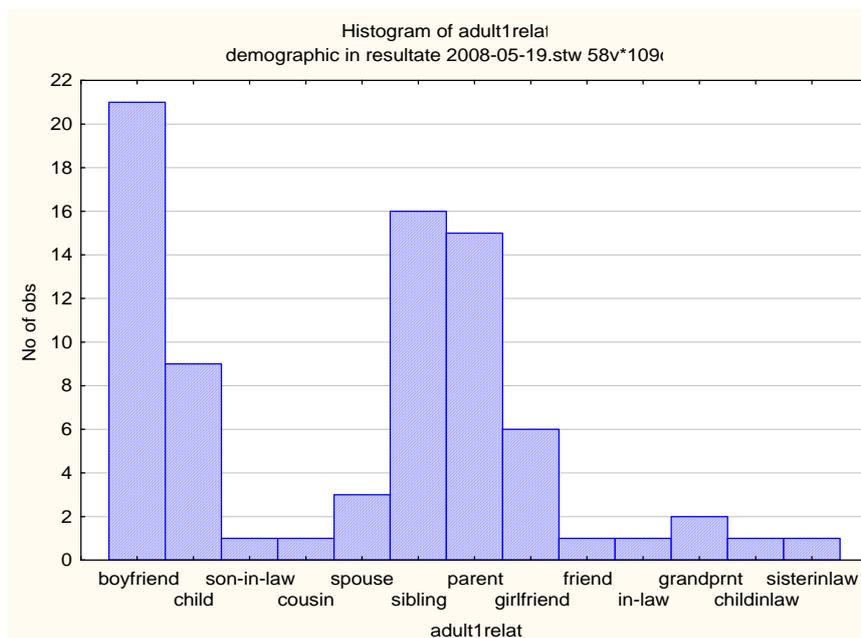


Figure 14. Relationship of a second adult living with the family to the adult representing the family.

5.3 Measures

In the current investigation, both quantitative and qualitative measures were used and they will be discussed in the following sections.

5.3.1 Quantitative measures

Single-parent families affected by HIV/AIDS in the Helderberg Metropole of the Western Cape, South Africa, most of whom were from the lower socioeconomic strata, were evaluated quantitatively to determine factors that contribute to successful family adaptation. In order to measure demographic and other variables, a biographical questionnaire and five questionnaires derived from the Resiliency Model of McCubbin and McCubbin (1996), the theoretical model upon which the current investigation is built, were used. In keeping with the research question, namely which factors correlate significantly with family adaptation as an indication of family resilience, the Family Attachment and Changeability Index 8 (FACI8) was used as a measure of family adaptation, the dependent variable in the current investigation. Independent variables were measured with the Social Support Index (SSI), the Family Hardiness Index (FHI), the Family Crisis Oriented Personal Evaluation Scales (F-COPES) and the Family Problem Solving Communication Scales (FPSC). What follows is a description of the measurement instruments used.

Demographic and socioeconomic variables, such as family composition, marital status, employment, HIV status, educational level and family income, were determined with a *biographical questionnaire*. A question using a 10-point Likert-type measure to give an indication of the severity of the shock experienced by the family, with 1 indicating no shock and 10 being a big shock; was added to the biographical questionnaire. Questionnaires were translated into Afrikaans, using the method of translation and back-translation in order to ensure the appropriateness of the terms and language used. Where needed, for instance when

a participant could not read, the counsellors slowly and clearly read the items and helped the participants to complete the questionnaires.

Due to the complexity of the family resilience construct, and in keeping with the theoretical model upon which the current investigation is built (Resiliency Model), family resilience per se was not measured directly. The current investigation aimed to determine factors (independent variables) that correlate significantly with high levels of family adaptation (dependent variable) as an indication of the presence of resilience factors that, consistent with the theory, are associated with successful adaptation to adversity (Greeff & Aspelung, 2007; Jonker & Greeff, 2009).

The dependent variable, family adaptation, was measured with the *Family Attachment and Changeability Index 8* (FACI8, McCubbin, Thompson & Elver, 1996), an ethnically sensitive instrument. The FACI8 consists of 16 items. A six-point Likert-type scale (Never = 1, Sometimes = 2, Half the time = 3, More than half = 4, Always = 5, Not applicable = 6) was used to determine how often an event occurs. Example items include “1. In our family it is easy for everyone to express his/her opinion” and “7. We have difficulty thinking of things to do as a family”. The 16 items are divided into two subscales, Attachment and Changeability, of eight items each. Attachment measures the family members’ attachment to each other. Changeability measures the flexibility of the family members’ relationships with one another. The two subscales may be used separately or in combination. In the current investigation, the combined score was used as a measure of family adaptation. McCubbin, Thompson and Elver (1996) reported a low intercorrelation of .13, noting that the variables are not assumed to be curvilinear. This is particularly important, in that the FACI8 was developed from the earlier Family Adaptability and Cohesion Evaluation Scales (FACES) of Olson and his co-workers (McCubbin, Thompson, & Elver, 1996). FACES was criticised in the literature particularly for its assumption of the curvilinearity of variables. The authors reported internal reliability

measures (Cronbach's alpha) for both youth (Attachment Scale = .73 and Changeability Scale = .80) and parents (Attachment Scale = .75 and Changeability Scale = .78). Validity was evaluated using chi-square analysis and two measures of success (programme completion and post-treatment living situation after three and twelve months). Statistically significant ($p < .01$) validity measures were reported for both the parents and youth. Test-retest reliability measures were reported for the youth (Attachment Scale = .32 and Changeability Scale = .26) and the parents (Attachment Scale = .48 and Changeability Scale = .48) (McCubbin, Thompson, & Elver, 1996).

The *Social Support Index* (SSI, McCubbin, Patterson & Glynn, 1996) was designed to measure family views of the availability of community support and of the family use of such support. The SSI has 17 items, which are rated on a five-point Likert scale of agreement, ranging from "strongly disagree" to "strongly agree". Sample items include "6. People can depend on each other in this community" and "17. Member(s) of my family do not seem to understand me; I feel taken for granted". The internal reliability (Cronbach's alpha) is .82. McCubbin *et al.* reported a validity coefficient of .40 with family well-being. The authors reported a number of studies that positively supported the validity of the hypothesis of the construct social support being an important aspect of family resiliency.

The *Family Hardiness Index* (FHI, McCubbin, McCubbin & Thompson, 1996a) measures hardiness in a family context as a resilience factor, with hardiness being viewed as cognitive and behavioural aspects associated with high levels of stress resistance. Hardiness refers to a sense of control over the outcomes of life events and hardships, as well as an active rather than passive orientation in adjusting to and managing stressful situations (McCubbin, McCubbin, & Thompson, 1996a). The FHI consists of 20 items that aim to measure the characteristics of hardiness as a stress-resistant and adaptational resource in families. Hardiness acts as a moderating factor in mitigating the effects of stressors and demands, and

facilitates adjustment and adaptation over time (McCubbin, McCubbin, & Thompson, 1996a). The FHI consists of three subscales (commitment, challenge and control), which require participants to assess on a four-point Likert rating scale the degree (False, Mostly false, Mostly true, True, or Not applicable) to which each statement describes their current family situation. The Commitment subscale measures the family's sense of internal strengths, dependability and ability to work together. The Challenge subscale measures the family's efforts to be innovative and active, to experience new things and to learn. The Control subscale measures the family's sense of being in control of family life rather than being shaped by outside events and circumstances. Items of the FHI include "7. While we don't always agree, we can count on each other to stand by us in times of need" and "18. We work together to solve problems". The internal reliability (Cronbach's alpha) of the FHI is .82, and the validity coefficients range from .20 to .23 with criterion indices of family satisfaction, time and routines, and flexibility (McCubbin, McCubbin, & Thompson, 1996a).

The *Family Crisis Oriented Personal Evaluation Scales* (F-COPES, McCubbin, Olson, & Larsen, 1996) identifies family problem-solving and behavioural strategies utilised by families in crisis situations. The F-COPES focuses on two levels of interaction; firstly, the individual to family system (the way in which the family manages crises and problems internally amongst family members) and, secondly, the family to social environment (the way in which the family manages problems outside its boundaries, but that still have an influence on the family as a unit) (McCubbin, Olson, & Larsen, 1996). The F-COPES consists of 30 Likert-type items divided into five scales derived from the family coping literature. High scores are an indication of effective, positive coping behaviour. Sample items include "When we face problems or difficulties in our family, we respond by: 1. Sharing our difficulties with relatives" and "21. Seeking professional counselling and help for family difficulties. The scale consists of five subscales, which are again divided into two dimensions, namely (1) internal family coping strategies, and (2) external family coping strategies. Internal family coping

strategies define the way in which crises are managed by using support resources inside the nuclear family system. External strategies refer to the active behaviour that a family adopts to elicit support resources outside the nuclear family system (McCubbin, Olson, & Larsen, 1996). Internal coping strategies are (1) reformulating or redefining the problem in terms of the meaning it has for the family (positive, negative, or neutral) (Cronbach's alpha = .64) and (2) passive appraisal – the family's tendency to do nothing about crisis situations. This avoidance response is based on a lack of confidence in own potential to change the outcome (Cronbach's alpha = .66). The external family coping strategies described by McCubbin, Olson and Larsen (1996) are (1) using social support, for example friends (Cronbach's alpha = .74), family members (Cronbach's alpha = .86) and neighbours (Cronbach's alpha = .79), (2) the search for religious support (Cronbach's alpha = .87) and (3) the mobilisation of the family to get and accept help (for example professional help and the use of community resources) (Cronbach's alpha = .70). A test-retest reliability coefficient of .71 was obtained after five weeks and an internal reliability coefficient (Cronbach's alpha) of .77 for the total scale (McCubbin, Olson, & Larsen, 1996). The construct validity of the questionnaire was proved with a factor analysis and a varimax rotation of the axes. Five factors were isolated with the items' factor loadings between .36 and .74. All five factors had Eigen values larger than one (McCubbin *et al.*).

The *Family Problem Solving Communication* scale (FPSC, McCubbin, McCubbin & Thompson, 1996b) measures two main patterns (positive and negative) of communication that families use in dealing with stressful situations. The FPSC was developed specifically for research into family stress and resilience and to measure the problem-solving and coping (PSC) part of the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin & McCubbin, 1996). It is assumed that quality of communication indicates to what extent family functioning, adjustment and adaptation are experienced as satisfactory. The ten items use a four-point Likert scale (False, Mostly False, Mostly True and True) and are divided into

two subscales representing the main forms of communication referred to, namely Incendiary communication and Affirming communication. Incendiary communication refers to types of communication that worsen stressful situations, for example Item 1, “We yell and scream at each other”. Affirming communication refers to supportive, caring and calming types of communication, as measured by Item 3, “We talk things through till we reach a solution”. McCubbin, McCubbin and Thompson (1996b) reported the alpha reliability for the whole index as .78, and the test-retest reliability is reported to be .86. Multiple studies reported by the authors, including some ethnic studies, support the validity of the FPSC.

The reliability coefficients for the measuring instruments were calculated (Cronbach’s alpha) using the data sets of the participants. The coefficients are reported in Table 3.

Table 3

Reliability Coefficients of Measuring Instruments in Terms of this Study

Measuring instrument	Parents (N = 109)			Children (N = 109)		
	M	SD	\bar{A}	M	SD	\bar{A}
Family Attachment and Changeability						
Index 8 (FACI8)						
Attachment	13.79	6.40	.78	14.03	6.73	.81
Changeability	25.84	8.32	.88	26.00	8.02	.85
Total scale FACI8			.58			.55
Family Hardiness Index						
Challenge	15.01	4.10	.52	14.57	3.97	.49
Control	.23	4.19	.45	.29	4.20	.44
Commitment	23.44	4.24	.47	23.56	4.40	.52
Total scale FHI	38.53	9.03	.53	38.40	8.95	.51
Social Support	Guttman =		.76	Guttman =		.73
Family Crisis Oriented Personal Evaluation Scale (F-COPES)						
Mobilising	14.75	3.27	.36	14.65	3.43	.46
Passive appraisal	12.18	3.29	.51	12.08	3.28	.48
Reframing	27.32	5.44	.68	27.28	5.37	.65
Acquiring social support	28.33	9.71	.88	28.99	9.39	.87
Seeking spiritual support	14.63	3.55	.57	14.53	3.59	.57
Family Problem Solving Scale (FPSC)						
Affirming	9.55	3.20	.50	9.71	3.43	.59
Incendiary	5.16	3.81	.65	4.91	3.71	.66
Total scale FPSC			.69			.67

Note. \bar{A} = Cronbach's alpha

Guttman = Guttman split-half reliability coefficient

In consultation with a senior statistician at the Centre for Statistical Analysis at Stellenbosch University, it was decided that a coefficient of .6 and higher may be interpreted as indicating that the results from measuring instruments on the population of the current investigation were reliable. The reliability coefficients for FACI8 (for measuring the dependent variable)

indicate that the total scale, as well as the subscales, is reliable for both parents and children. The reliability coefficients for the independent variable Family hardiness, for both the parents and the children, need to be interpreted with caution. The reliability coefficients for the independent variable Social support indicate reliable measures for both parents and children. The reliability coefficients for only two scales of the F-COPES, Reframing and Acquiring social support, indicate reliable results for both the parents and the children. Note that the reliability coefficients for all the subscales of the F-COPES are similar for both parents and children. The reliability coefficients for the FPSC indicate that the results of the measure for the incendiary types of communication and the total scale scores are reliable for both the parents and children.

The reported reliability coefficients will guide the interpretation of the results of the present investigation, reported on in Chapter 6 and discussed in Chapter 7.

5.3.2 Qualitative measure

An open-ended question asking about how the family coped with the news of a family member diagnosed with HIV formed the qualitative part of the investigation. The participants were requested to answer the question: “In your own words, what are the most important factors or strengths that helped your family through this stressful period?” The question was posed before the questionnaires were completed in order to control for contamination of the data due to the nature of the content of the questionnaires and to facilitate the discovery of possible “new” information regarding coping with adversity.

5.4 Procedures

It was decided that the 11 lay counsellors of the Helderberg AIDS Centre in Somerset West, South Africa would do the *data collection*. The reasons were that the lay counsellors have all been trained in counselling procedures, maintain a high visibility in the communities, have good access to the identified communities, enjoy a high level of trust in the communities and

all agreed to be a part of the research project. In return for their services, the current investigator offered free weekly workshops for the lay counsellors on various issues pertaining to work with HIV+ people, stress management, team building and conflict management. The Strand municipal library, which forms part of the Helderberg Metropole library services (inclusive of Somerset West, Macassar, Strand and Gordon's Bay), offered the free use of their facilities for this purpose. The lay counsellors were trained to interview and administer the questionnaires to families who met the inclusion criteria and who had consented to participate. Confidentiality and anonymity were maintained rigorously at all times.

After a visit to one of the seven council health clinics in the Helderberg Metropole, Somerset West, South Africa during which a responsible adult agreed to participate in the study, an appointment was scheduled at the clinic. In the follow-up appointment, the adult brought a child along in order to complete the questionnaires and respond to the qualitative question. A semi-structured interview was conducted during this meeting, written notes were taken and the questionnaires were completed by both family members in the company of the counsellor in a private office. The participants were encouraged to clarify any uncertainties relating to the questionnaires. In the event of a participant not being able to read or write, the counsellor slowly and clearly read the questions and helped the participant to make the appropriate choices. Initial low response rates were addressed by offering payment to the counsellors for completed data sets, after which participation rates increased.

Two research assistants were appointed to complete the data-collection procedures on behalf of the researcher. The research assistants distributed and collected the questionnaires and arranged for the payment of the lay counsellors. After collating and rigorously ascertaining that the questionnaires were filled in accurately and completely, the raw data was typed into an Excel database for statistical analyses.

5.5 Data analyses

5.5.1 Analysis of quantitative data

The statistical analyses were done with STATISTICA 7.1 (Statsoft, Inc., 2006) by a senior statistician at the Centre for Statistical Analysis at Stellenbosch University. Pearson's correlations were computed between the independent variables and the dependent variable *family adaptation*, except in the case of the independent variable employment status, for which ANOVAs were computed due to the variable being a categorical one. Multiple regression analysis was performed on the data in order to determine the nature of the relationships between multiple independent variables and the single dependent variable, family adaptation. A best subsets regression analysis was performed. Regression models were constructed for all combinations of predictor variables. From these models the "best" model was selected by inspecting the R-squared value together with the number of predictors included. The interpretive system used throughout the present study for the interpretation of significant correlations was a significance level of 5% ($p < .05$). The results are reported in Chapter 6.

