RESILIENCE IN FAMILIES WHERE A MEMBER IS LIVING WITH SCHIZOPHRENIA

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Chapter One: Introduction and Problem Statement

1.1. Introduction

Schizophrenia cuts across all racial, gender, and socioeconomic lines. Schizophrenia affects 1% of the population in Ireland: 35000 people (Schultz & Andreason, 1999); and affects 1.4 - 4.6% per 1000 people in the USA: 2.8 million - 9.8 million people (Jabelensky, 2004). In South Africa the figure is approximately 1% of the population or 500 000 people (Nicholas, Malcolm, Krosigk & Pillay, 2003).

The median age of onset is 21.4 years for men and 26.8 years for women (Daubenton & van Rensburg, 2001), with only 10-20% recovering fully after the first psychotic episode (Saddock & Saddock, 2003). The schizophrenic patient is often unable to continue life as before diagnosis, and may progressively need more care as the years pass. Deinstitutionalization over the course of a number of decades has resulted in responsibility for care of mentally-ill individuals shifting to the individual’s family. The struggles faced by such a family can be overwhelming as they struggle with this responsibility due to lack of training, lack of knowledge and insufficient professional support (Winefield & Harvey, 1994). The stress on the caregivers is often magnified as their support structures around them may ‘shut down’ out of fear of the schizophrenic illness (Williams & Mfoafo-M’Carthy, 2006).

The characteristic symptoms used to define schizophrenia include various forms of delusions, hallucinations, thought disorders and abnormalities in emotional expression, social interaction, attention, volition and drives. The functional decline of the schizophrenic individual leads not only to social difficulties, but also economic difficulties that may cripple a family (Fadden, Bebbington & Kuipers, 1987). When first diagnosed, some families may be so overwhelmed by the ‘label’ given to their family member, that they see little hope or way to move forward. One explanation is offered by an American psychiatrist whose own son was diagnosed with schizophrenia, “We experience this terrible feeling of loss and grief for the son we knew. There is also this terrible loss of expectations. We feel
cheated out of watching him mature…it is a mourning without end because, of course, Gary is not dead at all. He is very much still with us, seeming eternally twelve years old, needing constant care and attention” (Willick, 1994, p.14).

Providing such care is associated with high levels of distress. Accordingly, much attention has been given to understanding the pressures faced by family members, with the hope of understanding how coping resources may be strengthened to sustain these care-giving relationships (Harvey, Burns, Fahy, Manley & Tattan, 2001).

However, despite gains in understanding the needs of a schizophrenic family member once out of the hospital environment, care-giving relationships can still break down. The individual with the illness is often left more vulnerable to relapse, recurrent hospitalizations, homelessness and other negative outcomes (Jewel & Stein, 2002). The stress of not only interacting with the afflicted family member, but also with the grief associated with the illness, places an incredible strain on the day-to-day functioning of that family (Pollio, North, Reid, Miletic & McClendon, 2006).

From the brief review provided, it is evident that research has been conducted regarding the stressors, strains and difficulties of caregivers of schizophrenic family members. However, the strengths of these families are under-investigated, and the current study will attempt to start filling this void. The following section provides an understanding of how this strengths-based approach emerged.

1.2. Positive Psychology

The discipline of ‘positive psychology’ emerged formally as a psychological approach in 1879, in an attempt to understand better how to make meaning out of life and how to function optimally as a human being (Linley & Joseph, 2004). From Aristotle’s thesis on eudaimonia to Aquinas’ writing about virtue, people have been seeking to understand the human potential for fulfillment. Positive psychology emerged in response to the negative view of studying psychological disorders. It seeks to understand the qualities that strengthen and develop individuals (Linley & Joseph, 2004). Research has
moved from seeking to understand why people get ill to why, when people are exposed to the same stress which causes some to become ill, do some remain healthy (Antonovsky, 1987).

O’Leary (1998) stated that psychologists have moved away from vulnerability or deficit models to focus rather on how people triumph in the face of adversity. This may also be seen as a shift from pathogenesis – aiming to determine why people become sick and why certain people develop certain diseases - to salutogenesis – a paradigm for thinking about illness, health and resilience (Strumpher, 1990). Hawley and De Haan (1996) extended this to family therapy as they explain the movement in family work towards strengths–based approaches, where an emphasis on resilience in clients has accompanied this focus.

1.2.1. Resilience

Research has developed looking at various factors that allow individuals to achieve ‘wellness’. The concept of individual resilience “implies a track record of successful adaptation in the individual who has been exposed to biological risk factors or stressful life events” (Werner & Smith, 1983, p. 4). Masten and Coatsworth (1988, p. 459) defined resilience as “a process of, or capacity for, or the outcome of successful adaptation in challenging and threatening circumstances”. This resiliency can be understood in terms of values, attitudes and behavioural dimensions that the individual must have to overcome adverse conditions.

1.2.2. Family Resilience

Just as in recent decades there has been a shift in psychology from looking at a person’s pathology to rather examining his/her strengths for development, so to in the area of family research and therapy, the focus has shifted from examining a family’s deficits to discovering a family’s strengths (Walsh, 2003). McCubbin, McCubbin, Thompson, Han & Allen (1997) extended the definition of resilience to the family system, stating that there are two factors which are also important: These two factors are elasticity, which refers to that property of the family system that enables it to maintain its established patterns of functioning after being challenged and confronted by risk factors; and buoyancy, which is
the family’s ability to recover quickly from misfortune, trauma or transitional events causing or calling for changes in the family’s pattern of functioning. Subsequently, the process of resilience involves the ability to withstand disruptive life challenges and rebound from them (McCubbin, McCubbin, Thompson, Han & Allen, 1997).

Resilience involves dynamic processes fostering positive adaptation, where strengths and resources allow individuals and families to respond successfully to crises and persistent challenges, and to recover and grow from these experiences (Cowan, Cowan & Schultz, 1996). This positive orientation identifies the characteristics of healthy, strong and successful families, thereby emphasizing resilience (Saunders, 2003).

A family resilience framework offers several advantages (Walsh, 2003). Firstly it focuses on strengths in the midst of crises that are used to overcome adversity. Secondly, it does not prescribe that one model fits all families as functioning is assessed within the unique context of the family’s values, structure, resources available and life processes. Thirdly, it does not view a family’s functioning as static, but rather optimal functioning varies and evolves over time (Walsh, 2003). The Resiliency Model of Family Stress, Adjustment and Adaptation (hereafter referred to as the Resiliency Model) (Hawley, 2000; McCubbin & McCubbin, 2001) was used in the current research and consists of two phases namely the adjustment and adaptation phases. The adjustment phase involves the protective factors which influence and shape how the family is able to endure in the face of adversity. The adaptation phase can be seen as how the family responds to the demands of their environment – either successfully or unsuccessfully. When the family is not able to adapt to the change in circumstances, they may return to a state of crisis and the process will begin again (McCubbin & McCubbin, 2001).

1.3. Motivation for Study

The concept of family resilience research is gaining attention in South Africa, with a number of researchers having investigated resilience from a family perspective (Der Kinderen & Greeff, 2003; Greeff & Aspeling, 2004; Greeff & Human, 2004; Greeff & van der Merwe, 2004). Research by
Sellmeyer (2002) at the University of Cape Town sought to examine the needs of families with a relative who is schizophrenic. Two needs were identified as particularly relevant for consideration in this research, namely, support and education. Sellmeyer explained that family members wished to be able to relay their experience of living with a family member who is schizophrenic to a health professional who is empathetic, containing, respectful and sensitive. Participants in Sellmeyer’s research viewed education as knowledge they could gain of how they could improve their family’s functioning to be effective and constructive caregivers. The current research aimed to address these needs through providing family members the opportunity to communicate their experiences to the researcher, with the support of the mental health care workers at the clinics. Furthermore, through feedback given, knowledge could be gained about how better to care for their family member.

As the onset of schizophrenia for a family member may be seen as a crisis for a family, the Resiliency Model may be applied to understand the changes a family undergoes. To date there is no documented research conducted in South Africa or abroad which joins the research domains of schizophrenia and family resilience. Researching families that have lived with the daily challenges of caring for a mentally-ill family member can add to our understanding of why some families are resilient and how they are able to embrace family crises. Understanding key processes involved in families who are able to be resilient when faced with a chronic illness such as schizophrenia, can help clinicians and community health workers alike to mobilize untapped resources, enabling the distressed families to cope more effectively. Furthermore, the benefit and value for participants in this study is in gaining further understanding of how to cope with day-to-day life through understanding what ‘resiliency’ areas could be improved upon within their family. This in turn will allow for better management of the dependant’s illness and facilitate healthier family relations.

1.4. Primary Aim of the Study

This study aims to identify, explore and describe the resiliency factors that enable families to adjust and adapt as a result of having a member living with schizophrenia.
1.5. Outline of Chapters

Chapter One provided an introduction to the present study. The context of the research, including the focus on positive psychology, family resilience, the motivation for the study and the aim of the study are delineated.

Chapter Two examines the construct formulation of resilience. In this chapter the development of individual resilience, and how this led to the construct of family resilience, is presented. The conceptual model that was used in the present study to understand family resilience is then explained.

Chapter Three explores the DSM-IV-TR diagnosis of Schizophrenia by providing a historical background, and discussing the current understandings of the dynamics involved in managing this chronic illness. The challenges that a family may face, and the responsibilities upon the caregivers of family members living with schizophrenia, are examined.

Chapter Four describes the research methodology and procedure followed in this study. The manner in which the researcher gained access to the sample participants, data collection, the measures used, and the data analysis used, is explained. The ethical considerations given cognizance in this study are highlighted.

Chapter Five provides a discussion of the results obtained from the data analysis. Furthermore, the results are interpreted in terms of the literature presented in Chapters Two and Three.

Chapter Six brings the conclusions, which are based on the research results, to the fore. The limitations of the study are discussed, and the recommendations for future research in this field are made.

1.6. Conclusion

In this chapter the researcher highlighted the prevalence of schizophrenia in the general population, and the burden of care placed upon families. The stressors and strains upon the family have been well researched, but the strengths that allow the family to adapt to their family member’s chronic illness are under-investigated. The concept of positive psychology that has emerged in recent decades was
introduced in terms of how this has applied to, firstly, individual resilience research, and secondly, to family resilience research. The need to join two fields in research, schizophrenia and family resilience, has been highlighted, and is the focus of the current study. In the following chapter the concept of family resilience is explained in detail.
Chapter Two: Resilience

2.1. Introduction

Concern with risk, stress and coping in individuals and families has long been a research area in biomedical, psychological and sociological research (Hetherington & Blechman, 1996). The shift in recent decades has been away from making associations between risks and outcomes, towards factors and processes that allow for diverse responses to the risks, with some individuals being more vulnerable and some more resilient, in dealing with adversity (Hetherington & Blechman, 1996).

Traditionally risk was thought of as a single stressor or factor that could lead to a negative outcome. For example, investigations by Sullivan (1962) into families of patients diagnosed with schizophrenia showed a high incidence of pathology in the patient’s parents and poor parent-child relationships. However, this causal model of etiology – one factor being assumed as leading directly to another – did not account for other possible factors and dynamics within the family unit. Rutter (1987) argued that risk should be thought of as a process, where the ‘ingredients’ do not lie in the variable itself, but in the processes that flow from these variables. Rutter implied that all forms of trauma and difficulties in life do not inevitably lead to psychopathology. A paradigm shift is suggested that requires us as researchers to transform our concept of mental illness from a stable category with set outcomes, to a dynamic process of moving towards (or away from) psychological adaptation (Cowan, Cowan & Schultz, 1996).

When populations are defined by a common risk, some individuals are more likely to develop a disorder or have negative outcomes, while others do well despite the adversity they face. Two concepts – vulnerability and resilience - have been used to explain variations in outcomes (Cowan, Cowan & Schultz, 1996). Vulnerability increases the probability of a specific negative outcome in the presence of risk and is useful in understanding the potential negative effects upon an individual or family, when they have been assessed as experiencing some degree of risk (Cowan, Cowan & Schultz, 1996)
A buffer or protective mechanism decreases the chances of a negative outcome in the face of risk (Rutter, 1987). This suggests that psychological adaptation may take place which allows people to not show problematic effects when faced with risk. In some way these individuals may manifest reduced effects of exposure to risk or adapt well when others might not overcome the risk (Cowan, Cowan & Schultz, 1996).

Research has developed looking at various factors that allow individuals to achieve ‘wellness’. Research was conducted that investigated the development of ‘hardiness’, which could possibly mediate stress and illness, and thus reduce the negative effects of stress. Kobasa (1979) suggested that commitment to various areas of one’s life; having a sense of control; and viewing change as a challenge, allowed a ‘hardy’ person to develop. Hardiness was seen as a stress-illness mediator and a moderator of the stress-illness relationship in males and females (Bigbee, 1992; Kobasa, 1979, 1982). Kobasa (1979) found that stressful life events could be mediated by hardiness, and that this disposition is a resistance resource against the development of illness under crisis or stress conditions. Research also showed that it is possible that the state of health under stressful conditions can actually create hardiness, rather than the other way around (Kobasa, 1982).

A number of concepts emerged out of the field of behaviour modification, one of which was learned resourcefulness. This term was in contrast to the (negative) one of learned helplessness, which caused people to see themselves as helpless to control external events (Rosenbaum & Ben-Ari, 1985). Rosenbaum and Ben-Ari (1985) noted that people differed in their capacity for self-regulation and control. When a person was able to regulate their internal processes during a difficult situation, they would be more adept at responding effectively to the situation in the future.

Out of the same field, Bandura formed the construct of self-efficacy (1982). This author stated that people appraise their ability to complete a task, or to judge how long “they will be able to persist in the
face of obstacles or aversive experiences. When beset with difficulties people who entertain serious doubts about their capabilities slacken their efforts or give up altogether” (1982, p. 123).

This section has introduced concepts that contributed to the development of the field of resilience. The concept of resilience as it applies to individuals, and how it has been extended to and developed for families, is now discussed.

2.2. The Concept of Resilience

2.2.1. The Construct of Individual Resilience

Individual resilience theory began with studies of children who were born into adverse conditions, but were able to develop reasonably well and rise above these conditions (Masten, Garmezy, Tellegen, Pelligrini, Larkin & Larsen, 1988). Contributing to this notion that children can rise above their circumstances Antonovsky (1984) developed the notion of salutogenis which views health on a continuum with some people at one end being healthy, and people on the other end being diseased. The author focused on what allows a person to move towards health, with recognition that a variety of factors influence health (Antonovsky, 1984).

An understanding of individual resilience tended to suggest that resilient people had ‘inborn’ qualities or abilities that allowed them to overcome adversity. However, Walsh (1996) indicated that resilient people could not be thought of as simply having “the right stuff all along” (p. 262). The author explained that there were other environmental factors that need to be considered.

The importance of familial factors has repeatedly emerged from individual resiliency studies, which showed that ego-resilience can emerge out of families where there is discord and conflict. Even when children come from under-privileged families, having one supportive parent who instills a hope for the future can have an impact on a child’s resilience (Jenkins & Smith, 1990; Werner & Smith, 1992). Similarly, studies of children from homes which were loving, integrated, had competent parents and
placed a value on education, highlighted the protective aspects of family functioning (Rutter, 1979; Werner & Smith, 1989).

2.2.2. Definitions of Resilience

Masten et al (1999, p. 143) broadly defined resilience as “the class of phenomena involving successful adaptation in the context of significant threats to development”. As indicated, studies focusing on single risk factors, or examining just one variable, were not comprehensive enough, and so research shifted towards indices of cumulative risk or adversity (Garmezy & Masten, 1994). Luthar, Cicchetti and Becker (2000, p. 543) highlighted that it is “a dynamic process encompassing positive adaptation within the context of significant adversity”.

In understanding resilience, the reader can see that risk is usually a predisposing condition of a negative outcome for an individual, with vulnerability increasing the probability of a negative outcome. However, there are individuals and families who overcome and even thrive on the challenges of an adverse situation. Such people are said to be resilient or stress-resistant (Garmezy, 1985). Garmezy and Masten (1994) elaborated by stating that resilience refers to the skills, abilities, knowledge, and insight that accumulate over time as people struggle to overcome adversity and meet challenges. These authors viewed it as an ongoing and developing fund of energy and skill to be used in the current situation. Within the field of developmental psychology various explanations are given of resilience including describing it as individual variations in response to risk (Rutter, 1987).

Hawley and DeHaan (1996) viewed resilience as encompassing three broad themes. Firstly, resilience emerges in the face of hardship and involves the way in which individuals respond to difficulties. Secondly, it has the property of buoyancy, which assumes individuals can ‘bounce back’ or ‘rebound’ from adversity, reaching or surpassing his/her pre-crisis level of functioning. Thirdly, resilience is generally described in terms of wellness rather than pathology.
Polk (1997) explained that four patterns of resilience can be delineated from individual resilience literature. Firstly, the *dispositional pattern* relates to the physical and ego-related psychosocial attributes of an individual. This allows for a resilient disposition towards stressors in life. These attributes include a sense of autonomy or self-reliance, basic self-worth, good physical health and appearance. Secondly, the *relational* pattern refers to the individual’s roles in society and with other people. These roles include intimate relationships and those within the broader societal system. Thirdly, the *situational* pattern looks at the link between an individual and the stressful situation. This pattern includes the individual’s problem-solving ability, ability to evaluate situations and capacity to take action. Fourthly, the *philosophical* pattern refers to the individual’s world view or paradigm, which includes beliefs that promote resilience such as finding positive meaning in all experiences, valuing self-development and seeing life as having a purpose.

Rutter (1987) highlighted the need to focus on the protective *processes* involved in resilience rather than just identifying vulnerability factors. This researcher explained that protection against risk lies in the mechanisms involved in changes in life that reduce the risk impact. One of these mechanisms is the availability of secure and supportive relationships. Understanding what facilitates successful adaptation in individuals is important in understanding the etiology, prevention and treatment of developmental psychopathologies (Cicchetti & Garmezy, 1993; Masten & Coatsworth, 1995). Researchers have used the absence of psychopathology as an indicator of resilience against high-risk conditions (Rutter, 1982; Rutter & Quinten, 1984).

The processes and patterns involved in an individual achieving resilience must be understood in order to understand how the concept of resilience may be extended to the family unit. The following section explains how the concept of family resilience moves beyond seeing individual family members as potential resources for resilience to focus on the family unit as functioning together (Walsh, 1996).
2.2.3. The Construct of Family Resilience

In understanding this approach McCubbin and McCubbin explained that a series of crises, defined as “a state of imbalance, disharmony and disorganization in the family system” (2001, p. 22), and persistent adversities have an impact on the family. Certain family processes will facilitate the recovery of the family members and the unit. There is a necessity for change in the family’s patterns of functioning, placing the family at risk for continued decline. If certain key processes are missing, the family will become maladjusted or dysfunctional. In order for the unit to emerge as resilient, two related family processes must occur within the family system namely adjustment and adaptation. Adjustment involves the influence of protective factors which allows the family to maintain its integrity, functioning and fulfill developmental tasks in the face of adversity. Adaptation involves the recovery factors that allow the family to ‘bounce back’ in a crisis situation (McCubbin & McCubbin, 1993, 2001).

Hawley (2000) explained that resilience for a family may be viewed as a path which a family follows over time, in response to a significant stressor or series of stressors. In crisis situations resilience can be seen as

“the positive behavioural patterns and functional competence individuals and family members demonstrate… which determine the family’s ability to recover by maintaining its integrity as a unit while ensuring, and where necessary restoring, the well-being of family members and the family unit as a whole” (McCubbin & McCubbin, 2001, p. 5).