5.5.2 Analysis of qualitative data

Pope, Ziebland and Mays (2000) indicated that analysing qualitative data is not simple, nor quick, that it is time consuming and labour-intensive, needs to be done properly and needs to be systematic and rigorous. According to Strauss and Corbin (1998), qualitative research is an important step in theory building and, through careful scrutiny of data, new concepts and novel relationships will be uncovered through the use of the *open coding technique* (the development of which the authors have been accredited with). This technique was used in the current study and incorporates procedures such as conceptualising, abstracting and discovering categories and phenomena. The authors expect analysts to use the procedures flexibly and as an extension of their own abilities.

Strauss and Corbin (1994) proposed qualitative research due to the philosophical view of a “universe where nothing is strictly determined” (p. 280), where a measure of reciprocal shaping shows the purity of the data contaminated or influenced by the presence of the observer. This comment relates to keeping an open mind when posing a question such as in the current study where it was asked of participants to describe in their own words what they thought helped them to cope. It further relates to the use of the qualitative question about what helped the family cope before the quantitative measures were used. This was done to obtain “pure” information, uncontaminated by prior knowledge and learning about resilience through exposure to and completion of questionnaires. Strauss and Corbin (1994) described their method as one of constant questioning and provisionality of hypotheses. The grounded theory method of Strauss and Corbin (1994, 1998) is practically used by careful scrutiny and reading of each sentence written or spoken by participants. The comments of participants of the current study were carefully read and analysed to define emerging resilience themes. The identified themes were developed incorporating Pope *et al.* (2000)’s framework of five stages of data analysis using the grounded theory method, including *familiarisation* with the raw data, *identifying themes*, *indexing*, *charting* and finally *mapping and interpretation*. Tolich and Davidson (1999) suggested practical approaches, including that the investigator compare and paraphrase incessantly, rename thematic files continually and integrate quotes smoothly into the text; which guided the analysis and the manner in which the results of the qualitative analysis were reported in the current study.

The use of the grounded theory method developed a deeper understanding of what families perceived to be factors that helped them cope with the news of a family member diagnosed positively for HIV/AIDS. Each comment was carefully and meticulously read and contemplated in order to uncover emerging themes. After the initial noting of emerging themes, further refining was done and two further sets of themes were developed until it was found that further perusal and contemplation merely led to a circularity of theme

development, rendering predictable results. In keeping with the recommendations of Pope *et al.* (2000), Strauss and Corbin (1994, 1998) and Tolich and Davidson (1999), further work with the themes was ceased.

Practical use of the grounded theory method in the present study included that the researcher, with the assistance of assistants, typed each response into MSWord files. This was done in order to store the data electronically and to enable copying and pasting of parts of comments into new files that essentially formed the new categories of data reduction. The researcher completed the analysis and data reduction as described below in order to facilitate the development of the resilience factors or themes considered important by the study participants. A consideration of epistemology leads to a consideration of the fact that prior knowledge may not be “unknown”. In this regard it remains inevitable that the researcher read the participants’ responses from a perspective of prior knowledge of resilience factors and, as an inevitable consequence, reduced the data to reflect resilience factors that were identified and developed in the literature. Although this latter fact may seem to be a negative appraisal of the qualitative aspect of the present investigation, it does serve the function of bringing theory and practical research findings to form a new and possibly easier way to comprehend the synthesis of the two. In order to become familiar with the data, the researcher read all the responses of all the participants a number of times. Following that, the researcher commenced with the grouping of identified themes that appeared to be representative of resilience factors, or that which appeared to have helped families cope. A first attempt at data reduction led to the reduction of 105 responses to a file containing 67. In keeping with the recommendations of authors such as Pope *et al.* (2000), a more rigorous approach at data reduction was adopted and further perusals of the participant responses lead to a file containing 17 themes. A final rigorous reframing, reformulation and combining of similar themes led to a final reduced data file containing seven themes. The results are reported in Chapter 6.

5.6 Ethical considerations

The participants in the current investigation were entitled to ethical considerations, such as the right to privacy, to anonymity and confidentiality, to give informed consent for participation and not to be harmed physically, emotionally or psychologically (Bless & Higson-Smith, 1995; Huysamen, 1994; Mouton, 2001). The American Psychological Association has published quite extensive guidelines for conducting research in an ethical way (Rosnow & Rosenthal, 1996). With reference to the above guidelines, the names of the participants were not shared with the current investigator, ensuring anonymity. Raw data was kept safe by the current investigator. Only the counsellors who collected the information were aware of the identity of the participants. Participation was voluntary and the participants were entitled to withdraw from the investigation at any time. The survey was conducted at a convenient time and place for the participants, although most preferred this to be done at the council clinics where they received free pre- and post-HIV antibody test counselling. Conducting the interviews at the clinics provided a measure of confidentiality with regard to the stigma associated with HIV/AIDS and the counsellors being associated with involvement in HIV/AIDS programmes in their respective communities. No intervention was offered, as the current investigation is a cross-sectional survey method of research and consequently it was thought that no harm would come to the participants for completing the questionnaires. The counsellors were paid for their efforts for collecting the data and received weekly supervision and mentoring sessions from the researcher, as agreed. The counsellors were trained to gather the data.

Both Huysamen (1994) and Mouton (2001) highlight the ethical responsibility of maintaining integrity with regard to the data being true. This aspect had been controlled for as far as possible, with consideration for reliance on the integrity and honesty of the counsellors who collected the data. It may be noted that the counsellors initially were not paid for their efforts, but had agreed to collect the information in exchange for the mentoring and supervision

received from the author. In keeping with the recommendations of Rosnow and Rosenthal (1996), the counsellors were offered payment for completed data sets in an attempt to address a low participation rate, after which the participation rates increased. Concerning the use of incentives, Singer (2002) says that response rates do not increase at the expense of response quality when incentives are used, and that the practice of incentives has been in use in research for many years. After completion of the questionnaires, the participants were thanked for their contributions.

The preceding section described the method used to investigate family resilience variables in single-parent families affected by HIV/AIDS, inclusive of the cross-sectional survey design, participants, data-collection procedures, processing and analysis and adherence to ethical considerations. The results are reported in Chapter 6.

Chapter 6

Results

Introduction

The results of the qualitative and quantitative investigations of possible resilience factors in South African single-parent families affected by HIV/AIDS are presented in this chapter. One adult and one child represented a family and each participant completed a set of questionnaires. Correspondingly, two sets of data per family were collected during the current investigation, one set representing the parents' perceptions and a second set reflecting the children's perceptions of the level of their family adaptation. The investigation was guided by the Resiliency Model of Family Stress, Adjustment and Adaptation (Resiliency Model) of McCubbin and McCubbin (1996). The results of the statistical analyses of the two sets of data are reported in terms of qualitative and quantitative parameters. It is important to note that the parents' and the children's data are reported separately. The following quantitative results will include reference to correlations between various independent variables representing potential resilience factors and the dependent variable family adaptation. The results of a best subsets multiple regression analysis will also be reported.

6.1 Qualitative results

The results of an analysis of the responses of the parents and children to a question about the most important factors or strengths that helped the family cope with a member diagnosed with HIV are summarised in Table 4. The grounded theory method of Strauss and Corbin (1994, 1998) was used for a qualitative analysis of the parents' and children's responses, a method through which resilience factors could be identified. The resilience factors were identified in a rigorous process of theme identification through a reduction process that included repeated reading of the participants' responses according to grounded theory, until only those themes shown in Table 4 remained as essential ones.

Table 4

Themes from Parents' and Children's Responses to a Qualitative Question Regarding Most Important Factors or Strengths which Helped the Family Through this Stressful Period

Themes	Parents (n = 105)		Children (n = 106)	
	n	%	n	%
Strength (including internal strength, acceptance, family support)	35	33	46	43
Social support (including medical support, education, knowledge (getting and using it), friends, neighbours)	31	30	34	32
Communication (including discussion, no discussion, not disclosing status, disclosing status, fighting)	29	28	26	26
Hope (including future orientation, religion)	23	22	23	22
Denial (including passing time, nothing, don't know, changing behaviour, substance use, happy to be alive)	18	17	17	16
Changing thoughts (including positive attitude, making sense, denial, fatalism, nihilistic, cynical, antagonistic)	19	18	9	8
Material support (including well-being, food, money)	10	10	6	6

From the results in Table 4 it can be seen that the parents ($n = 35$, 33%) and the children ($n = 46$, 43%) viewed strength as the most important factor that helped their families cope with the news of a family member being diagnosed with HIV. Strength or hardiness may be viewed as resistance strength, that aspect of offering an unbending or unyielding quality to the effects of being confronted with stressors. Strength includes responses that may appear as if the person or family is seemingly unaffected by the stressor. Factors such as being committed to each other as a family unit, viewing the crisis as a challenge and that the crisis is not beyond the control of those affected;

contribute to strength in the face of adversity. Comments reflective of internal strength and of representing a strength or hardiness quality include “move thou [meaning moved by the experienced, but then moving on and] accepting it” (parent, family #6), “my parents were already infected so it was not big blow” (child, family #8), “to accept the thing because we can’t change what happen. I love my mother. That all” (child, family #9), and “it is something that you must accept and living positive life in order to survive” (parent, family #8).

It further is evident in Table 4 that both the parents ($n = 31$, 30%) and the children ($n = 34$, 32%) thought social support to be the second most important factor that assisted in their coping ability. Social support includes the availability and use of both social and economic factors. It was found to be reflected in comments such as “it was the support group which is in our clinic and the HIV/AIDS counsellors” (parent, family #25), “it was a program called Soul City” (child, family #145), “it was my family and friends” (parent, family #146) and “family support, empowerment, church” (child, family #60).

The third most important factor considered by the families to be helpful in coping with the news of a family member diagnosed with HIV was communication (28% ($n = 29$) of the parents and 25% ($n = 26$) of the children). In the interpretation of family comments, consideration was given to all types of communication, some helpful and others less so, inclusive of discussion, no discussion, not disclosing status (HIV), disclosing status and fighting. Responses indicating communication as important included “my father and his girlfriend discuss their problem” (child, family #43), “no strength which help my family, we fight till we get the solution, the neighbours help us to understand each other” (parent, family #59), “I was shocked, but we discuss the matter as a family” (parent, family #62) and “when my sister was telling them about my status my mother gave the look I never saw from her, very hateful, angry” (child, family #75).

It is also evident in Table 4 that families felt that hope, including a future orientation and religious ideation, was an important factor that assisted in adaptive coping behaviours. As such, 22% ($n = 23$)

of both the parents and the children ranked hope as the fourth most important resilience factor. Examples of comments from the families that resonated hope and religious beliefs are “we are used to problems, but we have hope that one day there will be a light and we believe in God. To have three HIV+ people at home is the worse thing, but I believe in God” (child, family #2), “because we all believe in Jesus, so everything is much easy for us to accept” (parent, family #9), “they gain strength from me just because I teach them about HIV/AIDS information and how to live positive” (parent, family #31), and “prayer is the most important factor” (child, family #31), “die ding wat maak my gesin sterk, hulle glo van die Bybel en vertrou Here” (child, family #32), “I am so worried because she is not dreaming anymore, she loss hope but we support her as much as we can” (parent, family #104).

The use of denial as a coping strategy, not thinking about the process, including things such as merely passing time, doing nothing, substance abuse or even just considering being happy to be alive, were ranked by both the parents ($n = 18$, 17%) as the sixth and by the children ($n = 17$, 16%) as the fifth in a range of helpful coping strategies. Using denial as coping was reflected in comments such as “nothing” (both parent and child of family #143), and “there are no important factors” (child, family #141). The comments by the parent of family #135 in particular describe the hardship, even futility, in resisting the onslaught:

To know that we are living with HIV+ people in the house was a big shock. It took time for me to accept the news. To had the second HIV+ member I was not even over from the first news. I will never forget the past few months or a year. To live with someone who can die at anytime is the worst pain I don't want anyone to experience it. It is not easy really.

The parents ($n = 19$, 18%) ranked in fifth place and children ($n = 9$, 8%) in sixth place the ability to maintain a positive attitude, to make sense, using denial and being fatalistic (reframing). The parent of family #106 used a coping strategy thought to reflect reframing by stating, “we pretend that we don't know he is HIV positive so that we cannot have the stress”. The child of family #77 used a

reframing technique when stating, “I love my HI virus because of the support I get from my family. They make me to forget that I am HIV+”.

Material support, including well-being, food and money, were considered the least important factor that helped the family cope, mentioned by both the parents ($n = 10$, 10%) and the children ($n = 6$, 6%). The plight and perhaps even sadness of the situation of having a family member diagnosed with HIV is reflected in an almost naive response by the child of family #70: “My familie se liefde, bystand, verstandhouding. Hulle is altyd daar wanneer ek hulle nodig het. Hulle het vir my nuwe skool klere gekoop en skoene en ‘n rugsak en ek kry baie kos”. Although considered the least important coping factor, a comment such as the preceding highlights the reality of poor families affected by a chronic fatal illness and perhaps brings about a notion of universality of human suffering and experience that is indiscriminate in terms of class. The parent of family #49 wrote that “As long as we have something to eat everyday we are happy”, indicating a slightly different appreciation of the importance of material support to what was written by the parent of family #50, who said, “I have money so what”.

6.2 Quantitative results

The results obtained with the Family Attachment and Changeability Index 8 (FACI8) were used as a measure of the dependent variable, family adaptation. A number of independent variables were measured in a biographical questionnaire. These were family size, employment status, level of education, family income and measure of shock. Further independent variables were measured using questionnaires designed specifically in accordance with the Resiliency Model. These independent variables were family hardiness (Family Hardiness Index, FHI), social support (Social Support Index, SSI), five ways of coping, using the Family Crisis Oriented Personal Evaluation Scales (F-COPES) (acquiring social support, reframing, seeking spiritual support, mobilising and passive appraisal), and family problem-solving communication (FPSC) (affirming and incendiary). Using the statistical package STATISTICA 7.1 (Statsoft, Inc., 2006), Pearson’s correlations were calculated between the dependent variable *family adaptation*, and the independent variables

mentioned. Due to the independent variable, employment status, being a categorical one, ANOVAs were computed. The correlations of the independent variables with the dependent variable for both the parents and the children are reported in Section 6.2.

6.2.1 Correlations between dependent and independent variables

Graphical representations or scatterplots of correlations between the dependent variable family adaptation and a number of independent variables that are of relevance and interest are shown in the following figures. It was decided to include visual representations of the identified relationships between variables in order to facilitate an improved view of the direction of the relationships. This is accomplished by a regression line that is drawn across the data points. A line that slopes upwards from left to right indicates a positive correlation, a line that slopes down from left to right indicates a negative correlation, and a line that shows no slope usually indicates that there is no relationship between the variables. Figure 15 shows the relationship between the steeling resistance offered (family hardiness) and the parents' views of family adaptation.

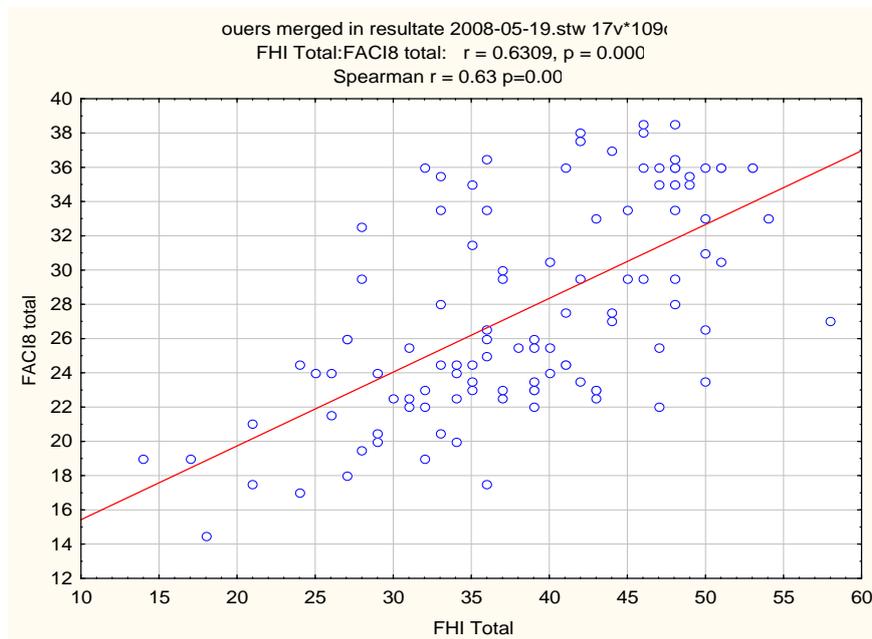


Figure 15. Scatterplot of the relationship between the resistance to challenge the stressor (FHI Total score) and family adaptation (FACI8 Total score).

Figure 16 shows the relationship between the availability of community social support and family adaptation.