Furthermore, the family members can be seen as an interacting and integral part of a larger social ecology where hardships faced by the family call for changes in the family system. These include roles, goals, values, rules, priorities, boundaries and overall patterns of functioning (McCubbin & McCubbin, 2005).

Hawley and DeHaan (1996) described the family in two contexts. Firstly, the family can serve as a risk factor, raising the vulnerability of family members. Family factors that create risk are severe marital conflict, parental mental illness and so on. Secondly, the family can serve a protective function, boosting
the resilience of family members. Protective factors include the maintenance of family rituals, proactive confrontation of problems, and the absence of divorce, for example.

A developmental perspective is necessary when studying family resilience. Family functioning is assessed over time as the family moves forward, coping with significant events and transitions. The Family Life Cycle (Carter & McGoldrick, 2005) needs consideration when examining events in the life of a family. Typically the Life Cycle consists of 6 stages:

1. Leaving home – young adults take emotional and financial responsibility for themselves.
2. Creating new families through marriage – a new family system begins.
3. Families with young children – new members enter the system.
4. Families with adolescents – there is an increase in the flexibility of boundaries as children start to gain independence.
5. Launching the children and moving on - individuals exit the family system and new individuals enter.

It is important to consider whether the stressors are predictive normative stressors (e.g. the birth of a first child) or unpredictable, disruptive events (e.g. untimely death of a parent) (Walsh, 2002) for the family. The stage of the Family Life Cycle that the family is in can determine the resources available to the family.

2.2.3.1 Family Resources

Walsh (2002) explained that nine resources may be important for family adaptation:

1. Making meaning of adversity - the family develops resilience through the relationships they have together. Through a sense of coherence, the family is able to interpret the crisis as meaningful, understandable, and a manageable challenge. The manner in which the family appraises the crisis, their distress and recovery is important in overcoming the adversity.
2. Positive outlook - having hope and confidence in their ability to ‘overcome the odds’ is important for the family to ‘master’ the possible crisis. Similarly, encouraging each other to focus on their strengths, and to accept what cannot be changed, is important.

3. Spirituality - having a faith, rituals, and larger values in life (future goals and dreams) allow the family to ‘transcend’ and be transformed by the adversity, which encourages learning and growth.

4. Flexibility – (the capacity to change and reorganize) allows the family to adapt to the challenges over time.

5. Connectedness - mutual support, collaboration and commitment facilitate positive growth within the family.

6. Social and economic resources - the family needs to be able to mobilize the ‘kin and social network’ to build community networks which assist them through the crisis situation. The family must also learn how to balance work and family strains to build financial security.

7. Clarity - clear communication processes are needed in the family, where there are consistent messages between words and actions.

8. Open emotional sharing - the family must share their range of feelings and show emotional empathy towards each other. It is important for the family members to take responsibility for their own feelings and behaviour and avoid blaming each other.

9. Collaborative problem solving - the family must be able to show creative brainstorming which will lead to resourcefulness. The family members must share decision-making and negotiate the resolution of conflict together. Through focusing on goals, the family can take steps forward to build on past successes and learn from their failures.

McCubbin and McCubbin (1993) stated that adaptability - the ability to handle misfortune and change direction successfully - and cohesion – the belongingness of the family – are the most important resources the family has for resilience.
McCubbin and McCubbin (1988) also viewed the family as an ‘operating’ system, rather than a context in which an individual lives. The family is central, and individuals are mere components thereof, and not visa versa. Two concepts that explain properties of the family system, which further facilitate a family’s successful adaptation, are elasticity and buoyancy. Elasticity enables the family to maintain established patterns of functioning after being challenged and confronted by risk factors; buoyancy refers to the family’s ability to recover quickly from a trauma or transitional event causing changes in the family’s pattern of functioning (McCubbin, McCubbin, Thompson, Han & Allen, 1997).

McCubbin, McCubbin, Thompson, Han and Allen (1997) elaborated on two factors (which have not been mentioned in the context of family resilience thus far) which facilitate family resiliency: hardiness and family routines. Time spent together provides a family with a sense of predictability and stability that fosters harmony and balance. During times of crisis, family time and routines may be set aside or disrupted and replaced by a complete devotion to the family crisis. The care of an ill family member or a family member living with a disability needs to be accompanied by a commitment and effort to sustain some family practices and routines. This will help to maintain the family’s stability and continuity during times of stress. Similarly, family hardiness involves the family having a shared commitment to work together to attack and solve their problems. The family is able to reframe and redefine their hardships as challenges, over which they have a sense of control and influence over the outcome (McCubbin, McCubbin, Thompson, Han & Allen, 1997).

2.3. Research Review

2.3.1. Individual Resilience

Research into factors that resulted in adaptive outcomes for individuals despite adverse conditions being present, has a founding base in schizophrenia (Masten, Best, & Garmezy, 1990). Investigations looked at disorganized patients, focusing on understanding maladaptive behaviour, as well as the group of patients who showed adaptive patterns of behaviour, and were thus ‘atypical’ (Garmezy, 1970; Zigler & Glick, 1986). Similarly, studies of children of
schizophrenic mothers led to the emergence of childhood resilience (Garmezy, 1974; Garmezy & Streitman, 1974). Evidence that many children thrived despite their ‘high risk’ status led to further efforts to understand individual differences in response to adversity.

A longitudinal study into childhood resilience by Werner sought to understand children’s vulnerability to negative developmental outcomes, and examined resilience in those children that coped with biological and psychosocial risk factors (Werner & Smith, 1977). Werner and Smith’s study later extended to examine the protective factors that aided in the recovery of troubled youth as they grew into adults (Werner & Smith, 1989, 1992). Following on Werner’s study, resilience research extended to include other conditions such as socioeconomic disadvantage and risk (Rutter, 1979; Werner & Smith, 1992); parental mental illness (Masten & Coatsworth, 1995, 1998); urban poverty and community violence (Luther, 1999); chronic illness (Wells & Schwebel, 1987); and catastrophic life events (O’Dougherty-Wright, Masten, Northwood & Hubbard, 1997).

Masten and Garmezy (1985), as part of initial research into this field, focused on personal qualities of resilient children such as autonomy or high self-esteem. Later research showed that it could actually be external factors that allowed resilience to develop. Three sets of factors were identified (some of which have been explained in detail): attributes of the children themselves; aspects of their families; and characteristics of their wider social environment (Masten & Garmezy, 1985; Werner & Smith, 1982, 1992). The last two decades has seen the focus moving away from identifying protective mechanisms to understanding protective processes (Luthar, Burrack, Cicchetti & Weisz, 1997). Instead of just studying what family and environmental factors are involved in resilience, researchers have sought to understand how these processes lead to positive outcomes processes (Luthar, Burrack, Cicchetti & Weisz, 1997).

Conceptualisation of resilience changed too through the decades as early writers referred to individuals who did well despite multiple risks, as ‘invulnerable’ (Anthony, 1974). As research
into the field progressed, it became clearer that evasion of risk was not absolute and unchanging, but could emerge with changing life circumstances. Therefore positive adaptation, despite exposure to risk, could be a developmental progression (Masten & Garmezy, 1985; Werner & Smith, 1982).

The terminology used in literature has also developed and become distinct. Jeanne and Jane Block (1980) developed the construct of ego-resiliency that referred to personal characteristics of an individual. This resiliency was seen to encompass a set of traits that an individual had, including general resourcefulness, sturdiness of character and flexibility of functioning, all in response to varying environmental circumstances. This definition could imply that the individual was exposed to risk, but it was not a prerequisite for functioning in this way. The term resilience therefore came to be used to refer to a process whereby an experience of adversity was overcome by an individual, with a resultant positive outcome. The following section reviews how the construct of resilience has been studied and applied to family functioning (Luthar, 1999).

2.3.2. Family Resilience Review

There has been significant progress in family resilience research in the past seventy years, as outlined by van Breda (2001):

1. There has been a move from considering the family as a source of dysfunction above which individuals arise, to considering families as a source of resilience and strength.

2. The family is no longer seen as only the context for the development of individual resilience, but is considered a unit that develops resilience in relationships with other family members.

3. There has been a development of understanding family-level constructs that cannot be easily identified in individual members.

The first study into family resilience investigated the variability of responses to the crisis of war in military families (McCubbin & Dahl, 1976). This prompted further research into the study of families
faced with chronic stressors and illnesses (McCubbin & McCubbin, 1989); the study of family transitions and changes over life cycles (McCubbin & McCubbin, 1988); and the study of Native population groups in the United States of America (McCubbin & McCubbin, 1988). The past decade is marked by studies of individuals showing the importance of significant relationships with adults and mentors who supported the efforts of ‘at risk’ children and who believed in their potential to make the most of life (Walsh, 1996). The focus on parental pathology limited researchers’ examination of familial resources, even if a parent is seriously impaired. Focus lay on developing extra-familial resources, and dismissing the family as dysfunctional (Walsh, 2002). A large body of individual resilience research has been conducted, and researchers advocated the importance of resilience as a concept in the family field (Patterson, 2002b; Walsh, 1996, 2003). A family resilience perspective recognises the influences of parental and family member strengths, alongside limitations. It follows a systemic orientation, looking beyond the parent-child dyad to consider broader influences such as sibling bonds, couple relationships and extended family ties. This approach alters the view of troubled parents and families as damaged and beyond repair, to viewing them as challenged by adversities in life, with the potential for healing and growth (Walsh, 2003).

As explained, a systemic view of resilience in the individual links the emergence of resilience to three interrelated domains, namely, the individual, the family and the larger context (Cohler, 1987). Garmezy (1985) identified three categories of factors that may also be seen to support these domains and enhance resilience: 1) personality features; 2) family cohesion and lack of discord; and 3) the availability of external support systems. The development of ego-resilience through childhood into adult life was found amongst individuals whose parents were competent, integrated, loving, patient and had shared values. The value of the family as a unit for support, served a protective function for an individual, and impacted upon the individual’s adult life (Dawes, 1992).
Accordingly, McCubbin, McCubbin, Thompson, Han and Allen (1997) explained that studies that focused on children revealed the importance of the family system fostering resilience. Family resilience research has revealed some of the protective factors that are important to family adjustment as well as recovery factors that are essential to the adaptation process (McCubbin, Thompson & McCubbin, 2001).

Many of the studies that were conducted were primarily descriptive in nature with the goal of identifying family resources in resilient families that facilitate adaptation after a crisis has occurred (McCubbin & McCubbin, 1988). However, as research interest in the field of family resilience grew, researchers also emphasized the need for theory building (De Haan, Hawley & Deal, 2002; Walsh, 1996) and the investigation of family typologies (McCubbin & McCubbin, 1988; McCubbin, Thompson & McCubbin, 2001). Recent studies have focused on the clinical implications of family resilience, i.e. how viewing families as resilient may affect clinical work (De Haan, Hawley & Deal, 2002; Hawley, 2000; Walsh, 2003). The results suggested that a resilience-orientated view of the family empowers the family since they are all viewed as survivors of the crisis (Hawley, 2000; Walsh, 2002). This positive view of the family can be valuable for future crises (Hawley, 2000).

2.3.3. South African Family Resilience

The construct of individual resilience was studied by researchers such as Wissing in South Africa (1996). As interest in the salutogenic paradigm grew, family researchers began to investigate resilience within the family context (Greeff, 2004; Greeff & Aspeling, 2004; Greeff & Ritman, 2005). Studies into resilience factors in the following type of families has been researched: families in which a parent accepted a voluntary retrenchment package (Der Kinderen & Greeff, 2003); families in which a parent has died (Greeff & Human, 2004); divorced families (Greeff & Van der Merwe, 2004); as well as single-parent families (Greeff & Aspeling, 2004). Results from studies conducted in South Africa have shown that family hardiness characteristics
such as internal strengths and durability of the family unit play a significant role in the family’s resilience. Furthermore, the importance of support and utilization of immediate family members, the extended family and friends, was highlighted (Greeff & Human, 2004; Greeff & Van der Merwe, 2004).

Currently, a family resilience project at the University of Stellenbosch is investigating the characteristics of different population groups of families affected by normative and non-normative crises. This project includes the demographic groups of African (Zulu and Xhosa speaking) and Coloured (Afrikaans and English speaking) families in South Africa. The above-mentioned studies, as well as the present study formed part of the family resilience project which was funded by the South African Netherlands Research Programme on Alternatives in Development (i.e., SANPAD). To summate, the literature suggests that South African families are able to be resilient in the face of challenges and that they make use of various resources in attempting to adjust and adapt to crises (Greeff & Human; Greeff & Van der Merwe, 2004). The resiliency model to be used in the current research is now discussed.

2.4. Resiliency Model of Family Stress, Adjustment and Adaptation

This resiliency model is founded in Hill’s ABCX thesis (1949) which formulated how stressors impact on families. Hill described the model as follows,

“A (the event) – interacting with B (the family’s crisis-meeting resources) – interacting with C (the definition the family makes of the event) – produces X (the crisis). The second and third determinant – the family resources and definition of the event – lie within the family itself and must be seen in terms of the family’s structures and values. The hardships of the event, which make up the first determinant, lies outside the family and are an attribute of the event itself” (p. 5).
McCubbin and Patterson (1983) developed the Double ABCX model in response to deficits in Hill’s model and the need for an expanded model. This model differed in that it asked ‘What happens to the family after X?’ (Van Breda, 2001). In the same year, the process-oriented Family Adjustment Adaptation Response (FAAR) model was presented. This model extended the Double ABCX Model by introducing the following characteristics: coping; the resistance, the consolidation and the restructuring phases in family stress model; and the balance concept of family-to-member and family-to-community fit to the adaptation factors as a critical dimension of family adaptation (McCubbin, Thompson & McCubbin, 2001).

The FAAR model was followed by the Typology Model of Family Adjustment and Adaptation (McCubbin, Thompson & McCubbin, 2001). This model continued to build on theory by focusing on both pre-and post-crisis factors. This model also highlighted the importance of family patterns of functioning.

The current model to be used in the proposed research, namely, the Resiliency Model of Family Stress, Adjustment and Adaptation (hereafter referred to as the Resiliency Model), incorporates elements from all the abovementioned models, with the main focus being on the discovery and testing of resilience factor processes in families. The Resiliency Model advanced the Double ABCX Model, the FAAR Model and the Typology Model, adding four domains of family system functioning: interpersonal relationships; development, well-being and spirituality; community ties; and structure and functioning. These domains were found to be significant in the adjustment and adaptation processes (McCubbin, Thompson & McCubbin, 2001).

The Resiliency Model highlights important family processes, such as the family’s attempt to restore harmony and balance in the face of adversity and views family relationships as a factor that plays a central role in the family’s adaptation. In addition, the model delineates five family levels of appraisal, and includes the family’s culture and ethnicity as important factors that play a role in the family’s
development and recovery (McCubbin, Thompson & McCubbin, 2001). The Resiliency Model consists of two phases namely the adjustment and adaptation phases, which are interrelated, but distinguishable processes. The adjustment and adaptation phases are discussed in detail.

2.4.1. Adjustment

When a family is confronted with a stressful event, three demands are placed upon the family: the stressor event; the hardships directly associated with this stressor; and prior strains that are already existing in the family system. Factors that may influence the adequacy of the family’s adjustment can be the nature, number and duration of demands upon the family’s existing resources as well as the number of unresolved strains the family faces (McCubbin & Patterson, 1983). Family protective factors will shape the family’s ability to persevere in the face of adversity and plays a significant role in facilitating the family’s ability to bounce back from a crisis (McCubbin, McCubbin, Thompson, Han & Allen, 1997).

The stressor (A) interacts with the family’s vulnerability (V), which is determined by the pile-up of demands faced by the family, and by the pressures associated with the family’s life cycle. The family’s vulnerability can be seen as the family’s susceptibility to deterioration and dysfunction in the face of adversity (McCubbin, McCubbin, Thompson, Han & Allen, 1997). As the family is seldom in a situation where they are only dealing with one stressor, ‘pile-up of demands’ faced by the family occur simultaneously with the stressor and the family’s life cycle (McCubbin, Thompson & McCubbin, 2001).

The vulnerability of the family interacts with the family typology, known as the Established Patterns of Functioning (T). Four family types are identified: Regenerative, Rhythmic, Versatile and Traditionalistic families. The Regenerative family is high in family hardiness – the family’s internal strengths and durability – and high in family coherence – the family’s emphasis on acceptance, loyalty, trust, faith, caring and shared values in the management of tension and strain (McCubbin, Thompson & McCubbin, 2001). Such families are secure in their sense of purpose and their ability to make future plans, and view life as meaningful. Regenerative families feel that they are in control and are not
victims of circumstance. Thus, Regenerative families are active and in control, and when faced with life challenges, are tolerant of hardships (McCubbin, Thompson & McCubbin, 2001).

The Rhythmic family is high on family times and routines, and places great value therein. Rhythmic families value the importance of creating predictable activities and routines in an attempt to foster a shared sense of purpose and meaning of family togetherness, regularity and predictability (McCubbin & McCubbin, 2001).

Versatile families have high levels of family bonding - the degree to which the family is emotionally bonded together into a meaningful family unit - and flexibility – the ability to shape and change rules, boundaries and roles in an attempt to accommodate changing dynamics within and outside of the family system. This family’s strength lies in its ability to change (McCubbin, Thompson & McCubbin, 2001).

Traditionalistic families are low on family celebrations and high on traditions. Celebrations may be seen as a family birthday, special occasions, holidays and so on. Traditions refer to specific family behaviours and practices. Traditionalistic families “carry on their lives with minimal emphasis upon celebrating major events, but with a strong belief in and greater emphasis upon family traditions carried across time and from generation to generation” (McCubbin & McCubbin, 1996, p. 78).

These components – A, V, and T - feed back to the family’s resources (B), the family’s appraisal of the stressful situation (C) and the family’s problem solving and coping mechanisms (PSC). The family’s (resistance) resources are viewed as the abilities and capabilities that a family has to address and manage the stressor and its demands, while maintaining and promoting harmony and balance to avoid a crisis (McCubbin & McCubbin, 1996). Some of the essential family resistance resources include social support, cohesiveness, financial stability, flexibility, hardiness, shared spiritual beliefs, open communication and traditions.

The family’s appraisal of the stressor is subjective, and this appraisal has a greater impact upon the family’s adjustment than the ‘standardised’ severity of the stressor in the society (Van Breda, 2001). The
stressor may range from being viewed as uncontrollable, to the family viewing it as a minor incident and challenge (McCubbin, Thompson & McCubbin, 2001).

Family problem solving and coping may be seen as two parts of a single process: problem solving involves the family’s ability to define the stressor, divide the situation into components, identify plans of action, and actually take steps to resolve the problem. The term coping describes the collection of overt and covert strategies used when confronting a challenge (Wills, Blechman & McNamara, 1996). This may be seen as the patterns and behaviours the family follows to maintain and strengthen the organization and stability of the family unit, which include the emotional stability of the family members, accessing community resources, and resolving family hardships (McCubbin & McCubbin, 1989).

Together these factors shape the family’s outcome, which can range from bonadjustment to maladjustment. Bonadjustment refers to the maintenance of family patterns. This requires minor adjustments in the family system and its functioning. Maladjustment refers to unsuccessful adaptation to the crisis situation. Major stressors may challenge the family’s established patterns of functioning to such an extent that the family will most likely experience maladjustment and a crisis (McCubbin, Thompson & McCubbin, 2001).