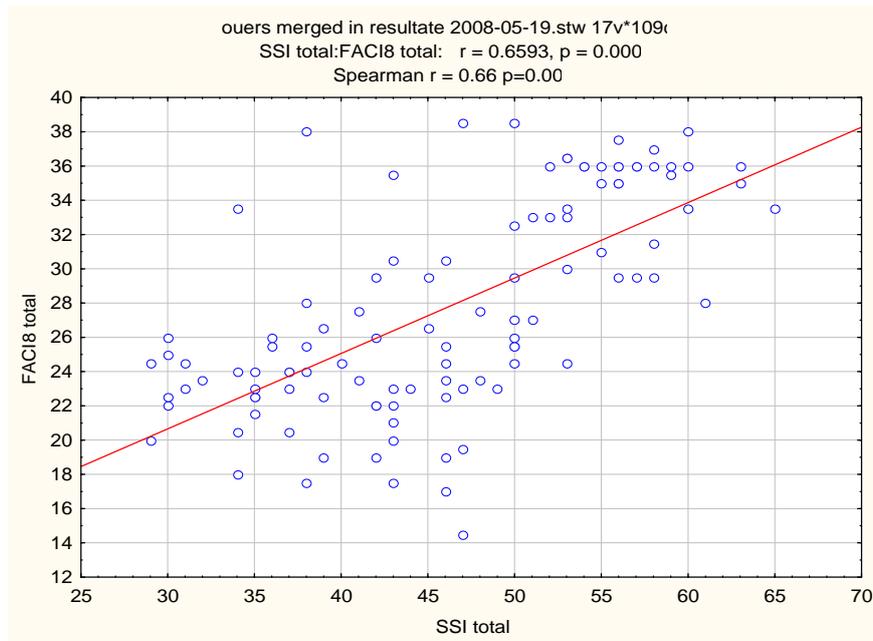


Figure 16. Scatterplot showing the relationship between the parents' views of the availability of community social support (SSI Total score) and family adaptation (FACI8 Total score).

Figure 17 shows the relationship between actively seeking out the available social support and the level of family adaptation.

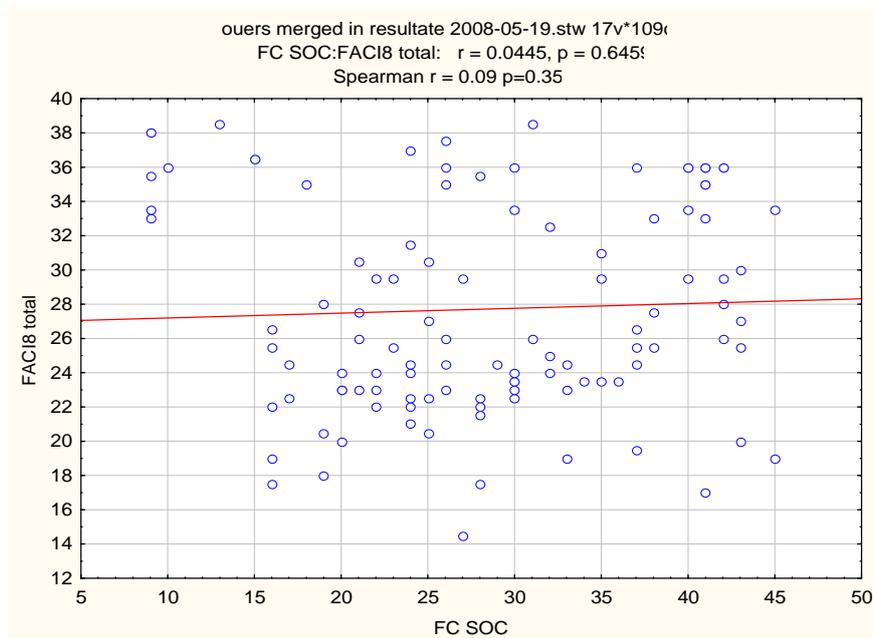


Figure 17. Scatterplot showing the relationship between the parents' views of actively seeking community social support (F-COPES - Acquiring social support) and family adaptation (FACI8 Total score).

The relationship between passive acceptance of a crisis situation and family adaptation is shown in Figure 18.

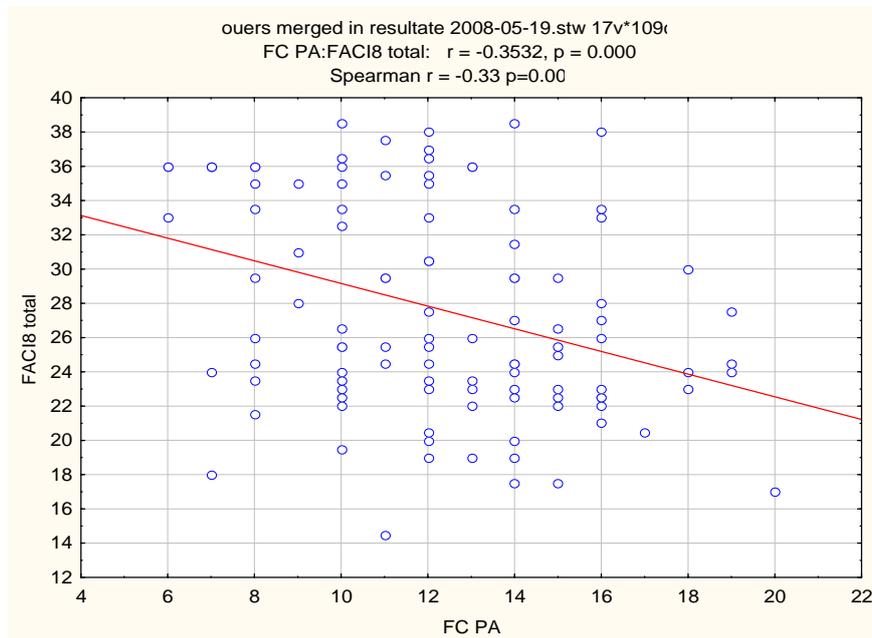


Figure 18. Scatterplot showing the relationship between passive appraisal (F-COPES - Passive appraisal) and family adaptation (FACI8 Total score).

Figure 19 shows the relationship between inflaming types of communication that tend to make the situation worse and family adaptation.

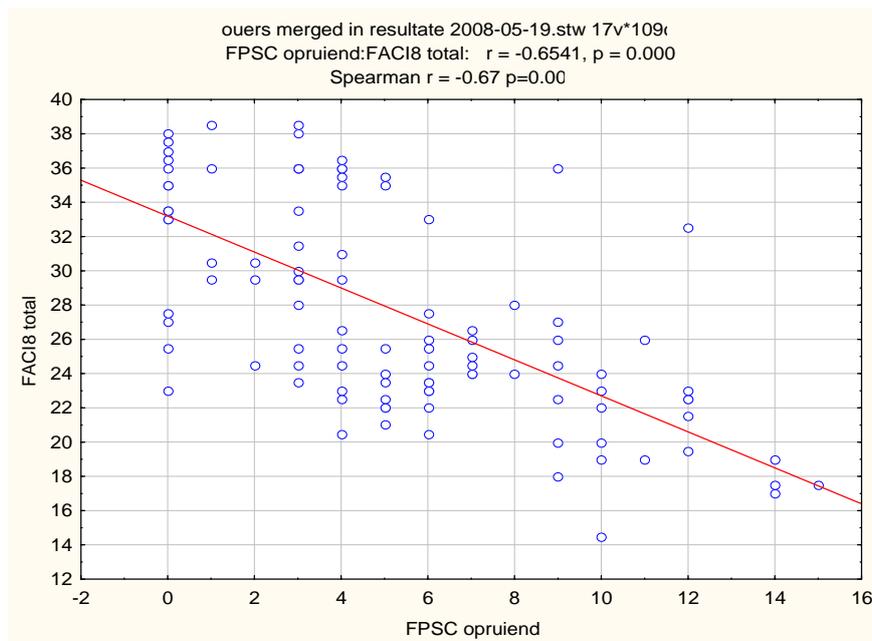


Figure 19. Scatterplot showing the relationship between inflaming communication styles (FPSC – Incendiary communication) and family adaptation (FACI8 Total score).

The number of family members was shown to correlate significantly with the parents' views of family adaptation, as shown in Table 5. In Figure 20, the linear relationship between the number of family members and the parents' views of family adaptation can clearly be seen as a tendency for family adaptation to increase with the number of family members. The relationship, although significant, is not a strong one.

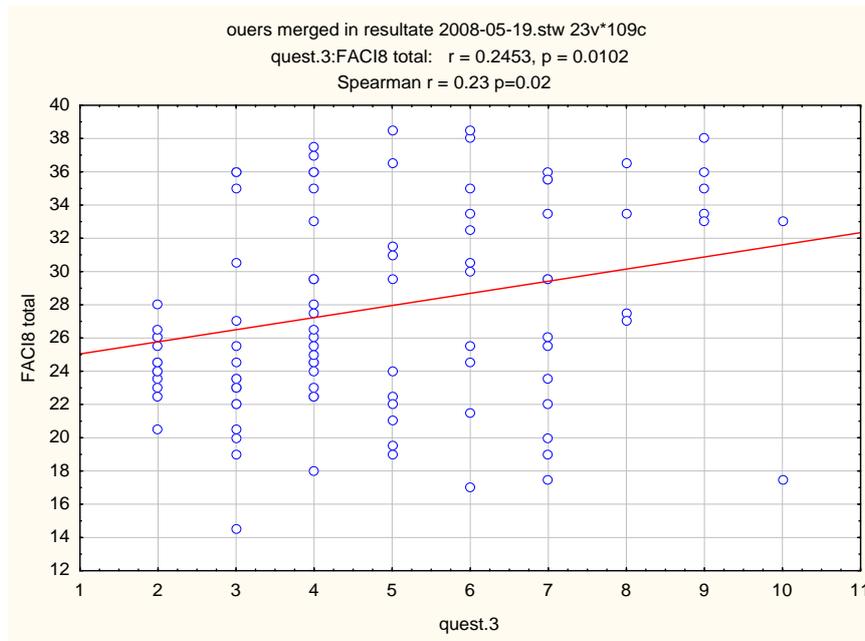


Figure 20. Scatterplot showing the relationship between the number of family members and the parents' views of family adaptation (FACI8 Total score).

Although family income did not correlate significantly with family adaptation, the correlation was close to being significant according to the parents' data (see Table 5) and does show a positive direction, as shown in Figure 21.

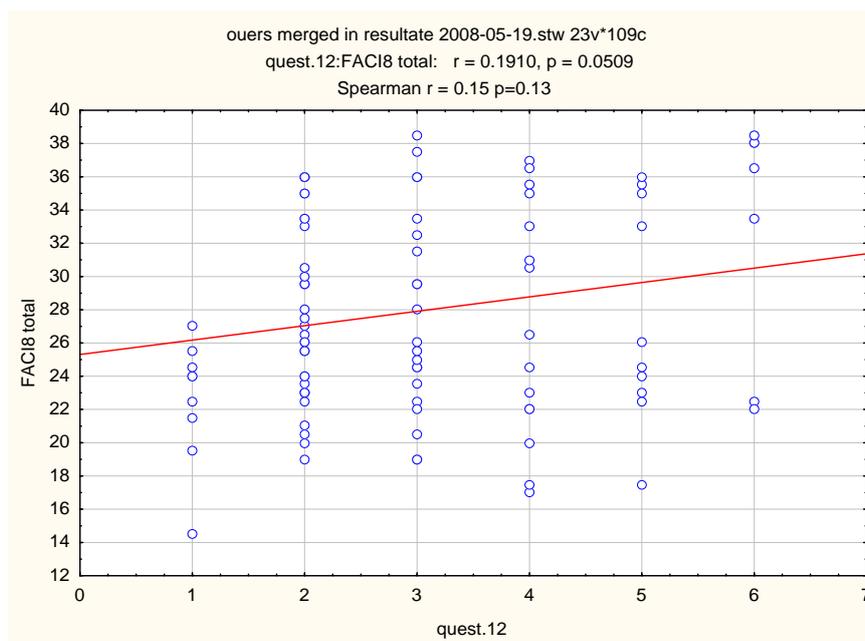


Figure 21. Scatterplot showing the relationship between family income and the parents' evaluation of family adaptation (FACI8 Total score).

A comparison of the means between unemployed and employed parents shows that the difference between the means is not significant. Although most of the parents were employed and the mean for the dependent variable family adaptation was higher in this group, this variable does not differ significantly from that of the unemployed parents, as shown in Figure 22.

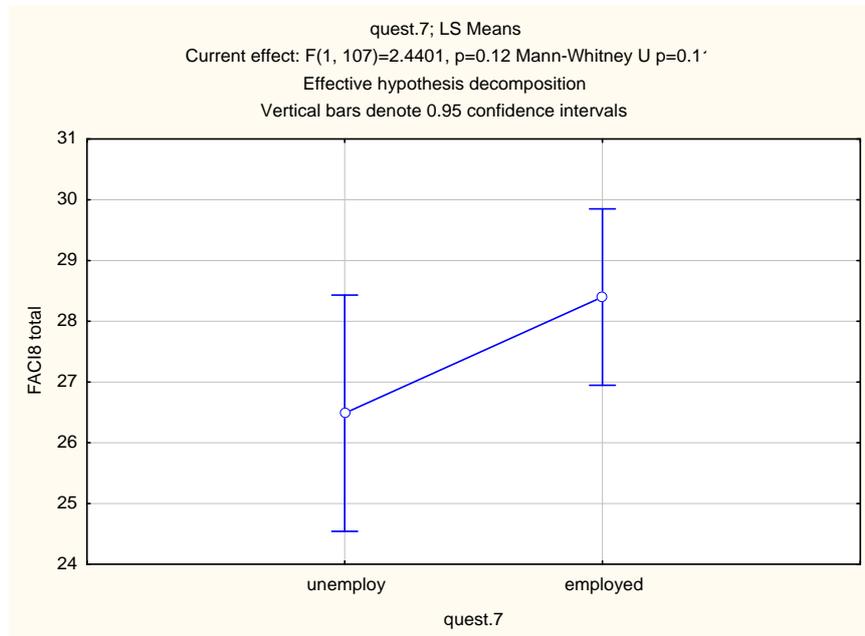


Figure 22. Comparison between the means of the employed and unemployed parents' evaluations of family adaptation.

Figure 23 shows the frequency distribution of the level of shock experienced by the parents when confronted with the news of a family member being diagnosed with HIV.

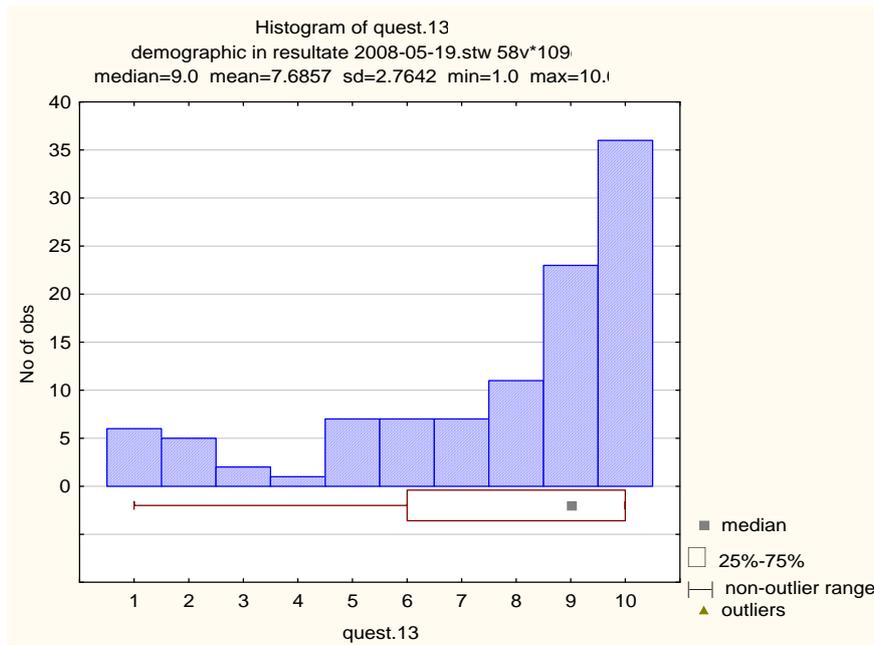


Figure 23. Frequency distribution of parents' levels of shock.

Although most parents recorded the news of a member being diagnosed with HIV as a bad shock (on a Likert-type scale where 1 denotes little shock and 10 denotes a big shock), the correlation with family adaptation was not significant, as can be seen in Figure 24.

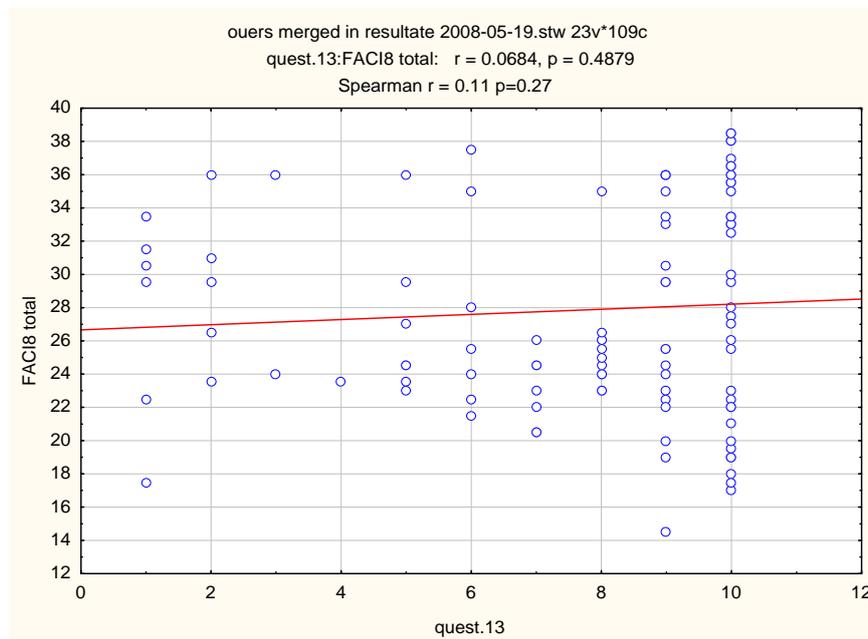


Figure 24. Scatterplot showing the relationship between the parents' levels of shock and family adaptation.

The children's level of education was significantly negatively correlated with their evaluation of family adaptation, as shown in Figure 25.

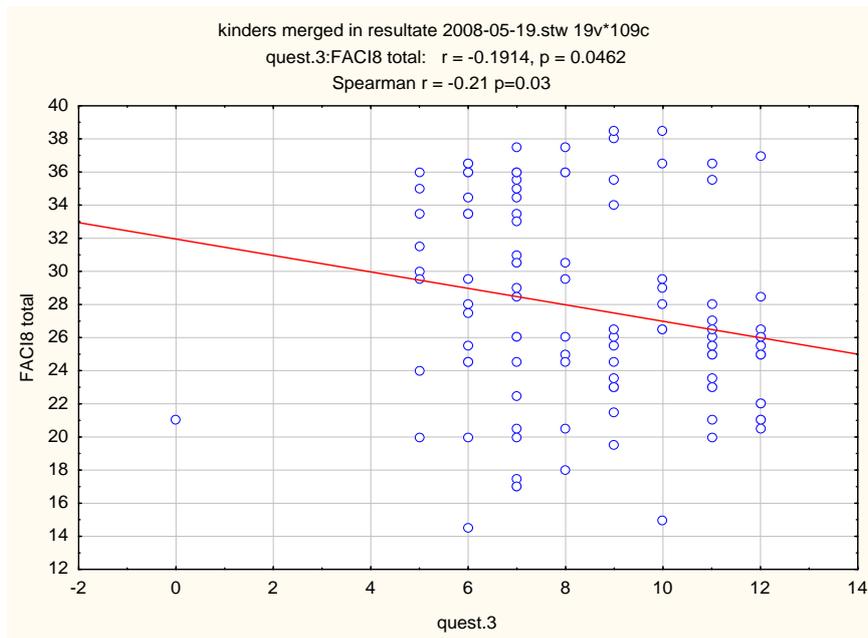


Figure 25. Scatterplot showing the relationship between the children's level of education and their evaluation of family adaptation (FACI8 Total score).

The correlations between the dependent variable and the independent variables are shown in Tables 5 and 6 for the parents' and children's results.

Table 5

Pearson Correlations between the Dependent Variable, Family Adaptation (Family Attachment and Changeability Index 8 - FACI8 total scores), and Independent Variables in the Parents' Responses (n = 109)

Variables	M	SD	r	p
Family Hardiness Index (FHI) Total (Steeling resistance as family response to stressor)	38.53	9.03	.63	.00**
FHI Commitment (family's sense of internal strength, dependability & ability to work together)	23.44	4.24	.49	.00**
FHI Challenge (family's efforts to be innovative, active to experience new things and to learn)	15.01	4.10	.54	.00**
FHI Control (family's sense of being in control of family life rather than being shaped by outside events and circumstances)	.23	4.19	.32	.00**
Social Support Index (SSI) (degree to which families find emotional, esteem and network support in their communities)	25.94	5.77	.66	.00**
Family Crisis Orientation Personal Evaluation Scale (F-COPES) – family problem-solving behaviour				
Acquiring social support (family's ability to actively engage in acquiring support from relatives, friends, neighbours and extended family)	28.33	9.71	.04	.65
Reframing (family's capability to redefine stressful events in order to make them more manageable)	27.32	5.44	.61	.00**
Spiritual and religious support (family's ability to acquire spiritual/religious support)	14.63	3.55	.48	.00**
Mobilising (family's ability to acquire community resources and accept help from others)	14.75	3.27	.42	.00**

Table continues

Table continued

Variables	M	SD	r	p
Passive appraisal (family's ability to accept problematic issues minimising reactivity)	12.18	3.29	-.35	.00**
Family Problem Solving Communication (FPSC)				
Total score			.66	.00**
Affirming communication style (pattern of family communication which conveys support and caring and exerts a calming influence)	9.55	3.20	.49	.00**
Incendiary communication style (pattern of family communication that is inflammatory in nature, tending to make a stressful situation worse)	5.16	3.81	-.65	.00**
Biographical variable				
Family size			.25	.01*
Parents' level of education			-.14	.17
Family income			.19	.05
Parents' level of shock			.07	.49

* p < .05

** p < .01

Table 6

Pearson Correlations between the Dependent Variable, Family Adaptation (Family Attachment and Changeability Index 8 - FACI8 total scores), and Independent Variables in the Children's Responses (n = 109)

Variables	M	SD	r	p
Family Hardiness Index (FHI) Total (Steeling resistance as family response to stressor)	38.40	8.95	.58	.00**
FHI Commitment (family's sense of internal strength, dependability & ability to work together)	23.56	4.40	.47	.00**
FHI Challenge (family's efforts to be innovative, active to experience new things and to learn)	14.57	3.97	.49	.00**
FHI Control (family's sense of being in control of family life rather than being shaped by outside events and circumstances)	.29	4.20	.29	.00**
Social Support Index (SSI) (degree to which families find emotional, esteem and network support in their communities)	26.10	5.35	.62	.00**
Family Crisis Orientation Personal Evaluation Scale (F-COPES) – family problem-solving behaviour				
Acquiring social support (family's ability to actively engage in acquiring support from relatives, friends, neighbours and extended family)	28.99	9.39	-.02	.85
Reframing (family's capability to redefine stressful events in order to make them more manageable)	27.28	5.37	.68	.00**
Spiritual and religious support (family's ability to acquire spiritual/religious support)	14.53	3.59	.46	.00**
Mobilising (family's ability to acquire community resources and accept help from others)	14.65	3.43	.38	.00**

Table continues

Table continued

Variables	M	SD	r	p
Passive appraisal (family's ability to accept problematic issues minimising reactivity)	12.08	3.28	-.35	.00**
Family Problem Solving Communication (FPSC)				
Total score			.66	.00**
Affirming communication style (pattern of family communication which conveys support and caring and exerts a calming influence)	9.71	3.43	.45	.00**
Incendiary communication style (pattern of family communication that is inflammatory in nature, tending to make a stressful situation worse)	4.91	3.71	-.69	.00**
Biographical variable				
Children's level of education			-.19	.05*
Children's level of shock			.12	.23

* $p < .05$ ** $p < .01$

Note that for employment status, which is a categorical variable, the ANOVA results are non-significant for both the parents ($F(1, 107) = 2.44, p = .12$) and the children ($F(1, 107) = .34, p = .56$), implying no relationship between employment status and family adaptation.

In both Table 5 and in Table 6, significant positive correlations are shown between the dependent variable family adaptation and virtually all of the independent variables evaluated. It is also clear that the views of the parents and children were similar regarding the strength and significance of the correlations. The steeling resistance or fortitude offered by the family (FHI Total score) correlated significantly and positively with family adaptation, inclusive of significant positive correlations with all three aspects of family hardiness (internal strength, positive reframing and internal locus of control). The families' views of social support availability (SSI) were significantly correlated positively with family adaptation but, interestingly, actively seeking out such support (F-COPES –

acquiring social support) was not. Problem-solving behaviours (F-COPES) such as reframing of a problem, seeking spiritual support, mobilising the family and using community support are shown to correlate significantly and positively with family adaptation. Family problem-solving communication styles (FPSC Total score) are correlated significantly and positively with family adaptation, in particular with supportive, positive or affirming communication styles (FPSC). Two independent variables showed significantly negative correlations with family adaptation: passive acceptance (F-COPES - passive appraisal of the crisis) and inflaming types of problem-solving communication (FPSC incendiary communication), such as fighting or arguing. With regard to the demographic variables measured, it was shown that the parents' views of family adaptation were correlated significantly and positively with the number of people living in the family (family size). It is interesting to note that the children's level of education was correlated significantly and negatively with their view of family adaptation (although the correlation was not a very strong one).

6.3 Regression analyses

Multiple regression analyses were performed in order to identify the combination of independent variables that would best predict the dependent variable, family adaptation. A best subsets regression was performed, with regression models being constructed for all combinations of predictor variables. From this, the "best" model was selected by inspecting the R-squared value together with the number of predictors included. Thus, if two competing models had similar R-squared values, the model with the least number of predictors was selected. The problem of multicollinearity was addressed by only considering models in which predictors had intercorrelations smaller than 0.7. The "best" model summary of the parents' data following the multiple regression analysis is shown in Table 7.

Table 7

Summary of Best Predictive Model According to the Parents' Data (n = 103)

Variable	β	Std. err. - of		
		beta	t (103)	p level
Family Hardiness Index (FHI – Total score)	0.16	0.08	2.18	.03
Social Support Index (SSI – Total score)	0.39	0.08	5.09	< .01
F-COPES (Acquiring social support)	-0.2	0.06	-3.36	< .01
F-COPES (Reframing)	0.22	0.07	3.16	< .01
FPSC (Total score)	0.32	0.07	4.64	< .01
F-COPES (Spiritual and religious support)	Excluded			
F-COPES (Mobilising)	Excluded			
F-COPES (Passive appraisal)	Excluded			

Table 8 provides a summary of the statistics of the multiple regression analysis of the parents' data.

Table 8

Summary Statistics of the Multiple Regression Analysis of the Parents' Data (n = 103)

Statistic	Value
Multiple R	0.84
Multiple R ²	0.70
Adjusted R ²	0.69
F (5, 103)	48.54
P	< .01
Std. error of estimate	3.45

The independent variables presented in Table 7 together predicted 69% of the variance in family adaptation (FACI8 Total score) of the parents ($R^2 = .69$, $F(5, 103) = 48.54$, $p < .01$) (as shown in Table 8). The predictive model in Table 7 indicates the expected resilience factors, such as hardiness, social support, communication styles and the ability to change thoughts about the stressor, to contribute significantly to a prediction of the level of family adaptation (the dependent

variable). Note that a negative sign in front of the beta value usually indicates the direction of the association between the variables, as is the case with the relationship between family adaptation and acquiring social support (F-COPES subscale) (see Table 7). It is interesting to note that acquiring social support has a non-significant correlation with family adaptation, as shown in Table 5 and Table 6, and the scatterplot in Figure 17 ($r = .04$, $p = .65$). This finding shows that acquiring social support (F-COPES subscale), along with other independent variables, cooperates to predict the dependent variable family adaptation. Further investigation showed that acquiring social support as a coping style correlated with the degree to which families find emotional, esteem and network support in their communities (Social Support Index). This result indicates that a high level of implementing this coping style along with a low level of finding social support results in low levels of family adaptation. This also implies that low levels of acquiring social support (as a coping style), along with a high degree of finding emotional, esteem and network support in their communities (SSI scores), results in high family adaptation (see Figure 26).

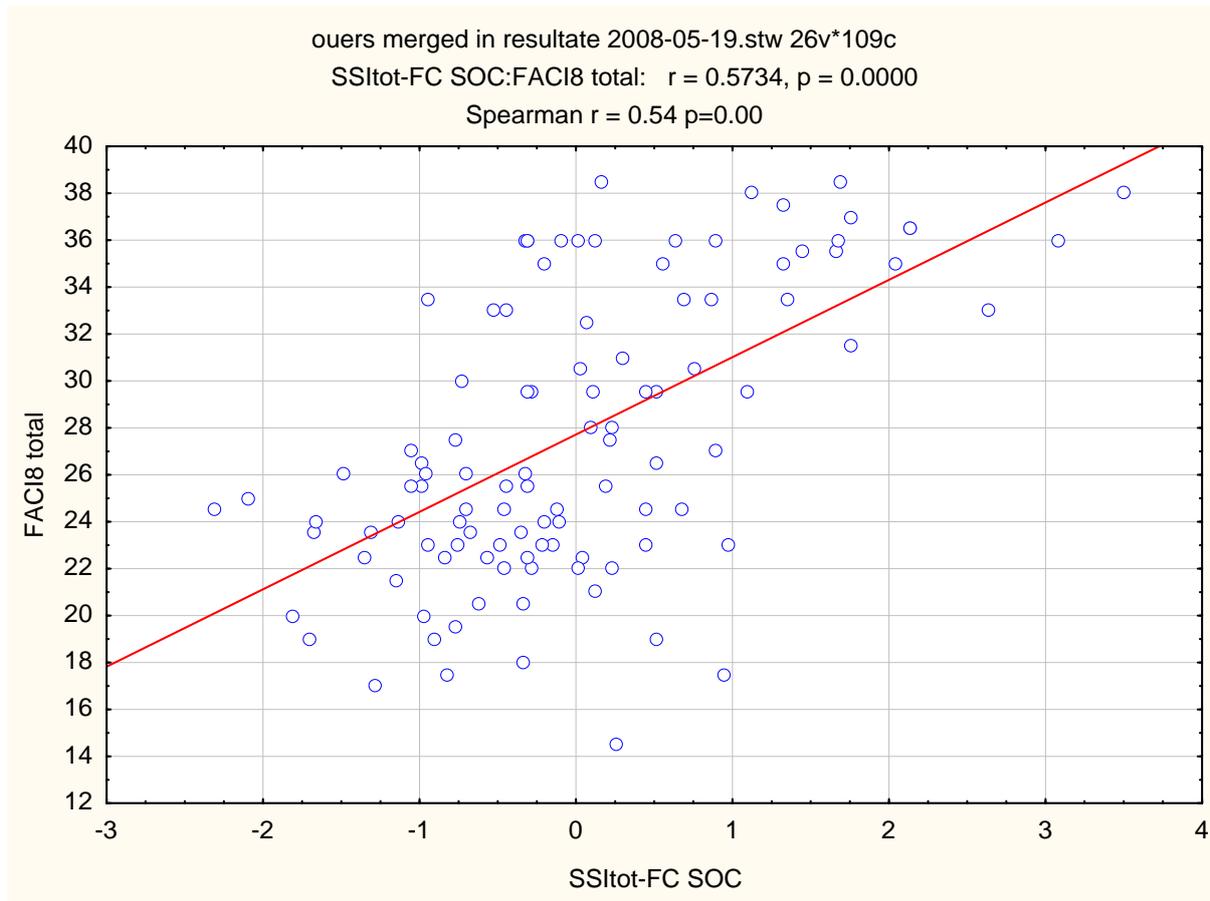


Figure 26. Scatterplot showing the relationship between the SSI (Total score) minus F-COPES (subscale acquiring social support) and the dependent variable family adaptation (FACI8 Total score).

A summary of the “best” model for the children’s data following the multiple regression analysis is shown in Table 9.

Table 9

Summary of Best Predictive Model According to the Children's Data (n = 104)

Variable	β	Std. err. - of		
		beta	t (104)	p level
Social Support Index (SSI – Total score)	0.34	0.07	4.95	< .01
F-COPES (Acquiring social support)	-0.19	0.06	-3.44	< .01
F-COPES (Reframing)	0.35	0.06	5.41	< .01
FPSC (Total score)	0.42	0.06	7.55	< .01
Family Hardiness Index (FHI – Total score)	Excluded			
F-COPES (Spiritual and religious support)	Excluded			
F-COPES (Mobilising)	Excluded			
F-COPES (Passive appraisal)	Excluded			

Table 10 provides a summary of the statistics of the multiple regression analysis of the children's data.

Table 10

Summary Statistics of the Multiple Regression Analysis of the Children's Data (n = 104)

Statistic	Value
Multiple R	0.85
Multiple R ²	0.73
Adjusted R ²	0.72
F (4,104)	69.82
p	< .01
Std. err. of estimate	3.25

The independent variables presented in Table 9 predicted 72% ($R^2 = .72$, $F(4, 104) = 69.82$, $p < .01$) of the variance in family adaptation (FACI8 Total score). The predictive variables in Table 9 showed that resilience factors such as social support, the ability to change thoughts about the

stressor and problem-solving communication styles are important in the children's views of family adaptation. A similar finding in the results of the children, compared with that of the parents, shows that the relationship between the independent variable, actively seeking out social support, and the dependent variable, family adaptation, is a negative one. As is the case with the parents, the relationship between the two variables is a non-significant one ($r = -.02$, $p = .85$) (see Table 6).