2.4.2. Adaptation

The second phase, adaptation, may be viewed as the responses that the family makes to the demands of their environment and the term encompasses the mutuality and reciprocity of interactions between people and their environments (McCubbin, McCubbin, Thompson, Han & Allen, 1997). This phase begins with a crisis situation (X), and may be seen as the ability a family system has to change its power structure, role relationships and relationship rules in response to situational and developmental stress (Olson, Portner & Bell, 1989). The adaptation phase involves various components that interlink in order for the family to adapt to a crisis situation and attain a state of balance and harmony in the family unit.
Figure 2: The Adaptation Phase of the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin, Thompson & McCubbin, 2001, p. 25).
A pile-up of demands (AA), which refers to the accumulation of pre and post crisis stressors has an impact on the families’ level of vulnerability (McCubbin & McCubbin, 1993). As a family’s adaptation is a process achieved over time, in addition to the identified stressor, the family could also be dealing with normative transitions, prior family strains and unexpected situational demands. The family’s attempt to adjust to the crisis can also be stressful and could add to the family’s burden (McCubbin, Thompson & McCubbin, 2001).

The desired outcome is thus adaptation (XX), and is the response of the family’s efforts to adapt to the demands of the crisis, and to the demands of the adaptation itself. This phase of the Resiliency Model was the focus of this research project. The identified crisis was having a family member who is living with schizophrenia and who is being cared for by his/her family. The illness, and maintenance of the family member’s health, was viewed as a stressor, which places demands upon the family. When there was an imbalance or disharmony between the perceived family’s capabilities and the demands of the chronic illness, the family may have entered a state of crisis (McCubbin, Thompson & McCubbin, 2001).

The level of successful adaptation, also referred to as bonadaption (XX), is determined by the interacting influences of retained and restored patterns of functioning (T) such as traditions and celebrations, and the new patterns of functioning (TT) such as new boundaries and rules and patterns of communication. These interact with the family’s own internal resources as well as social, family, kin and community support. The family’s internal resources (BB) are capabilities such as hardiness and their sources of social support are extended family, the neighborhood, church, community or friends (BBB). Another important resource that is available to the family is their appraisal of the stressor (C) (McCubbin, Thompson & McCubbin, 2001).

There are five levels of appraisal processes in crisis situations, namely, schema (CCCCC), coherence (CCCC), paradigms (CCC), situational appraisal (CC) and stressor appraisal (C). A family’s schema (CCCCC) is expressed through the family’s worldview and includes family values and beliefs such as
respecting and maintaining the family’s ethnic heritage, and respecting one’s elders. This contributes to giving order, harmony, balance and structure to family life and plays a significant role in shaping the family’s patterns of functioning (T), as well as the family’s problem solving and coping behaviours and patterns (PSC) (McCubbin & McCubbin, 2005; McCubbin, Thompson & McCubbin, 2001).

The family’s sense of coherence (CCCC) forms the motivational and appraisal basis for transforming the family’s potential resources into actual resources. The family’s sense of coherence reduces family dysfunction by mobilising family resources. This is a view that the world is comprehensible, manageable and meaningful (Hawley, 2000; McCubbin, Thompson & McCubbin, 2001).

Family paradigms (CCC) are expectations and rules that are shaped and adopted to guide the family’s development of patterns of functioning around domains of family life. Such domains of family life are parenting, work and family communication, spirituality and so on (McCubbin, Thompson & McCubbin, 2001). The situational appraisal (CC), along with the above-mentioned levels of appraisal, impact on the definition of the Stressor (C). As mentioned earlier, the established patterns of functioning, resources and levels of appraisal are influenced by the family’s problem-solving and coping repertoire (PSC) and create, change and discard patterns of family functioning in order to achieve a satisfactory level of adaptation (McCubbin, Thompson & McCubbin, 2001).

The crisis provides the family with an opportunity for constructive changes in its patterns of functioning. Throughout this process the family introduces changes aimed at restoring its harmony and balance to both the family and its external environment. In the adaptation phase, the variables of this phase interact with the variables of the Double ABCX-Model and this complex interaction will result in the outcome (XX). Families may not achieve a satisfactory level of adaptation (hence maladaptation) and the family returns to a crisis situation and the cycle repeats itself until new patterns are adopted and family adaptation is achieved (bonadaptation) (McCubbin, Thompson & McCubbin, 2001).
2.5. Advantages of a Family Resilience Framework

Walsh (2003) explained that assessment of healthy family functioning can be problematic as researchers bring their own assumptions and personal experiences into assessment. Post-modern perspectives highlight that views of family normality, pathology and health are socially constructed, and not objectively measured (Walsh, 1998). Secondly, the continually changing nature of family arrangements as the world undergoes rapid social and economic transformation, raises the problem of no single model of family ‘health’ fitting all. As was mentioned earlier, the family processes, involving quality of care and committed relationships, are important.

Traditionally, systems-orientated family research has been static, and has not taken a contextual view of a family’s resources and constraints over time. A family resilience framework rather focuses on strengths under stress in the midst of crisis and overcoming adversity (Walsh, 2003). Secondly, it recognizes that no single model can fit all families or their situations, and functioning is assessed relative to each family’s values, structures, resources, and so on. Thirdly, the processes for optimal functioning and the well-being of family members is seen to vary over time as challenges occur and the family moves across the life-cycle (Walsh, 2003). Fourthly, a family resilience framework was developed to guide clinical practice and is informed by research in the social sciences, and can be used with a variety of models for intervention (Walsh, 1996). It offers a conceptual map to guide key family processes that reduce the risk of dysfunction, buffer stress, and encourages healing and growth from crises. It allows families to focus on their strengths and highlights the reparative potential of the family.

2.6. Conclusion

In this chapter the emergence of the construct of resilience was explained. The researcher went on to explore perspectives held about what makes an individual resilient. This was then extended to the family as a unit, and the model used in this research was explained. The manner
in which the family resilience framework considers the interpersonal and intra-familial factors in resilience, rather than just intra-psychic factors was explained. Attention is paid to systemic issues, such as the relationships between a family member and the unit, and between the family and the community. As family resilience theory points towards resilience factors located within the family unit, there is room for intervention on the part of a clinician, through encouraging development of support systems, patterns of communication and cohesion (van Breda, 2001). In the following chapter, the impact of schizophrenia on the family unit and its functioning is explored.
Chapter Three: Schizophrenia and the Family

3.1. Introduction

The mental illness of schizophrenia, which provides the context in which family resilience is explored in this study, is reviewed in this chapter. The historical background to the DSM-IV-TR diagnostic criteria of schizophrenia; the criteria for diagnosis; symptomology; and emotion will be discussed. The chapter continues with an examination of the responsibility of care that falls upon the caregivers of individuals living with schizophrenia and concludes with the manner in which families can manage the ill family member in the home. The historical background of schizophrenia follows.

3.2. Historical Background to Schizophrenia

Schizophrenia is often regarded as one of the most severe psychiatric disorders and carries serious implications for those who are afflicted by it (Canavan, 1999). The widespread distribution of this disorder and the variability of people affected is vast. People from all socioeconomic backgrounds are at risk, although lower socioeconomic individuals seem more susceptible (Jenkins, & Barrett, 2004). It may be hypothesized that this could be due to ‘social causation’ or ‘downward drift’. The association between schizophrenia and social class is one of the most consistent findings in psychiatric epidemiology (Fox, 1990).

The identity of modern Schizophrenia was formed at the start of the 20th Century by Emil Kraepelin with his account of dementia praecox (Torrey, 2006). Kraepelin described a set of behaviours that allowed clinicians of the day to better understand a confusing set of behaviours. Kraepelin (1919) gave the following descriptions of ‘patients’:

“The patients have lost every independent inclination for work and action; they sit idle…a not inconsiderable number join without resistance the crowd of vagabonds” (p. 37).

“They have no connection either among each other or with ideas or emotions. The patients hop, jump…screech, grunt…but without any recognizable aim” (p. 43).
“The patients become monosyllabic, sparing their words, speaking hesitantly…they enter into no relations with other people, never begin a conversation with anyone, ask no questions, make no complaints…” (p. 65).

In contrast, Kraepelin explained:

“In place of taciturnity, a prodigious flow of talk may appear which does not correspond to a need for expression, but usually unburdens itself without any reference to the surroundings. Often it consists of outbursts of filthy abuse, piercing shrieks or singing… many patients carry on monologues or answer voices out loud, often cursing and abusing, especially at night” (Kraepelin, 1919, p. 56).

One hundred years later, we see these symptoms still being displayed as the ‘modern day’ schizophrenic has changed little in his actions. It is us as clinicians who have developed our conceptualization of the chronic illness to better manage such behaviours in society. However, the historical ‘problem’ of schizophrenia still needs understanding in order for validity to be given to knowledge produced today.

The late 1800’s saw debates emerging about the causes of insanity as the population of asylums grew in Victorian England. One clinician, Morel, identified a process of severe intellectual deterioration, that was termed ‘demence precoce’ (Sadock & Sadock, 2003). In 1896, Emil Kraepelin brought together the syndromes of demence precoce, hebephrenia, catatonia and dementia paranoids with the name dementia praecox, a single disease entity. When Kraepelin published his theory a decade later, it led to a number of debates which encouraged further research. New understandings of issues in the lives of schizophrenic patients were explored to facilitate self–understanding for the patients. One such researcher was Manfred Bleuler, who told the stories of schizophrenic lives as well as how to characterize what is happening with the schizophrenic patient. Bleuler coined the term schizophrenia, stressing that it did not need to have a deteriorating course. This researcher described the principle of incurability that governed psychiatric thinking after Kraepelin’s publication, postulating that it was a
result of scientists being unable to find a brain disease as an explanation for schizophrenia (Saddock & Saddock, 2003).

Bleuler identified fundamental symptoms of schizophrenia in developing his theory about the mental ‘schisms’ of sufferers. They consisted of four ‘A’s’: associations, affect, autism and ambivalence. This researcher joined these fundamental symptoms with what Kraepelin had seen as indicators of dementia praecox – hallucinations and delusions – to form a modern day picture of schizophrenia (Saddock & Saddock, 2003).

3.3. DSM-IV-TR Conceptualisation of Schizophrenia

Schizophrenia is referred to as a single entity in standard nomenclatures such as the Diagnostic and Statistic Manual of Mental Disorders (DSM-IV-TR) and the International Classifications of Diseases, 10nth Revision (ICD-10) (Saddock & Saddock, 2003). However, schizophrenia is rather a group of illnesses covering cognitive, emotional and behavioural domains. The symptoms that can be observed represent a variety of systems, including referential and abstract thinking; language; appetite drives; and auditory, visual and tactile perceptions (Andreason, Arndt, Alligler, Miller & Flaum, 1995). Appendix A describes the DSM-IV-TR criteria for a diagnosis of schizophrenia.

In the making of this diagnosis, consideration is given to the tendency towards chronicity. Schizophrenia is an illness that usually spans a patient’s lifetime or at least, causes difficulties for that person in some way across a life span. As the DSM-IV-TR criteria stated, there are prodromal symptoms that characterise the onset of a psychotic episode (Keith & Matthews, 1991). The duration of these symptoms is restricted to a month, and this has significance for treating the illness timeously as prodromal symptoms that are identified early can, with active treatment, reverse their course (Herz, Szymanski & Simon, 1982). Table 1 reports on the rank order of symptoms noted by Herz and Melville (1980) in 50 % of schizophrenics before hospitalization. The division of symptoms into positive and negative is discussed in the following section.
Table 1: Rank order of symptoms as reported by schizophrenic patients (Keith, & Matthews, 1991).

<table>
<thead>
<tr>
<th>SYMPTOMS</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tense and nervous</td>
<td>80.4</td>
</tr>
<tr>
<td>Eating less</td>
<td>71.7</td>
</tr>
<tr>
<td>Trouble concentrating</td>
<td>69.6</td>
</tr>
<tr>
<td>Trouble sleeping</td>
<td>67.4</td>
</tr>
<tr>
<td>Enjoying things less</td>
<td>65.2</td>
</tr>
<tr>
<td>Restlessness</td>
<td>63.0</td>
</tr>
<tr>
<td>Can’t remember things</td>
<td>63.0</td>
</tr>
<tr>
<td>Depression</td>
<td>60.9</td>
</tr>
<tr>
<td>Preoccupied</td>
<td>59.6</td>
</tr>
<tr>
<td>Seeing friends less</td>
<td>59.6</td>
</tr>
<tr>
<td>Feeling laughed at</td>
<td>59.6</td>
</tr>
<tr>
<td>Loss of interest</td>
<td>56.5</td>
</tr>
<tr>
<td>More religious thinking</td>
<td>54.3</td>
</tr>
<tr>
<td>Feeling bad for no reason</td>
<td>54.3</td>
</tr>
<tr>
<td>Feeling too excited</td>
<td>52.2</td>
</tr>
<tr>
<td>Hearing voices/seeing things</td>
<td>50.0</td>
</tr>
</tbody>
</table>

3.4. Positive versus Negative Symptoms

Crow (1980) formulated a two-syndrome hypothesis: ‘positive’ (florid) or ‘negative’ (defect) symptoms. This distinction led to clinicians being able to see a variety of important differences within the (heterogenous) group of schizophrenia. Positive symptoms refer to the onset of distortions in the client’s thinking, such as hallucinations or delusions, or behaviour. Negative symptoms represent a loss of functioning as seen by affective flattening, avolition, asociality and attentional impairment (Andreason & Olsen, 1982) (See Table 2).

Bleuler (1950) gave preeminence to disturbances in associations (avolition, blunting of emotions and so on). These were later renamed ‘negative’ symptoms and seen as the most important feature of...
schizophrenia (with delusions and hallucinations rather being accessory symptoms) (Andreason, 1982). Negative symptoms may be seen on one end of a continuum and are correlated with a poor response to neuroleptic treatment; a chronic course and poor long-term outcome; cognitive impairment; and atrophic changes to the brain. Positive symptoms usually have a better premorbid adjustment; better response to treatment and are predominately a biochemical disorder involving dopaminergic transmission (Andreason & Olsen, 1982). Further research by Andreason et al (1995) supported earlier findings that positive symptoms consist of psychoticism (delusions and hallucinations) and disorganization (positive formal thought form disorder, bizarre behaviour and affect). When positive symptoms occur in conjunction with negative symptoms, the latter responds better to neuroleptic treatment, than if only negative symptoms were present. Positive symptoms however, begin to decline within a two week period, whereas negative symptoms decline within a 4 week period (Breier et al, 1987).

Adding support to these findings, a later study by Hargreaves et al (1989) showed that 1 month after the start of treatment, positive symptoms had moved into the moderate to mild range, and their decline predicted their stabilization at a later time. Conversely, negative symptoms changed little in the same time period and did not predict early outcome. Positive symptoms tend to become less severe with time, but the socially debilitating negative symptoms may increase in severity. It is these symptoms that cause one third of schizophrenic patients to lead lives characterized by aimlessness, inactivity, frequent hospitalization, homelessness and poverty (Saddock & Saddock, 2004). Negative symptoms can be seen to be significantly more predictive of quality of life at stabilization, than positive symptoms. These symptoms may be more difficult to detect during the acute phase of illness, as positive symptoms may mask them. This correlation is found to exist across all phases of the illness (Bow-Thomas, Velligan, Miller & Olsen, 1999).

3.5. Development and Progression of Schizophrenia
As the history of schizophrenia shows, this illness was seen as chronic with no chance of recovery. With new understandings of the etiology, course and treatment of schizophrenia being presented, researchers are endeavoring to formulate a set of parameters to define recovery, as this can help in effectively developing treatment and goals for an individual. The disease course has been better defined. Patients may have had poor or declining social functioning for years before either the prodromal or first manifest psychotic phase begins. A slow deterioration in functioning over years can increase the threshold of the patient or family that is needed to be overcome for effective help (Larson, McGlashan, Johannessen & Vibe-Hansen, 1996).

Characteristically, the first symptoms of schizophrenia begin in adolescence and the prodromal symptoms develop from days to a few months. The peak ages of onset are between 10 and 25 years for men and 25 to 35 years in women (Saddock & Saddock, 2003). The typical course of schizophrenia is that after a first psychotic episode the patient will recover and function relatively normally again. A relapse, though common and the pattern of the illness in the first five years after diagnosis is indicative of the patient’s course (Saddock & Saddock, 2003). Very often this recovery is followed by cycles of relapse, caused by noncompliance with treatment, or suboptimal treatment. The view of recent research is that some patients deteriorate significantly early in their illness and then stabilize with time, compared with those who deteriorate with subsequent relapses (Andreason, 2005).

Anti-psychotic treatment for schizophrenia was introduced over 50 years ago, and the efficiency of a strict treatment regime in preventing relapse has been demonstrated in controlled studies (Hummer & Fleischhacker, 1999). Despite this evidence, non-compliance can be as high as 50-60% in patients that are prescribed anti-psychotic treatment (Kane, 1985). The general attitude of the patient towards the illness, as well as their significant others, will positively or negatively affect adherence to prescribed treatment (Hummer & Fleischhacker, 1999).

From a premorbid stage characterized by non-specific cognitive, motor and social impairments, patients move into an extended prodromal stage where mood, psychosocial and mild psychotic
symptoms, which vary in duration and severity, appear (Andreason et al, 2005). Most patients will improve significantly with treatment of their first episode, but only a small fraction return to premorbid levels of functioning.

The American Psychiatric Association (APA) (1997) proposed a three-phase model of the course of schizophrenia: the acute phase is characterised by florid psychosis and severe positive/negative symptoms; the stabilization phase is characterised by a decrease in the severity of symptoms; and the stable phase is marked by relative symptom absence. The APA has stated that these phases merge into one another without clear boundaries between them.

Remission criteria in non-psychiatric illness can be characterized by cessation of disease symptoms. The criteria and rationale for remission and recovery in schizophrenia is less clearly defined. In schizophrenia, remission may be seen as a step towards recovery as patients experience an improvement in core signs and symptoms to the extent that they no longer interfere with behaviour, and are below the threshold utilized in an initial diagnosis. The reported remission rates range from 10 to 60%, and 20 to 30% of schizophrenic patients are able to lead ‘normal’ lives. 20 to 30% experience moderate symptoms, with 40 to 60% remaining significantly impaired (Saddock & Saddock, 2004). Table 2 (Andreason et al, 2005) summarises the various criteria emergent from research.

Table 2: Criteria for remission (Andreason et al, 2005)
<table>
<thead>
<tr>
<th>STUDY</th>
<th>YEAR</th>
<th>CRITERIA FOR REMISSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amminger et al</td>
<td>1997</td>
<td>“Absence” of hallucinations, delusions, thought disorder, and catatonic behaviour for 8 consecutive weeks</td>
</tr>
<tr>
<td>Easton et al</td>
<td>1998</td>
<td>Absence of Interim Follow-Up Schedule – defined criteria (hallucinations, delusions, thought disorder, extreme psychomotor disorder) for at least 3 months</td>
</tr>
<tr>
<td>Curtis et al</td>
<td>2001</td>
<td>Global Assessment of Functioning Scaled score of &gt;60; no psychotic symptoms for more than 1 month; no hospitalization for 3 months; no more than one residual symptom; presence of employment; and association with friends</td>
</tr>
<tr>
<td>Yen et al</td>
<td>2002</td>
<td>Any one of three Positive and Negative Syndrome Scale subscales (positive, negative, general psychopathology) with a mean score of &lt;2 (minimal) at a single time point evaluation</td>
</tr>
<tr>
<td>Ho et al</td>
<td>2002</td>
<td>Scale for the Assessment of Positive Symptoms positive symptoms global items score of &lt;2 (mild) on psychotic and disorganized dimensions for 8 consecutive weeks.</td>
</tr>
</tbody>
</table>

Despite these proposed criteria, a common, quantitatively derived set of remission and recovery criteria do not exist. Over the 5–10 year period after a patient’s first hospitalization, about 10–20% have what can be described as a positive outcome. More than 50% have a poor outcome, as determined by frequent hospitalizations, episodes of major mood disorders and suicide attempts (Larson, McGlashan, Johannessen & Vibe-Hansen, 1996).