The following chapter will be used to discuss the results reported in Chapter 6 in relation to theory and previous research. Following the discussion, conclusions will be drawn so as to inform recommendations for future studies and the development of intervention programmes according to the alternative goal of this study. The limitations of the present study will also be discussed.

Chapter 7

Discussion and conclusions

Introduction

In this chapter the findings will be discussed and linked with the related research and literature. This will be followed by a discussion of the limitations of the study, the conclusions drawn, the implications of the findings and recommendations for further research (American Psychological Association, 2001; Burns & Grove, 1995).

The goal of the present study was to identify and describe variables associated with resilience in South African single-parent families affected by HIV/AIDS. The Resiliency Model of Family Stress, Adjustment and Adaptation of McCubbin and McCubbin (1996) formed the theoretical basis of the investigation. This model is based on earlier work described by Antonovsky and Sourani (1988) as a salutogenic orientation. It coincides with a shift from deficits to strengths in the focus of family studies. This orientation forms the basis of the present investigation to identify factors thought to assist families to adapt and bounce back to former (Hawley & DeHaan, 1996) or even better levels (Walsh, 1996) of functioning following confrontation with a stressful situation. Consequently, what follows is a discussion of variables found to have contributed to poor South African single-parent families coping with a family member (or members in some instances) diagnosed as being infected with HIV. These variables assist in bouncing back and are also thought to contribute to what Walsh (1996) termed psychosocial inoculation.

The major findings of the present study include qualitative findings resulting from the responses to a question about what the family considered factors that supported them when in crisis. Further supportive findings include statistically significant correlations between family adaptation and a number of independent variables, thought to represent resilience factors according to the Resiliency Model (McCubbin & McCubbin, 1996; McCubbin *et al.*, 1997; Walsh, 1993, 1996, 2003).

The parents and children responded in a similar fashion to a question about what they considered to have helped them to cope with the news that a family member had been diagnosed with HIV. Use of the grounded theory method of Strauss and Corbin (1994, 1998) for the qualitative data analysis revealed that the parents and children considered strength or hardiness, social support, communication, hope, denial, changing thoughts and material support to be helpful factors that could be described as family strengths (see Table 4). Quantitative supportive findings for the preceding themes were present in the data of both the parents (see Table 5) and the children (see Table 6). Although similarities were found in the parents' and children's results, a number of variations were noted. Both the parents and the children identified resilience factors such as hardiness, social support, communication and a number of crisis orientation factors (as measured with F-COPES, such as redefining negative events positively, actively seeking spiritual support and actively seeking and accepting social support). Both the parents and the children indicated that doing nothing and passively accepting the crisis situation, as in the role of a victim, was not associated with family adaptation. According to the parents' data, the bigger the family, the better the family adaptation. A most interesting result from the children's data was the existence of a negative, statistically significant correlation between their own level of school education and family adaptation, implying that the further a child has studied, the less successful their family's adaptation was. It could be postulated that the correlation between the level of the children's education and their view of family adaptation was confounded by the influence of other demographic variables, such as the age of the children or the socioeconomic level of the family, but this effect was not investigated.

Before the identified resilience factors are discussed individually, it may be prudent to be reminded of the key resilience factors described by McCubbin *et al.* (1997), namely family problem-solving communication, equality, spirituality, flexibility, truthfulness, hope, family hardiness, family time and routine, social support and health. Walsh (1996) described key resilience factors, using the descriptive terms family paradigms (shared beliefs), spiritual values, community resources (and use

thereof), and optimism and hope. Wolin and Wolin (1993), on the other hand, identified seven resilience factors, namely insight, independence, relationships, initiative, creativity, humour and morality. Along with the preceding resilience factors, the defining qualities of elasticity and buoyancy and the functions of protection and recovery will guide the further in-depth discussion of the individual findings of the present study.

The following section includes a discussion of the findings of the present study, including a number of new findings and a discussion of the best prediction models found, based upon the results of the present study. The discussion will be within an objective framework, relating the findings to the primary and secondary objectives of the present study (with reference to the salutogenic view of focus on strengths rather than on the presence of hardship). The primary objective was to identify factors that are associated with resilience in single-parent families affected by HIV/AIDS in terms of The Resiliency Model (McCubbin & McCubbin, 1996). The secondary objective was to identify and suggest possible strategies for the development and strengthening of the identified resilience variables.

7.1 Resilience factors identified

Within the context of the objective framework, the following discussion of the results of the present study will incorporate theory and previous research. The discussion will firstly focus on the association of biographical variables with family adaptation, followed by a discussion of the qualitative and quantitative results.

7.1.1 Biographical variables

The association of a number of biographical variables with the level of family adaptation was investigated in the present study. Family size, family income, level of education of both parents and children, and the participants' levels of shock will be discussed in the following sections.

7.1.1.1 Family size

In the present study it was hypothesised that a larger family may have access to more social support, more adults to contribute to child rearing and finances, and a greater sense of unity to offer resistance to the onslaught of crises. It was therefore important to consider that the level of family adaptation may have been influenced significantly by the number of family members.

The demographics of the participants were discussed in Section 5.2.2. where it was seen that the 109 families that participated were from the lower socio-economic parts of the Helderberg Metropole, close to Cape Town in South Africa. Interesting demographics are shown, such as the townships where the families live (see Figure 5) and the fact that most (74%) of the families are black. This particular racial or cultural fact is important in the consideration of the cultural variation in resilience (McCubbin & McCubbin, 1996) and the influence of the traditional valuing of larger or smaller family sizes. Indeed, McCubbin and McCubbin (1996) specifically indicated their Resiliency Model to be suitable for research across cultures and that resilience research would benefit from such research. This latter point served as a strong source of motivation for the present study.

Further demographic information about the participants offers interesting perspectives on the results of the present study and will be referenced in the following section. As can be seen in Figure 6, the number of family members ranged from two to ten members, with most families (45% of the sample) having either three or four members. Ages were widely represented, with the mean age of the adults being 38 (Figure 8) and that of the children (Figure 9) being 16 years. Most participants were female (80% of parents and 55% of children). In Figures 10 and 11 the HIV status of the participants themselves is given, providing a glimpse of what the families in the present study had to contend with. It can be seen that 59% of the parents and 23% of the children were HIV positive. Very important, however, is the 25% of parents and 33% of children who did not know what their HIV status was. This is significant information in the light of the fact of HIV prevention strategies promoting HIV status determination through voluntary testing – a factor that has been shown to be

highly correlated with a significant reduction in sexual risk-taking behaviour (UNAIDS, 2007, 2008a, 2008b, 2009). Very interesting data is reported in Table 2, showing just how prevalent HIV infection is in the families studied. Multiple family members are infected in many of the families. The type of single-parent family represented is shown in Figure 12, and it can be seen that 72% identified themselves as single-parent families, with the rest being widowed, separated or divorced. In Figure 14 the complexities in relation to defining, describing and understanding family composition are shown, and it is interesting to note the many forms that a second adult in the household (even while it is defined as a single-parent family) may represent, from being a boyfriend, sibling, parent, cousin and so forth. This latter point is significant for our development of an impression of what the families who participated in the present study actually looked like and how many variations in family composition were represented.

The author of the present study did not locate any specific studies that aimed at investigating the effects of family size or family composition on the level of family functioning under situations of distress. The section on family typologies (Section 2.1.3) offers interesting views in this regard, but this aspect is focused mostly on how family types respond and does not address the issue of family size per se. This should perhaps be investigated in future studies of family resilience.

The correlation between the dependent variable, family adaptation, and the independent variable, family size, is significant (5% level) in a positive direction and rather weak (Table 5). It may be deduced from this result that the size of the family did not appear to have a strong influence on how well the families remained in their functioning despite being confronted by a significant stressor. What may be deduced from this correlation is that larger families tended to adapt slightly better under adversity than smaller ones, and that it is not merely by chance that the bigger families had significantly higher levels of adaptation.

The qualitative results of the present study support the finding that the size of the family matters when families are confronted by stressful situations. This conclusion may be deduced from the fact

that both the parents and the children in the present study considered factors that could be described as family hardiness, social support and to some extent material support were helpful for coping with a family member diagnosed with HIV. It may then further be indicated that the primary objective of the present study was reached to some extent, namely showing that family size is a factor to be considered regarding family resilience. The secondary objective of determining development strategies for the identified factors indicates the need for keeping families intact and developing strategies that help families remain intact in the face of adversity.

7.1.1.2 Family income

In the present study it was thought that family income would be significantly and positively correlated with family resilience. This premise and, ultimately, hypothesis is based upon the theory of the Resiliency Model of McCubbin and McCubbin (1996) that poses family resources as one of four main domains supporting family resilience. Sufficient family resources such as finances contribute to family hardiness, which is the family's ability to offer steeling resistance when confronted by adversity. Family income or being employed is not one of the key resilience factors of McCubbin *et al.* (1997), but is incorporated in the family hardiness factor. Walsh (1993) did not make specific mention of family financial resources, and neither did Wolin and Wolin (1993). In Section 2.4.5, however, it is discussed at length that poverty, poor housing, poor recreation facilities and opportunities, social isolation and problems associated with cheaper accommodation are of the many problems that confront single parents (Davidson & Moore, 1992; Greeff & Van der Merwe, 2004; Lehohla, 2004; Torremocha, 2002; Walshe, 1994). Comments that the needs of single-parent families include more than merely money (Sugarman, 2003) are heeded; however, it is not understood to intend that financial resources are not important. Indeed, it was Burns and Scott (1994) who raised awareness of the fact that "oppressive social conditions, rather than men in general, are the main enemy" (p. 181).

Numerous recent studies indicate the importance of financial well-being as a resilience-enhancing factor (Kaplan *et al.*, 1997; Krishna *et al.*, 2005; Mellon & Northouse, 2001; Milan *et al.*, 2005) and

consequently important to consider in terms of a salutogenic perspective. In relation to the topic of the present study it is relevant to note that, in a study of HIV-positive intravenous drug users in Russia, coping was found to be negatively influenced by stigma related to job loss and other forms of discrimination. The South African Statistician-General made specific mention of the plight of poverty and HIV, offering further support for the hypothesis that South African single-parent families affected by HIV may indeed function less optimally due to financial constraints (Lehohla, 2004, 2005a, 2005b). In a recent South African study, Greeff and Van der Merwe (2004) indicated that economic resources act as sources of buffering agents that appear rather congruent with the term psychosocial inoculation (Walsh, 1996). The importance of tangible support, such as the availability of financial, material and other forms of support programmes for South African families in crisis, is shown in studies by Der Kinderen and Greeff (2003) and Greeff and Holtzkamp (2007).

The correlation between the dependent variable family adaptation and the independent variable family income is non-significant (Table 5, Figure 21). It is also reported that the correlation between the dependent variable and employment status is non-significant (Figure 22). The income distribution is shown in Figure 7, indicating that 38% of the families had an income of only R1 000 per month. The qualitative results of the present study partly support the quantitative findings. Although it was indicated in Table 4 that the families considered material support (including financial support) as something that helped them to cope with the news of a family member diagnosed with HIV, it was considered the least most important supportive factor of all others considered by both the parents and the children.

Based on the preceding it should not be concluded that the level of family income is not important when considering which resilience factors are present in South African single-parent families affected by HIV. The independent variable, family income, may in fact act as a moderator of other variables. The primary objective of the present study, namely finding which resilience factors are present in single-parent families affected by HIV/AIDS, is enhanced by the knowledge that financial resources play only a minor role. The secondary objective of recommending interventions

is enhanced in the sense that the focus of interventions should be on the development and maintenance of other identified resilience factors, as discussed in the following sections.

7.1.1.3 Level of education

In the design of the present study it was considered that higher levels of education would correlate significantly and positively with higher levels of family resilience. This hypothesis and reason for inclusion in the biographic questionnaire is based on the theory of the Resiliency Model of McCubbin and McCubbin (1996), where emphasis is placed on family resources (higher education considered a potential resource). The ten key resilience factors of McCubbin *et al.* (1997) include factors that may be shown to perform at higher levels in families with higher education, including factors such as equality, problem-solving communication and flexibility. It was also postulated that higher education may be considered in Walsh's (1996) community resources domain and in some of Wolin and Wolin's (1993) seven resilience factors, such as insight, independence, initiative and creativity. Kiernan *et al.* (1998) show that, from 1973 to 1993, the average level of education of single mothers in the UK doubled. This view, added to the critical view of the offspring of single-parent families being viewed as lower achievers who, in turn, perpetuate the single-parent lifestyle, supported the motive for investigating the level of education as a potential resilience factor in South African single-parent families affected by HIV.

In Table 5 and Table 6 it is shown that the correlation between the dependent variable family adaptation and the independent variable level of education was different for the parents and children. In the case of the parents the correlation was non-significant. In the case of the children, however, the correlation was significant. The strength of the correlation was rather weak, but most interesting is the fact that it was a negative one, as shown in Figure 25. The qualitative results do not support the notion of level of education as a resilience construct on the basis of the present interpretation of the data. Note, however, that one child indicated its appreciation of material support, such as someone helping the family by buying school clothing and other necessities. It may therefore be deduced that, in the case of the parents, the level of education made no difference to

what they viewed the level of family adaptation to be. In the case of the children however, the higher levels of education achieved by them appeared to influence their view of the family's adaptation in a more negative light.

It is evident from the preceding that the influence of education on resilience needs to be investigated further. In some way it is heartening to glean from the reported results that the families that did not have high levels of education harboured some measure of resilience, which may bring valuable insights through further inquiry. With regard to the primary objective of the present study it may be said that level of education was not a main source of resilience and that, in the case of the children, it in fact was reflected in a negative view of family resilience. The secondary objective of the present study, namely of operationalising the primary findings, is met when it is considered that intervention designs need to consider individual educational levels and adapt interventions accordingly.

7.1.1.4 Level of shock

During the period when the present study was designed, a question arose in discussion with the staff at the clinics where the data was collected as to whether the assumption that news of a family member being infected with HIV was really that bad. Initially, anecdotal information collected created the impression that the participants in the study thought HIV infection to be a bad thing. It was concluded that investigating this hypothesis, of HIV infection representing a big shock, would contribute to the understanding of resilience factors in single-parent families affected by HIV/AIDS. For this reason a visual analogue rating scale was included in the biographical questionnaire, where the participants would rate the level of shock they experienced upon hearing the news that one of their family members had been diagnosed as being infected with HIV. The ratings ranged from 0 (to indicate no shock) to 10 (to indicate a very high level of shock). This question was included to highlight new information previously not considered in studies of resilience.

In Table 5 and Table 6 it can be seen that the correlations between the dependent variable, family adaptation, and the independent variable, level of shock, were non-significant for both the parents and the children. In Figure 23 the frequency distribution of the level of shock shows that, in the case of the parents, most considered the news of a family member being diagnosed with HIV infection as a very big shock. However, the size of the shock showed no correlation with the level of family adaptation. It may be deduced from the preceding that the nature and size of the adversity has no effect on family resilience. This finding supports the salutogenic approach of a strengths-based inquiry into resilience. It therefore may be concluded that it is indeed aspects within individuals, families and communities that contribute to resilient outcomes and not the form of adversity, large or small. This finding does, however, raise questions about the validity of the emphasis placed on the role that appraisal plays in resilience, a factor that would insist on further investigation.

7.1.2 Qualitative and quantitative results

7.1.2.1 Family hardiness

Hardiness refers to the resistance offered when confronted by stressors, particularly the steeling type of resistance offered. The presence of hardiness as a resilience factor is supported in theory. McCubbin *et al.* (1997) described hardiness as one of the key resilience factors. Hardiness also forms a central construct of the Resiliency Model of McCubbin and McCubbin (1996), the theory underpinning the present study. Tangible and intangible aspects are highlighted, as well as individual and family level aspects of hardiness. McCubbin and McCubbin (1996) view family hardiness at various levels. The authors firstly look at commitment to the family as a unit, secondly at the manner in which the family views the stressor as manageable, and thirdly consider the sense of the family feeling more or less in control of their lives despite the presence of adversity. Finally, gaining an overall sense from the three mentioned levels and consolidating it into a unit of hardiness, or total family hardiness, completes McCubbin and McCubbin's (1996) conceptualisation of family hardiness. Other theorists, such as Walsh (2003) and Wolin and Wolin (1993), offer a different view of hardiness and perhaps do not describe family hardiness in as much

detail. However, the premise of hardiness in successful coping with adversity is nevertheless supported.

Lindblad-Goldberg *et al.* (1988) provide supportive evidence for family internal resources as resilience factors, while Bower *et al.* (1998) indicate that family hardiness mediates the effect of coping with a child with Down Syndrome. Stetz *et al.* (1994) show the significance of the subordination of personal needs to that of the family to indicate family hardiness related to the aspect of working together as a team. Recent South African studies (Greeff & Aspeling, 2007; Greeff & Du Toit, 2009; Greeff & Fillis, 2009; Greeff & Holtzkamp, 2007; Greeff & Human, 2004; Greeff & Van der Merwe, 2004; Greeff, Vansteenwegen, & De Mot, 2006; Greeff, Vansteenwegen, & Ide, 2006; Greeff & Wentworth, 2009) report supportive evidence for the importance of family hardiness as a resilience factor.

The results of the family hardiness index (FHI total score) correlated significantly, positively and quite strongly with the level of family adaptation as appraised by both the parents (see Table 5, and Figure 15) and the children (Table 6) in the present study. All three subscale measures (commitment, challenge and control) correlated significantly and positively with the dependent variable family adaptation, but the strength of the correlations varied, making for interesting hypothesis development (and perhaps indicating avenues for future investigation). The strength of the correlations between the dependent variable and all three hardiness subscale measures was less than that of the correlation between the dependent variable and the total hardiness score, providing evidence for considering the premise that the whole is larger than the individual bits. These results were the same for both the parents and the children, providing further corroboration of the findings of the present investigation that viewing the family as hardy had a significant influence on thoughts and behaviours consistent with a resilient outcome. Further supportive evidence for the importance of hardiness as a resilience factor is found when it is considered that both the parents and the children viewed hardiness as the most important factor when asked what they considered to have

helped them cope with the news that one of their family members had been diagnosed as infected with HIV (see Table 4).

The results of the hardiness measure need to be interpreted with caution, as the reliability (Cronbach's alpha) coefficients reported in Table 3 are less than .6 for the total scale and all three subscales. The reliability results were similar for both parents and children.

In terms of the primary objective of the present study, it may therefore be concluded that the resilience factor of family hardiness is an important one. In keeping with the secondary objective of operationalising the identified resilience factors, intervention strategies for resilience building in families should therefore include activities and/or content that develops family cohesion and the ability to work together as a unit. In this regard, team-building activities may be of benefit. Positive reframing of the stressor as a skills-acquisition activity for the family may lean towards cognitive behaviour therapy interventions, with reframing forming an integral part of this psychological therapy. The development of an internal locus of control, with a focus on own ability to manage the onslaught of stressful events, is supported by the work of Antonovsky and Sourani (1988), who showed in their sense of coherence construct that a belief in own ability to manage crises positively supported a resilient outcome (the mentioned salutogenic or strength-based view). Doing things that make families stronger appears to be the most helpful in supporting families to cope with crises, a fact supported by the notion that the families in the present study considered that the things that helped them cope best with the news of a family member diagnosed with HIV could mostly be grouped under the theme heading *hardiness*.

7.1.2.2 Social support

Social support as a resilience factor relates to relationship networks that support families coping with adversity in both a protective and recovery sense. The theory upon which the present study is based (McCubbin *et al.*, 1997) includes social support as one of its ten key resilience factors. Other theorists, such as Hawley and DeHaan (1996), Walsh (1996) and Wolin and Wolin (1993),

emphasise clearly the importance of the availability of social support for families to cope with adversity. A number of studies (Markstrom *et al.*, 2000; Mellon & Northouse, 2001; Mizota *et al.*, 2006; Parapully *et al.*, 2002; Pomeroy *et al.*, 1996; Rotheram-Borus *et al.*, 2005; Tak & McCubbin, 2002; White *et al.*, 2004) report supportive evidence for the importance of social support as a resilience factor. However, it is not merely the simple matter of having social support available in order to manage the effects of crises. Complexities relating to social support, such as negative undertones associated with over-protectiveness, are reported by Owens (2003) and Pakenham *et al.* (1994). Contrary to what usually is reported about social support as offering protection and mediating effects, Lindblad-Goldberg *et al.* (1988) and Pakenham *et al.* report that social support was found to play more of a recovery than a protective role in their studies. It is important to consider that, although studies report that social support usually plays an important role in helping families to overcome adversity, in many instances social isolation and stigma (particularly in the case of HIV) cause a loss of the availability of social support (such as discussed in the study by Amirkhanian *et al.* (2003)). A number of recent South African studies (Greeff, 2000; Greeff & Aspeling, 2007; Greeff & Du Toit, 2009; Greeff & Fillis, 2009; Greeff & Holtzkamp, 2007; Greeff & Human, 2004; Greeff & Van der Merwe, 2004; Greeff, Vansteenwegen, & De Mot, 2006; Greeff, Vansteenwegen, & Ide, 2006; Greeff & Wentworth, 2009; Van der Merwe & Greeff, 2003) provide clear evidence for social support as a resilience factor.

In the present study, the correlation between the dependent variable, family adaptation, and the independent variable, social support, was significant and positive (see Table 5, Table 6 and Figure 16). The qualitative findings of the present study support the correlations reported (see Table 4). This is true for both the parents and the children. It is shown in Table 3 that the social support measure was reliable for both the parents and the children in the present study, offering good support for the correlations reported.

From the preceding it may be concluded that social support appears to be an important resilience factor for South African single-parent families affected by HIV/AIDS. Such conclusions are

supported by the theory, in practice, as reported in a number of recent studies (including in a South African context) and, finally, by both the qualitative and quantitative results of the present study. Interventions to build the activation and use of social support by families in crisis are indicated. As a consequence, central and local governing bodies and nongovernmental agencies are encouraged to develop and maintain social support for families affected by HIV/AIDS. It may therefore be stated that the primary objective of the present study, namely to identify resilience factors in single-parent families affected by HIV/AIDS, was achieved through recognising social support as a resilience factor. The secondary objective, of operationalising said resilience factors, was also achieved, as can be seen from the emphasis placed on the need for the maintenance and development of social support. Interventions for families in crisis may benefit from the knowledge that advertising the availability of social support in itself contributes to families being able to function better under stress. It is of course important that such advertised social support is to be funded and put in place in the first instance. Government-sanctioned and -funded support forms a large part of the structures available to the community, but the impact of nongovernmental agencies should not be overlooked.

7.1.2.3 Family problem-solving communication

The primary objective of the present study was to define resilience factors in single-parent families affected by HIV/AIDS. Greeff (2000) describes family problem-solving communication as something that families use to plan and implement strategies in order to cope. Focused on the creation of harmony and interactional patterns, the Resiliency Model of McCubbin and McCubbin (1996) includes problem-solving communication styles as an important part of describing what it is that families do in crisis. Walsh (2003) also included communication for problem solving as part of her resilience framework and stated essential aspects for resilience to be clarity, open emotional expression and collaborative problem solving. The resilience theory of Wolin and Wolin (1993) includes a more abstract consideration of communication as a resilience factor, with a slight shift in focus to *relationships*, *humour* and *creativity*. McCubbin *et al.* (1997) describe two forms of problem-solving communication: affirming and incendiary. Affirming communication is calming

and supportive, encouraging of talking until a solution is found. Incendiary communication is identified by yelling, screaming and fighting and basically makes the situation worse. It is important to bear in mind that both forms are of course present in all families at one time or another. Crises create an environment in which incendiary communication may dominate, promoting family deterioration and preventing successful adaptation. A number of recent South African studies (Greeff & Du Toit, 2009; Greeff & Holtzkamp, 2007; Greeff & Wentworth, 2009; Jonker & Greeff, 2009) show that affirming types of problem-solving communication increase the likelihood of bonadaptation as an outcome. Other studies, such as those of Knafl and Zoeller (2000) and Lindblad-Goldberg *et al.* (1988), show that a unified view (perception or appraisal) of the stressful event is important for recovery. As shown in the Resiliency Model, it is postulated that agreement about the stressor and about how the family will manage it is based on affirming communication types. In a study by Dutra *et al.* (2000) it was reported that the parent-child relationship is the only significant individual predictor for resilient adaptation, implying the importance of supportive types of communication for successful coping as a family. Milan *et al.* (2005), however, show that some HIV-positive women may choose to remain in conflictual relationships. This finding shows that the presence of inflaming types of communication may not necessarily mean the end of the family (although family satisfaction may be less than what is desired). This latter factor further highlights the complexities of human interaction and decision making and supports further investigations, as well as reminding that individual factors alone might not be what accounts for resilience, but rather the complex interplay of individual resilience factors and those superimposed on individual family differences.

The parents and the children regarded communication as the third most important factor in coping with adversity (see Table 4), confirming McCubbin *et al.*'s (1997) inclusion of family problem-solving communication (affirming and incendiary types) as a key resilience factor. The quantitative results of the present investigation show that the dependent variable, family adaptation, correlated significantly with the independent variable, family problem-solving communication (as measured

with the FPSC). The results are similar for the parents and the children, as shown in Table 5 and in Table 6. The direction of the FPSC total scale correlation is positive and it is a strong correlation. The reliability coefficient for the total scale shows good reliability (Table 3). From this result it may be deduced that the presence and nature of communication have a significant and positive correlation with the level of family adaptation. Assumptions may be made that high levels of problem-solving communication will indicate high levels of family adaptation (and vice versa).

The FPSC fortunately offers good insights into the nature of family problem-solving communication by focussing on two very different kinds of communication (affirming and incendiary, as discussed previously), with possibly different influences on the level of family adaptation. The correlation between family adaptation and affirming communication is not very high and indicates a trend, rather than a more definite influence. What is of significance is the strong, negative correlation between family adaptation and incendiary communication. It is further noteworthy that the reliability indicators point to good reliability for the incendiary measure and less reliability for the scale measuring affirming communication. It may therefore be deduced that communication plays an important role for families in crisis, that the presence of affirming communication possibly plays a minor role, but that incendiary communication has a definite negative and strong influence on how a family copes. The scatterplot in Figure 19 dramatically shows the strong, negative influence quite clearly.

Further deductive reasoning related to the results of the present study, supported by the literature and the reviewed studies, indicates that communication per se forms an important resilience factor. This is further illustrated by a closer scrutiny of the types of communication. Supportive communication leads to better family adaptation and supports other resilience factors, such as family hardiness (based on an increased ability to work together and to believe in own coping ability). Inflaming types of communication, such as arguing and fighting, clearly indicate decreased coping and decreased belief in own abilities (with an associated decrease in the desire to remain bonded to the family group). It was also shown that a passive coping style, in other words basically

doing nothing about the crisis situation, contributed to lower family adaptation (see Figure 18). The results of the qualitative investigation of the present study support the quantitative results. Both the parents and the children reported that communication, both positive and negative, characterised aspects of that which helped them to cope.

In keeping with the secondary objective of the present study, namely to indicate possible ways in which the identified resilience factors could be operationalised, it is proposed that intervention programmes need to consider the significant correlation between family adaptation and communication, inclusive of communication style. As such, it is firstly important that intervention programmes incorporate activities that build communication skills. Such activities should include consideration and highlighting of the significant effects of negative or incendiary communication, and highlighting of the fact that increased stress levels may contribute to increased incidences of fighting and arguing. It is almost to be expected that the characteristic, calm nature of family life may be disrupted in the face of adversity. It is further important to consider that the presence of incendiary communication needs to be addressed if the family is to adapt successfully at all. The focus of communication-based interventions should further include the fostering of positive communication skills. The importance that families develop positive, caring communication and special occasions for the demonstration of positive regard for all family members should be emphasised. Due to the usually fatal outcome of HIV infection, it is particularly important to acknowledge the time-limited opportunity for family members to develop appropriate communication skills in suitable intervention programmes.

7.1.2.4 Hope, spirituality and religious support

Spirituality as a resilience factor is described as a quest for personal meaning in relationships with people, the environment or with a superior being as sources of support and comfort in times of crisis (Greeff & Joubert, 2007). McCubbin *et al.* (1997) included both hope and spirituality as key resilience factors. Support in the literature for the importance of hope and spirituality in coping is shown in Chapter 2 (Sections 2.1.2.3 and 2.1.2.6) (Antonovsky & Sourani, 1988; McCubbin,

Thompson & McCubbin, 1996; McCubbin *et al.*, 1997; Sarafino, 2006; Walsh, 1996, 2003; Wolin & Wolin, 1993). McCubbin *et al.* (1997) separated spirituality and hope into two distinct resilience factors. Walsh (1996) grouped these two aspects into the *spiritual values* domain of her resilience framework, while Wolin and Wolin (1993) included the notion in the *morality* domain of their seven-factor model of resilience.

Evidence for hope and spirituality as resilience factors is found in numerous studies (Kaplan *et al.*, 1997; Milam, 2006; Parapully *et al.*, 2002; Rotheram-Borus *et al.*, 2005; Rotheram-Borus *et al.*, 2006b; Tarakeshwar *et al.*, 2006; White *et al.*, 2004). In the South African context, the importance of spirituality as a resilience factor is clearly supported (Greeff & Du Toit, 2009; Greeff & Fillis, 2009; Greeff & Human, 2004; Greeff & Joubert, 2007; Greeff & Loubser, 2008; Greeff & Van der Merwe, 2004). It was shown by Greeff and Loubser (2008) that spirituality is a complex phenomenon, with complex influences on coping behaviours. Not all studies found supportive evidence for spirituality as a coping resource, as shown in a South African study by Jonker and Greeff (2009), who did not find quantitative support for the notion that the families in their study viewed spirituality as a factor that helped them cope. It is interesting to note that the qualitative and quantitative findings in the same study are not always indicative of similar results. Another South African study failed to find support for spirituality as a resilience factor (Greeff & Holtzkamp, 2007).

In Table 5 and Table 6 it is shown that the dependent variable, family adaptation, correlated significantly and positively with the independent variable spiritual and religious support. The results are similar for the parents and the children. The strength of the correlations, however, indicates a trend rather than a more definite conclusive result and should be interpreted as such. The quantitative results of the present investigation support the qualitative results. In Table 4 it can be seen that both the parents and the children regarded hope, including religiosity, as something that they thought to have helped them cope with the news of a family member being diagnosed with HIV.

In the light of the primary objective of the present study, hope and spirituality may be considered to be significant resilience factors. This finding may (as part of the secondary objectives of the present study) inform intervention design to include aspects related to the development and maintenance of hope in adversity and of the complex and variable manifestations of religious and spiritual practice. The links between a sense of hope and optimism and the physiological aspects of immunity were recalled in reference to psychoneuroimmunology, a field rich in material for further investigation and possible contribution to the field of salutogenesis and resilience. It thus remains important to consider the inclusion of sustained hope in the design of intervention programmes. It is, however, necessary to consider the cautions of Brown and Stetz (1999) regarding the caregiver burden. Accordingly, continued supervision of healthcare workers and awareness of their own reactions to the strain of supporting others to maintain a hopeful outlook should be incorporated into the design of intervention programmes. The role of meetings of the multidisciplinary team should not be overlooked with regard to a team approach and the maintenance of hope.

7.1.2.5 Denial

The primary objective of finding evidence of resilience factors in single-parent families affected by HIV/AIDS includes behaviours, thoughts and feelings, grouped under a heading described as “denial”. Behaviours that characterise denial as a coping mechanism include merely passing time, doing nothing, avoiding thinking about the stressor or even about coping, changing some behaviour patterns, substance abuse and focusing on just being happy to be alive. McCubbin and McCubbin (1996) theorise about the influence that such behaviour would have on successful coping with adversity. It is thought that passive acceptance may indicate a lack of confidence in own potential to effect change. Passive acceptance, however, may also indicate a desire to minimise reactivity and whatever possible consequences may arise out of reacting due to the presence of a stressful event. McCubbin and McCubbin (1996), McCubbin *et al.* (1997) and Walsh (2003) show that the ability to get on with life is important for family adaptation, supporting the notion of ignoring the stressful event as a form of coping. Greeff, Vansteenwegen and Ide (2006) point out that in their study of

families with a member with mental illness, passive evaluation and the use of avoidance strategies were helpful in successful adaptation. It may, however, be that, as this was a cross-sectional study, the long-term costs of avoidance were not investigated and warrant further investigation. Greeff, Vansteenwegen and De Mot (2006) report evidence in favour of avoidance strategies for successful coping. Recent research offers support for the notion of focusing on getting on with life rather than doing something about the stressful event (Amirkhanian *et al.*, 2003; Lindblad-Goldberg *et al.*, 1988; Markstrom *et al.*, 2000; Milam, 2006; Parapully *et al.*, 2002; Rotheram-Borus *et al.*, 2006a; Rotheram-Borus *et al.*, 2005; Stetz *et al.*, 1994; White *et al.*, 2004; Zautra *et al.*, 2005). Two South African studies (Greeff & Aspeling, 2007; Greeff & Fillis, 2009) show the converse, proposing that an active orientation and a positive approach to problems are more helpful in confronting stressful situations.