The remission of the symptoms described above, and the patient remaining apsychotic, can be mediated by the emotional climate in their home. The following section describes the experience of expression emotion in families where a member is living with schizophrenia.

3.6. Emotion

The experience of emotion for a schizophrenic patient has received attention since the late 1920’s. Theorists such as Sullivan and Bleuler commented on the discrepancy between what schizophrenic patients reported feeling and what they outwardly expressed to other people (Torrey, 2006). Kring and Germans (2004) suggested that an emotional response consists of three components: a behavioural or expressive component; a subjective or experiential component; and a physiological component. Such emotions serve a number of social or interpersonal functions including promoting social
communication through giving a person information about the social environment and emotions evoked by the people with whom they are interacting.

3.6.1. Lack of Expression

For a schizophrenic patient, emotions are often not co-ordinated, and a number of functions that emotions serve are not realized. Research has shown that patients are less expressive than non-patients in a variety of contexts and in response to different stimuli. Their facial and vocal expression may bear resemblance to symptoms noted in depression, Parkinson’s Disease and patients with right hemisphere damage (Levin, Hall, Knight & Alpert, 1985).

As schizophrenic patients exhibit subtle or even unobservable facial expressions, their inexpressions have a number of interpersonal consequences. Bellack (1990) found that patients who were least expressive had poorer interpersonal relationships which included poor adjustment at home and in other social domains. Without the usual overt signs of emotion, family members living with the schizophrenic patient may misinterpret the patient’s emotional state. This would lead to the schizophrenic patient not understanding others’ reactions to their emotional states as they are not aware of how unexpressive they are being. This lack of expression or flattening of affect may be in contrast to the expressed emotion (EE) of a relative who is interacting with the patient everyday. This is discussed in the next section.

3.6.2. Expressed Emotion (EE)

EE is a measure of a relative’s attitude towards a person with a mental disorder. Relatives, who have hostile, critical or emotionally over-involved attitudes, place a patient at greater risk for a relapse. Research has shown a 48% median relapse rate in high EE homes compared to 21% in low EE environments (Kavanagh, 1992). EE classification of relatives is based on two variables: ‘criticism’ (or critical comments – CC) and emotional over-involvement (EOI). ‘Hostility’ is a third element associated with high CC levels (Widemann, Kurt, Hank, Feinstein, Muller & Dose, 1994). Criticism is a statement that is made in such a manner that it is an unfavorable comment related to the behaviour or
personality of another. Hostility refers to the generalization of criticism, and the rejection of the relative as a person, or in combination. The third element, over-involvement, is more qualitatively assessed by reported behaviour outside the interview context. Such behaviour may include self-sacrificing, over-protection and a lack of boundaries between the relative and the patient (Szmukler, Berkowitz, Eisler, Leff & Dare, 1987).

EE represents a form of psychosocial stress that schizophrenic patients are extremely vulnerable to. A consistent finding of research is that interactions in families with high EE relatives are characterized by more intense verbal exchanges (Cook, Strachan, Goldstein & Miklowitz, 1989). Negative verbal exchanges escalate quickly in high EE families, and such families demonstrate greater patterns of conflict than low EE families (Wuerker, 1994). A further difficulty is that the communication patterns tend to be rigid: high EE relatives respond in a controlling manner, no matter whether the patient is attempting control or responding neutrally. There are thus two patterns of interpersonal control in families with high EE relatives: a pattern where the relative and patient compete for ‘who’s in charge’ and a pattern of rigid responding, regardless of what the patient is saying (Wuerker, 1994). High EE families tend to believe that their relative can control their symptoms and are often unsympathetic towards their illness (Wuerker, 1994). This could be linked to such relatives having more negative information regarding schizophrenia. In the above research, Barrowclough et al (1987) also asked whether the relatives believed their family member’s problems were due to their natural self or the illness. Relatives who were the most hostile believed this behaviour was part of their relative’s natural self.

This study was supported by Leff and Vaughn (1985) who highlighted that relatives who are highly critical react to premorbid or long-standing personality traits, rather than illness behaviour. The implication for treatment between high and low EE families differs as patients in a low EE environment often need less medication; and non-compliance to medication, which leads to relapse, is greater in
high EE families (Beels, 1981). This difference in treatment may be due to low EE families being able to adapt better to the needs of the schizophrenic patient and the patient’s symptoms, which reduces the hostility in the home. This may be linked to a lower expectation for the relative and a greater level of tolerance for their relative’s low level of functioning. The ability to remain calm when their relative acts in an agitated or bizarre way – which highlights the flexibility found in low EE families – further reduces the psychosocial stressors upon the schizophrenic patient (Leff & Vaughn, 1985).

EE has consistently been found to be a predictor of relapse in a family environment where it is high (Barrowclough et al, 1987; Leff, 1976; Tarrier, Barrowclough, Porceddu & Fitzpatrick, 1994). When a person returns home to an environment where relatives respond with criticism, hostility and over-involvement, a return of symptoms can occur within 9 months (Brown, Birley & Wingl, 1972; Greenblatt, Rosina, Becerra & Serafetinides, 1992; Leff et al, 1987). When this follow up period is extended to two years, the relapse of patients in high EE homes was 62% compared to 20% in low EE environments (Leff & Vaughn, 1981). Furthermore, when a family does not only tolerate symptoms, but is able to recognize symptoms, the chance of hospitalization is lessened (Suvisaari, Haukka, Tanskaneen & Lonnqvist, 1998).

3.6.3. Symptomology and EE

Research by Provencher and Fincham (2000) sought to examine the attributions of causality and responsibility for positive and negative symptoms, and how these attributions can have an impact on the management of a relative’s illness. The attributions give rise to EE when the relatives consider the causes of the problematic behaviour to be attributable to the patient and therefore controllable by him/her. As caregivers are confronted by a variety of behaviour in their relative, there are different consequences assigned by the relatives to positive and negative symptoms. When caregivers perceived that their relative has knowledge about the occurrence of their behaviour, and had more intention to produce the behaviour, greater responsibility fell on the patient.
For positive symptoms, knowledge and intent were predictors of responsibility, and for negative symptoms the caregiver based their judgment on the volitional nature of the symptoms. Furthermore, the association between a diagnosis of schizophrenia and concern about a family member’s personal or social issues is largely a response to negative symptoms that inhibit social functioning (Polio, North, Osborne, Kap & Foster, 2001). When a patient is in a home which is critical or hostile (high EE), the caregivers will assign more blame to negative behaviours, than if it is a low EE environment. This same study showed low EE relatives would place greater attribution upon the illness for positive and negative symptoms, and give a peripheral role to the patient. This was also mediated by the patient’s compliance with treatment given.

The long-term wellness of the schizophrenic patient can be mediated by the environment in which he/she lives. While family members’ handling of the patient can impact upon his/her relapse into psychosis, the responsibility of caring for a chronically ill member can not be understated (Bultzlaff & Hooley, 1998). The following section examines the burdens and responsibilities that fall upon the caregivers themselves.

3.7. Responsibility of Care

3.7.1. Phases of Change

There are 5 phases that a family may go through which change the relationships between members as a result of the mentally ill family member:

1. Early warning signs: here the family is isolated and confused as first signs of the illness appear.

2. Keeping the peace: the family begins to realize that the changes in their relatives are serious.

   However, they may not seek help as they have not yet discussed the problem as a family; they are fearful of blame; or they disagree on what should be done.

3. Rude awakening: by this point, the family may have endured several psychotic episodes and are forced to seek help and a diagnosis for the family member.

4. Just coping: new coping skills are learnt which allow the family to survive.
5. A delicate balance: this balance involves how the family is going to provide care, and how much responsibility to take for another member’s life and emotional well being. The family looks at many options to improve their own and their family member’s quality of life post-diagnosis (Johnson, 1994).

The caregivers are faced with emotions and thoughts that can be overwhelming and may have the following questions troubling him/her:

1. Where are we going as a family due to the uncertainty around my family member’s illness?
2. What will happen to the family member if I, as a carer, become old or dies?
3. (If a relative is young) Is this going to be a lifelong illness?
4. What are the benefits, side-effects, or consequences of non-compliance with medication?
5. Can I trust the doctors and professional caregivers?
6. What is the community going to say about my family now?
7. Are there support structures out there and who can I confide in? (Stern, Doolan, Staples, Szmukler, & Eisler, 1999)

3.7.2. Stress upon Family Members

Deinstitutionalization over the course of a number of decades has resulted in responsibility for care of mentally-ill individuals shifting to the individual’s family. The struggles faced by such a family can be overwhelming as they struggle with this role due to lack of training, lack of knowledge and insufficient professional support (Winefield & Harvey, 1994). The stress of not only interacting with the afflicted family member, but also with the grief associated with the illness, places an incredible strain on the day-to-day functioning of that family (Pollio, North, Reid, Miletic & McClendon, 2006).

The impact of mental illness is felt in other areas of family life too, such as leisure, work, income, family health, relations with relatives, friends and neighbours. Attending to the needs of a relative living with a debilitating illness involves up to 35 hours of caregiving activities per week (Baronet, 1999).
In the early years (after first diagnosis) the burden upon the family is found to be greater, as they adjust to the reality of their family member’s illness, which may include recurrent psychotic episodes, unmet expectations, and lack of support from the mental health care system. The burden upon the family can also increase as the parental age (of the primary caregivers) increases and his/her ability to meet the demands of their mentally ill family member decreases (Doornbos, 1997).

An understanding of the subjective experience of schizophrenia emerged in the 20th century, and this includes the experience of what the caregivers endure daily. Research establishes that caregiving involves a variety of instrumental, social and emotional activities (Szmuckler, Berkowitz, Eisler, Leff & Dare, 1996). Furthermore, there is a significant transition that the family must go through from being a family unaffected by mental illness to one affected, which must now deal with significant behavioural, cognitive and emotional changes (Muhlbauer, 2002).

3.7.3. Factors Influencing Acceptance and Emergent Problems

As time passes and the family comes to understand more about their member’s illness, they will begin to develop their own meaning of the mental illness. Firstly, the pre-morbid personality of their family member will contribute to how they understand the affliction of schizophrenia. As they will have feelings about the person and knowledge of how they behaved pre-morbidly, this will influence whether they attribute the individual’s current (ill) behaviour to that individual (his/her personality) or to the sickness. Secondly, the specific behaviours that the family member manifests will contribute to seeing the illness as manageable or not and able to be overcome within the dynamics of the family. The degree of psychotic behaviour, or only the presence of negative symptoms, will impact upon what the illness means within the family. Thirdly, the phase of schizophrenia will have resultant emotions for the family members, as well as feelings about the future of the family unit. Fourthly, the family members’ life experience, exposure to and understanding of mental illness will affect how they are able to face the change in their familial and personal life (Terkelson, 1987).
The disruption upon the lives of the family members cannot be underestimated. The change, gradual or fairly quickly, will impact each member of the family, even if he/she refuses to acknowledge this, as they might feel that they are to blame for what is happening to their family member. When the family member is diagnosed at a later age (such that he/she has been independent) the rest of the family may have to put their own needs ‘on hold’ to care for their mentally ill relative. It may be easier to take control of all the needs of their family member, to minimize the chaos that could develop at home if he/she is left to function independently as before. Families may find it difficult to separate from their role as caregiver, and allow their relative age- and ability–appropriate independence (Terkelson, 1987).

Leaver (1998) summarised the range of problems encountered by families where a member is living with schizophrenia as follows: a lack of knowledge may contribute to stress in the family, thus increasing the disharmony in the family unit. High levels of EE may further contribute to hostility between family members. When there is ambiguous communication this can lead to confusion. Role expectations by the family have to be reassessed to allow the family member living with schizophrenia to attain a degree of self worth, but with clear limits on behaviour. This is particularly important when boundaries within the family system have become blurred. This too brings a need for flexibility within the family, or the stress levels may increase within the household. The family may not have adequate problem-solving skills to alleviate the high levels of stress generated by a member living with schizophrenia, which may be problematic. Finally, Leaver (1998) explained that a failure to accept the illness increases the stress for the family, which often leads to social withdrawal, especially when the family feels as if they are being judged by those around them for the family member’s illness.

3.7.4. Objective Burden (OB) and Subjective Burden (SB)

The recognition that caring for a mentally ill family member places a significant burden upon the caregivers gained attention from the mid 1960’s. The value for the mentally ill family member of being cared for by relatives, however, can equally not be underestimated. Research has shown that family intervention has a significant impact on the amount of relapses for a person living with schizophrenia.
(Mari & Striner, 1994). In a 15 year outcome study by Brown and Birtwhistle (1998), it was found that subjects who no longer lived with family spent 3 to 4 times as long in acute hospital beds than those living with family.

Hoenig and Hamilton (1966) first distinguished between objective burden (OB) and subjective burden (SB). OB refers to specific tasks, financial costs, negative effects of the illness on the household; and SB refers to emotional reactions, cognitive appraisals and the extent to which individuals perceive they are carrying a heavy load. In an extensive review of literature of the factors associated with caregiver burden, Baronet (1999) highlighted research from 1982 through to 1997. Some of the many findings that emerged about OB was that there was an increase in the lack of professional support and that the ill family member was not receiving continuity of care from social services. When there were disruptions in social or leisure time, work missed and disruption in domestic routine, this increased the OB.

OB was also related to the severity of negative symptom behaviour and the caregiver’s perception of the ill family member’s responsibility for their negative symptoms. SB increased with the caregiver being older; reporting lower levels of psychological adjustment; being a member of an ethnic minority; a higher level of premorbid functioning in the family member; and recency of illness (Baronet, 1999).

In a study conducted by Pickett, Vraniak, Cook and Cohler (1993), there were more factors associated with family members’ feelings of ‘ongoing responsibility’ for white parents. These factors included low education and income, depressive symptomology, the ill child’s behaviour-age discrepancy in behaviours, and immaturity. For black parents, depressive symptomology was the main burden related to ongoing responsibility.

The stress of caring for a mentally ill family member is mediated by the social support that the family receives. Trivette, Dunst, Deal, Hamer and Propst (1990) indicated that strong families show a balance between the use of their internal and external family resources when dealing with a life changing event such as a family member’s diagnosis of schizophrenia. Consequently, social support is
an important external resource that the family has. When the family has poor coping resources and reduced social networks, psychological distress increases (Magliano et al, 1998). Social support has been identified as one of the most important family resources, as families often feel isolated from usual channels of social support (Marsh, 1992). Social support groups are a key component of social support for families. Social support serves as a buffer in caregiver stress. A family is better able to function when they are able to harness social support networks, which help them to function effectively on a day-to-day basis. Furthermore, McCubbin and McCubbin (1992) emphasized the mediating influence of social support in protecting against the effects of stressors. This social support may be seen to promote recovery from a stressor such as schizophrenia, and allow the family to positively adapt to the changes in their way of living.

3.7.5. Depression Amongst Caregivers

Depression is also common among caregivers, with up to 72 % of caregivers of relatives living with a mental illness reporting depressive symptoms (Heru, Ryan & Madrid, 2005). Female spousal caregivers have twice the rate of depression, especially when the caregiver feels ‘captive’ in her role. In a study conducted by Pruchno and Patrick (1999), it was found that mothers were more depressed when their adult children had higher rates of non-compliance and violence; when their own health was poor; and when they experienced increased caregiver burden. For fathers, the level of caregiver burden was the sole significant predictor of depression. As stressors increase and conditions persist, the caregiver’s symptomology increases accordingly. However, caregivers do not readily seek treatment. Factors that might prevent them seeking treatment could be a lack of time, stigma of mental illness, and a perception that, compared with their mentally ill family member, they have no right to complain. One of the most powerful predictors of caregiver depression is also a lack of social support. Receiving of support, especially at the time of hospitalization, is great in reducing the chances of depressive symptomology (Pruchno & Patrick, 1999).
3.7.6. Learning to Manage the Family Member with Schizophrenia

Schizophrenia can be seen to involve many practical problems which a family has to learn to adapt to. One of the reasons that schizophrenia is so difficult to manage is that most people do not understand the illness, and so the family does not receive support like they would if the member was living with another chronic illness, such as muscular dystrophy, for example. Torrey (2006) suggested that a family needs to have the right attitude to survive schizophrenia. This author explained that giving up shame of the illness and blame given to family members for causing it is essential for a family to survive. Only once this is done can the family manage the illness in their home. The acceptance of the illness involves acknowledging that the disease is real, and that there will be limitations placed upon the family member, and upon the manner in which the family will operate.

A difficulty for the family member living with schizophrenia and for the family unit is the issue of treating the ill member as normal. Geanellos (2005) described how living with schizophrenia can increase or decrease resilience, by the “forces” (p. 10) operating around the family member. Trying to maintain the appearance of normalcy to the world about him/her, with no-one to share the suffering with, can worsen the struggles of the ill family member. Living in a home where the family member is not marginalized, but treated like any other member of the family, allows the person to increase resilience (Torrey, 2006).

It is important that the family maintains a balance between the needs of all its members, and not just the needs of the ill family member. The family experiments to find leisure time activities that they may all participate in, which will enhance the quality of their time together. It also helps if there are routines established as the structure is most helpful for the member with schizophrenia, such as regular meal times and chores. This further maintains the balance in the home (Torrey, 2006).

Creer and Wing (1974) highlighted the importance of clear communication in the home. This is very important when the family member living with schizophrenia has difficulty dealing with the
sensory stimuli around him/her, and will only become more irrational if the family does not
demonstrate patience. The family needs to communicate in short, concise statements that do not cause
greater confusion. The authors explained that making statements, and then not engaging in an argument
allows for the confusion to be reduced for the patient. Torrey (2006) also stressed that no matter how
great the pressure for the family member, patience needs to be displayed in communicating and dealing
with the behaviour of the patient. This will avoid repeated misunderstanding and confusion.

Beyond the home, an important source of support is the mental health professionals such as
psychiatrists, psychologists, nurses and social workers. They provide much needed education and
instrumental support in the form of medication regime management and counseling. They are also able
to place the family and patient in contact with support groups, which allows them to share their burden
with people living with the same daily struggles (Torrey, 2006).

A further aspect of family life which has been demonstrated as important to help a family survive, is
spirituality. The use of religion to cope has been documented and observed as offering hope, comfort,
acceptance and strength, in situations of health related stress (Siegel, Anderman & Schrimshaw, 2001).
Although the terms spirituality and religion are often used interchangeably, religion has become more
narrowly defined to incorporate the practice of religious behaviour, and the beliefs and practices of a
particular faith (Larson, Swyers & McCullough, 1998). Spirituality refers to the search for meaning and
purpose in life, and the feelings associated with this search (Larson, Swyers & McCullough, 1998).

When individuals encounter situations which they view as out of their control, the hope of divine
intervention through placing their trust and faith in God, increases the family’s belief that God is in
control (of an otherwise unmanageable situation) (Paragament, 1995). Similarly, religious institutions
are seen as organizations who offer emotional support and practical assistance in times of serious
illness (Siegel, Anderman & Schrimshaw, 2001).
When families are faced with illness, religious activities, and affiliation with a religious organization can help psychological adjustment (Siegel, Anderman & Schrimshaw, 2001). These religious resources may also be seen as stress-buffers no matter how high the level of stress (Paragament, 1995). Through attending religious services and involvement in religious activities, the individuals cope better than if following no faith. These activities, coupled with the stability of religious faith buffer the impact of health-related crises (e.g. schizophrenia) (Ellison, 1991).

3.8. Conclusion

Distress in relatives of people living with schizophrenia is common, and the level at which the family is able to cope will have an impact on the course of their family member’s illness. The ability to reframe the experience positively, to come to a point of acceptance, and to find hope for the future, will impact upon the family’s ability to overcome their struggles. If the family has the perception of being able to cope, this will contribute to each member’s personal sense of control (Fortune et al, 2005). First person accounts confirm all of the above literature: families feel guilty, experience hopelessness, shock, disappointment and worry. Families feel alone and overwhelmed with the burden of schizophrenia, and at times describe symptoms of trauma (Sellmeyer, 2002).