The correlation between the dependent variable, family adaptation, and the independent variable passive appraisal is significant in the data of both the parents (see Table 5) and the children (see Table 6). The correlation for both sets of data is negative, as is clearly indicated in the scatterplot in Figure 18. The reliability coefficients of the passive appraisal scale are not very convincing and indicate caution in the interpretation of the findings (see Table 3). The qualitative investigation shows that the parents and the children in the present investigation thought that behaviours that could be described as denial or passive appraisal were considered to be helpful in dealing with the news of a family member diagnosed with HIV. Examples of such thought-to-be-helpful behaviours include merely passing time, doing nothing, avoiding thinking about the stressor or even about coping, changing some behaviour patterns, substance abuse and focusing on just being happy to be alive. It is important, however, to bear in mind that, in the present study, the use of passive appraisal is negatively correlated with family adaptation and, as such, is not considered a helpful behaviour. The fact that families responded to a question about what they considered to have helped them cope with a family member being diagnosed with HIV with comments that were themed under a description of denial should be interpreted with caution. Such comments may, for example, be

comments on how these families coped, without indicating how helpful this was. The limitations of the data-collection method of having families write comments were raised. Making use of interviews for future research may offer solutions to the scarcity of information gathered.

The secondary objective of the present study leans towards viewing the presence of passive appraisal or denial as a form of family problem-solving and coping behaviour not only in a negative fashion and, as shown, it may offer positive coping effects. It remains important, however, that intervention designs raise awareness of the potential negative effects of some forms of denial and/or passive appraisal. Substance abuse as a way of coping with life stressors has obvious negative connotations and costs. The use of the cognitive behaviour therapy technique of cost-benefit analysis may, for instance, offer insight, particularly if combined with adapted Socratic questioning-style interventions, bringing the participants to their own insights regarding short-term benefits at too high a cost. An example that is often and popularly cited in clinical practice relates to substance abuse as a way of avoiding of painful feelings, with the short-term benefits being outweighed by the associated long-term costs. As indicated before, the work of Hayes, Strosahl and Wilson (1999) describes the trap of experiential avoidance in terms of the pain of presence and the pain of absence, where temporary relief and avoidance of pain translate into increased suffering. As mentioned before, short-term denial and passive appraisal may be needed initially when confronting stressful events. Developments in the Acceptance and Commitment Therapy field (Dahl & Lundgren, 2006; Harris, 2007; Hayes & Smith, 2005; Hayes *et al.*, 1999) are highly recommended as evidence-based intervention strategies to support families to achieve a rich and meaningful life despite the presence of adversity.

7.1.2.6 Reframing

The internal family level of problem-solving and coping behaviour, namely reframing, is an important resilience factor, as was shown in the discussions of resilience theory. Reframing relates to the ability to reformulate or redefine the problem in terms of the meaning it has for the family (positive, negative, or neutral) (McCubbin & McCubbin, 1996). Coping behaviours related to

changing thoughts about the severity of the influence of a stressful event may be described as behaviours inclusive of the maintenance of a positive attitude, making sense of the stressful situation, and being fatalistic, nihilistic, cynical and perhaps even antagonistic. It is thought that denial (described in the previous section) may represent a form of reframing. In the discussion of their ten key resilience factors, McCubbin *et al.* (1997) did not discuss reframing *per se*, nor did they operationalise the ability to change thoughts about a stressful situation. However, the authors included reframing in some of the other key resilience factors, such as problem-solving communication (of which the reframing scale forms a part of the FCOPES measure), equality, flexibility and truthfulness. The importance of reframing as a resilience factor is founded in the theoretical views that underpin the present study (McCubbin & McCubbin, 1996; McCubbin *et al.*, 1997; Walsh, 2003) and a number of recent studies (Amirkhanian *et al.*, 2003; Lindblad-Goldberg *et al.*, 1988; Markstrom *et al.*, 2000; Milam, 2006; Parapully *et al.*, 2002; Rotheram-Borus *et al.*, 2006a; Rotheram-Borus *et al.*, 2005; Stetz *et al.*, 1994; White *et al.*, 2004; Zautra *et al.*, 2005). Reframing was incorporated in Walsh's (1996) resilience framework in the family paradigms or shared beliefs aspect, and for Wolin and Wolin (1993) it is included in their seven resilience factors, with the emphasis placed slightly differently on insight and humour. As reframing as a psychological coping skill is enhanced by the presence of a more flexible approach to and view of stressors, it may be noted that there is support for reframing (perhaps open to compromise approach to adversity management) in recent South African studies of resilience (Greeff, 2000; Greeff & Human, 2004; Greeff & Van der Merwe, 2004).

The primary objective of identifying resilience factors in single-parent families affected by HIV/AIDS was achieved when it is shown that reframing is one such factor. The results of the qualitative part of the present study show that the parents' responses regarding what helped them cope with a family member being diagnosed positively with HIV ranked reframing (changing thoughts about the effects of a stressor on family adaptation) in the fifth place, while the children ranked it sixth. The results obtained for the reframing subscale of the FCOPES showed that, in the

present study, the dependent variable of family adaptation correlated significantly and in a positive direction with the independent variable reframing. The correlations are strong and are similar for both the parents (Table 5) and the children (Table 6). Table 3 shows good reliability coefficients for the reframing subscale for both parents and children.

By operationalising reframing as a resilience factor, the secondary objective of the present study is achieved. Reframing, or changing thoughts about an event or perceptions about something, forms the basis of cognitive psychology and is operationalised in Cognitive Behaviour Therapy (CBT), Rational Emotive Behaviour Therapy (REBT) and Acceptance and Commitment Therapy (ACT), all which have roots in individual and group behaviour therapy. Family therapeutic interventions may make fruitful use of the above psychotherapies to support families in a variety of ways to develop more functional and adaptive coping styles that increase the potential for a resilient outcome in the face of adversity. A cautionary note, however, rests in the preclusive high level of training required for skilled practitioners to employ interventions (possibly with high financial implications). However, it is the stated intent and indeed philosophical basis of the mentioned therapeutic interventions to promote individual independence and, consequently, numerous self-help materials can be found in the marketplace. Skilled searches on the Internet surprise with the number of freely available resources.

7.1.2.7 Material support

Both the parents and the children indicated material support as the least important strength (see Table 4) that helped them cope with a family member being diagnosed with HIV. In the present investigation the independent variable, family income, did not correlate significantly with the dependent variable, family adaptation (see Table 5), and neither did employment status (see Figure 22). This finding supports the qualitative reports on the lesser importance of material support for resilience. It is, however, not implied that material support is not important; there is indication that material support is valued by families in crisis, although perhaps not as highly as other resilience factors. McCubbin *et al.* (1997) did not indicate material support as a separate key resilience factor.

These authors did, however, include material support as part of their family hardiness factor, referred to by McCubbin and McCubbin (1996) as the tangible aspect of hardiness. Walsh (2003) included social and economic resources as sources of material support in her family resilience framework. It is important to bear in mind that poverty was indicated as a serious problem for single-parent families (Horowitz, 1995; Swain & Howe, 1995; Walshe, 1994), referred to by Torremocha (2002) as the “new poverty” (p. 184) to highlight the economic struggles of female-headed single-parent households (see Section 2.4.5.1). Concerns about material support have been indicated as significant in recent studies of family resilience (Amirkhanian *et al.*, 2003; Krishna *et al.*, 2005; Lindblad-Goldberg *et al.*, 1988; McCubbin, 1989; Milan *et al.*, 2005). Although most studies referenced in the present investigation showed similarly for the parents and children that material support was not the most important resilience factor, it remains one of concern. In the South African context, Van der Merwe and Greeff (2003) found that economic resources are deemed the least most important coping resource.

From the preceding it may be concluded that material support is clearly not the most important resilience factor considered by the participants in the present study. This does not mean, however, that material support in itself is not important. It appeared only to be not as important as a number of other factors. In this regard, material support fulfils the primary objectives of identifying resilience factors in single-parent families affected by HIV/AIDS. Although material support is not usually included in psychosocial interventions designed to assist families faced with adversity, it highlights the need for consideration by agencies that have the power or ability to make a difference in a more tangible manner. Politically, the plight of families affected by HIV is advocated at a high level worldwide. This will have to continue for as long as HIV infections continue at levels described as pandemic in nature. Raising awareness of the need for material support is part of meeting the secondary objective of the present study, namely of supporting the operationalisation of the resilience factors identified in the study.

7.1.2.8 Acquiring social support

Although it was shown that social support is an important resilience factor (see Section 7.1.2.2), it is thought that the behaviours of families in crisis are also important to consider. In this light, in their Resiliency Model, McCubbin and McCubbin (1996) deemed reaching out to friends to be an example of a problem-solving and coping behaviour. Consequently, the acquiring social support subscale of FCOPES was designed to measure the frequency of such behaviours in families in crisis. Communication patterns, doing something about the crisis and reaching out to others for assistance when in crisis are proposed by leading theorists (Antonovsky & Sourani, 1988; McCubbin *et al.*, 1997; Walsh, 2003) to be characteristic of resilient behaviour. It is interesting that Wolin and Wolin (1993) did not particularly highlight reaching out as a resilience quality per se. However, these authors did include the importance of relationships and of using initiative, perhaps referring to acquiring social support when in distress in an abstract manner.

The correlations between the dependent variable, family adaptation, and the independent variable acquiring social support were non-significant. This result was similar for the parents (see Table 5) and the children (see Table 6) in the present study. The reliability coefficients of the acquiring social support subscale indicate reliable results for both the parents and the children (see Table 3).

It is an interesting finding that reaching out for support did not correlate significantly with family adaptation, as did the variable social support. The present author did not find either supportive or contradictory findings of this nature in other studies. From this result it may be deduced that a distinction needs to be made between social support and the actual use of such support by families in crisis probably is necessary. The qualitative investigation showed that the families indicated social support and the use thereof to be important. An example was the parent in family #25 indicating the support group to have been helpful when asked about what was considered to have helped the family cope with the news of a family member being diagnosed with HIV. It may be concluded that the social support factor and mobilising the use of this factor needs further investigation.

7.1.2.9 Mobilising

Similar to acquiring social support (see Section 7.1.2.8), mobilising the family unit to find, get and accept help such as professional help and the use of community resources is proposed by McCubbin and McCubbin (1996) to represent a slight variation in the resilience factors that make up the Resiliency Model. Rather than offering a view of how the family reaches out to others in times of crisis, the mobilising subscale of FCOPEs offers views of the ways in which the family as a unit organise themselves in terms of reaching out and accepting help. Although not a separate key resilience factor identified by the authors whose work underpins the present study, McCubbin *et al.* (1997) incorporate the mobilising aspect of resilience behaviours and actions under a number of other key resilience factors, such as family problem-solving communication, flexibility and social support. In the theory of Walsh (1996), mobilising is included in the community resources (and use thereof) aspect of her resilience framework. Wolin and Wolin (1993) list insight, relationships, initiative and creativity as being part of seven identified resilience factors among which it may be deduced that the notion of mobilising as crisis orientation behaviour is embedded. Insight into creative problem solving and stimulated initiative may serve to activate or mobilise the family into active coping behaviours (probably in the context of supportive relationships).

The correlations between the dependent variable, family adaptation, and the independent variable mobilising is significant and in a positive direction. The results are similar for the parents and the children (see Table 5 and Table 6). Mobilising as a separate resilience factor was not investigated in the qualitative part of the present investigation. The parents and children, however, indicated that the presence of social and material support is important to help them cope. This finding supports the primary objective of identifying resilience factors. The manner of interpretation may, however, have overlooked the possible notion of mobilising as a family unit and indicates the need for future, more in-depth discussion with families about this aspect of their coping behaviours. The use of semi-structured interviews rather than only offering an opportunity to write comments, such as was

done in the present investigation, may offer solutions in this regard. The reliability of the mobilising scale is not very satisfactory for both the parents and the children (Table 3).

It therefore may be concluded that mobilising behaviours do not indicate a separate resilience factor per se, but form part of another construct that serves as a resilience factor in its own right (namely that of family problem-solving and coping behaviours). This conclusion is congruent with the theory in the sense that not one of the main resilience theories driving the present study emphasised mobilising as a separate key resilience factor. All the theories considered included mobilising within other resilience factors. The findings of the present study in this regard support the theory. Consequently, it is important to consider the presence of mobilising behaviours, and not merely the presence of resilience factors, as important in aiding successful coping by families in crisis.

7.1.2.10 New insights

A number of new insights developed during the review and analysis of the children's responses to the qualitative question about the important aspects that contributed to the family's ability to cope with adversity. The families that participated in the study were of low socioeconomic standing and it appeared that the news of a family member being diagnosed positively for HIV merely presented another setback amongst various other difficulties. Comments such as "We are used in problems" and "My parents were already infected so it was not a big blow" emerged in the children's responses, but were not present in those of the parents. Some children saw their parents as sources of strength, for example "My mother is a very strong lady". Another theme that emerged was one of guilt and remorse, which also was not present in the parents' comments. This is reflected in a comment such as "I disappointed my mother and my family and I'm very sorry". These insights pose an opportunity for further research into the notion that what appears to be a crisis situation may in fact not even be considered as such by those affected. This latter point was in fact addressed in the appraisal aspect of the Resiliency Model.

7.2. Best predictive models

Regarding best subsets regression, recognition is given to the fact that this is an empirically driven method that relies solely on the data to derive “optimal” models. Hierarchical regression analysis, a possible alternative technique, was not applicable in this instance because the underlying theory of the constructs did not propose any hierarchical structure of variable influence on family adaptation (measured with the Family Attachment and Changeability Index 8 (FACI8) at the time when the study was conducted. The best subsets regression was never used in isolation for drawing conclusions. It was used as multivariate extensions to the correlation analyses, and always interpreted in conjunction with the findings from the correlations analyses. Statistical findings were always discussed in relation to the underlying theory, and in cases where statistical findings could not be backed up by theoretical arguments, recognition was given to the fact that these were findings in need of further research.

The best subsets regression model utilising the parents’ data (see Table 7) showed the resilience factors family hardiness, availability of social support, acquiring social support, reframing of a crisis situation and family problem-solving communication to best predict family adaptation. In Table 9 the children’s best subsets regression model, based on the results of the present investigation, included the resilience factors availability of social support, acquiring social support, reframing of a crisis situation, and family problem-solving communication. Interestingly, the children’s predictive model did not include family hardiness, but other than that it was similar to that of the parents. The parents’ model significantly predicts family adaptation, accounting for 69% of the variance. The children’s model significantly predicts 72% of the variance in family adaptation. It is also noted, as discussed in Section 6.3, that the negative sign in front of the acquiring social support factor in both the parents’ and the children’s models offers interesting information. It is shown (see Figure 26) and discussed that the variable availability of social support co-operated with the variable acquiring of social support (even though acquiring social support, when considered independently, did not correlate significantly with family adaptation). This latter

finding shows that the high availability of social support, combined with low acquiring of social support, predicts high family adaptation (and vice versa) (shown in Figure 26).

It may therefore be concluded that, in the case of the parents' data, better family adaptation is predicted by the presence of the following independent variables: more family hardiness, more available social support, less acquiring social support, more reframing of crisis situations, and more family problem-solving communication. The children's view of family adaptation is similarly predicted, except for the omission of family hardiness.

The qualitative findings support the quantitative findings of the present study, in so far as both the parents and the children reported that they valued the presence of factors such as hardiness, social support, reframing and communication as supportive aspects in the face of crisis. It is interesting, however, to note that the children's model does not include hardiness, as is the case with the parents. It is further interesting to note that the actual acquiring of social support in the predictive model played a significant role regarding the level of family adaptation. However, the correlations between the dependent variable, family adaptation, and the independent variable, acquiring social support, are non-significant for both the parents and the children.

The resilience factors identified through multiple regression analysis and included in the best predictive models will be discussed in the next section.

7.3 Conclusions

The most important family resilience factors identified through qualitative analysis in the present investigation were family hardiness, availability of social support, communication, hope (including a sense of spirituality or religiosity), denial (or getting on with life) and reframing (the ability to change thoughts about the adverse event). Material support was found to be the least important resilience factor contributing to family adaptation. In the quantitative analysis of the present study, the correlations of a number of independent variables with the dependent variable family adaptation were determined. The independent variables were selected on the basis of the theory that the present

study was based on, namely the Resiliency Model of McCubbin and McCubbin (1996). As previously discussed, most of the correlations were significant and the results of the parents and children were similar, with only slight variations, which were noted and discussed. A best predictive model was developed by means of multiple regression analysis. Two models, one for the parents and one for the children, were calculated. As indicated previously, the models were essentially the same, with only one factor (family hardiness) not included in the model based on the children's data. The factors identified through multiple regression analysis and making up the best predictive models will be discussed in the following paragraphs, with reference to the theory upon which the present study built and expanded and to published research findings. The factors identified are family hardiness, social support, acquiring social support, reframing and family problem-solving communication.