In this chapter, the historical background to the modern day conceptualisation of Schizophrenia; the course of the illness; the different forms of stress placed upon the caregivers of a person living with schizophrenia; and the need to increase the body of research which identifies resiliency factors in a family were reviewed. Such research is important for the long-term functioning of the family units. The following chapter describes the research methodology used in this research.
Chapter Four: Research Design and Methodology

4.1. Introduction

This chapter outlines the aim, methodology, research procedure, data collection and data analysis. The chapter will conclude with the researcher examining the ethical considerations that were taken into account when this research study was conducted.

4.2. Research Aim

The study aimed to identify, explore and describe the resiliency factors that enable families to adjust and adapt as a result of having a member (fully dependant upon the family, including financially) living with schizophrenia.

4.3. Research Methodology

The study used triangulation of method, as defined by Neuman (2003). Increasingly family researchers have advocated the integration of qualitative and quantitative methods in single research studies (Sells, Smith & Sprenkle, 1995). The decision was taken in the current research in order for the complementary strengths of these methods to enrich the data obtained from the study.

According to de Vos (2000) and Neuman (2003), the purpose of exploratory research is to gain insight into a relatively new and unstudied area. Although resilience within individuals has been researched, the study of family resilience in South Africa is new and relatively unstudied (Greeff & Aspeling, 2004; Greeff & Human, 2004). Such research also serves the purpose of formulating future research questions (Rubin & Babbie, 2001; Struwig & Stead, 2001).

Exploratory research provides findings of independent variables for more refined analysis and potential attributes of behavior that should be studied in the future selection of independent variables. In the current research, by gaining a clearer understanding of the resiliency factors most significant in families who have a member living with schizophrenia, the important relationships between the
independent and dependent variables are isolated, and the findings may be beneficial to the participants of the study and the broader academic community (Ray, 1993).

Descriptive research describes participants in their natural settings without manipulating variables (Heiman, 1995). The purpose of this research technique is to measure and capture variables as they exist naturally. In the current research the goal was to describe family resilience factors as found in a family where a member is living with schizophrenia (Gravetter & Forzano, 2003). There are various techniques to conduct descriptive research such as the survey method, which was used for the current research.

According to Cozby (2004), survey research uses questionnaires and interviews in order to gain information about people’s demographics, behaviours, and beliefs. Demographic data was gathered by means of a biographical questionnaire and structured paper-and-pencil measures to describe resilience factors in families. A benefit of this approach is that the researcher did not have to wait for any particular behaviour or response to occur, but gained an accurate picture of each family at the moment of data collection. As such, there were savings in money and time for the researcher and participants.

There are, however, also disadvantages to the survey research design. Much time must be spent seeking participants who meet specific criteria and are willing to participate. Even when such participants are found, factors beyond the control of the researcher may impact upon the value of material gathered. These include participants giving socially acceptable answers, or not responding at all to the request for information (Cozby, 2004; Neuman, 2003).

The survey research design format needed to meet the following standards: the questions needed to be organized in a coherent manner so that the participants could easily understand and complete them (Gravetter & Forzano, 2003). The present study employed measures that have been successfully used in family resilience research, where significant findings indicate the validity of the measures (Der Kinderen & Greeff, 2003; Greeff & Human, 2004; Greeff & van der Merwe, 2004). Furthermore, only selecting participants who were able to read at a certain Grade level ensured that they would be able to give answers which accurately reflected the questions being asked. Secondly, a selection process needed to be
formed to ensure that the participants were representative of the general group being studied. The present study used a number of primary healthcare sites to access families from two cultural and language groups in South Africa, in order for the findings to not be limited to only one cultural group.

4.4. Research Procedure

4.4.1. Sampling

Nonprobability purposive sampling was used. Nonprobability sampling means that every member of the population does not have an equal opportunity to be selected (Heiman, 1995). The researcher specifically used nonprobability purposive sampling, where individuals who were made available through primary healthcare sites and who met the inclusion criteria and were willing to participate, were selected to participate (Ray, 1993).

In purposive sampling the researcher uses his judgment to select participants who have special knowledge or characteristics that are of particular interest to the researcher, thereby fulfilling the goals of the research (Whitley, 2002). This sampling technique was appropriate for the current research owing to the fact that members of the targeted population were sought through primary healthcare sites and not at random. However, due to selection bias in this type of sampling being high, the results of the research are not generalisable (Ungar & Lienbenberg, 2004).

The benefit and value is that conclusions may be drawn for the broader group of which the participants are representative. Furthermore, through the feedback given, participants themselves were able to gain better understanding of how to cope with day-to-day life in their home environment by understanding what resiliency areas could be improved upon. This in turn may allow for better management of the dependent’s illness and facilitate healthier family relations (Heiman, 1995).

4.4.2. Participants

The goal of the study was to survey 56 families. This number was required in order to conduct regression analysis. The researcher identified 68 family units (116 individuals) who met the inclusion
criteria for the research sample. However, the final number of families who participated was 18, with one or two members participating per unit. This meant that regression analysis could therefore not be conducted. The demographics of the participants were as follows:

1. The relationship of the family member living with schizophrenia to the participant: mother (n=1); father (n=1); daughter (n=3); son (n=8); brother (n=1); sister (n=1); husband (n=2); uncle (n=1).
2. The number of years the family member has been living with schizophrenia: 3-5 years (n=2); 6-9 years (n=2); and 10 or more years (n=14).
3. In response to the question of whether anyone else lives in the home with the participant and the family member living with schizophrenia, (n=12) said no; (n=6) participants responded yes.
4. 4 participants have a home language of English, while 14 have a home language of Afrikaans.
5. The employment demographics of the participants were as follows: self-employed (n=5); pensioner (n=2); teacher (n=1); unemployed (n=9); and student (n=1).
6. The educational level of the participants was as follows: completed High School (n=15); other (non-specified) (n=3).
7. The educational level of the family member living with schizophrenia was as follows: completed High School (n=10); diploma (n=3); and ‘other’ (non-specified) (n=5).

The process followed in gaining the maximum number of family units is explained under section 4.5.

A Grade 10 level of language proficiency was recommended to understand the questionnaires, but previous successful research had been conducted with participants having a Grade 8 proficiency level in South Africa (Greeff & Aspeling, 2004; Greeff & Human, 2004). The language level of the participants was qualitatively determined prior to commencing with data collection. This was done through the nursing sisters at the primary healthcare sites who work with the family members and identified families who would be able to understand the questions asked in their home language.

The inclusion of Xhosa speaking participants may be regarded as a confounding variable in the proposed research due to the concepts of amafufunyana, thwasa and phambana being recognized cultural
phenomena in South Africa (Lund & Swartz, 1998). Consequently, the research was limited to participants whose home language is English or Afrikaans. The inclusion criteria for the present study were as follows:

1. participants were part of a family unit where a member was clinically diagnosed as schizophrenic for longer than 12 months;
2. the family member living with schizophrenia must have had a single Axis I diagnosis of Schizophrenia;
3. the participants had to live in the same residence as the dependent, and needed to be involved in caring for him/her;
4. the family member living with schizophrenia needed to be fully dependent, including financially, upon the family unit, as a result of his/her illness;
5. the family member living with schizophrenia needed to be between the ages of 18 and 65 years of age. This would place the family members living with schizophrenia in the young through middle adulthood stage of development, as explained by Erickson, Schaie, Sternberg and Piaget (Papalia & Olds, 1992);
6. participants needed to have a Grade 8 level proficiency in English or Afrikaans in order to fully understand the questionnaires; and
7. participants had to be over 18 years of age.

4.5. Data Collection

The researcher approached the District Office of the Department of Health: Eastern Cape for permission to be granted access to primary healthcare sites i.e. state-run clinics and hospitals in order to access participants for the study. The researcher also approached a Mental Health Support Group in the Nelson Mandela Metropole, for permission to address its members. The researcher gave the District Office and the group co-ordinator a detailed description of the study in the format of a written document,
along with the research proposal. Once permission was granted, the researcher worked closely with the nursing sister-in-charge or the psychologist at each clinic to identify participants who met the inclusion criteria. The researcher also addressed the monthly meeting of the Mental Health Support Group. However, no members of this group were willing to complete the questionnaires, or fell outside of the inclusion criteria.

The researcher and clinic nursing sisters identified 68 family units across 4 primary health care sites where the participant’s home language was English or Afrikaans. Those identified were then asked on their next clinic visit whether or not their family would be willing to participate by answering the survey questionnaires. The majority was willing and accepted the envelope to take home with them. They were requested, on collection of their medication the following month, to return the sealed envelopes to the clinic for later collection by the researcher.

The researcher gave a detailed description of the study in a written document form (Appendix B) to each participant, including a consent form (Appendix C) stressing the voluntary nature of the research. The researcher obtained written, informed consent before the participants proceeded with completion of the biographical and structured paper-and-pencil questionnaires. Of utmost importance and concern in a study of this nature was confidentiality and anonymity. The researcher explicitly reassured participants that their confidentiality and anonymity in reporting results would be maintained. Furthermore, the questionnaires were coded, and returned in a coded envelope to enhance confidentiality and anonymity. Participants were given the opportunity to ask questions at any time during the research process through telephonically contacting the researcher, or through questions forwarded to the researcher by the administrator at the primary healthcare sites.

As the researcher followed up fortnightly with the clinics regarding progression of data collection, it became evident that many families had read the questionnaires and told the clinic sisters they were not willing to participate, or had simply returned the questionnaires unanswered. The researcher, with the continued help of the clinic sisters or psychologist at the primary healthcare site, contacted the families
who had not collected the questionnaires, or had not returned them. Appointments were then set up with the families willing and able to participate (N=20), in order for the researcher to meet with them, to explain the research process and to establish a date to return the questionnaires. Of these families, 18 provided completed survey questionnaire sets.

4.6. Method

A biographical questionnaire with an open-ended question was administered as well as a number of structured paper-and-pencil questionnaires. The following structured questionnaires were used in the study: Family Attachment and Changeability Index 8 (FACI8), Family Crisis-Oriented Personal Evaluation Scales (F-COPES), Family Hardiness Index (FHI), Family Problem-Solving Communication (FPSC), Family Time and Routine Index (FTRI), Relative and Friend Support (RFS) and the Social Support Index (SSI). The FACI8 was viewed as the dependent variable, (the extent to which the family has adapted) and the other measures were viewed as the independent variables. Although the questionnaires have not been standardized for the South African population, they have been used in published South African studies (Der Kinderen & Greeff, 2003; Greeff & Human, 2004; Greeff & van der Merwe, 2004). These questionnaires took approximately one hour to complete. These questionnaires, along with the biographical questionnaire, were available in Afrikaans or English. A brief description of these measures follows.

4.6.1. Biographical Questionnaire

The purpose of the biographical questionnaire was to obtain relevant contextual information for the current research (See Appendix D). The following data was requested:

- Area of residence;
- Relationship of family member living with schizophrenia to the participant;
- The number of years that the family member has been living with schizophrenia;
- Family composition i.e. number of family members living in the home with the participant;
• Home language;
• Educational level of dependent family members and participant;
• Employment status of dependent family member and participant.

This information enabled the researcher to contextualise the findings of the open-ended question and the paper-and-pencil measures. The biographical questionnaire also included an open-ended question requesting each participant’s opinion on which factors or strengths they believed helped their family through their crisis period.

4.6.2. Family Attachment and Changeability Index 8 (FAC18)

The Family Attachment and Changeability Index 8 (FAC18) was adapted from the Family Adaptability and Cohesion Evaluation Scales II by Olson, Portner and Bell (1989). In the current study the FAC18 is used to determine the level of family adaptation (XX).

The FAC18 consists of 16 items and is rated on a 5-point Likert scale, from Never to Always. The following is an example of a question asked: Family members discuss problems and feel good about the solutions. The FAC18 is divided into two subscales - Attachment, which measures strength of attachment between family members – and Changeability, which measures the flexibility of family relationships. Each consists of eight items and may be used together or separately.

The internal reliability (Cronbach’s alpha) varies between 0.75 and 0.80, whilst validity was established by determining the FAC18’s relationship to a treatment programme’s successful outcomes (McCubbin, Thompson & McCubbin, 2001). In this study the internal reliability of the subscales (Cronbach’s alpha) was 0.83 for Attachment, and 0.86 for Changeability.
4.6.3. Family Crisis-Oriented Personal Evaluation Scales (F-COPES)

The Family Crisis-Oriented Personal Evaluation Scales (F-COPES) is used to identify how the family solves problems, and what strategies they use in crisis situations. This instrument examines how the cumulative effect of demands (AA); family resources (BB) and meaning (CCC) of the Resiliency Model interact.

The measure consists of 30 items and focuses on two levels of interaction. Firstly, the measure looks at how the family manages problems and crises internally amongst themselves. Secondly, it focuses on how the family measures problems outside their boundaries, but which have an influence on the family unit. Each question is answered on a five-point Likert scale from *Strongly Disagree* to *Strongly Agree* and is in response to the statement, *When we face problems or difficulties in our family we respond by.* An example of a question is, *Seeking encouragement and support from friends.*

The measure consists of eight scales with three measuring Internal Family Coping Patterns and five measuring External Family Coping Patterns (McCubbin, Thompson & McCubbin, 2001). Higher scores indicate effective and positive coping behaviour. The F-COPES has an internal reliability (Cronbach’s Alpha) of 0.77, and a test-retest reliability of 0.71 (McCubbin, Thompson & McCubbin, 2001). In this study, the internal reliability scores of the subscales were also measured i.e., (1) Mobilising family to acquire and accept help – 0.90 (Cronbach’s alpha); (2) Passive appraisal – 0.26 (Cronbach’s alpha); (3) Reframing – 0.52 (Cronbach’s alpha); (4) The construct validity of the questionnaire was proved with a factor analysis and a varimax rotation of the axes.

4.6.4. Family Hardiness Index (FHI)

The Family Hardiness Index (FHI) was used to measure internal strengths and durability of the family unit. Hardiness here refers to the sense of control over life events and hardships. Furthermore, whether the family takes an active or passive stance in managing stress and adjusting to stress, was assessed
This measure addresses the family resources (BB) and situational appraisal (CC) components of the Resiliency Model.

The instrument consists of 20 items which are divided into three subscales, namely commitment, challenge, and control. Participants answer on a 5-point Likert rating scale. An example of a question is, *We do not feel we can survive if another problem hits us.* The internal reliability is 0.82 (Cronbach’s alpha), and the test-retest reliability is 0.86 (McCubbin, Thompson & McCubbin, 2001). The validity coefficients are between 0.20 and 0.23 for family satisfaction, time, routine and adaptability (McCubbin, Thompson & McCubbin, 1996). The internal reliability of the subscales for this study were (1) Challenge – 0.78 (Cronbach’s alpha); (2) Control – 0.74 (Cronbach’s alpha); and (3) Commitment – 0.55 (Cronbach’s alpha).

**4.6.5. Family Problem-Solving Communication (FPSC)**

The Family Problem-Solving Communication (FPSC) Index measured two dominant patterns in family communication which families use in dealing with stressful situations, namely positive and negative communication patterns. In particular, the FPSC measured the problem solving and coping (PSC) component of the Resiliency Model. The index consists of 10 items with a 4-point Likert scale. An example of a question asked is, *We work hard to be sure family members are not hurt, emotionally or physically.*

Within this measure there are two subscales, namely, Incendiary Communication, and Affirming Communication. Incendiary communication involves communication that exacerbates a conflictual situation, whilst affirming communication supports and cultivates a calming environment (McCubbin Thompson & McCubbin, 2001). The alpha reliability for the whole measure is 0.89, and the test-retest reliability is 0.86 (McCubbin, Thompson & McCubbin, 2001). In this study the overall internal reliability was 0.84 (Cronbach’s alpha), and the two subscales were 0.76 (Cronbach’s alpha) for Incendiary Communication and 0.61 (Cronbach’s alpha) for Affirming Communication.
4.6.6. Family Time and Routine Index (FTRI)

The Family Time and Routine Index (FTRI) was developed to assess the types of activities and routines families partake in, and the value they attribute to these activities. Family time together and routines offer reliable indices of family integration and stability (McCubbin, Thompson & McCubbin, 2001).

The FTRI is a 32-item instrument, which can be divided into eight subscales, namely, parent-child togetherness; couple togetherness; child routines; meals together; family time together; family chores routines; relative’s connection routines; and family management routines. An example of a question asked is, *Family has a certain family time each week when they do things together at home.* This is then answered in terms of whether the routine is false or true about the family and how important each routine is to keeping the family together and strong.

The FTRI links into the family type (T) component of the Resiliency Model as the participant is assessing the degree to which each statement describes the family’s behaviour. The internal reliability is 0.88 (Cronbach’s alpha) (McCubbin, Thompson & McCubbin, 2001). The overall internal reliability in this study was 0.95. The validity was confirmed through significant correlations with various criterion indices of family strengths (McCubbin et al, 1996).

4.6.7. Relative and Friend Support (RFS)

The Relative and Friend Support Index (RFS) measured the degree to which family members use relative and friend support as a coping strategy when dealing with stressors. This instrument sought to measure the family resources (BB) component of the Resiliency Model. The RFS consists of eight items based on a 5-point Likert scale from *strongly disagree* to *strongly agree.* Each question is answered in relation to the statement, *We cope with family problems by....* An example is, *Sharing our difficulties with relatives.* The scale has an internal reliability of 0.82 (Cronbach’s alpha) and a validity coefficient of
0.99 (McCubbin, Thomspn & McCubbin, 1996). The internal reliability of the RFS for this study was 0.86 (Cronbach’s alpha).

4.6.8. Social Support Index (SSI)

The Social Support Index (SSI) was used to determine the degree to which families find support within their community. Social support is an important factor in resiliency and links in with the family resources (BBB) component of the Resiliency Model (McCubbin, Thompson & McCubbin, 2001). This instrument consists of 17 items and uses a 5-point Likert scale. An example of a question asked is, *If I had an emergency, even people I do not know in this community would be willing to help.*

The internal reliability is 0.82 (Cronbach’s alpha) and a validity coefficient (correlated with criteria of family well-being) is 0.40. The internal reliability in this study was 0.71 (Cronbach’s alpha). The test-retest reliability is 0.83 (McCubbin, Thompson & McCubbin, 2001).

4.7. Data Analysis

The data from the biographical questionnaire was analysed using descriptive statistics. The quantitative data was analyzed using correlation analysis. This method involved measuring both the Independent variable (FACI8) and the Dependent variables (all the other measures) to determine whether they co-variated. Correlation analysis therefore measured the association between two or more variables and the extent to which values on one could be predicted from values on another (Calder & Sapsford, 2006). A correlation coefficient was calculated to describe how strongly the variables were related to one another. A Pearson $r$ coefficient provided information about the strength of the relationship and the direction of the relationship (positive or negative) (Cozby, 2004).

Content analysis was used to analyse the qualitative data obtained from the open-ended question on the biographical questionnaire. This systematic analysis involved the researcher devising a coding system to classify information into categories or themes. The researcher defined categories and coded messages that emerged from the questionnaire into these categories in an objective manner that would ensure high interrater reliability (Cozby, 2004). An independent coder was then employed in order to counter
potential researcher bias. The steps that were followed in the content analysis were according to the eight-step model as outlined by Tesch (1990). The eight steps may be summarized as follows:

1. The researcher gained a sense of the ‘gestalt’ of the data. As the data came in, the researcher read the material so as to gain an understanding and to formulate ideas around the data.

2. The next step was to pick any data document to start with and identify topics from the material and capture them in writing. The ultimate goal was to determine what the document was about and what the underlying meaning was. The procedure was repeated for all data documents.

3. During the third step, the researcher made a list of all the topics and themes from the data documents that were studied. Themes were now organized into columns that could be classified as major themes, unique themes and leftovers.

4. Once the themes had been identified, the researcher returned to the data, where the themes were abbreviated into codes and written next to the relevant sections in the text. This phase also allowed for the detection of new themes and codes that could be integrated into the text.

5. The researcher named the themes in descriptive wording and then created categories. From these lists of categories, themes were related to each other. By grouping related themes, the overall list of themes was reduced.

6. Once the researcher had made a final decision of the abbreviation that represented each category, these were alphabetised.

7. Related data was assembled in one place and a preliminary analysis was done. The goal was to identify and summarise the content for each category so as to identify information that was relevant to the present study.

8. After closer investigation, the researcher decided that the categories were inclusive or not exclusive enough and so recoded the data.
Guba and Lincoln’s Model of Trustworthiness (1985) was also used to ask the following questions:

- How credible are the particular findings of the study. By what criteria can we judge them?
- How transferable and applicable are these findings to another setting or group of people?
- How can we be reasonably sure that the findings would be replicated if the study were conducted with the same participants in the same context?
- How can we be sure that the findings are reflective of the subjects and the inquiry itself, rather than a creation of the researcher’s biases or prejudices?

This model ensured objectivity was maintained while analyzing the data by looking at the above mentioned four constructs, namely credibility, transferability, dependability and conformability.

Credibility, which may also be referred to as internal validity, aimed to ensure that data gathered was valid. This was ensured by accurately describing the participants, placing parameters around the study, and by seeking to describe the complexities of variables and interactions (De Vos, 2005).

The second question, involving transferability of the data gathered to beyond the present study, was not considered. This was due to the exploratory-descriptive nature of the study rather than to generalise the findings to larger populations.

The third question addresses the dependability of the findings. This may also be seen as reliability, and involved the researcher accounting for the dynamics surrounding the research participants. This included being aware of changing conditions which allowed the researcher to gain a refined understanding of the research setting (De Vos, 2005).

The fourth question examined the objectivity involved in the research. The goal was to remove the subjective influence of characteristics that are inherent to the researcher, and to focus on the data itself. This was done by the researcher working with the clinic nursing sisters and psychologists, in order that the research participants were not biased towards the subjective qualities of the researcher (De Vos,
Furthermore, an independent coder was employed to counter researcher bias. The following section examines the ethical considerations taken into account in this study.

4.8. Ethical Considerations

In psychological research, the researcher must be acutely aware of the rights of the participants, and balance these with the ‘right’ of the researchers to produce sound data. The study underwent strict evaluation by the Research Ethics Committee (Human) at NMMU prior to approval. A number of issues were considered which governed the research activities. The first ethical issue considered was gaining informed consent from participants. Cozby (2004) suggested that the consent form be written in the second person, in language that is commensurate with the expected language level of the participants. It was important to include the purpose and voluntary nature of the research, who the researcher was and a contact number should any questions have arisen. The information given was complete, as the research did not involve any deception, and so would not have undermined the goals of the research. Rather, by disclosing the value and benefits of the research to participants, participants were encouraged to share their first hand knowledge of schizophrenia (Gravetter & Forzano &, 2003).

Secondly, the issues of confidentiality and anonymity were addressed. This was stressed in writing in the covering letter of the documents given to participants, and an offer to provide feedback on conclusion of the research was made. These issues are important to closely scrutinize when research is of a highly sensitive nature. Anonymity meant that the privacy of the participants was protected in that the data they provided was handled and reported in such a manner that their personal identities were not revealed in reporting the research (Mertens, 1998).

Strict adherence to confidentiality was beneficial to both the participants and researcher as the emotional stress or embarrassment that could have resulted from public exposure was avoided. Anonymity - ensuring that no uniquely identifying information is attached to the data - was ensured through only participants’ personal details being recorded if they specifically had requested feedback
from the research (Abbot & Sapsford, 2006). A related issue was providing a prompt opportunity for the participants to obtain the results and conclusions of the research (APA, 1992).

The third issue to beware of was coercion. Coercion refers to potential participants feeling compelled to participate, and thus removing their right to participate out of their own free will. To ensure that this did not occur, the opportunity to discontinue their involvement at any time was stated (Ungar & Liebenberg, 2004). When a researcher assumes a position of power, participants may respond in a submissive manner. The answers they give may be what they considered ‘right’ for the researcher to hear, which could affect the internal validity of the research. It was thus important for the researcher to not view the participants as research material, but to allow the participants to maintain their dignity at all times. This was further ensured by no deception of the participants regarding the nature of the research (Kemmelmeier, Davis & Follete 2003).

Cultural sensitivity and respect were important for the researcher to be cognizant of. As APA guidelines state that psychologists should not practice outside their boundaries of competence (1992), the researcher limited participants to the English and Afrikaans South African populations, so as not to negatively bias results against certain population groups, and affect the validity of the research.

4.9. Conclusion

The aims, the research methodology, and research procedure, including sampling and participants, was outlined in this chapter. The manner in which the data was collected, and the instruments that were given to each participant, were described. Data analysis for the qualitative and quantitative measures was explained, and finally the ethical considerations in the current research were discussed. The following chapter examines the results of the data collection.
Chapter Five: Results and Discussion

5.1. Introduction

The results of this study and discussion are presented in this chapter. The study aimed to identify, explore and describe the resiliency factors that enable families to adjust and adapt as a result of having a member living with schizophrenia. Chapter Five provides a description of the quantitative and qualitative findings that were obtained from the seven questionnaires employed.

The following structured questionnaires were used in the study: the Family Attachment and Changeability Index 8 (FACI8), the Family Crisis-Oriented Personal Evaluation Scales (F-COPES), the Family Hardiness Index (FHI), the Family Problem-Solving Communication (FPSC), the Family Time and Routine Index (FTRI), the Relative and Friend Support (RFS) and the Social Support Index (SSI). The FACI8 was viewed as the dependent variable (the extent to which the family has adapted) and the other measures were viewed as the independent variables.

The relationship between the dependent variable and the independent variables is firstly discussed. This is followed by a discussion of the results of the open-ended question which was included in the biographical questionnaire. The following section outlines the results of the measures.

5.2. Results of the Measures

This section focuses specifically on the aim of the study which was to identify, explore and describe the resiliency factors that enable families to adjust and adapt as a result of having a member living with schizophrenia. To identify, explore and describe these resiliency factors, the results of the measures are now discussed.

5.2.1. Quantitative Analysis

In this study, quantitative data was analysed through correlation analysis. Correlation analysis measured the association between two or more variables and the extent to which values on one variable could be predicted from values on another variable. Furthermore, it described the direction and degree
of relationship between variables (Wilson & Sapsford, 2006). Pearson product-moment correlation coefficients (Pearson $r$) were calculated to determine the interrelationship between family adaptation (as measured on the FACI8) and resilience factors.

To assess the significance of these correlations, $p$ values were used. A $p$ value of 0.05 is the standard value that is used for most psychological reports, whereas a value of 0.01 or 0.001 is considered to be more significant. This is due to the latter $p$ values being representative of more stringent and rigorous significance levels (Harris, 1998). Guilford’s guidelines (1946) were used to interpret the magnitude of the relationships, where $p$ values indicated the significance of correlations. According to these guidelines, correlations that range between 0.40 and 0.70 are considered moderate, indicating a fairly substantial relationship. The guidelines are as follows:

- Less than 0.20 slight; almost negligible relationship
- 0.20 – 0.40 low correlation; definite but small relationship
- 0.40 – 0.70 moderate correlation; substantial relationship
- 0.70 – 0.90 high correlation; marked relationship
- 0.09 – 1.00 very high correlation; very dependable relationship

The correlation results for the research participants are represented in Table 3.
Table 3: Pearson Product-Moment Correlations between Adaptation (FACI8) and Potential Resilience Variables

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>CAREGIVERS(N=18)</th>
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<tbody>
<tr>
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<tr>
<td><strong>Family Crises Orientated Personal Evaluation Scales (F-COPES)</strong></td>
<td></td>
</tr>
<tr>
<td>Mobilisation</td>
<td></td>
</tr>
<tr>
<td>Passive Appraisal</td>
<td>0.59</td>
</tr>
<tr>
<td>Reframing</td>
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</tr>
<tr>
<td>Social Support</td>
<td>0.19</td>
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<tr>
<td>Spiritual and religious support</td>
<td>0.59</td>
</tr>
<tr>
<td><strong>Family Hardiness Index (FHI)</strong></td>
<td></td>
</tr>
<tr>
<td>Commitment</td>
<td>0.65</td>
</tr>
<tr>
<td>Challenges</td>
<td>0.64</td>
</tr>
<tr>
<td>Control</td>
<td>0.89</td>
</tr>
<tr>
<td>Total FHI score</td>
<td>0.29</td>
</tr>
<tr>
<td><strong>Family Problem-Solving Communication (FPSC)</strong></td>
<td>0.74</td>
</tr>
<tr>
<td>Incendiary communication</td>
<td></td>
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<tr>
<td>Affirming communication</td>
<td>-0.75</td>
</tr>
<tr>
<td>Total FPSC score</td>
<td>0.75</td>
</tr>
<tr>
<td><strong>Family Time and Routine Index (FTRI)</strong></td>
<td>0.79</td>
</tr>
<tr>
<td>Parent-child togetherness</td>
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<tr>
<td>Couple togetherness</td>
<td>0.28</td>
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<tr>
<td>Child routines</td>
<td>0.42</td>
</tr>
<tr>
<td>Meals together</td>
<td>0.05</td>
</tr>
<tr>
<td>Family time together</td>
<td>0.15</td>
</tr>
<tr>
<td>Family chores routines</td>
<td>0.66</td>
</tr>
<tr>
<td>Relatives connection routines</td>
<td>0.36</td>
</tr>
<tr>
<td>Family management routines</td>
<td>0.36</td>
</tr>
<tr>
<td>Total FTRI score</td>
<td>0.25</td>
</tr>
<tr>
<td><strong>Relative and Friend Support (RFS)</strong></td>
<td>0.35</td>
</tr>
<tr>
<td>Total RFS score</td>
<td></td>
</tr>
<tr>
<td><strong>Social Support Index (SSI)</strong></td>
<td>0.85</td>
</tr>
<tr>
<td>Total SSI score</td>
<td>0.73</td>
</tr>
</tbody>
</table>

* p< 0.01
The results indicate that for caregivers of family members who are living with schizophrenia, family adaptation (as indicated by FACI8 total score) is associated with a variety of resilience factors. These factors, as described by the measures utilised in this study, are discussed below. This discussion will be within the context of the literature pertaining to resilience and to schizophrenia explored in Chapter Two and Three.

5.2.1.1. Family Crises Orientated Personal Evaluation Scales (F-COPES)

A significant positive correlation was found between family adaptation and selected sub-scales of the F-COPES. The F-COPES is used to identify how the family solves problems, and what strategies they use in crisis situations. This instrument examines how the cumulative effect of demands (AA); family resources (BB) and meaning (CCC) of the Resiliency Model interact.

Literature on resilience indicates that a family’s resistance resources are the abilities and capabilities that a family has to address and manage the stressor and its demands, while maintaining and promoting harmony and balance. As such, three subscales of the F-COPES are viewed as some of the essential family resistance resources (McCubbin & McCubbin, 1996).

The first sub-scale to show a significant correlation with the FACI8 was the Mobilisation subscale, indicating that families are able to access resources in a time of crisis ($r = 0.59, p = 0.009$). The strength of the correlation is moderate and according to Guilford’s (1946) guidelines, a moderate correlation indicates a substantial relationship. As no literature was found supporting this correlation, it may be speculated that the families’ ability to access resources, such as primary health-care clinics for their dependent’s medication, allows them to adjust and adapt when faced with their family member’s illness. Furthermore, it may be speculated that being able to attend supportive organizations such as religious institutions, is another way in which mobilisation is a resource used in resiliency.

The second subscale to show a significant correlation with the FACI8 is the Social Support subscale. This indicates that the family is able to use the support of members of their community in a
time of crisis \( r = 0.59, p = 0.010 \). According to Guilford’s (1946) guidelines there is a moderate correlation between the FACI8 and this subscale, indicating a substantial relationship between variables. Research emphasizes the mediating influence of social support in protecting against the effects of stressors (McCubbin & McCubbin, 1992). Social support promotes recovery from a crisis such as schizophrenia and allows the family to positively adapt to the changes in their family unit and way of living.

The final subscale of the F-COPES to show a significant correlation with the FACI8 is the Spiritual and Religious support subscale \( r = 0.65, p = 0.003 \). A substantial relationship may be seen between variables (Guilford, 1946) where the families make use of religious and spiritual support during times of crises. Spirituality may be seen as an important family paradigm (CCC) that shapes and guides the family’s development of patterns of functioning (McCubbin, Thompson & McCubbin, 2001). The use of religion to cope in situations of health-related stress has been documented as offering hope, comfort, acceptance and strength (Siegel, Anderman & Schrimshaw, 2001). Religious institutions are seen as organizations which offer emotional support and practical assistance in times of serious illness (Siegel, Anderman & Schrimshaw, 2001). They can help families in their psychological adjustment to the chronic illness they are dealing with (Siegel, Anderman & Schrimshaw, 2001). As such then, the various resources that religion and spirituality offer to families may be seen as buffers to the stress of health-related crises (Paragament, 1995).

5.2.1.2. Family Hardiness Index (FHI)

The second measure which shows a significant positive correlation with the FACI8 is the Family Hardiness Index. The FHI was used to measure internal strengths and durability of the family unit. Hardiness referred to the sense of control over life events (CC) and hardships (AA) which the families had and whether the families took an active or passive stance in managing and adjusting to stress (McCubbin, Thompson & McCubbin, 2001). In addition to these aspects being assessed, this measure
addressed the family resources (BB) and situational appraisal (CC) components of the Resiliency Model.

A positive correlation between family adaptation and the total score for family hardiness was found, with the correlation being highly significant ($p < 0.001$). The FHI global score showed a high correlation with the FACI8, and according to Guilford’s guidelines (1946), there is a marked relationship between these two variables ($r = 0.74, p = 0.000$). Resilience literature suggests that ‘hardiness’ could possibly mediate stress and illness, and thus reduce the negative effects of stress. Kobasa (1979) suggested that commitment to various areas of one’s life; having a sense of control; and viewing change as a challenge, allows a ‘hardy’ person to develop.

Two subscales of the FHI also indicated significant positive relationships with the FACI8. Firstly, the Commitment subscale indicated that the families make a commitment to work together to solve their crises ($r = 0.64, p = 0.004$). A moderate correlation may be found, which indicates a substantial relationship between family adaptation and the commitment that the family has to work together (Guilford, 1946). McCubbin, McCubbin, Thompson, Han and Allen (1997) explained that hardiness is one of two factors which facilitate family resiliency. When the family is able to reframe and redefine their hardships together as challenges over which they have a sense of control and influence in the outcome, the family is able to adjust and adapt to the crisis they are facing.

The second subscale of the FHI which showed a significant positive correlation with the FACI8 was the Challenges subscale ($r = 0.89, p = 0.000$). This indicates that the families are able to reframe and define their hardships as challenges rather than problems, allowing them to develop hardiness. According to Guilford’s guidelines (1946) the correlation is high, indicating a marked relationship.

Although no literature was found to further explain this correlation, it may be speculated that having a family member living with a chronic illness such as schizophrenia presents continuous challenges. Managing the moods and behaviour of the family member will involve having to find new
solutions daily that best accommodate him/her, and at the same time allows for the family unit to remain resilient in the face of a chronic illness.

All of the above correlations support the results from other studies conducted in South Africa which have also shown that family hardiness characteristics, such as internal strengths and durability of the family unit, play a significant role in the family’s resilience (Greeff & Human, 2004; Greeff & van der Merwe, 2004).

5.2.1.3. Family Problem-Solving Communication (FPSC)

The third measure which showed a significant correlation with the FACI8 was the Family Problem-Solving Communication scale. The FPSC measured two dominant patterns in family communication which families use in dealing with stressful situations, namely positive and negative communication patterns. The FPSC measured specifically the problem-solving and coping (PSC) component of the Resiliency Model.

Walsh (2002) explained that clear communication processes, where there are consistent messages between words and actions, are needed in a family in order for the family to adapt in a time of crisis. Resilience literature indicates that the level of successful adaptation for a family is determined by the interacting influences of retained and restored patterns of functioning and the new patterns of functioning which includes new patterns of communication (McCubbin, Thompson & McCubbin, 2001).

The global score for the FPSC indicated a highly significant positive correlation between family adaptation and problem-solving communication \( (r = 0.78, p = 0.000) \). Guilford’s guidelines (1946) indicate that when there is a high correlation, a marked relationship between variables may be seen.

The FPSC consists of two subscales, namely Incendiary and Affirming communication. Incendiary communication involves communication that exacerbates a conflictual situation, whilst affirming communication supports and cultivates a calming environment (McCubbin, Thompson & McCubbin,
The first scale showed a significant high negative correlation with the FACI8 ($r = -0.75$, $p = 0.000$). This indicates that communication which exacerbates conflict is not a resource which is used in family adaptation. Literature detailing the problems encountered by families where a member is living with schizophrenia highlights how many families do not have adequate problem-solving skills to alleviate the high levels of stress (Leaver, 1998). This suggests that this may result in communication which does not build resilience in the family, but rather causes further disharmony in the family unit.

Results indicated a significant high positive correlation between the Affirming communication subscale and family adaptation ($r = 0.75$, $p = 0.000$). A high correlation suggests a marked relationship between the FACI8 and Affirming communication as a resource used in family adjustment and adaptation (Guilford, 1946). Literature about how families can ‘manage’ schizophrenia in their home highlights the importance of clear communication. Creer and Wing (1974) emphasized that it is very important that a family communicates in short, concise statements with their family member who is living with schizophrenia in order to not cause confusion or disagreement. This may be seen as affirming and thus a resource which allows the family to adjust and adapt.

From these correlations it may be seen that less communication that exacerbates stressful situations is a resource which can help the family adapt in times of crisis. More communication that conveys support and understanding is beneficial to the family. Torrey (2006) stressed that no matter how great the pressure for the family member trying to communicate with the patient, patience needs to be displayed in communicating and dealing with the behaviour of the patient. This will avoid repeated misunderstanding and confusion.

5.2.1.4. Family Time and Routine Index (FTRI)

The fourth measure of family adaptation which had a subscale showing a significant positive correlation with the FACI8 is the Family Time and Routine Index. The FTRI assessed the types of activities and routines the families partake in, and the value they attribute to these activities. Family
time together and routines offer reliable indices of the families’ integration and stability (McCubbin, Thompson & McCubbin, 2001). The FTRI links into the family type (T) component of the Resiliency Model as the participants assessed the degree to which each statement described their family’s behaviour.

Resilience literature indicates that time spent together provides a family with a sense of predictability and stability that fosters harmony and balance. During times of crisis, family time and routines may be set aside or disrupted and replaced by a complete devotion to the family crisis. However, the care of an ill family member needs to be accompanied by a commitment and effort to sustain some family practices and routines. This will help to maintain the family’s stability and continuity during times of stress (McCubbin, Thompson & McCubbin, 2001).

While the total score for the index was not significant, the Family Time Together subscale showed a significant positive correlation with the FACI8 as a resource that aids family adjustment and adaptation ($r = 0.66$, $p = 0.003$). As indicated by Guilford’s guidelines (1946), a moderate correlation between the FACI8 and this subscale is indicative of a substantial relationship between these variables.