Family hardiness as a resilience factor is based on the resilience theories upon which the present study built (Hawley & DeHaan, 1996; McCubbin & McCubbin, 1996; McCubbin *et al.*, 1997; Walsh, 2003; Wolin & Wolin, 1993). A number of studies (Bower *et al.*, 1998; Lindblad-Goldberg *et al.*, 1988; Stetz *et al.*, 1994), including some South African studies (Greeff & Aspelung, 2007; Greeff & Du Toit, 2009; Greeff & Fillis, 2009; Greeff & Holtzkamp, 2007; Greeff & Human, 2004; Greeff & Van der Merwe, 2004; Greeff, Vansteenwegen, & De Mot, 2006; Greeff, Vansteenwegen, & Ide, 2006; Greeff & Wentworth, 2009) that based their investigations on the Resiliency Model of McCubbin and McCubbin (1996), provide evidence of the importance of family hardiness. As discussed, family hardiness presents as an important family resilience factor that correlates significantly, positively and strongly with the dependent variable family adaptation for both the parents and the children. However, as shown, family hardiness only predicts family adaptation in the case of the parents' views. Confounding the findings is the fact that, qualitatively, the children reported hardiness types of factors to have been helpful in coping with a family member diagnosed with HIV. This result warrants further investigation and consideration of the limitations of the measuring instruments used, and of the interpretive model used for the qualitative analysis. Due to a

difference in the predictive model of the parents and the children, being that the children's one did not include family hardiness as a resilience-predicting factor, family interventions should consider different age-related content.

The importance of social support for resilience forms a significant part of the model on which the present study is built. The significance of social support as a resilience factor is supported in theoretical writing (Hawley & DeHaan, 1996; McCubbin & McCubbin, 1996; McCubbin *et al.*, 1997; Walsh, 2003; Wolin & Wolin, 1993), and by resilience research (Markstrom *et al.*, 2000; Mellon & Northouse, 2001; Mizota *et al.*, 2006; Parapully *et al.*, 2002; Pomeroy *et al.*, 1996; Rotheram-Borus *et al.*, 2005; Tak & McCubbin, 2002; White *et al.*, 2004), including in the South African context (Greeff, 2000; Greeff & Aspeling, 2007; Greeff & Du Toit, 2009; Greeff & Fillis, 2009; Greeff & Holtzkamp, 2007; Greeff & Human, 2004; Greeff & Van der Merwe, 2004; Greeff, Vansteenwegen, & De Mot, 2006; Greeff, Vansteenwegen, & Ide, 2006; Greeff & Wentworth, 2009; Van der Merwe & Greeff, 2003). Two studies (Owens, 2003; Pakenham *et al.*, 1994) reported on the negative effects of social support, such as a tendency for over-protectiveness. The quantitative and qualitative results of the present study support the importance of social support as a resilience factor. It therefore is essential for social support to be established and maintained (limitations considered) in communities.

The predictive resilience factor, acquiring social support (discussed in Section 7.1.2.8), offers interesting information about the family adaptation of the participants in the present study. In the predictive models of both the parents and children it was shown that the independent variable, acquiring social support, always co-operated with the independent variable social support, but in a negative way (as shown in Figure 26). Interestingly, what this means is that, for the families in the present study, the availability of social support was considered (qualitatively reported and, with significant positive correlations with the dependent variable family adaptation, quantitatively determined) to be a resilience factor, but that actually reaching out for such support brought about lower, or indicated lower, family adaptation. This may of course be a rather obvious phenomenon

or observation, should it be considered that families might only reach out for support when the level of family adaptation has deteriorated significantly. Acquiring social support did not correlate significantly with the dependent variable in both the parents' and the children's observations. This factor was not investigated in depth in any studies on observing or investigating resilience that the present investigator could locate, indicating future directions of inquiry.

Reframing forms part of the predictive model of family resilience. The resilience factor, reframing, is proposed in the theories upon which the present study is based; such as those of McCubbin and McCubbin (1996), McCubbin *et al.* (1997), Walsh (1996) and Wolin and Wolin (1993). Research in international (Amirkhanian *et al.*, 2003; Lindblad-Goldberg *et al.*, 1988; Markstrom *et al.*, 2000; Milam, 2006; Parapully *et al.*, 2002; Rotheram-Borus *et al.*, 2006a; Rotheram-Borus *et al.*, 2005; Stetz *et al.*, 1994; White *et al.*, 2004; Zautra *et al.*, 2005) and South African (Greeff, 2000; Greeff & Human, 2004; Greeff & Van der Merwe, 2004) contexts offers support for reframing as an essential resilience skill. In the present study it is shown that reframing correlated significantly, positively and strongly with the dependent variable family adaptation (see Table 5 and Table 6). The measure was shown to be reliable (see Table 3) and the qualitative results showed that the parents and children considered reframing as one of the factors that helped their families cope with the news of a family member being diagnosed with HIV. It may therefore be concluded that reframing or the ability to change thoughts about an event or perceptions about a crisis event is an important element to be included in intervention programmes. Programme content based on evidence-based treatments or interventions may include Cognitive Behaviour Therapy (CBT), Rational Emotive Behaviour Therapy (REBT) and Acceptance and Commitment Therapy (ACT). As mentioned before, a cautionary note needs be raised about the need for skilled practitioners, with the associated high costs (human and financial resources). Self-help and free resources available on the Internet may offer solutions to this concern.

Family problem-solving communication is shown to be a final predictive variable in the best predictive model based on the findings of the present study. The significance of family problem-

solving communication is firmly established in the resilience theories upon which the present study is based; theories such as those proposed by McCubbin and McCubbin (1996), McCubbin *et al.* (1997), Walsh (1996) and Wolin and Wolin (1993). Published studies support the significance of family problem-solving communication in international (Dutra *et al.*, 2000; Knafl & Zoeller, 2000; Lindblad-Goldberg *et al.*, 1988; Milan *et al.*, 2005) and South African (Greeff & Du Toit, 2009; Greeff & Holtzkamp, 2007; Greeff & Wentworth, 2009; Jonker & Greeff, 2009) contexts. It is necessary to heed the positive and negative aspects of communication when endeavouring to design intervention programmes aimed at improved family problem-solving communication. Good evidence for the importance of family problem-solving communication in the results of the present investigation is shown in Table 5 and Table 6, where the correlations between the dependent variable family adaptation and the independent variable family problem-solving communication are significant, positive and strong. The measurement instrument was found to have good reliability coefficients (see Table 3). The qualitative evidence in the present study provides further support for the inclusion of problem-solving communication skills when building interventions. Note, however, as discussed in the detailed sections on family problem-solving communication, that this is a highly complex resilience factor that warrants further investigation.

Concluding remarks will be made and an overview of the present study will be provided in the following sections, including views on resilience as a descriptive characteristic, behaviour or both, a discussion of the limitations of the study, recommendations for further study, and final concluding remarks.

7.3.1 To be or to do?

The findings of the present study, viewed against a backdrop of sound theory, robust research and the salutogenic approach of strength-focused interventions, pose the question as to whether it is aspects of family characteristics, such as family typology (see the models discussed in 2.1.3), or what families do in the face of adversity that contribute to a resilient outcome following confrontation with a crisis. The findings of the present study support the notion that both family

characteristics and what families do are important for resilient outcomes when families are confronted by adversity. Family hardiness, for example, may be measured as a variable, a characteristic of a resilient family, but may also be identified by activities that promote hardiness in itself. The same may be said of the other factors identified in the present study. Consequently, it may be deduced that the answer to the question, *to be or to do?* is, in fact, both.

7.3.2 Limitations of this study

The findings of the present study support the viability and usefulness of the Resiliency Model (McCubbin & McCubbin, 1996) for research and clinical practice. It is necessary, however, to highlight the limitations of the present study. The limitations will be discussed on the basis of a number of factors, including the limitations associated with a cross-sectional study design, the use of self-report measures, cultural and language issues, measurement difficulties, the data techniques used and the potential for Type 1 error, data selection and recruitment, and the definition of single parenthood.

7.3.2.1 Limitations of cross-sectional study design

Family resilience may perhaps be studied better by means of longitudinal research designs. Resilient outcomes in the face of adversity may offer valuable insights over time. However, costs, in terms of finances and time, are prohibitive for the implementation of longitudinal studies. The cross-sectional study design offers a time-limited view of the complex phenomenon of how families cope with adversity. At the time of assessment, a participating family may be assessed as coping well; however, over the passage of time, including the long-term stresses associated with coping with a chronic or life-threatening illness, for instance, such coping may deteriorate. It may, however, be said that, in terms of the salutogenic approach, the present study is interested in determining those factors that contribute to coping well with adversity (a factor in which the chosen research design has proven to be efficient). The cross-sectional study design offered a valuable snapshot of how poor, single-parent South African families cope with the news of a family member being diagnosed positively for HIV at a particular point in time. The cross-sectional design does not

allow much room for the consideration of individual variability in coping. However, the present study is interested in discovering what many families considered to have helped them cope with the diagnosis of HIV/AIDS.

7.3.2.2 Use of self-report measures

Self-report measures offer a subjective perception of whatever is being measured. Even though the measures used in the present study have been shown to be valid and reliable, it has to be considered that the manner in which questionnaires are completed is influenced by many factors outside of the parameters that the researcher can control. Factors such as how individual participants were feeling at the time of completion, and perhaps that they wanted to please the counsellors who collected the data, may have contributed to a negative or positive bias. The items in self-report questionnaires do not capture the subtle complexities that interview and qualitative research techniques may offer. In the present study it was attempted to address this latter issue by posing two qualitative questions to provide more detailed information about how the families coped.

7.3.2.3 Cultural and language issues

Language issues were addressed by translation and back-translation of questionnaires from English into Afrikaans and vice versa. When the participants needed assistance with the completion of the questionnaires, such as explanation of an item, not being able to read, or needing translation into Xhosa, the counsellors would offer help. This latter factor brings to mind a consideration of consistency, which may have been compromised. Culturally, difficulties with investigating the effects of HIV/AIDS offered many challenges. The method section provided a description of the fact that, due to stigma (also a well-documented factor mentioned in the literature), the researcher did not have personal access to the participants. It is important to consider the incredibly sensitive nature of HIV infection in the communities that were visited, and there is a place for future research in which privacy will not be compromised and more direct access to patients may be available.

7.3.2.4 Measurement difficulties

Some aspects of the measurement difficulties were raised in the preceding point. Future research may well consider practical methods of developing trusting relationships with local communities in order to gain direct access to participants. The lack of control over the measurement process, and the fact that the researcher had to rely on a number of counsellors, need to be considered. It was described how the counsellors initially were not paid for data collection. At that time, data collection was sporadic, giving rise to a need for a change in data-collection strategy. When an offer was made to pay the counsellors for completed data sets, participant numbers increased. The participating families were not paid for their contribution. Future research may consider an alternative manner of offering compensation for participation. It may further be included in research designs that payment or material reward be discussed during the earlier stages of research, such as during a pilot study.

7.3.2.5 Data analysis technique and potential for type 1 error

The best subsets regression technique was used because no hierarchical structure was evident at the time of data collection. Conclusions were drawn in conjunction with the results of the correlation analyses and underlying theory. It is important to consider that, although no null hypothesis was stated, the potential for interpreting the results of the present study as “false positives” or type 1 error should guide the careful and sensitive appreciation of the findings of the present study, and the potential meanings associated with said findings.

As part of the correlation and regression analyses, judgements were made throughout on the acceptability of assumptions by inspecting scatterplots (for correlations) and residual plots (for regression). No serious problems were found that could be judged to have had a negative influence on the conclusions drawn from the results in the interpretation of the findings of the present study).

7.3.2.6 Data selection and recruitment

It was difficult to manage participation in the present study according to clear inclusion and exclusion criteria in order to maintain consistency throughout the process of data selection. The definition of single parenthood proved to be problematic in the study population; as discussed in the following section. The advantages of multi-site recruitment considered, this method also proved challenging in relation to the exercise of control over the selection of the study population in a remote manner. The researcher did not have direct access to the potential participants and it was not clear how many families were approached and, indeed, how many refused to participate. Future studies may benefit from a study design in which more direct control can be exercised over the selection of study participants. It is envisaged that future studies on the efficacy of potential interventions for single-parent families affected by HIV/AIDS will be designed and that there will be a more direct influence over the inclusion and exclusion of potential participants.

7.3.2.7 Definition of single parenthood

Inclusion and exclusion criteria for the participants in the present study regarding single-parenthood status were complicated due to the different definitions found in the course of the literature review, as discussed in Chapter 2. For the present study it was allowed that, if families considered themselves to be single-parent families, they were included in the study. This inclusion led to families being included in which a cohabiting boyfriend may have been part of the family structure; this was a decision based on the views of Sugarman (2003) and discussed extensively in Chapter 2. Future research may consider a more strict inclusion policy of adhering to the notion of a single-parent family being defined as consisting of one adult living with his or her children.

7.3.3 Recommendations

The findings of the present investigation support the design and implementation of family-level intervention programmes. Rotheram-Borus *et al.* (2005) indicated the need for support for the whole family, while Rotheram-Borus *et al.* (2006a) showed the benefits of family-based interventions over a period of time. Pomeroy *et al.* (1996) found supportive evidence for

psychoeducational intervention programmes, and Rotheram-Borus *et al.* (2006b) concluded that time-limited, family-based interventions offered long-lasting benefits. White *et al.* (2004) showed that resilience behaviours can be taught and reinforced and that family-focused interventions are needed. The findings of the present study support family-based interventions, inclusive of content that reflects the quantitatively supported focus on those family resilience variables identified as most important. The findings of the present investigation show that material support is not the most important focus needed by governmental family-support programmes. However, material support was raised as one of the factors thought by families to have been helpful in their coping, and should not be negated as not being important. Specialised training will be needed for facilitators following the development of programmes that focus on the development of family hardiness, the use of social support, communication styles and techniques, the fostering of hope and the utilisation of denial in efficient ways (finding ways of identifying negative coping behaviours such as substance abuse and desisting from using them, using denial in an efficient, short-term way to get on with the business of living despite suffering some form of adversity) and acquiring reframing skills as a coping style for families (as discussed extensively in Section 7.2.6).

Recommendations for further research, consistent with the recommendations in the reported studies, include that the phenomenon of family resilience needs to be investigated further. Continued work on the development of a direct measure of family resilience is recommended. Longitudinal studies, and investigations in rural communities and with various populations (cultural, medical conditions, etc.) have consistently been recommended by earlier studies. Despite the limitations of cross-sectional survey designs, as discussed in the limitations of the current study, they are still recommended due to their benefits, such as cost and time effectiveness. Further research on resilience in various types of families affected by HIV/AIDS is recommended. Further research remains the moral responsibility of the scientific community in order to support mankind in its hour of need, as reflected in the number of HIV infections that continue to increase at an astounding rate. It is also the moral responsibility of the scientific community to develop and make available new

medical discoveries and novel psychosocial interventions, where indeed investment may not show monetary returns striven for in a purely capitalistic venture. Research and development programmes usually involve large financial investments, and it has been shown that HIV/AIDS affects some of the poorest nations the worst. In the light of this, the return on investment for pharmaceutical companies, for example, may not make the investment worthy if only the financial benefits of shareholders are considered. For the altruistic benefit of mankind at large, it remains important to invest in efforts to address the effects of HIV infections on families, and it is hoped that the preceding will play its role in stimulating further scientific endeavour.

7.3.4 Final concluding remarks

The present study represented a rewarding experience for the investigator, particularly also through the efforts to assist in the struggles of the participants (and others) to come to terms with either themselves or a loved one having been diagnosed with a potentially life-threatening illness. Despite the limitations of the study, and the extended demands on the investigator and his family in the name of science, it is thought that the endeavour was both necessary and representative of the subject of resilience. Many of the participants would have died in the time that the study evolved. It is in their memory that the resolve of the investigator was tested time and again. It is in the memory of those who have passed on that human kindness needs to prevail, that human beings will continue to care – to care to the extent that they will contribute to efforts to decrease suffering and, where suffering cannot be avoided, to increase the ability of those affected to manage.

It may be succinct to conclude the intent of the current study with a New Zealand Maori proverb:

He aha mea nui o te Ao?

He tangata, he tangata, he tangata.

(What is the most important thing in the world? It is people, people, people.)

In the light of the preceding, it may be stated that the present study highlighted the significance of HIV infection in a global sense. Further contributions of the present study relate to support for the

plight of poor, single-parent families. More so, however, it may be stated that adherence to scientific inquiry brought to light factors that contribute significantly to these families' coping abilities (the primary objective). It was further shown that these identified factors may be operationalised (secondary objective) in effective interventions. The hope is expressed that the recommendations for further research and intervention made in this study will stimulate future developments.

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