These findings are supported by Torrey’s (2006) explanation that it is important for a family to maintain a balance between the needs of all its members, and not just the needs of the ill family member. The family must find leisure time activities in which they can all participate as this enhances the quality of their time together. In order that the illness and the family member living with it does not control and dominate family life, all members of the family must be willing to engage in activities that meet their individual needs, but also creates unity of the family and builds meaningful experiences. The value of family time together is that this can be a time when the family looks away from outside influences, and focuses just on their internal familial relationships.
No significant relationships between the other seven subscales and the FACI8 were found. It may be speculated that as these subscales tapped into activities which parents and children/adolescents would engage in, they were not applicable to the participants in this study.

5.2.1.5. Relative and Friend Support Index (RFS)

The results indicate a significant positive correlation between family adaptation and relative and friend support (as indicated by the RFS total score). The Relative and Friend Support scale measured the degree to which family members use relative and friend support as a coping strategy when dealing with stressors. This instrument tapped into the family resources (BB) component of the Resiliency Model. Resilience literature indicates that the family’s internal resources which help to determine the level of successful adaptation, include their sources of social support i.e. the extended family, the neighbourhood, church, community and friends (McCubbin, Thompson & McCubbin, 2001).

The RFS showed a highly significant positive correlation with the FACI8 ($r = 0.85$, $p = 0.000$) as a resource that the families used in adjusting and adapting to the crisis of schizophrenia. According to Guilford’s guidelines (1946), a high correlation indicates a marked relationship between variables. Social support has been identified as one of the most important resources available to families when faced with a crisis. Social support groups are a further component of support for families and serve as a buffer in caregiver stress (Marsh, 1992). Pruchno and Patrick (1999) found that one of the most powerful predictors of caregiver depression is a lack of social support. Receiving support, especially at the time of hospitalization of their family member, is important in reducing the chances of depressive symptomology. A family is better able to function when they can harness social support networks, which help them to function more effectively on a day-to-day basis. Results from studies conducted in South Africa also show the importance of support and utilization of immediate family members, the extended family and friends (Greeff & Human, 2004; Greeff & Van der Merwe, 2004) in family adjustment and adaptation.
5.2.1.6. Social Support Index (SSI)

The sixth and final measure that showed a significant positive correlation with the FACI8 is the Social Support Index \( r = 0.73, p = 0.000 \). The SSI was used to determine the degree to which families find support within their community. Social support is an important resource when available to families in their developing of resiliency. Social support links in with the family resources (BBB) component of the Resiliency Model (McCubbin, Thompson & McCubbin, 2001). The strength of the correlation was high, indicating a marked relationship between the social support a family has, and their ability to adjust and adapt in a time of crisis (Guilford, 1946).

As indicated in the Relative and Friend Support Index section, social support is very important for fostering resilience in families when faced with crises. Within the context of schizophrenia, the stress of caring for a mentally ill family member can be lessened by the social support that the family receives. When relatives have reduced social networks, psychological distress increases (Magliano et al, 1998). Social support groups are essential in providing support to families. These, along with relatives, friends, community organizations and so on, serve as buffers to caregiver stress. A family is better able to function when they are able to harness social support networks which can help them to function more effectively on a day-to-day basis (Marsh, 1992).

5.2.1.7. Summary of Quantitative Results

In conclusion, all six measures administered showed significant positive or significant negative correlations with the FACI8, at a total and/or subscale score level. This suggests that mobilisation; social and relative support; religious and spiritual support; less incendiary communication, but more affirming communication; and family time together are resilience factors that facilitate adjustment and adaptation for research participants in this study. These findings support literature on resilience and family adaptation, as well as literature and research on the manner in which families can successfully manage a family member living with schizophrenia.
The following section reports on the themes that emerged from the qualitative open-ended question in the biographical questionnaire. Furthermore, the correlations between the quantitative and qualitative results are discussed.

5.2.2. Qualitative Analysis

There were 21 research participants (18 families) that took part in the study, of whom 18 responded to the open-ended question in the biographical questionnaire. The participants were asked what are the most important factors or strengths that they as a family have, which help them in dealing with a member who is living with schizophrenia, and his/her illness. Table 4 summarises the themes that emerged from the content analysis.

Table 4: Themes (N=18)

<table>
<thead>
<tr>
<th>RESOURCES</th>
<th>FREQUENCY</th>
</tr>
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<tbody>
<tr>
<td>Spirituality and Religion</td>
<td>15</td>
</tr>
<tr>
<td>• Behaviour</td>
<td>(8)</td>
</tr>
<tr>
<td>• Belief</td>
<td>(5)</td>
</tr>
<tr>
<td>• Support</td>
<td>(2)</td>
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<tr>
<td>Understanding of Patient’s Condition</td>
<td>9</td>
</tr>
<tr>
<td>Social Support</td>
<td>8</td>
</tr>
<tr>
<td>• Emotional</td>
<td>(5)</td>
</tr>
<tr>
<td>• Instrumental</td>
<td>(3)</td>
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<tr>
<td>Supportive Family Unit</td>
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<tr>
<td>Adherence to Treatment Regimen</td>
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<td>Communication</td>
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<td>Patience</td>
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<td>Treating Patient as Normal</td>
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<td>Hope</td>
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<td>Avoiding conflict situations</td>
<td>2</td>
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<tr>
<td>Individual characteristics of patient (e.g. temperament)</td>
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</tbody>
</table>
5.2.2.1. Spirituality and Religion

The theme which emerged as most important in helping families manage schizophrenia and their ill family member, was spirituality and religion (N=15). This theme is congruent with the quantitative results presented. Examples of participants’ responses to the open-ended question were:

- “Om te bid.” [By praying.]
- “My geloof dra my deur.” [My faith keeps me going.]
- “Bystand van predikant en sy vrou.” [Support of minister and his wife.]

The responses can further be divided into sub-themes of behaviour, belief and support, respectively.

Literature indicates that although the terms spirituality and religion are often used interchangeably, religion has become more narrowly defined to incorporate the practice of religious behaviour, and the beliefs and practices of a particular faith (Larson, Swyers & McCullough, 1998). Spirituality refers to the search for meaning and purpose in life, and the feelings associated with this search. The participants in this study relied upon their specific religion (Christianity), and the activities which came with belonging to a church, as strengths in their family unit. Their religious behaviour involved praying frequently.

When individuals encounter situations which they view as out of their control, the hope of divine intervention through placing their trust and faith in God, increases the individuals’ belief that God is in control of an otherwise unmanageable situation (Paragament, 1995). Similarly, religious institutions are seen as organizations which offer emotional support and practical assistance in times of serious illness (Siegel, Anderman & Schrimshaw, 2001).

When families are faced with illness, religious activities, and affiliation with religious organizations can help psychological adjustment (Siegel, Anderman & Schrimshaw, 2001). These religious resources may also be seen as stress-buffers, no matter how high the level of stress (Paragament, 1995). Through
attending religious services and involvement in religious activities, these individuals cope better than if following no faith. These activities, coupled with the stability of religious faith buffer the impact of health-related crises (e.g. schizophrenia) (Ellison, 1991).

5.2.2.2. Understanding of Patient’s Condition

Participants’ answers to the open-ended question indicated that an understanding of their family member who was living with schizophrenia was a factor that helped the family adjust and adapt (N=9). Terkelson (1987) highlighted the importance of a family coming to understand a family member’s illness. This researcher suggested a number of things would mediate this understanding: firstly, the pre-morbid personality of their family member contributes to how they understand the affliction of schizophrenia. Secondly, the specific behaviours that the family member demonstrates will contribute to seeing the illness as manageable or not and able to be overcome within the dynamics of the family. Thirdly, the phase of schizophrenia will have consequent emotions for the family members. Fourthly, the family members’ life experience, exposure to and understanding of mental illness will affect how they are able to face the change in their familial and personal life.

The participants indicated that they had found knowledge through the years of dealing with their family member, as many had been caring for this member for a number of years. Examples of statements made were:

- “We understand him.”
- “He also does not like to see any member of his family in distress, so we try to avoid these circumstances if possible.”
- “I understand him very well. I know how to handle him when he feels ill.”

This understanding of the family member living with schizophrenia highlights the resilience that the family can display, as indicated by Garmezy (1985).
5.2.2.3. Social Support

A number of participants (N=8) indicated the importance of social support as a resource that helped their family manage the chronic illness of schizophrenia. This support was further specified as emotional (5) or instrumental (3) by participants. Emotional support can be seen as the provision of trust, empathy and love. Instrumental support is provided by health practitioners and can include offering help and teaching skills (Seppanen, Kyngas & Nikkonen, 1999). These findings were congruent with those in the quantitative section of this study. Examples of statements indicating emotional support were:

- “Ons probeer om altyd daar te wees vir mekaar. Ons respek mekaar en is baie lief vir mekaar.” [We try to always be there for one another. To respect one another. We love each other a lot.]
- “Liefde en begrip van familie en vriende.” [Love and understanding from family and friends.]

Examples of statements indicating instrumental support were:

- “Ons het vir J na Schizophrenia support groups gestuur en hy sê dat hy baie uit die support groups uit geleer het.” [We sent J to Schizophrenia support groups and he said that he learnt a lot from these support groups.]
- “My husband and I belong to the H support group, which in the beginning was a big support.”
- “’n Baie ondersteunende suster het regtig baie omgegee…” [A very supportive sister really cared a lot.]

Literature reflects that the stress of caring for a mentally ill family member is mediated by the social support that the family receives. Social support has been identified as one of the most important family
resources, as families often feel isolated from usual channels of social support (Marsh, 1992). Social support groups can serve as a buffer in caregiver stress and the family is better able to function when they are able to harness social support networks, helping them to function effectively on a day-to-day basis. Baronett (1999) also highlighted that Objective Burden (OB) increased for caregivers when there was an increase in the lack of professional support and the ill family member did not receive help from social services. When there were disruptions in social or leisure time, work missed and disruption in domestic routine, this increased the OB.

In dealing with a crisis, one of the essential family resistance resources includes social support (McCubbin & McCubbin, 1996). This resource can be seen as one of the abilities and capabilities that the family has to address and manage the stressor and its demands. The level of successful adaptation to the crisis includes their sources of social support such as the extended family, the neighborhood, church, community or friends (BBB). The fact that the participants indicated use of such sources highlights their abilities to overcome the day-to-day challenge of having a family member living with schizophrenia.

5.2.2.4. Supportive Family Unit

The next theme that emerged, which ties in with the above theme, is that of a supportive family unit. The participants (N=7) made the following statements:

- “One of the most important factors which helps our family to cope with our family member living with schizophrenia is the fact that he is ‘family’ and we love him…”
- “Sometimes when he cries, we as a family talk to him that he mustn’t worry because we are here for him.”

Literature on the environment in which the schizophrenic individual lives repeatedly speaks of the impact of high Expressed Emotion (EE). When relatives are hostile, critical or emotionally over-involved, the patient is at greater risk for a relapse. When there is hostility and the rejection of the
relative as a person, the family unit will not work together to overcome challenges, as the schizophrenic member will be likely to relapse, and the cycle will start again (Wuerker, 1994).

Similarly, Torrey (2006) stated that when a family could give up shame and blame they would be able to manage the illness in their home. The acceptance of the illness, by acknowledging that the illness is real, will allow the family to move forward meaningfully.

Resilience literature highlights that the Regenerative Family will be high in family coherence – the family’s emphasis on acceptance, loyalty, trust, faith, caring and shared values in the management of tensions and strains. These families are secure in their purpose together and their ability to make future plans. A number of participants responded in ways indicating being a part of such families (McCubbin, Thompson & McCubbin, 2001). The family’s sense of coherence (CCCC) forms the motivational and appraisal basis for transforming the family’s potential resources into actual resources. This too reduces the family dysfunction by mobilising family resources (Hawley, 2000; McCubbin, Thompson & McCubbin, 2001).

5.2.2.5. Adherence to Treatment Regimen

A number of families indicated the importance of following the prescribed treatment regime (N=5). The following were responses given:

- “Medikasie” [Medication]
- “…besef die noodsaaklikheid om sy medikasie gereeld te gebruik.” […]realises the importance of taking his medication regularly.]
- “I remind him to take his tablets as it is written on the packets.”

Compliance with anti-psychotic treatment has a great impact on the likelihood of relapse for the schizophrenic family member (Hummer & Fleischhacker, 1999). The general attitude of the patient
towards the illness, as well as their significant others, will positively, or negatively affect adherence to prescribed treatment (Hummer & Fleischhacker, 1999).

The use of medication may be seen as a problem-solving and coping method which the family uses as they divide the crisis situation into components, identify plans of action, and take steps to resolve the problem. When the use of medication has been identified by mental health professionals and the family as a way to cope with schizophrenia, the therapeutic environment (i.e. the home) will contribute to compliance (Hummer & Fleischhacker, 1999).

5.2.2.6. Communication

Research participants (N=3) highlighted that communication was a factor which helped their families to deal with schizophrenia in their home. These findings correlate with the quantitative results presented. Some examples were:

- “Baie praat.” [Frequent communication.]
- “We talk to him, and when he wants to say something to me I listen very carefully.”
- “We have good communication.”

McCubbin, McCubbin, Thompson, Han and Allen (1997) described communication as a general resiliency factor. In later literature, McCubbin, Thompson and McCubbin (2001) referred to affirming communication as a resiliency factor in the Resiliency Model of Family Stress, Adjustment and Adaptation. The communication described above may be seen as affirming the members of the family and bringing solidarity to the family unit.

Furthermore, Walsh (2002) stated that clear communication processes are needed in the family, where there are consistent messages between words and actions. This is one of the nine resources (Walsh, 2002) that may be found in family adaptation.
Literature about schizophrenia highlights the importance of clear communication in the home. It is very important that the family communicates in short, concise statements that do not cause confusion or disagreement (Creer & Wing, 1974).

5.2.2.7. Patience

Patience was highlighted as allowing participants to adjust and adapt to their family member living with schizophrenia (3). An example of statements made were:

- “Baie geduldig wees.” [Being very patient.]
- “Ons het aan die begin dit moeilik gevind, maar ons probeer om baie geduldig te wees.” [We found it very difficult at the beginning, but we try to be very patient.]

Literature explains that schizophrenic patients often exhibit subtle or even unobservable facial expressions. Such patients (who are less expressive) have poorer interpersonal relationships, including poor adjustment at home. Without the usual overt signs of emotion, family members living with the schizophrenic individual may misinterpret the individual’s emotional state (Bellack, 1992).

Conversely, high EE is a form of psychosocial stress that schizophrenic individuals are extremely vulnerable to. A consistent finding of research is that interactions in families with high EE relatives are characterized by more intense verbal exchanges (Cook, 1989). Negative verbal exchanges escalate quickly in high EE families, and such families demonstrate greater patterns of conflict than low EE families (Wuerker, 1994). It may be observed, then, that patience allows harmony to be maintained as best as is possible, in the home. Torrey (2006) stressed that no matter how great the rush for the family member, patience needs to be displayed in communicating and dealing with the family member living with schizophrenia.

There is an implication for treatment of the schizophrenic family member when they are living in a low EE environment. Families which display patience and understanding are able to adapt better to the needs of the schizophrenic individual and his/her symptoms, which reduces the hostility in the home.
Furthermore, being able to remain calm when their relative acts in an agitated or bizarre manner reduces the psychosocial stressors upon the schizophrenic family member (Leff & Vaughn, 1985).

**5.2.2.8. Treating the Patient as Normal**

When a person is diagnosed with schizophrenia, the community around him/her may now treat the person with fear. The family may become isolated and only be able to rely on themselves (Winefield & Harvey, 1994). From before diagnosis, Johnson (1994) highlighted that the family may go through a time when they are isolated and confused as first signs of the illness appear. The family may not seek help as they have not yet discussed the problem as a family; they are fearful of blame; or they disagree on what should be done.

Geanellos (2005) described, however, the importance a family unit has to increase or decrease resilience, by the “forces” (p.10) operating around the family member. Trying to maintain the appearance of normalcy to the world about him/her, with no-one to share the suffering with, can worsen the struggles of the ill family member. Living in a home where the family member is not marginalized, but treated like any other member of the family, allows the person to increase resilience. In line with this literature, family members (2) expressed their attempts at doing this as seen by the following examples:

- “Ek hanteer my pasiënte (my twee dogters) soos normale mense en nie soos mense wat geestelik siek is nie.” [I treat my patients (my two daughters) like normal people and not like people that are mentally ill.]
- “Probably one of the most important factors, particularly for the member living with schizophrenia, in my case my son, is to treat him as normally as possible.”

These statements highlight the core beliefs of a family resilience perspective which recognises the influences of parental and family member strengths. It allows the family to not
be viewed as damaged and beyond repair, but rather challenged by adversities in life, with the potential for healing and growth (Walsh, 2003).

5.2.2.9. Hope

Two participants responded with statements indicating hope for the wellness of their family member. These statements were:

- "Ek was altyd optimisties dat hy in die nabye toekoms beter sal word." [I was always optimistic that he would become better in the near future.]
- "Ek as ouer van A was altyd gemotiveered dat A gou beter sal word." [I, as A’s parent was always believing that he would get better quickly.]

Hawley and DeHaan (1996) viewed resilience as encompassing three broad themes, two of which can be seen to correlate with the participants’ hope for the future. Firstly, that despite hardship (in this instance having a family member living with schizophrenia) the manner in which they respond to the illness fosters resilience. Secondly, that the family demonstrates the property of buoyancy, which allows the family to ‘bounce back’ from adversity and continue to see hope for their family member’s life.

Similarly, Polk’s (1997) fourth dispositional pattern of resilience, the philosophical pattern (referring to the individual’s world view, including beliefs that promote resilience) may be seen in these family members’ lives. The family members find positive meaning in their experiences, value self-development and see life as having a purpose, despite having a family member living with schizophrenia. These families display one of the nine resources described by Walsh (2002) found in family adaptation: positive outlook. The families have hope and confidence in their ability to overcome the odds and to master the possible crisis. Similarly, encouraging each other to focus on their strengths, and to accept what cannot be changed, is important.
5.2.2.10. Avoiding Conflict Situations

Participants (2) indicated on the open-ended question that avoiding conflict situations with their family member allowed them to manage schizophrenia in their home. The examples given were:

- “Dit het ons baie gehelp om nie met haar te redeneer nie, want sy raak aggressief…” [It helped us a lot not to argue with her since she becomes aggressive…]

- “Jy moet hulle nie verskree nie en onnodig slaan nie want dan word hulle meer aggresief.” [You must not scream and unnecessarily hit them because then they become more aggressive.]

As schizophrenic individuals have great difficulty in processing sensory input of all kinds, especially two or more simultaneous stimuli, avoiding unnecessary arguments is important for harmony in the house (Torrey, 2006). As mentioned in the Communication section, clear communication in the home is necessary. This can be achieved through making short, concise statements that do not cause greater confusion (Creer & Wing, 1974).

5.2.2.11. Individual Characteristics of the Patient

One participant reported that the characteristics of their family member prior to diagnosis helped in accepting the family member’s illness:

- “I think it was in his Matric year that he had a nervous breakdown. Up until then he was a very pleasant, easygoing, normal person. We remember still how he was before and therefore we have a lot of sympathy for him.”

Literature indicates that in high EE environments relatives believed their family member’s problems were due to their natural self and not due to the illness. Relatives who were the most hostile believed this behaviour was part of their relative’s natural self (Barrowclough et al, 1987). Similarly, a study by Leff and Vaughn (1985) highlighted that relatives who are highly critical reacted to premorbid or long-standing personality traits, rather than to illness behaviour.
When a family member treats his ill brother or son in the manner quoted above, this would contribute to the long-term wellness of the family member. Equally significant, their home could be viewed as one low in EE, which helps the family member to avoid a relapse.

5.3. Integrating Quantitative and Qualitative Results

The quantitative results of this study might have been interpreted with caution owing to the small sample size if these were not supported by the findings of the qualitative open-ended question. The quantitative measures (and selected subscales) correlate in their findings with a number of the ‘verbatim’ responses given by participants. These correlations, which indicate strengths or resiliency factors that the families utilize in managing schizophrenia in their home, are religion and spirituality; social support; relative support; positive communication; and a commitment to work together as a family unit to solve problems.

The added value of the qualitative question is that a number of additional themes to those tapped into by the quantitative measures also emerged. These additional themes could be used as stepping-stones for areas of future research in the field of family resilience and schizophrenia.

5.4. Conclusion

The results of this study were discussed in relation to the aims of the study in Chapter Five. The findings of the quantitative component of the research were presented and discussed with support of accompanying literature in the field of resilience and schizophrenia. These findings were supported by the answers given by participants to the open-ended question in the qualitative component of the research. It was noted that as the sample size in this study was small, the quantitative findings may have been viewed as less significant, had they not been supported by the ‘verbatim’ responses to the open-ended question. Nevertheless, it is advisable for the researcher to use caution when making interpretations and conclusions based on the quantitative data only.
With the integration of the quantitative and qualitative data presented above, certain conclusions can now be made. The following chapter presents the conclusions, limitations and recommendations for future study, based on the results of the study.
Chapter Six: Conclusions, Limitations and Recommendations

6.1 Introduction

Chapter Five examined the results of the present study. Chapter Six draws conclusions that can be made from these findings. This chapter will begin with a summary of the main findings of the study, followed by the contributions the study has made to the body of existing research, as well as the limitations encountered. The chapter will end with recommendations for future research areas.

6.2. Conclusions of the Study

Valid conclusions may only be drawn from the results of the study by returning to the aim of the study. The aim of the study, and results pertaining to this aim, are discussed below.

The study aimed to identify, explore and describe the resiliency factors that enable families to adjust and adapt as a result of having a member (fully dependent upon the family, including financially) living with schizophrenia. The research was based upon the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin, Thompson & McCubbin, 2001) which premises that certain resources allow families to adjust and adapt in the face of a crisis. As the crisis in the present study was schizophrenia, the study aimed to identify the resilience resources a family uses to overcome such a crisis.

The results from the quantitative measures indicated that mobilisation (to access needed resources); social support in the form of friends and relatives; religious support; family time spent together; positive or affirming communication; and family hardiness, as seen through the families’ commitment to overcoming the crisis, and viewing it as a challenge, were all resources that the families used to adjust and adapt to the crisis of schizophrenia.

The results of the qualitative question asked as part of the biographical questionnaire enhanced the data further. The responses allowed the researcher to hear, in the participants own ‘voices’ which resiliency factors or strengths allowed them to manage the family member and his/her illness on a day-
to-day basis. Through content analysis, 11 themes were identified. The resiliency factors identified were consistent with findings from literature and research (Garmezy, 1985; McCubbin, McCubbin, Thompson, Han & Allen, 1997) which indicates three domains responsible for the emergence of resilience: individual personality, the family (in terms of cohesion and lack of discord) and the community (or social support).

The open-ended question identified spirituality and religion, understanding of the patient’s condition, social support, supportive family unit, and adherence to a treatment regime, as the most important resiliency factors. Other themes which emerged were communication, patience, treating the family members as normal, hope, avoiding conflict situations, and individual characteristics of the patient. Of significance is that the qualitative findings corroborated the quantitative data collected. This strengthens the value of findings as each section supports the other.

6.3. Value of the Research

The research conducted contributes to the field of salutogenesis, as described by Antonovsky (1987). It sought to examine what allows families to move towards health, with a recognition that a variety of factors influence health. The research looked more specifically at what resiliency factors emerge out of a family when the family is faced with a crisis situation. The present study contributes to the field of resiliency research that has burgeoned in recent decades in South Africa (Der Kinderen & Greeff, 2003; Greeff & Aspeling; Greeff & Human, 2004; Greeff & Ritman, 2005; Greeff & Van Der Merwe, 2004). Furthermore, this research is the first of its kind in South Africa to investigate the adjustment and adaptation processes of families where a member is living with schizophrenia. Through an extensive review of international literature and published studies in the area of schizophrenia, the researcher identified a lack of material bringing family resilience and schizophrenia together under one research topic. Thus the present study highlights the importance of beginning such research beyond South Africa, where cultural differences may also be found to mediate findings.
In line with the recommendations made by Sellmeyer (2002), the present research gave the participants social support through allowing them to express their burdens experienced with having a family member living with schizophrenia. It also allowed them to reframe their experiences in a more positive light through highlighting the resources and strengths they access to manage the illness. As families often feel isolated from the usual channels of social support when a family member has a chronic illness such as schizophrenia (Marsh, 1992), the researcher received positive feedback during the data collection process. Comments such as “I never have anyone to speak to about this”, confirmed the value of the research. This may also help to reduce psychological distress that reduced social networks can cause (Magliano et al, 1998).

By exploring the resiliency factors related to families where a member is living with schizophrenia, the notion that the family unit can serve a protective function for individuals was highlighted (Hawley & DeHaan, 1996). The researcher reinforced the families’ belief in their effective functioning and that they have adjusted and adapted to living with schizophrenia. By asking participants to examine the functioning of their specific family unit this in turn could aid their resilience.

At a broader social support level, the research has shown the need for the clinic psychiatric nursing sisters and psychologists to establish family support groups at the clinics where family members receive medication. This will allow families with similar problems being encountered to share solutions with each other. This will enhance the resilience of the respective family units and meet the need for education expressed in previous research (Sellmeyer, 2002).

The research conducted can be seen to be valuable in a number of research and interpersonal domains. However, the limitations to this study must also be mentioned. A discussion of these limitations follows.

6.4. Limitations

The sampling method used to collect data meant that the results of the study are not representative of the general population of families where a family member is living with schizophrenia. While non-
probability sampling was convenient for the researcher’s aims, it limits the conclusions that may be
drawn for this broader familial community.

A further reason why the results cannot be generalised to this community relates to the small sample
of participants. Although the researcher identified and sent out 68 sets of questionnaires, many were
returned unanswered with an indication of the family’s unwillingness to participate. On following up
on those not returned at all, the sample size was further reduced when families failed to return the
questionnaires by a given date, or indicated their unwillingness to participate. As the sample size was
small, the findings produced could be statistically nonsignificant (Cozby, 2004). It is postulated that
the sensitive nature of the illness that each family was living with impacted on identifying themselves,
despite anonymously, to the broader research community.

It is also suggested tentatively that the number of questionnaires might have deterred participants
from engaging in the research. The researcher observed during appointments that participants became
tired by the last two questionnaires, and needed to have a break. Furthermore, the complexity of the
wording of many questions meant that there was a need for clarification by the researcher. It could be
assumed that if the researcher was not present, potential participants might have abandoned completing
the questionnaires.

In terms of the measures used, the standard consent form used for research at the Nelson Mandela
Metropolitan University is only available in English. As a large number of families identified were
Afrikaans first-language speaking, they may not have understood the consent form and have chosen, on
this basis, not to participate. From individual appointments with participants, the researcher often had
to explain some of the terms in Afrikaans, even when the participant could informally converse in
English.

Exploring the value and limitations of research highlights recommendations for future work. A
discussion of these recommendations follows.
6.5. Recommendations

Walsh (2002) has called for longitudinal studies on family resilience to be conducted. As resilience may be seen as a process which occurs over time, the experience that a family has may change. There would be value in designing a research study that examines the level of resilience within families at different stages after a family member has been diagnosed with schizophrenia. This would provide information about how and when resilience resources develop in families. It is suggested that three measurements of resilience be obtained: (a) at six months after diagnosis; (b) 12 months after diagnosis, and (c) 24 months after diagnosis.

Secondly, in view of the low response rate and subsequent possible nonsignificance of quantitative results, the use of larger and more representative samples could boost generalisability of findings. This could be done through a country-wide accessing of primary health-care sites, which would also be more representative of the schizophrenic population in South Africa. Different regions with their different cultures and social structures could generate additional information regarding resilience resources families use. Furthermore, engaging the family member themselves who are living with schizophrenia could generate a co-relational or alternative view to that of the caregivers.

Thirdly, in making research into resilience in families where a family member is living with schizophrenia more relevant to the South African population, exploring differences cross-culturally would be of value. Finally, the researching of resilience in families where a member is living with other Axis 1 diagnoses (i.e. Bipolar Mood Disorder) will further contribute to the salutogenic paradigm, with the focus on psychological illnesses. Such research could highlight similarities and/or differences in strength factors that families use in their attempt to adjust and adapt to a chronic psychological illness.

6.6. Conclusion

The present study aimed to identify, explore and describe the resiliency factors that facilitate adjustment and adaptation in a family where a member is living with schizophrenia. The use of quantitative measures and a qualitative question have highlighted strengths that the participants have to
help them manage their family member and his/her illness. The researcher used the Resiliency Model of Family Stress, Adjustment and Adaptation (McCubbin, Thompson & McCubbin, 2001) to provide the framework for the interpretation of these findings. The study, although limited in its sample size, made contributions to the field of family resilience, especially in the South African context. A consideration of the limitations upon the findings allowed the researcher to examine and make recommendations for future research in the field of family resilience and schizophrenia.
References


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research and practice (pp. 1-62). Madison, WI: University of Wisconsin.


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project: Relapse rates of schizophrenia at five and eight years. *British Journal of Psychiatry, 165*, 829-832.


Appendix A:

DSM-IV-TR Criteria for Schizophrenia
Diagnostic Criteria for Schizophrenia

A. **Characteristic symptoms:** Two (or more) of the following, each present for a significant portion of time during a 1-month period (or less if successfully treated):

1. delusions
2. hallucinations
3. disorganized speech (e.g. frequent derailment or incoherence)
4. grossly disorganized or catatonic behavior
5. negative symptoms, i.e., affective flattening, alogia, or avolition

**Note:** Only one Criterion A symptom is required if delusions are bizarre or hallucinations consist of a voice keeping up a running commentary on the person’s behavior or thoughts, or two or more voices conversing with each other.

B. **Social/ Occupation dysfunction:** For a significant portion of time since the onset of the disturbance, or one or more major areas of functioning such as work, inter-personal relations, or self-care are markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, failure to achieve expected level of interpersonal, academic, or occupational achievement).

C. **Duration:** Continuous signs of disturbance persist for at least 6 months. This 6-month period must include at least 1 month of symptoms (or less of successfully treated) that meets Criterion A (i.e. active phase symptoms) and may include periods of prodromal or residual symptoms. During these prodromal or residuals period, the signs of disturbance may be manifested by only negative symptoms if two or more symptoms listed in Criterion A present in attenuated form (e.g. odd beliefs, unusual perceptual experiences).
D. *Schizoaffective and Mood Disorder exclusion:* Schizoaffective Disorder and Mood Disorder with Psychotic features ruled out because either (1) no Major Depressive, Manic or Mixed Episodes have occurred concurrently with the active-phase symptoms; or (2) their total duration has been brief relative to the duration of the active and residual periods.

E. *Substance/general medical condition exclusion:* The disturbance is not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition.

F. *Relationship to a Pervasive Developmental Disorder:* There is no history of Autistic Disorder or another Pervasive Developmental Disorder, the additional diagnosis of Schizophrenia is made only if prominent delusions or hallucinations are also present for at least a month (or less if successfully treated).

*Classification of longitudinal course* (can be applied only after at least 1 year has lapsed since the initial onset of active-phase symptoms):

- **Episodic with Interepisodic Residual Symptoms** (episodes are defined by the re-emergence of prominent psychotic symptoms); *also specify if: With Prominent Negative Symptoms*
- **Episodic with No Residual Symptoms**
- **Continuous** (prominent psychotic symptoms are present throughout the period of observation); *also specify if: With Prominent Negative Symptoms*
- **Single Episode in Partial Remission, also specify if: With Prominent Negative Symptoms**
- **Single Episode in Full Remission**
- **Other or Unspecified Pattern**
Appendix B:

Covering Letter
28 February 2007

Dear Sir/ Madam

In line with the requirements for a Master’s degree in Clinical Psychology, it is necessary to complete a research treatise as part of my course work. The title of my treatise is, “Resilience in families where a member is living with Schizophrenia”. The aim of the research is to explore and describe the factors that facilitate adjustment and adaptation in families after a member is diagnosed as schizophrenic. The benefit for you as a participant is to gain further understanding of how to cope with day-to-day life for you and your dependant, through understanding what resiliency areas could be improved upon. This would allow for better management of your dependant family member’s illness and facilitate healthier family relations, if needs be.

If you decide to participate in this research you will receive an envelope with a number on it. This number will appear on each questionnaire and will enable the researcher to keep track of the questionnaires to ensure that all your information remains together. In the envelope you will find a consent form, a biographical questionnaire in addition to seven other brief questionnaires pertaining to your adjustment and adaptation as a member of a family with a dependant living with schizophrenia. The researcher will provide instructions for completing the questionnaires. The questionnaires will take approximately 1 hour to complete.

You will be asked to complete and sign a consent form and provide your surname and initials. However, your identity and that of your family will at all times be kept confidential, and only the researcher and clinic/ society officer will be aware of this.

Please indicate if you would like to receive general feedback by completing the relevant section in the biographical questionnaire. All responses to the questionnaires will be regarded as confidential. For this reason you are requested to answer the questions as honestly as possible. Once you have completed all the questionnaires, you are requested to place these questionnaires in the envelope and hand these back to the society officer.
Your participation is greatly appreciated.

Yours sincerely,

Jason Haddad           Ms Ottilia Brown-Baatjies
(Researcher)           (Supervisor)

Prof Greg Howcroft     Prof Mark Watson
(Co-supervisor)        (Head of Department)
Appendix C:

Consent Form
# INFORMATION AND INFORMED CONSENT FORM

<table>
<thead>
<tr>
<th>Title of the research project</th>
<th>“Resilience in families where a member has been diagnosed with Schizophrenia”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference number</td>
<td></td>
</tr>
<tr>
<td>Principal investigator</td>
<td>Mr Jason Haddad</td>
</tr>
<tr>
<td>Address</td>
<td>NMMU</td>
</tr>
<tr>
<td></td>
<td>Department of Psychology</td>
</tr>
<tr>
<td></td>
<td>PO Box 77000</td>
</tr>
<tr>
<td></td>
<td>6031</td>
</tr>
<tr>
<td>Contact telephone number (private numbers not advisable)</td>
<td>0824662383</td>
</tr>
</tbody>
</table>

## A. DECLARATION BY OR ON BEHALF OF PARTICIPANT
(Person legally competent to give consent on behalf of the participant)

<table>
<thead>
<tr>
<th>I, the participant and the undersigned I.D. number</th>
<th>(full names)</th>
</tr>
</thead>
</table>

**OR**

<table>
<thead>
<tr>
<th>I, in my capacity as</th>
<th>of the participant I.D. number</th>
<th>Address (of participant)</th>
</tr>
</thead>
</table>

## A.1 I HEREBY CONFIRM AS FOLLOWS:

1. I, the participant, was invited to participate in the above-mentioned research project that is being undertaken by Mr Jason Haddad of the Department of Psychology in the Faculty of Health Sciences of the Nelson Mandela Metropolitan University.

2. I understand the research as follows:
2.1 **Aim:** The researcher is studying resilience in families who have a member living with Schizophrenia. The information will be used to gain an understanding of the factors that contribute to families’ ability to overcome a diagnosis of a chronic illness, in this instance, Schizophrenia.

2.2 **Procedures:** I understand that I will be provided with questionnaires that will take approximately one hour to complete and will receive general feedback regarding the results of the study after its completion.

2.3 **Risks:** Will not remain anonymous to researcher and supervisors.

2.3 **Possible benefits:** As a result of my participation in this study, more insight can be gained into the factors that make families living with a member who is Schizophrenic, resilient. This information can be used in intervention programmes to offer families information and support.

2.5 **Confidentiality:** My identity will not be revealed in any discussion, description or scientific publications by the investigators.

2.6 **Access to findings:** Any new information/or benefit that develops during the course of the study will be shared as follows: The researcher will provide information in the form of a psychological report or feedback session to the participants.

2.7 **Voluntary participation/refusal/discontinuation:**

| My participation is voluntary | X | YES | NO |
| My decision whether or not to participate will in no way affect my present or future care/employment/lifestyle | X | TRUE | FALSE |

3. The information above was explained to me/the participant by Mr Jason Haddad in

<table>
<thead>
<tr>
<th>English</th>
<th>Afrikaans</th>
</tr>
</thead>
</table>

and I am in command of this language/it was satisfactorily translated to me by

| N/a |

I was given the opportunity to ask questions and all these questions were answered satisfactorily.

4. No pressure was exerted on me to consent to participation and I understand that I may withdraw at any stage without penalisation.

5. Participation in this study will not result in any additional cost to myself.
A.2 I HEREBY VOLUNTARILY CONSENT TO PARTICIPATE IN THE ABOVE-MENTIONED PROJECT

Signed/confirmed at ____________________ on ____________________ 20 ______

<table>
<thead>
<tr>
<th>Signature of witness</th>
<th>Signature or right thumb print of participant</th>
<th>Full name of witness</th>
</tr>
</thead>
</table>

STATEMENT BY OR ON BEHALF OF INVESTIGATOR(S)

I, Jason Haddad declare that

- I have explained the information given in this document to ____________________

  (name of patient/participant)

  and/or his/her representative

  (name of representative)

- he/she was encouraged and given ample time to ask me any questions;

- this conversation was conducted in ____________________ by ____________________

  (language) ____________________

  and no translator was used / this conversation was translated into

- I have detached Section D and handed it to the participant

  YES ____________ NO ____________

Signed/confirmed at ____________________ on ____________________ 20 ______

<table>
<thead>
<tr>
<th>Signature of witness</th>
<th>Signature of interviewer</th>
<th>Full name of witness</th>
</tr>
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</table>

[Language option: English, Afrikaans]
Appendix D:

Biographical Questionnaire
BIOGRAPHICAL INFORMATION

All information in this questionnaire is strictly confidential and your information will be
anonymously processed.

Please cross the box most appropriate to you, or complete the statement in the space
provided:

1. Area of residence…………………………………………………………….(town or city or suburb)

2. Relationship of family member (living with schizophrenia) to you

3. Number of years that family member has been living with schizophrenia

<table>
<thead>
<tr>
<th>1 – 2 years</th>
<th>3-5 years</th>
<th>6-9 years</th>
<th>10 or more years</th>
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</table>

4. Is there anyone else who lives permanently with you in your home?
No ☐
Yes ☐ Please give
details………………………………………………………………………………………………………..

5. What is your home language?  English ☐  Afrikaans ☐

Other (specify) …………………………….

6. Job and Education:

Please give some detail about your job (e.g. Temporary/permanent? Nature of work?) ……..

……………………………………………………………………………………………………………………………..

Please give a short description of your dependant family member’s position
(Temporary/permanent work? Nature of work? Or Enrolled in Tertiary Education?) ………

……………………………………………………………………………………………………………………………..

What is the highest level of education attained by:

Yourself ☐ High school ☐ Diploma ☐ Degree ☐ Other

Your ☐ Primary school ☐ High school ☐ Diploma ☐ Degree ☐ Other

Dependant Family Member
7. In your own words, what are the most important factors, or strengths, which help your family in dealing with a member who is living with schizophrenia, and his/her illness?

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8. Would you like to receive general feedback regarding the results of this study?

Yes    No

If ‘yes’, please provide a postal address (Street address or PO Box)

…………………………………………………………………………………………………………

Your co-operation is greatly appreciated.